

BEML LIMITED

TENDER DOCUMENT

For

EMCP/1004471965- Civil / 1004473027-Electricals / Construction for Painting Hangar EM Division KGF /Tender Document Dt:28-06-2024

CIVIL & ELECTRICAL WORKS FOR CONSTRUCTION OF NEW PAINTING HANGAR AT BEML LIMITED EM Division, KGF COMPLEX

TENDER CONDITIONS
SCOPE OF WORK
&
BILL OF QUANTITY (BOQ)

SRM Bid No: 6300038942

LAST DATE FOR SUBMISSION ONLINE: 31/07/2024 - 17.00 Hours

ISSUED BY

The Manager
Material Management
BEML Limited
EM Division, KGF Complex

Tender Document

Sub

Civil & Electrical works for construction of New Painting Hangar at EM Division, BEML Ltd, KGF.

Index			
SI No.	Description	Page No	
1	Tender Notice	3	
2	Letter to Bidder / Tenderer	4	
2.2	Earnest Money Deposit (EMD)	6	
2.4	Technical Bid: Qualifying Criteria	9	
3	Scope of Work - Civil	13	
3.1	Scope of Work - Electricals	22	
4	Terms & Conditions	30	
5	Commercial Bid	42	
5.1	Schedule 'A' Bill of Quantities (Civil)	43	
5.2	Schedule 'A' Bill of Quantities (Electricals)	59	
	IP – Integrity Pact	70-76	
	NIT Acceptance Letter	77	
	Bid security Declaration format	78	
	Format for Bidder Financial Standing	79	
	Declaration-preference to MII	80	
	Total Number of Pages 80		

1.Tender Notice

Manager - Contract Purchase, EM Division, BEML Ltd, BEML Nagar, Kolar Gold Fields – 563 115, invites Tenders in two-bid system (Technical Bid and Commercial bid) through SRM, from eligible, reputed firms / Contractors / Agencies for the following:

Contract for Civil & Electrical works for construction of New Painting Hangar at EM Division, BEML Ltd, KGF.

Sl.No.	Description	Details
1	Approximate value of contract	Rs.16.62 Crore (Including GST)
2	Duration of the contract	One year

Note: (1) Value indicated at 1 above includes Labour Expenditure and Supply of Items, etc.

(2) Firm to quote unit rate including applicable GST for the specified line items in BOQ

For Scope of work, other terms and conditions, Qualifying criteria please refer respective sections in this NIT.

Please refer Bid Invitation and all attachments also.

Manager - Contract Purchase

EM Division, BEML Ltd

BEML Nagar, KGF - 563 115.

08153-279365

emekgf@beml.co.in

1. Letter to Bidder / Tenderer

To: M/s

Dear Sir,

Further to the tender notice (at page 3/80), we would like to appraise the bidders with the following details:

BEML Limited is a Government of India undertaking, under the Ministry of Defence Production, having manufacturing units at KGF, Bengaluru, Mysuru & Palakkad.

BEML desires to establish Providing Contract for Civil & Electrical works for construction of New Painting Hangar at EM Division, BEML Ltd, KGF.

Bids in prescribed format is invited for the work indicated in the tender notice.

Interested bidders can down load the tender document and quote in two bid system.

2.1 Instructions for submission of bids:

Both Technical Bid and Commercial bid are to be submitted only through SRM.

(A) Submission of Technical Bid:

- (a) Please upload all the technical bid documents in the system and ensure that no price details are mentioned in any of the documents uploaded as part of the Technical Bid.
- (b) Corrigendum regarding the tender if any will be published before the tender closing.
- (c) Documents as indicated in the Technical qualifying criteria are to be uploaded in SRM. Commercial bids of the bidder will be opened only if all the technical requirements are fulfilled and qualified through technical evaluation. Hence the bidders are advised to upload all the required documents carefully.
- (d) Tender documents will be considered at the sole discretion of M/s BEML Ltd, whose decision in the matter will be Final & Binding.
- (e) Please note that commercial bid / Price details should **not** be uploaded in the technical bid failing which the tender / bid will be liable for rejection.

(B) Submission of Commercial Bid:

- (a) Please quote the total value in SRM system against the price details provided therein, before tender closing date and time specified.
- (b) Technical Bids of the bidders will be opened first on the specified date and time. Commercial Bids of the technically accepted bidders only will be opened subsequently on completion of the technical evaluation.
- (c) **Before submitting the bid, Firms should visit the work place** / site to know the scope of work. Prior appointment may please be obtained from the Contract In-charge, Civil Maintenance, BEML Ltd KGF. Contact No. 9480148294 ,e-mail: srinivasalu.p@bemlltd.in & Contact No. 9900787628 ,e-mail: sudarshan@bemlltd.in
- (d) Bids should be only on SRM. (Quotations sent by Fax / Email / Quotations on letter heads or in any other mode will not be considered).
- (e) Conditional offers are liable for rejection.
- (3) This Letter + Tender document + Corrigendum if any, will be part of the contract.
- (4) For Scope of work, other terms and conditions, Qualifying criteria please refer respective sections in this NIT.

Thanking you,
For BEML Limited
Manager- Contract Purchase
EM Division,

BEML Nagar, KGF - 563 115.

08153-279365

emekgf@beml.co.in

2.2 Earnest Money Deposit (EMD):

(a) Method for Payment of EMD (Earnest Money Deposit):

EMD (**Approx. Rs.33.23 Lakhs**) to be deposited in particular Bank a/c and the same will be used for refund.

1. Seller Details.

		SELLER DETAILS	
SI No	DESCRIPTION	DETAILS	
1	SELLER NAME		
2	ADDRESS		
3	PIN CODE		
4	STATE		
5	CONTACT PERSION		
6	MOB-NO		
7	E-MAIL ID		
		SELLER BANK DETAILS	
8	BANK NAME		
9	A/C NO		
10	IFSC CODE		
11	BANK MAIL ID		
12	BANK CONTACT NO		
	SIGNATURE WITH SEAL		

BEML BANK DETAILS

		DELIE BANK DE IALES
SL NO	DESCRIPTION	DETAIL
1	BANK NAME	SBI
2	BRANCH	BEML NAGAR, KGF 563115
3	ACCOUNT NO.	54029289872
4	IFSC code	SBIN0040168

- (b) For EMD is exemption, copy of relevant and Valid documents like NSIC certificate / MSE Udyam Registration Certificate, etc., along with bid security declaration (Format ATTACHED) to be submitted with sign & seal.
- **2.2 (A2)Integrity Pact**: Integrity Pact Signed by the bidder with 2 witnesses. (Applicable if the tender / bid value is more than Rupees One Crore). **Integrity Pact is applicable for this tender.**

Integrity Pact format is at Page number (72 to 76) It can also be downloaded from BEML website (www.bemlindia.com).

Signed scanned copy of Integrity Pact format with following is to be submitted.

- In page 1, name of the firm is to be written (in the specific place at the top of page).
- Pages 1,2,3,4 & 5 are to be signed at bottom of the page by the authorized signatory of the firm with seal.
- In page 6 signature by the authorized signatory of the firm is to be done at indicated place with seal, place and date to be written.
- In page 6 name and address of 2 witness (at right side) to be filled in.

In page 7 signature by the authorized signatory of the firm is to be done at indicated place

BIDS NOT COMPLYING WILL BE REJECTED

Pre-Bid Meeting is Mandatory. Firm s should visit our site works for better understanding of Site Location & site conditions between 8:00 AM to 3:00 PM as indicated in SRM and then should submit their quote. If Consultant/Firms submit their quote without attending prebid meeting, their bid will be rejected.

Note:

- (a) Bidders are suggested to upload all documents well in advance (say 3 to 4 days before closing date), not resorting to last date last minute uploading, which may result in improper / missing of documents uploading.
- (b) Bidder has to submit all the requisite documents for qualifying in Technical bid. It is suggested to cross check all the documents against the list after uploading on SRM to ensure that all the necessary documents are correctly uploaded.
- (c) In case some of the above documents are not submitted / uploaded by the bidders/ if clarity in documents are not found, BEML reserves the right to reject the bid. Decision of

BEML in this regard will be final and binding.
(d) To have better clarity and easy identification, bidders are advised to upload the
documents separately by giving appropriate names, i.e.,
(1) For signed & sealed NIT Acceptance letter –FILE NAME = NIT_AL_Signed&Sealed
(2) For Annual Turnover certificate – FILE NAME = Annual Turnover, etc.,
Do not club all the documents in one single file.
(e) Bidders who are having a valid registration Certificate of Statutory bodies (like NSIC "The
National small industries corporation Ltd" etc.,) are exempted from submission of EMD
Amount as per applicable rules. As a proof of the above registration, firm has to upload
the valid registration certificate along with technical bid on SRM.
(g) Items (if any) quoted by the vendor has to conform specified brand / requirement / IS
and their samples to be approved by BEML before bulk supply.
(h)Firm has to ensure updating their GST details at BEML WEB SITE <u>www.bemlindia.com</u> .

2.4 Technical Bid: Qualifying Criteria

Scanned copies of following documents are to be uploaded.

(BIDS NOT COMPLYING WILL BE REJECTED)

	(BIDS NOT COMPLYING WILL BE REJECTED)			
SI No.	Description	Requirement Details	Additional Information	
A1	EMD (Earnest Money Deposit)	EMD (Rs.33.23 Lakhs) is to be deposited & copy of receipt to be uploaded Scanned copy of	For EMD Exemption, copy of NSIC/ Udyam certificate along with the bid security declaration (format at page no.78) to be uploaded	
PI	NIT Acceptance Letter	signed letter with seal to be uploaded.	NIT Acceptance Letter is at Page number 77 (1 page)	
B2	Average Minimum Annual financial Turn over in the last 3 years: Rs.498.44 Lakhs (Including GST)	Scanned copy of letter or Profit & Loss Account Statement Certified by practicing Chartered Accountant to be uploaded.	Latest three financial years (or) FYs 2021-22, FY 2020-21 & FY 2019-20 will be considered).	
B3	Experience in executing similar type of works or Civil Engineering Works, completed during last 7 years ending last date of the previous month of date of publication of NIT, value greater than or equal to the said requirement indicated below:(Below value is Including GST) One Similar work of Minimum value: Rs.1329.20 Lakhs Two Similar works each of Minimum value: Rs.830.74 Lakhs Three Similar works each of	Enclose satisfactory work done / performance certificates (Not work orders / POs) issued by the customers. Similar works means Civil Works /Civil Maintenance works carried out in Public sector/ Private organizations & Govt. organizations.	(a)Select any applicable one and upload scanned copy of similar work completion certificates issued by customer. (b) If the works /contracts were carried out in other than Government or PSUs, the bidders have to submit TDS Certificates along with work done certificate.	

	Minimum value: Rs.664.60		
	Lakhs		
B4	3 Assessment Years IT returns	Scanned copy to be	Latest 3 AYs (OR) for
	Filing	uploaded	AY 2022-23
			AY 2021-22
			AY 2020-21
Note:	Exemption towards Turnover &	Experience for MSEs & St	tartups will not be considered.
			·
	Rids without above	indicated documents	will be rejected
	bias without above	maicatea aocaments	will be rejected.

2.5	QU	ESTIONNAIRE :		
	(To	be filled in by the Tenderer and to be uploaded along with the Technical Bid)		
	1	Name in full and address, under which the		
		tenderer is proposing to execute the contract.		
	2	Colour Passport size photo of Proprietor with		
		signature (if the firm is participating for the first		
		time in Tender floated by BEML EM Division).		
	3	Address of official premises at KGF, if any.		
	4	Address of official premises at other places		
	5	Telephone /		
		Mobile /		
		Fax /		
		e-mail ID		
	6	Indicate license number under contract labour		
		(Regulation & Abolition) Act -1970 if any obtained		
		for similar works.		
	7	Indicate ESI Registration/ Code No.		
	8	Indicate PF Registration / Code No.		
	9	Indicate GST Registration No. and applicable SAC		
		for the subject work.		
	10	Firm has to update their GST details on BEML		
		website (www.bemlindia.com).		
	11	Nature of other works contracts and period dealt		
		(Add additional sheet and upload if required).		
	12	Details of works carried out for the past three		
		years.		
	13	Indicate the companies/ undertakings where you		
		have undertaken any contracts (Also mention the		
		period of your association / contract with them)		
	14	Does your agency have ISO registration?		
		If so, give details.		
	15	Income tax PAN No		
	16	Copies of satisfactory performance certificates		
		with value executed		

17	Self-declaration by vendor that they are not black	
	listed by any Govt / PSU organization.	
18	1. Vendor Code:	
10	2. Vendor Name :	
	3. Account No:	
	4. Name of the Bank: Address:	
	5. IFSC Code : (Indian Financial System Code)6. MICR Code :	
	(Magnetic Ink Character Code) 7. NEFT Code: (National Electronic Fund Transfer)	
	I / We certify that to the best of my / our knowledge the particulars furnished above are true.	
	It is understood that the information furnished will be treated as confidential and will not be divulged to unauthorized persons.	
	Place :	
	Date :	
	SIGNATURE OF THE CONTRACTOR (S) WITH SEAL	
l ag	 ree to bear bank charges, if any, to be charged directl	y by the bank for RTGS/ECS
_	ment.	,

3. Scope of Work

Construction for Painting Hangar- Civil works

Note:

- (a) Contractor has to study and understand complete scope of Work and Terms & conditions before quoting the tender.
- (b) Subject contract comprises of full and satisfactory completion of the works as per the Bill of Quantities, Terms and conditions.
- (c) Following scope of work is included to be executed all as per instructions / directions of Contract in-charge, Civil Maintenance, EM Division, BEML Ltd., KGF.
- 1 HANGAR SUB & SUPER STRUCTURE -Excavation upto 1.5m Excavation over areas not exceeding 1.5m deep and getting out soft/ loose soil complete all as specified and as directed.
- Excavation in trenches upto 1.5m- Excavating in trenches, in loose soil/hard soil//hard rock and removal of water by mechanical means, not exc 1.5 m in depth; for foundation, etc. or for shafts, wells, cesspits, manholes, pier holes, etc. n exc 10 sq m on plan and n exc 1.5 m in depth and getting out etc complete
- Excavation in trenches upto 1.5m 3M Excavating in trenches, in loose soil/hard soil//hard rock and removal os water by mechanical means, not exc 1.5 m in depth; for foundation, etc. or for shafts, wells, cesspits, manholes, pier holes, etc. n exc 10 sq m on plan and n exc 1.5 m in depth and getting out for each additional 1.5m or part thereof in depth beyond the first 1.5 m etc complete.
- Excavation in trenches upto 3M 4.5M Excavating in trenches, in loose soil/hard soil//hard rock and removal os water by mechanical means, not exc 1.5 m in depth; for foundation, etc. or for shafts, wells, cesspits, manholes, pier holes, etc. n exc 10 sq m on plan and n exc 1.5 m in depth and getting out for each additional 1.5m or part thereof in depth beyond the first 1.5 m etc complete
- "Plum Concrete -Providing & Laying Plum concrete consisting of 80% P.C.C. mix (1:3:6) and 20% Rubble stone of maximum size of 150 mm laid in layers with ramming consolidating, watering including dewatering cost, seigniorage & conveyance of all materials, labour charges, machine mixing, finishing the surface etc. complete."
- Returning, Back filling Returning, filling in, including spreading, levelling, watering and well ramming in layers not exc 25 cm.
- Anti-Termite Treatment for foundation M&L for Treating the bottom and sides of excavation at the rate of 5 liters of emulsion per square meter of surface area.
- Anti-Termite Treatment for Filled Earth M&L for Treating the top surface of filled earth at the rate of liters of emulsion per square meter of surface.
- Hardcore for Flooring M & L Hardcore of gauge n exc. 63 mm, deposited, spread and levelled in layers n exc. 15cm thick, watered and rammed to a true surface below plinth protection
- P.C.C (1:3:6) M&L for Cement Concrete in Foundation, Filling and mass concrete 1:36 type C2 using 40mm Graded aggregate
- 11 R.C.C. M 30 Concrete for foundation M & L for RCC M-30design mix as in foundation footings, plinth beams, foundation beams, bases of col, basements slabs, under-reamed piles & mass concrete using 20mm graded stone aggregate.
- 12 R.C.C. M30 Concrete for Columns UPTO G. LM & L for RCC 30 design mix as in Columns using 20mm graded stone aggregate.
- 13 Form Work for foundation -Formwork to sides of concrete foundations, footings, bases of columns,

	raft and raft beams, sides and soffits (if any) of foundation and plinth beams; and similar work; vertical or to batter (Fair Finished)
14	Form Work for R.C.C. COLUMNS -Formwork to sides of pillars, posts, struts, iers, columns and
	stanchions.
15	REINFORCEMENT STEEL 10mm & over dia S & F TMT steel bars 10mm dia and over cut to length bent to shape required, including cranking bending spirally for hooping for columns, hooking ends and binding with and including MS wire (annealed) not less than 0.9mm dia or securing with clips.
16	REINFORCEMENT STEEL 5-10mm dia S & F TMT steel bars 5 to 10mm dia in stirrups Spacers & Binders
17	Plate Load test Carrying out Plate Load Test complete with necessary and adequate Kentledge loads,
	equipment's and instruments etc. as per specifications for ascertaining of bearing capacity of soil etc.
	complete as specified and directed and submitting reports in duplicate.
18	Super structure -R.C.C. M30 Concrete for Columns above G.L .M & L for RCC M-30 design mix as in Columns using 20mm graded stone aggregate.
19	R.C.C. M30 Concrete for beams, lintels, brackets M & L for RCC M-30 design mix as in Lintels Beams, Cantilevers, bressummers, lintels over 1.50m Span using 20mm Graded aggregate
20	R.C.C. M30 Concrete for Sunshades above Openings M & L for RCC M-30 design mix as in Slabs
	supported on walls, beams and columns in floors, roofs, landings, balconies, canopies, deck slabs
	and in shelves and the like Sunshades &Chajjas.
21	Brickwork 230 mm thick M& L Brickwork using A class bricks, straight /curved on plan in cement
	mortar 1:6.
22	REINFORCEMENT STEEL 10mm & over dia. S & F TMT steel bars 10mm dia and over cut to length
	bent to shape required, including cranking bending spirally for hooping for columns, hooking ends and binding with and including MS wire (annealed) not less than 0.9mm dia or securing with clips but in Stirrups.
23	REINFORCEMENT STEEL 5-10mm dia S & F TMT steel bars 5 to 10mm dia in stirrups Spacers & Binders.
24	Form Work For R.C.C. COLUMNS Formwork to sides of pillars, posts, struts, iers, columns and stanchions.
25	Form Work For R.C.C. Beams Formwork to sides and soffits of floor or roof beams, beam haunchings,
	girders, bressummers, lintels, cantilevers, shelves including supports, overhangs, etc. also splays
	between floors and beams, etc. for flat surfaces.
26	Form Work For R.C.C. for Sunshades (Chajjas) Formwork to chullah hoods, chajjas, troughs and similar items including edges.
27	Structural Steel for columns, side purlins, roof. Supply & fixing structural steel for columns, Roof
-'	trusses (framed), trussed, purlins, crane gantries, rails andfastenings and heavy bracketframing
	(Beam, tee, angle, channel or flat sections) including distance pieces, cleats etc including application
	of 2 coats of anti- corrosive paint on surface of member, preparation of shop drawing etc all
	complete .
28	Structural Steel for chequered plates Supply & fixing structural steel for Plates (plain or chequered)
	channels, square cut or notched (ordinary and counter sunk) forming holes, without any
	attachmentetc including application of 2 coats of anti- corrosive paint on surface of member,
	preparation of shop drawing etc all complete .
29	Roofing & Side Cladding Supply& fixing Pre- painted galvatume aluminum zinc coating GI based
	corrugated steel sheet 0.50mm thick of an colour having tensile strength of 550 Mpa as in roof
	covering/cladding to wall, fixed with self tapping screws as specified
30	Plastering CM 1:6 on Fair Surface 10mm Thick(Internal) M & L Plaster 10mm thick with CM 1:6 on
	brickwork or concrete surfaces on walls in even without using extra cement .
31	Plastering CM 1:4 on fair Surface15mm Thick(External) M & L Rendering 15mm thick with CM 1:4 in
	2 layers (5MM mm thick)over 10mm thick cement plaster in 1:4 on fair faces of brickwork or

	concrete surfaces all as specified. To be finished even and smooth (without using extra lime or
	cement).
32	Paint External surfaces Material &Labour for applying Two or more coatsof 100% Premium acrylic emulsion paint having VOC less than 50 gm/litre and UV resistance asper IS 15489:2004, Alkali & fungal resistance, dirt resistance exterior paint of required shade (Company Depot T nted) with silicon additives@ 1.43 litre/ 10 sqm over and including primingcoat of exterior primer applied @ 0.90 litre/ 10 sqm over new surfaces
33	preparing the new wall surface and applying two coats of putty for internal walls and applying two coats of plastic emulsion paint over acoat of primer to the wall surfaces etc complete
34	M60 CONCRETE Concrete pavement: Construction of un reinforced dowel jointe, plain concrete pavement over prepared subbase with OPCcement design M60 @ minimum 500 kg/ cum with 25 mm & downsize grded granite metal coarse aggrgate @ 0.67cum & fine aggregae @0.44 cum with superplastizer at 3 lts confirming to IS:383, mixed in batching & mixing plant as per approved mix design, transported to site, laid with fixed form, spread & compacted in continious operation including provision for contraction, expansion, construction & longitudunal joints, joint filler, seperation membrane, sealant primenr, joint sealant, debonding strip, dowel bars, tie rod, admixuures as approved curing compound, finishing to lines & grades as per drawing, complete as per MORTH specification NO 602, with vaccum dewatering with vaccum pump & suction mat & compaction with skin floater clubbed with floating disc including cost of generator, HOM machinerymscreed vibratory, power floater, blade with all lead & lift (including formwork)
35	DLC -Providing and laying Dry Lean Concrete base including providing coarse and fine aggregate to the specified gradation using minimum cement content 150 kg/cum of concrete with OPC 43 grade cement, mixing of concrete as per approved design mix using mechanised batch mix plant of appropriate capacity, transporting and laying with self propelled paver with electronic sensor device and compacting with vibratory roller of minimum 80- 100 KN static weight to give desired compacted density and average compressive strength of 10 MPa at 7 days and curing with liquid curing compound and sprinkling water and covering with moist hesian cloth of water for 7 days including providing construction joints, including all material, labour, machinery with all leads and lifts etc. complete as specified and as directed by the Engineer. B) Laying by paver with electronic sensor device.
36	"WBM- Providing & laying, spreading & compacting graded crushed stone aggregate to wet mix macadam to the satisfaction of Engineer including premixing the material with water to OMC in mechanical mix (pug mill) carriage of mix material by tipper to site, laying in uniform layer of 75 mm to 100 mm (compacted thickness each) with sensor paver finisher on prepared subbase & compacting with vibratory roller (10 tonne) to achieve desired density including lighting, guarding barricading & maintenance of diversion etc. as directed by the Engineer, (Rebate for not using sensor paver should be taken, (metal gradation from 53 mm to 75 micron as per MORTH Specifications ."
37	GSB- Providing & laying, spreading & compacting specified crushed stone in granular subbase course including premixing the material in mechanical mixer (pugmill or approved type), spreading of mixed material in uniform layer of 100 mm to 75mm (compacted thickness each) with motor grader or paver on prepared murum surface & compacting with 10 tonne vibratory roller to achieve desired density including all material ,labour ,machinery ,lighingbarricating to all lifts & lead maintenance of diversion etc. complete (metal gradation from 75 mm to 75 mm micron as per MORTH Specifications
38	Moorum -"P/L earth work in embankments &/ filling low-lying ground in layers not exceeding 25 cm. in loose thickness & compacting each layer with a 10/12 tonnes power roller including levelling watering etc. complete in conformity with the required lines, grades & cross sections & also cleaning & grubbing the ground etc. complete as per prevailing MORTH specifications for Roadworks Seperation Membrane of Minimum thickness of 150 micron polythene sheet etc complete
40)"UPVC WINDOWS -Providing and fixing factory made uPVG white colour Sliding window Three track made of extruded profiles with wall thickness of 2.3mm (+ -0.2mm). Window
•	· · · · · · · · · · · · · · · · · · ·

	profile with hollow section with multi chamber. Frame (88mm x 52mm), sliding sash (42mm x 67mm). Sliding mesh Sash (42mm x 57mm) Sliding interlock (One vertical length in each shutters) (45.5mm x 28mm), Glazing bead (24.5mm x 16mm) will be miterd cut and fusion welded at all corners, including drilling of holes for fixing hardware and drainage of water etc., making arrangement for fixing of hardware. EPDM gasket, 1.2+ -0.2mm thick galvanised steel Frame (30mm x 18mm) 2 nos, sliding sash (30mm x18mm), sliding mesh sash (26mm x 10mm) profile to be inserted in required profile, frame will be fixed to the wall with 8mm x 100mm long fasteners, Hardware [Touch Lock of zinc alloyed (white powder coated), steel roller system. Stainless steel wire cloth 0.36mm nominal dia of wire and average width of aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Net Opening will be measured lor payment purpose.)"
41	WINDOW GLASS 5.5 mm Sheet glass ordinary quality and glazong in oil putty in square exceeding 0.5 sq m.
42	"WINDOW SILL-M& L Marble work 18 to 20mm thick (table rubbed and polished) in steps, windowcills, cooking platforms and like incement mortar (1:4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type. Green Marble"
43	Rain water pipes PVC (SWR) pipes single socketed in any length with rubber ring joints fixed to walls
44	GI Gutter, ridge supplying & fixing Plain, galvanised, steel sheeting 2.5mm, in ridges,hips, valley gutters, drip and straight flashings (length and girth as fixed)
45	Rolling Shutters Electrically Operated Providing and fixing rolling shutters made out of 18 gauge steel sheets for curtains, including bottom rail, 100 mm wide guide channels for opening width up to 4.0m and 150mm wide guide channel for opening width more than 4.0m, lock plates, locking arrangement on both sides, fixing bolts, pulling handles, MS hood of appropriate size, rolling arrangement, standard make springs in brackets etc. including fixing of frames with rag bolts, grouting of parts in position etc. and also including two coats of red oxide zinc chromate primer and two coats of synthetic enamel paint of approved colour, shade and brand etc. complete as per IS:6248 / specifications and as directed by Engineer In Charge. The shutter should withstand wind pressure of 47meters per second, including Electrically operated (motorised) with switch & cable 460RCC Hume Pipe Providing & laying 450 MM Reinforced concrete pipes, class NP3, laid and jointed complete with collars etc all complete.
46	ORCC Hume Pipe Providing & laying 450 MM Reinforced concrete pipes, class NP3, laid and jointed complete with collars etc all complete.
47	GI PIPE FOR COMPRESSED AIR- Providing &lying 20 mm, medium grade galvanised iron pipes, with all fitting and fixed complete to walls and ceilings or laid in floors.
48	"Providing &lying 50 mm, medium grade' galvanised iron pipes, with all fitting and fixed complete to walls and ceilings or laid in floors".
49	Annexure building + sump Excavation upto 1.5mExcavation over areas not exceeding 1.5m deep and getting out soft/ loose soil complete all as specified and as directed.
50	Excavating in trenches, in loose soil/hard soil//hard rock and removal os water by mechanical means, n exc 1.5 m wide and n exc 1.5 m in depth; for foundation, etc. or for shafts, wells, cesspits, manholes, pier holes, etc. n exc 10 sq m on plan and n exc 1.5 m in depth and getting out etc, complete.
51	Excavation in trenches upto 1.5mExcavation in trenches upto 1.5m - 3M -Excavating in trenches, in loose soil/hard soil//hard rock and removal os water by mechanical means not exc 1.5 m wide and not exc 1.5 m in depth; for foundation, etc. or for shafts, wells, cesspits, manholes, pier holes, etc. not exc 10 sq m on plan and n exc 1.5 m in depth and getting out for each additional 1.5m or part thereof in depth beyond the first 1.5 m
52	Excavation in trenches upto 3M - 4.5MExcavating in trenches, in loose soil/hard soil//hard rock and removal os water by mechanical means n exc 1.5 m wide and n exc 1.5 m in depth; for foundation,

	etc. or for shafts, wells, cesspits, manholes, pier holes, etc. n exc 10 sq m on plan and n exc 1.5 m in
	depth and getting out for each additional 1.5m or part thereof in depth beyond the first 1.5 m.
53	Returning, filling in, including spreading, levelling, watering and well ramming in layers not exc 25
	cm.
54	Anti Termite Treament for foundation -M&L for Treating the bottom and sides of excavation at the
	rate of 5 litres of emulsion per square metre of surface area
55	Anti TermiteTreament for Filled Earth-M&L for Treating the top surface of filled earth at the rate of 5
	litres of emulsion per square metre of surface
56	"Hardcore for Flooring M & L Hardcore of gauge n exc. 63 mm, deposited, spread and levelled in
	layers n exc. 15cm thick, watered and rammed to a true surface below plinth protection "
57	P.C.C (1:3:6)M&L for Cement Concrete in Foundation, Filling and mass concrete 1:3:6 type C2 using
	40mm Graded aggregate
58	R.C.C. M 30 Concrete for foundation -M & L for RCC M-30design mix as in foundation footings,
	plinth beams, foundation beams, bases of col, basements slabs, under-reamed piles & mass
	concrete using 20mm graded stone aggregate.
59	R.C.C. M30 Concrete for Columns UPTO G.LM& L for RCC 30 design mix as in Columns using 20mm
	graded stone aggregate.
60	Form Work for foundation -Formwork to sides of concrete foundations, footings, bases of columns,
	raft and raft beams, sides and soffits (if any) of foundation and plinth beams; and similar work;
	vertical or to batter(Fair Finished)
61	Form Work For R.C.C. COLUMNS-Formwork to sides of pillars, posts, struts, Piers, columns and
62	stanchions
62	Form Work For R.C.C. Beams -Use & waste Formwork to sides and soffits of floor or roof beams,
	beam haunchings, girders, bressummers, lintels, cantilevers, shelves including supports, overhangs,
	etc. also splays between floors and beams, etc. for flat surfaces.
63	REINFORCEMENT STEEL 10mm & over dia S & F TMT steel bars 10mm dia and over cut to length bent
	to shape required, including cranking bending spirally for hooping for columns, hooking ends and
6.1	binding with and including MS wire (annealed) not less than 0.9mm dia or securing with clips
64	REINFORCEMENT STEEL 5-10mm dia -S & F TMT steel bars 5 to 10mm dia in stirrups Spacers & Binders
65	R.C.C. M30 Concrete for Columns above G.L M & L for RCC M-30 design mix as in Columns using
03	20mm graded stone aggregate.
66	R.C.C. M30 Concrete for beams, lintels, brackets-M & L for RCC M-30 design mix as in Lintels Beams,
00	Cantilevers, bressummers, lintels over 1.50m Span using 20mm Graded aggregate
67	R.C.C. M30 Concrete for Slab -R.C.C. M30 Concrete for Slab -M & L for RCC M-30 design mix as in
07	Slabs supported on walls, beams and columns in floors, roofs, landings, balconies, canopies, deck
	slabs and in shelves and the like Roof Slabs.
68	Brickwork 230 mm thickM& L Brickwork using A class bricks , straight /curved on plan in cement
00	mortar 1:6.
69	Brickwork 115 mm thick M& L Brickwork Brickwork using A class bricks , straight /curved on plan in
03	half brick thick wall in cement mortar 1:6
70	REINFORCEMENT STEEL 10mm & over diaS& F TMT steel bars 10mm dia and over cut to length bent
, 0	to shape required, including cranking bending spirally for hooping for columns, hooking ends and
	binding with and including MS wire (annealed) not less than 0.9mm dia or securing with clips but in
	Stirrups.
71	REINFORCEMENT STEEL 5-10mm diaS& F TMT steel bars 5 to 10mm dia in stirrups Spacers & Binders
	and the second and th
72	Form Work For R.C.C. COLUMNS -Formwork to sides of pillars, posts, struts, Piers, columns and
,	stanchions
73	"Form Work For R.C.C. Beams Use & waste Formwork to sides and soffits of floor or roof beams,
	beam haunchings, girders, bressummers, lintels, cantilevers, shelves including supports, overhangs,
	etc. also splays between floors and beams, etc. for flat surfaces."

74	Form Work For R.C.C. Slabs Use & waste Formwork to soffits of suspended slabs such as roof slabs,
	floor slabs, landings and similar work; not exceeding 200mm thick (Horizontal or sloping)
75	Plastering CM 1:6 on Fair Surface 15mm Thick(Internal) M & L Plaster 15mm thick with CM 1:6 on brickwork or concrete surfaces on walls in even without using extra cement.
76	Plastering CM 1:4 on fair Surface20 mm Thick(External) -M & L Rendering 20mm thick with CM 1:4 in 2 layers (5MM mm thick)over 10mm thick cement plaster in 1:4 on fair faces of brickwork or concrete surfaces all as specified. To be finished even and smooth (without using extra lime or cement).
77	Ceiling PLASTER -M &L 10MM plaster in CM(1:3) on ceiling To be finished even and smooth
	(without using extra lime or cement).
78	Paint External surfaces Material & Labour for applying Two or more coats of 100% Premium acrylic emulsion paint having VOC less than 50 gm/litre and UV resistance as per IS 15489:2004, Alkali & fungal resistance, dirt resistance exterior paint of required shade(Company Depot T nted) with silicon additives@ 1.43 litre/ 10 sqm over and including primingc oat of exterior primer applied @ 0.90 litre/ 10 sqm over new surfaces.
79	Paint Internal surfaces preparing the new wall surface and applying two coats of putty for internal walls and applying two coats of plastic emulsion paint over acoat of primer to the wall surfaces etc complete
80	Concrete flooring M & L For 25mm Thick PCC type B-0, 1:2:4 (12.5mm graded aggregate)
81	Bedding Layer for flooring-M & L For Bedding layer of mortar CM(1:4) 15 mm thick for laying floor finishes
82	"Vitrified Tile FlooringM& L for Virified Ceramic tiles 10 mm thick (square/ rectangular) polished, area of each tiles not exceeding 0.36 sqm, in floors etc. set and jointed in neat cement slurry and pointed in white or coloured cement to match"
83	Non skid ceramic tile- M & L Non - skid Ceramic tiles 7 to 8 mm thick (square/ rectangular) area of each tile exceeding 0.18 sqm but not exceeding 0.38 sqm, in neat cement slurry and floors etc. set and jointed in floors etc. set and jointed in pointed in white or coloured cement to match with shade of tile all as specified and directed. Laying 15mm thick C.M on screed bed (1:4) and jointed in neat cement slurry and pointed in white/ coloured cement.
84	Vitrified Tile Skirting -M & L Virified Ceramic tiles 10 mm thick (square/ rectangular) polished, area of each tiles not exceeding 0.36 sqm, in floors etc. set and jointed in neat cement slurry and pointed in white or coloured cement to match FOR SKIRTING.
85	"Kota Stone Skirting -M &L Kota stone slab 20-25mm thick in riser of steps, skirting, dado and pillar laid over cement screed and jointed properly.
86	Dado-M & L Non Skid ceramic tiles in vertical surface 350x 250x 7 mm/ 450X 350X 7mm thick set and jointed in neat cement slurry and pointed in white or colour cement to match with 12 mm thk backing coat in C:M 1:3.
87	Wooden Doors-S &F of 1st Class Hard wood for door Frames (Chowkats) from Plain, solid, straight chowkats and frames, wrought, framed rebated on the solid, rounded or chamfered, put together with glue pinned at joints, supplied and fixed.
88	Factory Made Wooden Shutters(35mm thick)Plain framed, panelled shutter (two panel) with lock rail and panel of 9 mm B.W.P. commercial ply or 12 mm veneered particle board with commercial veneering on both faces. The size of rail and stile as per IS: 1003 (Part I), kiln seasoned and chemically pressure treated.
89	"PVC DOOR - S & F Factory made solid panel PVC door shutter 30 mm thick (style) consisting of frame made out of M.S. tubes for top & bottom rails. M.S. frame shall be covered with heat moulded plain colour PVC 'C' channel having a PVC sheet strip of 20mm width stuck inside with solvent cement for stiles and plain colour PVC sheets for top rail, lock rail & bottom rail on either side & as gap insert for top rail & bottom rail; Panelling of plain colour PVC sheet to be fitted in the M.S. frame welded / sealed to the stiles & rails with suitable PVC sheet beading, and joined together with solvent cement.

90	"Providing and fixing factory made uPVG white colour Sliding window Three track made of extruded profiles with wall thickness of 2.3mm (+ -0.2mm). Window profile with hollow section with multi chamber. Frame (88mm x 52mm), sliding sash (42mm x 67mm). Sliding mesh Sash (42mm x 57mm) Sliding interlock (One vertical length in each shutters) (45.5mm x 28mm), Glazing bead (24.5mm x 16mm) will be miterd cut and fusion welded at all corners, including drilling of holes for fixing hardware and drainage of water etc., making arrangement for fixing of hardware. EPDM gasket, 1.2+ -0.2mm thick galvanised steel Frame (30mm x 18mm) 2 nos, sliding sash (30mm x 18mm), sliding mesh sash (26mm x 10mm) profile to be inserted in required profile, frame will be fixed to the wall with 8mm x 100mm long fasteners, Hardware [Touch Lock of zinc alloyed (white powder coated), steel roller system. Stainless steel wire cloth 0.36mm nominal dia of wire and average width of aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Net Opening will be measured lor payment purpose.)"
91	"Window Sills -M& L Marble work 18 to 20mm thick (table rubbed and polished) in steps, windowcills,cooking platforms and like incement mortar (1:4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)"
92	MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size
93	Aluminium Tower BoltsS& F 200mm long anodised barrel tower bolts of extruded section and fixed.
94	AluminiumHandelsS& F extruded aluminium alloy handels , fabricated type anodised, 150mm long.
95	Window Glass 5.5 mm Sheet glass ordinary quality and glazong in oil putty in square exceeding 0.5
	sq m.
96	Door lock supplying & fixing brass Mortice lock vertical type size 100mm 4 levers etc complete
97	Providing water proofing treatment by preparing the surfaces by scraping and clearing of all foreign matter by wire brushing and applying of premium quality acrylic waterproofing primer @250 grams per square meter after diluting as per the manufacturer's recommendation. Allow 3 to 4 hours for the primer to dry completely. Providing& applying of primium quality acrylic water proofing coating 350 grams per square meter using roller/brush after diluting as per the manufacturer's recommendation and simultaneously over this install 80 GSM thermally stabilized polyster reinforcement with 100mmm side laps and 150mm end laps and apply additional coat of premium quality acrylic water proofing coating @ 350 grams per square meter using roller/brush. Ensure there are no wrinkless or folds on the reinforcement memberane and allow it to dry for 24 hours. After 24 hours, apply the final coat of premium quality acrylic water proofing system @ 350 grams per square meter using using roller/brush as per the manufacturer's recomendations.
98	M & L for Screed bed or bedding layer of mortar CM(1:4) 15 mm thick Over Wall
99	PVC (SWR) Pipes Supply &Fxing PVC (SWR) pipes(100mm Dia) in Single socketed in any length with rubber rings laid in trenches & floors with all necessary fittings i.e., elbows, collars, bends etc.
100	PVC (SWR) Pipes Supply &Fxing PVC (SWR) pipes (70mm Dia) in Single socketed in any length with rubber rings laid in trenches & floors with all necessary fittings i.e., elbows, collars, bends etc.
101	GI PIPES Supply &Fxing Tubes, 'medium grade' galvanised, with all fitting and fixed completeto walls and ceilings or laid in floors 20mm dia
102	GI Pipes Supply &Fxing Tubes, 'medium grade' galvanised, with all fitting and fixed completeto walls
102	and ceilings or laid in floors 25mm dia
103	GI Pipes Supply &Fxing Tubes, 'medium grade' galvanised, with all fitting and fixed completeto walls and ceilings or laid in floors 32mm dia
104	GI Pipes Supply &Fxing Tubes, 'medium grade' galvanised, with all fitting and fixed completeto walls and ceilings or laid in floors 40mm dia

105	GI Pipes Supply &Fxing Tubes, 'medium grade' galvanised, with all fitting and fixed completeto walls
100	and ceilings or laid in floors 50mm dia
106	Rain water pipesSupply&Fxing PVC (SWR) pipes 110mm dia single socketed in any length with rubber ring joints fixed to walls
107	Gate Valve - Supply &Fxing Gun-metal, globe or gate valves, with iron wheel head, screwed both ends for iron pipe and fixed 20mm dia
108	"Supply &Fxing Stop valves, cast copper alloy, Screwed down, high pressure, with crutch or butterfly handle, screwed both ends for iron pipe or for unions and fixed fancy
	type, chromium plated with long shank and cup (concealed type) 15mm"
109	UrinalSupply&Fxing Vitreous China bowl urinal flat back, size of 465 x 355 x 265 mm white
103	(minimum), with grating and union for discharge pipe (excluding flushing cistern, flush pipe and
	waste pipe)
110	Flushing Cisteren Supply &Fxing PVCvalveless, syphonic action type, flushing cistern, low level,
110	white, with inlet, ball valve, float and handle including brackets(10liters)
111	Water Closelet Supply &Fxing Vitreous China squatting pan of pattern "long pan", size 580 mm
	white with 'P' or 'S" trap, front or back inlet and foot rests, any pattern (excluding flushing cistern
	and flush pipe)
112	Wash Basin Supply&Fxing Vitreous Cliina wash basin, angle back, size 600x480mm white, excluding
	taps, waste, chain and plug and orcelain stopper but including brackets
113	Nahani Trap Supply &Fxing P.V.C(S.W.R) gully trap125/110mm, setting and jointing with solvent
	cement.
114	Bib Tap -Supply &Fxing Bib taps 15mm dia, cast copper alloy with crutch or butterfly handle,
	screwed down, screwed for iron pipe or for brass ferrule and fixed(chromium plated)
115	Pillar Tap -Supply &Fxing Fancy Type Pillar taps, cast copper alloy, with capstan heads, chromium
	plated, screwed down high pressure, with or without lettered 'Hot' or 'Cold' with long screwed
	shanks and fly-nuts,screwed for iron pipe and fixed
116	Mirror - Supply &Fxing 600mmx450mm bevelled edge mirror of selected quality glass, mounted on 6mm thick AC building board or commercial plywood and fixed to wooden plugs with chromium.
117	"Supply &Fxing Towel Rail 600mm long of PTMT fixed with and including Chromium plated brass
	screws and wooden/plastic cleats. (Minimum weight 190gms)"
118	Supply &Fxing Supply& Fixing Liquid soap container of PTMT fixed with and including Chromium
	plated brass screws and wooden/plastic cleats.(Minimum weight 105gms)
119	Supply & fixing Rotational moulded polyethylene water storage tanks 500 L capacity(cylindrical
	vertical with closed top) hoisted and fixed in position
120	Supply & fixing structural steel for Plates (plain or chequered) channels, square cut or notched
	(ordinary and counter sunk) forming holes, without any attachmentetc including application of 2
	coats of anti- corrosive paint on surface of member , preparation of shop drawing etc all complete
121	Providing and fixing rolling shutters made out of 18 gauge steel sheets for curtains, including bottom
121	rail, 100 mm wide guide channels for opening width up to 4.0m and 150mm wide guide channel for
	opening width more than 4.0m, lock plates, locking arrangement on both sides, fixing bolts, pulling
	handles, MS hood of appropriate size, rolling arrangement, standard make springs in brackets etc.
	including fixing of frames with rag bolts, grouting of parts in position etc. and also including two
	coats of red oxide zinc chromate primer and two coats of synthetic enamel paint of approved
	colour, shade and brand etc. complete as per IS:6248 / specifications and as directed by Engineer In
	Charge. The shutter should withstand wind pressure of 47meters per second, including Electrically
	operated (motorised) with switch & cable.
122	For HARD STANDING Excavation upto 1.5m -Excavation over areas not exceeding 1.5m deep and
	getting out soft/ loose soil complete all as specified and as directed.
123	Excavation in trenches upto 1.5m Excavating in trenches, n exc 1.5 m wide and n exc 1.5 m in depth;
	for foundation, etc. or for shafts, wells, cesspits, manholes, pier holes, etc. n exc 10 sq m on plan and
	n exc 1.5 m in depth and getting out.

124	"Hardcore for Flooring M & L Hardcore of gauge n exc. 63 mm, deposited, spread and levelled in
	layers n exc. 15cm thick, watered andrammed to a true surface below plinth protection "
125	Bed P.C.C (1:4:8) M&L for Cement Concrete in Foundation, Filling and mass concrete 1:4:8 type C2
	using 40mm Graded aggregate
126	Hardstanding P.C.C (1:2:4) M&L for Cement Concrete in Foundation, Filling and mass concrete 1:2:4
	type C2 using 40mm Graded aggregate
127	R.C.C. M 30 Concrete for drain M & L for RCC M-30design mix as in foundation footings, plinth
	beams, foundation beams, bases of col, basements slabs, under-reamed piles & mass concrete using
	20mm graded stone aggregate.
128	REINFORCEMENT STEEL 10mm & over diaS& F TMT steel bars 10mm dia and over cut to length bent
	to shape required, including cranking bending spirally for hooping for columns, hooking ends and
	binding with and including MS wire (annealed) not less than 0.9mm dia or securing with clips.

NOTE; FIRM TO DEPLOY SUFFICIENT QUALIFIED /EXPERIENCED CIVIL AND ELECTRICAL ENGINEERS EACH FOR MONITORING/EXECUTION AND STUDY OF DRAWINGS /WORK PROGRESS ETC., FOR SMOOTH EXECUTION OF THE PROJECT.

Division KGF /Tender Document Dt:28-06-2024 3. Scope of Work **Construction for Painting Hangar - Electricals works** Note: (a) Contractor has to study and understand complete scope of Work and Terms & conditions before quoting the tender. (b) Subject contract comprises of full and satisfactory completion of the works as per the Bill of Quantities, Terms and conditions. (c) Following scope of work is included to be executed all as per instructions / directions of Contract in-charge, Civil Maintenance, EM Division, BEML Ltd., KGF. 1 HT BREAKER PANEL- Supply, installation, testing & Commissioning of 11KV, Totally enclosed single bus bar, floor mounting metal clad, Indoor type extensible type, flush mounted, Horizontal withdrawn, Horizontal isolation, Vacuum Circuit Breaker panel HT 11 KV, 3 phase, 50 cycles of rating up to 630 Amp all as per the detailed specification attached. Make: SCHNEIDER / ABB / SIEMENS / LT. 2 Supply, installation & commissioning of 11/0.433 kV, Step-down Transformer complete, outdoor/indoor, copper wound capacity 1600 KVA. Make: VIJAY VIDHYUTH / BESCOM APPROVED. As per Latest IS Standard & all as per the detailed specification attached. Supply and Laying of XLPE insulated, screen thermoplastic, tape inner sheathed, galvanized steel strip, armoured heavy duty electric power cable with stranded aluminum conductor, & over all PVC ST2 Sheathed 11kV(E) grade, cross-sectional area 3C X 240 sq. mm HT CABLE confirming to IS-7098 (Part-2)-2011 or Latest IS Standard. Make: POLYCAB / V-GAURD./GLOSTER/UNIVERSAL/RPG Supplying and laying of XLPE insulated, armoured heavy duty electric cable with aluminum conductor, 1100 volts grade, cross-sectional area 3.5C X 400 sq. mm LT CABLE confirming to Latest IS Standard. Make: POLYCAB / V-GAURD/GLOSTER/HAVELLS. Supplying and laying of XLPE insulated, armoured heavy duty electric cable with aluminum conductor, 1100 volts grade, cross-sectional area 3.5C X 240 sq. mm LT CABLE confirming to Latest IS Standard. Make: POLYCAB / V-GAURD/GLOSTER/HAVELLS. 6 Suppying providing Cable jointing kit for 1100V grade cable for indoor termination heat shrink type joint complete with jointing material and accessories suitable for 3.5 core XLPE armoured aluminum conductor cable of size 400 Sqmm. Make: RAYCHEM RPG. Supplying & Providing Cable jointing kit for 11 KV grade cable for indoor termination heat shrink type joint complete with jointing material and accessories suitable for 3 core XLPE armoured aluminum conductor cable of size 240 - 400 Sqmm. Make: RAYCHEM RPG 8 PAINTING HANGER LT KIOSK: (1 NO) Supply, installation, testing & commissioning of ACB, 2500A, 4P, 415V, 50kA, MP based LSIG Releases, MDO, Closing Coil, Opening Coil, Shunt Coil Etc. Make: SCHNEIDER / ABB / SIEMENS / L&T. MCB 6A,4P,10kA C Curve Indicating Lamp Red 230V AC Aux Supply Indicating Lamp Yellow 230V AC Aux Supply Indicating Lamp Blue 230V AC Aux Supply Indicating Lamp Red 230V AC Aux Supply Indicating Lamp Green 230V AC Aux Supply Indicating Lamp Amber 230V AC Aux Supply MCB, 6A, 2P, 10kA

Ref: EMCP/1004471965- Civil / 1004473027-Electricals / Construction for Painting Hangar EM

MFM Meter With Rs.485 Port-METSEEM6436HCL10RS

MPCB-MS132-6.3T

L.V Moulded Case CT Ring Type Single Phase 50 Hz Ratio 2500/5A Class 0.5 @ Burden 5VA ILV 0.72/3 kV.

Panel Size: 2000x1000x1000 (HxWxD)

Bus Bars -TP+N AL-E Grade , C/D@0.8Amps /Sq mm

Power & Control Wires U-8 Cable, 6Sq mm

FRP, Sleeves, Ferrules, Spiral, Cable Tie, Tie Base, Trough, Din, Lugs, Hardware's etc.

CTTBS, ConTrol Tbs, Aux Tbs etc

Documents, Assembly, Testing etc. Panel confirming to Latest IS standards

(Refer SLD and Make: Refer Make List for items).

9 PAINTING HANGER MAIN LT PANEL (1 No.)

Supply, installation, testing & commissioning of ACB, EDO, 2500A,4P, 50kA, Microprocessor Based, OL, SC, EF, Releases, With Microprocessor Fail Alarm, Indicators, ST/UV, ST Coil with ON, OFF, TRIP Contacts 2 no. Make: SCHNEIDER / ABB / SIEMENS / LT.(1 No.)

MCB 6A,4P,10kA C Curve

Indicating Lamp Red 230V AC Aux Supply

Indicating Lamp Yellow 230V AC Aux Supply

Indicating Lamp Blue 230V AC Aux Supply

Indicating Lamp Red 230V AC Aux Supply

Indicating Lamp Green 230V AC Aux Supply

Indicating Lamp Amber 230V AC Aux Supply

MCB, 6A, 2P,10kA

MFM Meter With Rs.485 Port-METSEEM6436HCL10RS

MCB 63A,4P,10kA C Curve

SPD

MPCB-MS132-6.3T

L.V Moulded Case CT Ring Type Single Phase 50 Hz Ratio 2500/5A Class 0.5 @ Burden 5VA ILV 0.72/3 kV

Auto/Manual Switch

Voltmeter 92X92 Analog/Digital

Ammeter 92X92 Analog/Digital

Earth Leakage relay, panel Mounting ,300mA to 30A, Class 2FS along With Round

CBCT:250mmX100mm

Annunciation -8 Programmable Windows

Output-A

SFU 630 A, front handle,36kA, (6 Nos) with Ammeter & Voltmeter

SFU 400 A, front handle,36kA (4 Nos)with Ammeter & Voltmeter

SFU 250 A, front handle,36kA, (4 Nos)with Ammeter & Voltmeter

SFU 125 A, front handle,36kA,(4 Nos)with Ammeter & Voltmeter

Panel Size: 2000x7000x1000 (HxWxD)

Bus Bars -TP+N AL-E Grade, C/D@0.8Amps /Sq mm

Power & Control Wires U-8 Cable , 6Sq mm

FRP, Sleeves, Ferrules, Spiral, Cable Tie, Tie Base, Trough, Din, Lugs, Hardware's etc.

CTTBS, Control TBS, Aux TBS etc

Documents , Assembly , Testing etc. Panel confirming to Latest IS standards

(Refer SLD and Make: Refer Make List for items).

10 PAINTING HANGER SDB-PANEL 1 (1 No.)

Supply, installation, testing & commissioning of MCCB,250A,4P,36kA,TMD,Xt4

RHE XT2-XT4 F/P STANDARD (250mm) Panel confirming to Latest IS standards

KIT ES XT1-XT4 AUX-C 2Q+1SY 250VAC/DC XT1..XT4 F/P MCB,6A,SP,10kA Indicating Lamp Red 230V AC Aux Supply Indicating Lamp Yellow 230V AC Aux Supply Indicating Lamp Blue 230V AC Aux Supply Indicating Lamp Red 230V AC Aux Supply Indicating Lamp Green 230V AC Aux Supply Indicating Lamp Amber 230V AC Aux Supply MCB, 6A, 2P, 10kA MFM Meter With RS 485 Port-METSEEM6436HCL10RS CT, 250A/5A,5VA Earth Leakage relay, panel Mounting, 300mA to 30A, Class 2FS along With Round CBCT:250mmX100mm Shunt opening release - SOR,220...240 V ac-220...250 V DC F/P MCCB, 63A,25KA,FP,XT1,TMD KIT ES XT1 8pcs, RHE XT1-XT3 F/P STANDARD (250mm), MCCB, 40A,25KA,FP,XT1,TMD KIT ES XT1 8pcs, RHE XT1-XT3 F/P STANDARD (250mm), MCB, 20A, SP, 10kA, C Curved 10Sq mm TB (Refer SLD and Make List for other items). 11 PAINTING HANGER SDB-PANEL 2 (1 No.) Supply, installation, testing & commissioning of MCCB, 250A, 4P, 36kA, TMD, Xt4 RHE XT2-XT4 F/P STANDARD (250mm) Panel confirming to Latest IS standards KIT ES XT1-XT4 AUX-C 2Q+1SY 250VAC/DC XT1..XT4 F/P MCB, 6A, SP, 10kA Indicating Lamp Red 230V AC Aux Supply Indicating Lamp Yellow 230V AC Aux Supply Indicating Lamp Blue 230V AC Aux Supply Indicating Lamp Red 230V AC Aux Supply Indicating Lamp Green 230V AC Aux Supply Indicating Lamp Amber 230V AC Aux Supply MCB, 6A, 2P, 10kA MFM Meter With Rs.485 Port-METSEEM6436HCL10RS CT, 250A/5A,5VA Earth Leakage relay, panel Mounting, 300mA to 30A, Class 2FS along With Round CBCT:250mmX100mm Shunt opening release - SOR,220...240 V ac-220...250 V DC F/P MCCB, 63A, 25KA, FP, XT1, TMD KIT ES XT1 8pcs, RHE XT1-XT3 F/P STANDARD (250mm), MCCB, 40A, 25KA, FP, XT1, TMD KIT ES XT1 8pcs, RHE XT1-XT3 F/P STANDARD (250mm), MCB, 20A, SP, 10kA, C Curved 10Sq mm TB (Refer SLD and Make List for other items). 12 Supply, installation, testing & commissioning of Automatic Power Factor Correction (APFC) Panel for

3 Phase, 415 V & 50 Hz system of capacity with incoming MCCBs 480 KVAR. As per latest IS

 STANDARUS Make: DUCATI/L&T/EPCOS Supply, installation, testing & commissioning of ACB 4 Pole, 415 V, with Thermal Magnetic Release (Manual Draw out type) of capacity 630 Amps, with cubical and panel including all accessories. MAKE: ABB/L&T/Schneider Supply, installation, testing & commissioning of MCCB 3 Pole, 415 V, fixed type, 25 to 100 Amps with breaking capacity 16 KA. MAKE: LEGRAND/Schneider/ABB/L&T Supply installation & fixing of Danger notice plate of 1.6mm thick mild steel sheet, vitreous enameled white, with letters, figures and conventional skull and bones in signal red colour and fixed with MS. clamps, bolts and nuts of approved size, for LT, 20x15cm size. Supply installation commission of Danger notice plate of 1.6mm thick mild steel sheet, vitreous enameled white, with letters, figures and conventional skull and bones in signal red colour and fixed with MS. clamps, bolts and nuts of approved size, for HT, 25x20cm size. Supply installation commission of Lightning arresters expulsion type complete with all fittings, 30 kilo amp discharge capacity, distribution class. Synthetic Rubber insulated mats 2.5 mm thick for voltage upto 11 kv for electrical purpose as per IS 15652-2006, (superseding IS 5424) suitable for electricals hock safety of sizes 2 m x 1m. XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 4C 10 sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 4sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 4sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100		CTANDADD
Supply, installation, testing & commissioning of ACB 4 Pole, 415 V, with Thermal Magnetic Release (Manual Draw out type) of capacity 630 Amps, with cubical and panel including all accessories. MAKE: ABB/L&T/Schneider Supply, installation, testing & commissioning of MCCB 3 Pole, 415 V, fixed type, 25 to 100 Amps with breaking capacity 16 KA. MAKE: LEGRAND/Schneider/ABB/L&T 15 Supply installation & fixing of Danger notice plate of 1.6mm thick mild steel sheet, vitreous enameled white, with letters, figures and conventional skull and bones in signal red colour and fixed with M.S. clamps, bolts and nuts of approved size, for LT, 20x15cm size. 16 Supply installation commission of Danger notice plate of 1.6mm thick mild steel sheet, vitreous enameled white, with letters, figures and conventional skull and bones in signal red colour and fixed with M.S. clamps, bolts and nuts of approved size, for HT, 25x20cm size. 17 Supply installation commission of Lightning arresters expulsion type complete with all fittings, 30 kilo amp discharge capacity, distribution class. 18 Synthetic Rubber insulated mats 2.5 mm thick for voltage upto 11 kv for electrical purpose as per IS 15652-2006, (superseding IS 5424) suitable for electrical shock safety of sizes 2m x 1m. 19 XLPE insulated, armoured heavy duty electric cable with aluminum conductor, 1100 volts grade, cross-sectional area 4C 10 sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. 20 XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 2.5sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. 21 XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 2.5sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. 22 XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 2.5sq. mm Make: POLYCAB / KEI / V-GAURD / HAVELLS. 23 Cable jointing kit for 11 KV grade cable for indoor termination heat shr		STANDARDS Makes DUCATI (1.8 T /EDCOS
 (Manual Draw out type) of capacity 630 Amps, with cubical and panel including all accessories. MAKE: ABB/L&T/Schneider Supply, installation, testing & commissioning of MCCB 3 Pole, 415 V, fixed type, 25 to 100 Amps with breaking capacity 16 KA. MAKE: LEGRAND/Schneider/ABB/L&T Supply installation & fixing of Danger notice plate of 1.6mm thick mild steel sheet, vitreous enameled white, with letters, figures and conventional skull and bones in signal red colour and fixed with M.S. clamps, bolts and nuts of approved size, for LT, 20x15cm size. Supply installation commission of Danger notice plate of 1.6mm thick mild steel sheet, vitreous enameled white, with letters, figures and conventional skull and bones in signal red colour and fixed with M.S. clamps, bolts and nuts of approved size, for LT, 20x15cm size. Supply installation commission of Lightning arresters expulsion type complete with all fittings, 30 kilo amp discharge capacity, distribution class. Synthetic Rubber insulated mats 2.5 mm thick for voltage upto 11 kv for electrical purpose as per IS 15652-2006, (superseding IS 5424) suitable for electrical shock safety of sizes 2m x 1m. XLPE insulated, un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 4C 10 sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 4C 540, mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area and accessories suitable for 3 core XLPE armoured aluminum conductor cable of size 240 - 400 Sqmm. XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area and accessories suitable for 3 core XLPE armoured aluminum conductor cabl	12	·
MAKE: ABB/L&T/Schneider MAKE: LEGRAND/Schneider/ABB/L&T Supply, installation, testing & commissioning of MCCB 3 Pole, 415 V, fixed type, 25 to 100 Amps with breaking capacity 16 KA. MAKE: LEGRAND/Schneider/ABB/L&T Supply installation & fixing of Danger notice plate of 1.6mm thick mild steel sheet, vitreous enameled white, with letters, figures and conventional skull and bones in signal red colour and fixed with M.S. clamps, bolts and nuts of approved size, for LT, 20x15cm size. Supply installation commission of Danger notice plate of 1.6mm thick mild steel sheet, vitreous enameled white, with letters, figures and conventional skull and bones in signal red colour and fixed with M.S. clamps, bolts and nuts of approved size, for HT, 25x20cm size. Supply installation commission of Lightning arresters expulsion type complete with all fittings, 30 kilo amp discharge capacity, distribution class. Synthetic Rubber insulated mats 2.5 mm thick for voltage upto 11 kv for electrical purpose as per IS 15652-2006, (superseding IS 5424) suitable for electrical shock safety of sizes 2m x 1m. XIPE insulated, armoured heavy duty electric cable with aluminum conductor, 1100 volts grade, cross-sectional area 4C 10 sq. mm. Make: POLYCAB / KEI /V-GAURD / HAVELLS. XIPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 4sq. mm. Make: POLYCAB / KEI /V-GAURD / HAVELLS. XIPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 4sq. mm. Make: POLYCAB / KEI /V-GAURD / HAVELLS. XIPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 4sq. mm. Make: POLYCAB / KEI /V-GAURD / HAVELLS. XIPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 4sq. mm. Make: POLYCAB / KEI /V-GAURD / HAVELLS. XIPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cros	13	
 Supply, installation, testing & commissioning of MCCB 3 Pole, 415 V, fixed type, 25 to 100 Amps with breaking capacity 16 KA. MAKE: LEGRAND/Schneider/ABB/L&T Supply installation & fixing of Danger notice plate of 1.6mm thick mild steel sheet, vitreous enameled white, with letters, figures and conventional skull and bones in signal red colour and fixed with M.S. clamps, bolts and nuts of approved size, for LT, 20x15cm size. Supply installation commission of Danger notice plate of 1.6mm thick mild steel sheet, vitreous enameled white, with letters, figures and conventional skull and bones in signal red colour and fixed with M.S. clamps, bolts and nuts of approved size, for HT, 25x20cm size. Supply installation commission of Lightning arresters expulsion type complete with all fittings, 30 kilo amp discharge capacity, distribution class. Synthetic Rubber insulated mats 2.5 mm thick for voltage upto 11 kv for electrical purpose as per IS 15652-2006, (superseding IS 5424) suitable for electrical shock safety of sizes 2m x 1m. XLPE insulated, armoured heavy duty electric cable with all minum conductor, 1100 volts grade, cross-sectional area 4C 10 sq. mm. Make: POLYCAB / KEI /V-GAURD / HAVELLS. XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 4C 6sq. mm. Make: POLYCAB / KEI /V-GAURD / HAVELLS. XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 2.5sq. mm Make: POLYCAB / KEI /V-GAURD / HAVELLS. XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 2.5sq. mm Make: POLYCAB / KEI /V-GAURD / HAVELLS. XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 2.5sq. mm Make: POLYCAB / KEI /V-GAURD / HAVELLS. Supply a		
breaking capacity 16 KA. MAKE: LEGRAND/Schneider/ABB/L&T Supply installation & fixing of Danger notice plate of 1.6mm thick mild steel sheet, vitreous enameled white, with letters, figures and conventional skull and bones in signal red colour and fixed with M.S. clamps, bolts and nuts of approved size, for LT, 20x15cm size. Supply installation commission of Danger notice plate of 1.6mm thick mild steel sheet, vitreous enameled white, with letters, figures and conventional skull and bones in signal red colour and fixed with M.S. clamps, bolts and nuts of approved size, for HT, 25x20cm size. Synthetic Rubber insulated mats 2.5 mm thick for voltage upto 11 kv for electrical purpose as per IS 15652-2006, (superseding IS 5424) suitable for electrical shock safety of sizes 2 m x 1 m. XIPE insulated, armoured heavy duty electric cable with aluminum conductor, 1100 volts grade, cross-sectional area 4C 10 sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. XIPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 4C 6sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. XIPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 4sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. XIPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 2.5sq. mm Make: POLYCAB / KEI / V-GAURD / HAVELLS. XIPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 2.5sq. mm Make: POLYCAB / KEI / V-GAURD / HAVELLS. ZUPP insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 2.5sq. mm Make: POLYCAB / KEI / V-GAURD / HAVELLS. ZUPP insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 2.5sq. mm Make: POLYCAB / KEI / V-GAURD / HAVELLS. ZUPP yand fixing LED Bay light 200 watt 230 V AC indoor t	14	
MAKE: LEGRAND/Schneider/ABB/L&T Supply installation & fixing of Danger notice plate of 1.6mm thick mild steel sheet, vitreous enameled white, with letters, figures and conventional skull and bones in signal red colour and fixed with M.S. clamps, bolts and nuts of approved size, for LT, 20x15cm size. Supply installation commission of Danger notice plate of 1.6mm thick mild steel sheet, vitreous enameled white, with letters, figures and conventional skull and bones in signal red colour and fixed with M.S. clamps, bolts and nuts of approved size, for HT, 25x20cm size. Supply installation commission of Lightning arresters expulsion type complete with all fittings, 30 kilo amp discharge capacity, distribution class. Synthetic Rubber insulated mats 2.5 mm thick for voltage upto 11 kv for electrical purpose as per IS 15652-2006, (superseding IS 5424) suitable for electrical shock safety of sizes 2m x 1m. XIPE insulated, armoured heavy duty electric cable with aluminum conductor, 1100 volts grade, cross-sectional area 4C 10 sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. XIPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 4C 46 sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. XIPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 4sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. XIPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 2.5sq. mm Make: POLYCAB / KEI / V-GAURD / HAVELLS. ALPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 2.5sq. mm Make: POLYCAB / KEI / V-GAURD / HAVELLS. Cable jointing kit for 11 kV grade cable for indoor termination heat shrink type joint complete with jointing material and accessories suitable for 3 core XLPE armoured aluminum conductor cable of size 2d-0400 Sqmm. Supply and fixing LED Bay light 200 watt 230 V AC indoor t		
 Supply installation & fixing of Danger notice plate of 1.6mm thick mild steel sheet, vitreous enameled white, with letters, figures and conventional skull and bones in signal red colour and fixed with M.S. clamps, botts and nuts of approved size, for LT, 20x15cm size. Supply installation commission of Danger notice plate of 1.6mm thick mild steel sheet, vitreous enameled white, with letters, figures and conventional skull and bones in signal red colour and fixed with M.S. clamps, botts and nuts of approved size, for HT, 25x20cm size. Supply installation commission of Lightning arresters expulsion type complete with all fittings, 30 kilo amp discharge capacity, distribution class. Synthetic Rubber insulated mats 2.5 mm thick for voltage upto 11 kv for electrical purpose as per IS 15652-2006, (superseding IS 5424) suitable for electrical shock safety of sizes 2m x 1m. XLPE insulated, armoured heavy duty electric cable with aluminum conductor, 1100 volts grade, cross-sectional area 4C 10 sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 4G 6sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 4sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 2.5sq. mm Make: POLYCAB / KEI / V-GAURD / HAVELLS. Cable jointing kit for 11 KV grade cable for indoor termination heat shrink type joint complete with jointing material and accessories suitable for 3 core XLPE armoured aluminum conductor cable of size 240 - 400 Sqmm. Supply and fixing LED Bay light 200 watt 230 V AC indoor type with thermal management in multiple optics and equipped with P66 protection, wi		
enameled white, with letters, figures and conventional skull and bones in signal red colour and fixed with M.S. clamps, bolts and nuts of approved size, for LT, 20x15cm size. Supply installation commission of Danger notice plate of 1.6mm thick mild steel sheet, vitreous enameled white, with letters, figures and conventional skull and bones in signal red colour and fixed with M.S. clamps, bolts and nuts of approved size, for HT, 25x20cm size. 17 Supply installation commission of Lightning arresters expulsion type complete with all fittings, 30 kilo amp discharge capacity, distribution class. 18 Synthetic Rubber insulated mats 2.5 mm thick for voltage upto 11 kv for electrical purpose as per IS 15652-2006, (superseding IS 5424) suitable for electrical shock safety of sizes 2m x 1m. 19 XLPE insulated, armoured heavy duty electric cable with aluminum conductor, 1100 volts grade, cross-sectional area 4C 10 sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. 20 XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 4C 6sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. 21 XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 4sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. 22 XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 2.5sq. mm Make: POLYCAB / KEI / V-GAURD / HAVELLS. 23 Cable jointing kit for 11 kV grade cable for indoor termination heat shrink type joint complete with jointing material and accessories suitable for 3 core XLPE armoured aluminum conductor cable of size 240 - 400 Sqmm. 24 Supply and fixing LED Bay light 200 watt 230 V AC indoor type with hermal management in multiple optics and equipped with IP66 protection, with impact and corrosion resistant complete with driver and lamp. as directed by engineering in charge. MAKE: HAVELLS/PHILIPS/BAJA/HALONIX 25 Supply and fixing LED street light fitting 120 Wa		MAKE: LEGRAND/Schneider/ABB/L&T
with M.S. clamps, bolts and nuts of approved size, for LT, 20x15cm size. Supply installation commission of Danger notice plate of 1.6mm thick mild steel sheet, vitreous enameled white, with letters, figures and conventional skull and bones in signal red colour and fixed with M.S. clamps, bolts and nuts of approved size, for HT, 25x20cm size. Supply installation commission of Lightning arresters expulsion type complete with all fittings, 30 kilo amp discharge capacity, distribution class. Synthetic Rubber insulated mats 2.5 mm thick for voltage upto 11 kv for electrical purpose as per IS 15652-2006, (superseding IS 5424) suitable for electrical shock safety of sizes 2m x 1m. 19	15	Supply installation & fixing of Danger notice plate of 1.6mm thick mild steel sheet, vitreous
Supply installation commission of Danger notice plate of 1.6mm thick mild steel sheet, vitreous enameled white, with letters, figures and conventional skull and bones in signal red colour and fixed with M.S. clamps, bolts and nuts of approved size, for HT, ZSx20cm size. 17 Supply installation commission of Lightning arresters expulsion type complete with all fittings, 30 kilo amp discharge capacity, distribution class. 18 Synthetic Rubber insulated mats 2.5 mm thick for voltage upto 11 kv for electrical purpose as per IS 15652-2006, (superseding IS 5424) suitable for electrical shock safety of sizes 2m x 1m. 19 XLPE insulated, armoured heavy duty electric cable with aluminum conductor, 1100 volts grade, cross-sectional area 4C 10 sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS 20 XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 4C 6sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. 21 XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 4sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. 22 XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 2.5sq. mm Make: POLYCAB / KEI / V-GAURD / HAVELLS. 23 Cable jointing kit for 11 kV grade cable for indoor termination heat shrink type joint complete with jointing material and accessories suitable for 3 core XLPE armoured aluminum conductor cable of size 240 - 400 Sqmm. 24 Supply and fixing LED Bay light 200 watt 230 V AC indoor type with thermal management in multiple optics and equipped with IP66 protection, with impact and corrosion resistant complete with driver and lamp. as directed by engineering in charge. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX 25 Supply and fixing LED street light fitting 120 Watt 230 V AC outdoor type with high pressure die cast aluminum hosing and heat resistant complete with driver, lamp bracket with impact and corrosion resistant including therma		
enameled white, with letters, figures and conventional skull and bones in signal red colour and fixed with M.S. clamps, bolts and nuts of approved size, for HT, Z5x20cm size. 17 Supply installation commission of Lightning arresters expulsion type complete with all fittings, 30 kilo amp discharge capacity, distribution class. 18 Synthetic Rubber insulated mats 2.5 mm thick for voltage upto 11 kv for electrical purpose as per IS 15652-2006, (superseding IS 5424) suitable for electrical shock safety of sizes 2m x 1m. 19 XLPE insulated, armoured heavy duty electric cable with aluminum conductor, 1100 volts grade, cross-sectional area 4C 10 sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. 20 XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 4C 6sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. 21 XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 4sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. 22 XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 2.5sq. mm Make: POLYCAB / KEI / V-GAURD / HAVELLS. 23 Cable jointing kit for 11 KV grade cable for indoor termination heat shrink type joint complete with jointing material and accessories suitable for 3 core XLPE armoured aluminum conductor cable of size 240 - 400 Sqmm. 24 Supply and fixing LED Bay light 200 watt 230 V AC indoor type with thermal management in multiple optics and equipped with IP66 protection, with impact and corrosion resistant complete with driver and lamp. as directed by engineering in charge. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX 25 Supply and fixing LED street light fitting 120 Watt 230 V AC outdoor type with high pressure die cast aluminum hosing and heat resistant complete with driver, lamp bracket with impact and corrosion resistant including thermal management in multiple optics complete with IP65/66 protection complete MAKE: HAVELLS/PHILIPS		
with M.S. clamps, bolts and nuts of approved size, for HT, 25x20cm size. Supply installation commission of Lightning arresters expulsion type complete with all fittings, 30 kilo amp discharge capacity, distribution class. Synthetic Rubber insulated mats 2.5 mm thick for voltage upto 11 kv for electrical purpose as per IS 15652-2006, (superseding IS 5424) suitable for electrical shock safety of sizes 2m x 1m. 19 XLPE insulated, armoured heavy duty electric cable with aluminum conductor, 1100 volts grade, cross-sectional area 4C 10 sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS 20 XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 4C 6sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. 21 XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 4sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. 22 XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 2.5sq. mm Make: POLYCAB / KEI / V-GAURD / HAVELLS. 23 Cable jointing kit for 11 KV grade cable for indoor termination heat shrink type joint complete with jointing material and accessories suitable for 3 core XLPE armoured aluminum conductor cable of size 240 - 400 Sqmm. 24 Supply and fixing LED Bay light 200 watt 230 V AC indoor type with thermal management in multiple optics and equipped with IP66 protection, with impact and corrosion resistant complete with driver and lamp. as directed by engineering in charge. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX 25 Supply and fixing LED Street light fitting 120 Watt 230 V AC outdoor type with high pressure die cast aluminum hosing and heat resistant complete with driver, lamp bracket with impact and corrosion resistant including thermal management in multiple optics complete with IP 65/66 protection complete MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX 26 In Single Enclosure 2 No's 32A 4P MCB 'C' Curve With INDUSTRIAL SOCKET And 2 nosof 16A DP	16	_ · · ·
 Supply installation commission of Lightning arresters expulsion type complete with all fittings, 30 kilo amp discharge capacity, distribution class. Synthetic Rubber insulated mats 2.5 mm thick for voltage upto 11 kv for electrical purpose as per IS 15652-2006, (superseding IS 5424) suitable for electrical shock safety of sizes 2m x 1m. XLPE insulated, armoured heavy duty electric cable with aluminum conductor, 1100 volts grade, cross-sectional area 4C 10 sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 4C 6sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 4sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 2.5sq. mm Make: POLYCAB / KEI / V-GAURD / HAVELLS. Cable jointing kit for 11 kV grade cable for indoor termination heat shrink type joint complete with jointing material and accessories suitable for 3 core XLPE armoured aluminum conductor cable of size 240 - 400 Sqmm. Supply and fixing LED Bay light 200 watt 230 V AC indoor type with thermal management in multiple optics and equipped with IP66 protection, with impact and corrosion resistant complete with driver and lamp. as directed by engineering in charge. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX In Single Enclosure 2 No's 32A 4P MCB 'C' Curve With INDUSTRIAL SOCKET And 2 nosof 16A DP MCB 'C' Curve with INDUSTRIAL SOCKET. MAKE: LEGRAND/INDO ASIAN/ SCHINDER 750 mm Sweep Aircirulator 230V 50 Cycles 250 Watts 1440 rpm Single Phase Heavy Duty Industrial Fans. MAKE: ALMONARD/ HAVELLS Supply and fixing LED luminaries 600 mm x 600 mm, 35/36 watt, 220 V AC surface type with high effici		
amp discharge capacity, distribution class. Synthetic Rubber insulated mats 2.5 mm thick for voltage upto 11 kv for electrical purpose as per IS 15652-2006, (superseding IS 5424) suitable for electrical shock safety of sizes 2m x 1m. XLPE insulated, armoured heavy duty electric cable with aluminum conductor, 1100 volts grade, cross-sectional area 4C 10 sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 4C 6sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 4sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 2.5sq. mm Make: POLYCAB / KEI / V-GAURD / HAVELLS. XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 2.5sq. mm Make: POLYCAB / KEI / V-GAURD / HAVELLS. XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 2.5sq. mm Make: POLYCAB / KEI / V-GAURD / HAVELLS. SLP insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 2.5sq. mm Make: POLYCAB / KEI / V-GAURD / HAVELLS. Supply and fixing LED Bay light 200 watt 230 V AC indoor type with thermal management in multiple optics and equipped with IP66 protection, with impact and corrosion resistant complete with driver and lamp. as directed by engineering in charge. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX Supply and fixing LED street light fitting 120 Watt 230 V AC outdoor type with high pressure die cast aluminum hosing and heat resistant complete with driver, lamp bracket with impact and corrosion resistant including thermal management in multiple optics complete with IP 65/66 protection complete MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX	17	
18 Synthetic Rubber insulated mats 2.5 mm thick for voltage upto 11 kv for electrical purpose as per IS 15652-2006, (superseding IS 5424) suitable for electrical shock safety of sizes 2m x 1m. 19 XLPE insulated, armoured heavy duty electric cable with aluminum conductor, 1100 volts grade, cross-sectional area 4C 10 sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS 20 XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 4C 6sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. 21 XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 4sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. 22 XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 2.5sq. mm Make: POLYCAB / KEI / V-GAURD / HAVELLS. 23 Cable jointing kit for 11 KV grade cable for indoor termination heat shrink type joint complete with jointing material and accessories suitable for 3 core XLPE armoured aluminum conductor cable of size 240 - 400 Sqmm. 24 Supply and fixing LED Bay light 200 watt 230 V AC indoor type with thermal management in multiple optics and equipped with IP66 protection, with impact and corrosion resistant complete with driver and lamp. as directed by engineering in charge. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX 25 Supply and fixing LED street light fitting 120 Watt 230 V AC outdoor type with high pressure die cast aluminum hosing and heat resistant complete with driver, lamp bracket with impact and corrosion resistant including thermal management in multiple optics complete with IP65/66 protection complete MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX 26 In Single Enclosure 2 No's 32A 4P MCB 'C' Curve With INDUSTRIAL SOCKET And 2 nosof 16A DP MCB 'C' Curve with INDUSTRIAL SOCKET. MAKE: LEGRAND/INDO ASIAN/ SCHINDER 27 750 mm Sweep Aircirulator 230V 50 Cycles 250 Watts 1440 rpm Single Phase Heavy Duty Industrial Fans. MAKE: ALMONARD/ HAVELLS Supply and fixing	1/	
15652-2006, (superseding IS 5424) suitable for electrical shock safety of sizes 2m x 1m. 19 XLPE insulated, armoured heavy duty electric cable with aluminum conductor, 1100 volts grade, cross-sectional area 4C 10 sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS 20 XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 4C 6sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. 21 XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 4sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. 22 XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 2.5sq. mm Make: POLYCAB / KEI / V-GAURD / HAVELLS. 23 Cable jointing kit for 11 KV grade cable for indoor termination heat shrink type joint complete with jointing material and accessories suitable for 3 core XLPE armoured aluminum conductor cable of size 240 - 400 Sqmm. 24 Supply and fixing LED Bay light 200 watt 230 V AC indoor type with thermal management in multiple optics and equipped with IP66 protection, with impact and corrosion resistant complete with driver and lamp. as directed by engineering in charge. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX 25 Supply and fixing LED street light fitting 120 Watt 230 V AC outdoor type with high pressure die cast aluminum hosing and heat resistant complete with driver, lamp bracket with impact and corrosion resistant including thermal management in multiple optics complete with IP 65/66 protection complete MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX 26 In Single Enclosure 2 No's 32A 4P MCB 'C' Curve With INDUSTRIAL SOCKET And 2 nosof 16A DP MCB 'C' Curve with INDUSTRIAL SOCKET MAKE: LEGRAND/INDO ASIAN/ SCHINDER 27 750 mm Sweep Aircirulator 230V 50 Cycles 250 Watts 1440 rpm Single Phase Heavy Duty Industrial Fans. 28 Supply and fixing LED luminaries 600 mm x 600 mm, 35/36 watt, 220 V AC surface type with high efficiency PMMA diffuser soft glare free light co	12	
 XLPE insulated, armoured heavy duty electric cable with aluminum conductor, 1100 volts grade, cross-sectional area 4C 10 sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 4C 6sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 4sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 2.5sq. mm Make: POLYCAB / KEI / V-GAURD / HAVELLS. Cable jointing kit for 11 kV grade cable for indoor termination heat shrink type joint complete with jointing material and accessories suitable for 3 core XLPE armoured aluminum conductor cable of size 240 - 400 Sqmm. Supply and fixing LED Bay light 200 watt 230 V AC indoor type with thermal management in multiple optics and equipped with IP66 protection, with impact and corrosion resistant complete with driver and lamp. as directed by engineering in charge. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX Supply and fixing LED street light fitting 120 Watt 230 V AC outdoor type with high pressure die cast aluminum hosing and heat resistant complete with driver, lamp bracket with impact and corrosion resistant including thermal management in multiple optics complete with IP 65/66 protection complete MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX In Single Enclosure 2 No's 32A 4P MCB 'C' Curve With INDUSTRIAL SOCKET And 2 nosof 16A DP MCB 'C' Curve with INDUSTRIAL SOCKET. MAKE: LEGRAND/INDO ASIAN/ SCHINDER T50 mm Sweep Aircirulator 230V 50 Cycles 250 Watts 1440 rpm Single Phase Heavy Duty Industrial Fans. MAKE: ALMONARD/ HAVELLS Supply and fixing LED luminaries 600 mm x 600 mm, 35/36 watt, 220 V AC surface type with high efficiency PMMA	10	
cross-sectional area 4C 10 sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 4C 6sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 4sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 2.5sq. mm Make: POLYCAB / KEI / V-GAURD / HAVELLS. Cable jointing kit for 11 KV grade cable for indoor termination heat shrink type joint complete with jointing material and accessories suitable for 3 core XLPE armoured aluminum conductor cable of size 240 - 400 Sqmm. Supply and fixing LED Bay light 200 watt 230 V AC indoor type with thermal management in multiple optics and equipped with IP66 protection, with impact and corrosion resistant complete with driver and lamp. as directed by engineering in charge. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX Supply and fixing LED street light fitting 120 Watt 230 V AC outdoor type with high pressure die cast aluminum hosing and heat resistant complete with driver, lamp bracket with impact and corrosion resistant including thermal management in multiple optics complete with IP 65/66 protection complete MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX In Single Enclosure 2 No's 32A 4P MCB 'C' Curve With INDUSTRIAL SOCKET And 2 nosof 16A DP MCB 'C' Curve with INDUSTRIAL SOCKET. MAKE: LEGRAND/INDO ASIAN/ SCHINDER To mm Sweep Aircirulator 230V 50 Cycles 250 Watts 1440 rpm Single Phase Heavy Duty Industrial Fans. MAKE: ALMONARD/ HAVELLS Supply and fixing LED luminaries 600 mm x 600 mm, 35/36 watt, 220 V AC surface type with high efficiency PMMA diffuser soft glare free light complete with driver, holders & LED lamp suitable for roof ceiling including connecting up with driver three core flexible copper conductor cases of suitable size complete. MAKE: HAVELLS/PHIL	10	
 XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 4C 6sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 4sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 2.5sq. mm Make: POLYCAB / KEI / V-GAURD / HAVELLS. Cable jointing kit for 11 KV grade cable for indoor termination heat shrink type joint complete with jointing material and accessories suitable for 3 core XLPE armoured aluminum conductor cable of size 240 - 400 Sqmm. Supply and fixing LED Bay light 200 watt 230 V AC indoor type with thermal management in multiple optics and equipped with IP66 protection, with impact and corrosion resistant complete with driver and lamp. as directed by engineering in charge. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX Supply and fixing LED street light fitting 120 Watt 230 V AC outdoor type with high pressure die cast aluminum hosing and heat resistant complete with driver, lamp bracket with impact and corrosion resistant including thermal management in multiple optics complete with IP 65/66 protection complete MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX In Single Enclosure 2 No's 32A 4P MCB 'C' Curve With INDUSTRIAL SOCKET and 2 nosof 16A DP MCB 'C' Curve with INDUSTRIAL SOCKET. MAKE: LEGRAND/INDO ASIAN/ SCHINDER 750 mm Sweep Aircirulator 230V 50 Cycles 250 Watts 1440 rpm Single Phase Heavy Duty Industrial Fans. MAKE: ALMONARD/ HAVELLS Supply and fixing LED luminaries 600 mm x 600 mm, 35/36 watt, 220 V AC surface type with high efficiency PMMA diffuser soft glare free light complete with driver, holders & LED lamp suitable for roof ceiling including connecting up with driver three core flexible copper conducto	19	
cross-sectional area 4C 6sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 4sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 2.5sq. mm Make: POLYCAB / KEI / V-GAURD / HAVELLS. Cable jointing kit for 11 KV grade cable for indoor termination heat shrink type joint complete with jointing material and accessories suitable for 3 core XLPE armoured aluminum conductor cable of size 240 - 400 Sqmm. Supply and fixing LED Bay light 200 watt 230 V AC indoor type with thermal management in multiple optics and equipped with IP66 protection, with impact and corrosion resistant complete with driver and lamp. as directed by engineering in charge. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX Supply and fixing LED street light fitting 120 Watt 230 V AC outdoor type with high pressure die cast aluminum hosing and heat resistant complete with driver, lamp bracket with impact and corrosion resistant including thermal management in multiple optics complete with IP 65/66 protection complete MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX In Single Enclosure 2 No's 32A 4P MCB 'C' Curve With INDUSTRIAL SOCKET And 2 nosof 16A DP MCB 'C' Curve with INDUSTRIAL SOCKET. MAKE: LEGRAND/INDO ASIAN/ SCHINDER 750 mm Sweep Aircirulator 230V 50 Cycles 250 Watts 1440 rpm Single Phase Heavy Duty Industrial Fans. MAKE: ALMONARD/ HAVELLS Supply and fixing LED luminaries 600 mm x 600 mm, 35/36 watt, 220 V AC surface type with high efficiency PMMA diffuser soft glare free light complete with driver, holders & LED lamp suitable for roof ceiling including connecting up with driver three core flexible copper conductor cases of suitable size complete. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX	20	
 XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 4sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 2.5sq. mm Make: POLYCAB / KEI / V-GAURD / HAVELLS. Cable jointing kit for 11 KV grade cable for indoor termination heat shrink type joint complete with jointing material and accessories suitable for 3 core XLPE armoured aluminum conductor cable of size 240 - 400 Sqmm. Supply and fixing LED Bay light 200 watt 230 V AC indoor type with thermal management in multiple optics and equipped with IP66 protection, with impact and corrosion resistant complete with driver and lamp. as directed by engineering in charge. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX Supply and fixing LED street light fitting 120 Watt 230 V AC outdoor type with high pressure die cast aluminum hosing and heat resistant complete with driver, lamp bracket with impact and corrosion resistant including thermal management in multiple optics complete with IP 65/66 protection complete MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX In Single Enclosure 2 No's 32A 4P MCB 'C' Curve With INDUSTRIAL SOCKET And 2 nosof 16A DP MCB 'C' Curve with INDUSTRIAL SOCKET. MAKE: LEGRAND/INDO ASIAN/ SCHINDER T50 mm Sweep Aircirulator 230V 50 Cycles 250 Watts 1440 rpm Single Phase Heavy Duty Industrial Fans. MAKE: ALMONARD/ HAVELLS Supply and fixing LED luminaries 600 mm x 600 mm, 35/36 watt, 220 V AC surface type with high efficiency PMMA diffuser soft glare free light complete with driver, holders & LED lamp suitable for roof ceiling including connecting up with driver three core flexible copper conductor cases of suitable size complete. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX 	20	
cross-sectional area 3C 4sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS. XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 2.5sq. mm Make: POLYCAB / KEI / V-GAURD / HAVELLS. Cable jointing kit for 11 kV grade cable for indoor termination heat shrink type joint complete with jointing material and accessories suitable for 3 core XLPE armoured aluminum conductor cable of size 240 - 400 Sqmm. Supply and fixing LED Bay light 200 watt 230 V AC indoor type with thermal management in multiple optics and equipped with IP66 protection, with impact and corrosion resistant complete with driver and lamp. as directed by engineering in charge. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX Supply and fixing LED street light fitting 120 Watt 230 V AC outdoor type with high pressure die cast aluminum hosing and heat resistant complete with driver, lamp bracket with impact and corrosion resistant including thermal management in multiple optics complete with IP 65/66 protection complete MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX In Single Enclosure 2 No's 32A 4P MCB 'C' Curve With INDUSTRIAL SOCKET And 2 nosof 16A DP MCB 'C' Curve with INDUSTRIAL SOCKET. MAKE: LEGRAND/INDO ASIAN/ SCHINDER 750 mm Sweep Aircirulator 230V 50 Cycles 250 Watts 1440 rpm Single Phase Heavy Duty Industrial Fans. MAKE: ALMONARD/ HAVELLS Supply and fixing LED luminaries 600 mm x 600 mm, 35/36 watt, 220 V AC surface type with high efficiency PMMA diffuser soft glare free light complete with driver, holders & LED lamp suitable for roof ceiling including connecting up with driver three core flexible copper conductor cases of suitable size complete. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX		
 XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 2.5sq. mm Make: POLYCAB / KEI / V-GAURD / HAVELLS. Cable jointing kit for 11 KV grade cable for indoor termination heat shrink type joint complete with jointing material and accessories suitable for 3 core XLPE armoured aluminum conductor cable of size 240 - 400 Sqmm. Supply and fixing LED Bay light 200 watt 230 V AC indoor type with thermal management in multiple optics and equipped with IP66 protection, with impact and corrosion resistant complete with driver and lamp. as directed by engineering in charge. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX Supply and fixing LED street light fitting 120 Watt 230 V AC outdoor type with high pressure die cast aluminum hosing and heat resistant complete with driver, lamp bracket with impact and corrosion resistant including thermal management in multiple optics complete with IP 65/66 protection complete MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX In Single Enclosure 2 No's 32A 4P MCB 'C' Curve With INDUSTRIAL SOCKET And 2 nosof 16A DP MCB 'C' Curve with INDUSTRIAL SOCKET. MAKE: LEGRAND/INDO ASIAN/ SCHINDER 750 mm Sweep Aircirulator 230V 50 Cycles 250 Watts 1440 rpm Single Phase Heavy Duty Industrial Fans. MAKE: ALMONARD/ HAVELLS Supply and fixing LED luminaries 600 mm x 600 mm, 35/36 watt, 220 V AC surface type with high efficiency PMMA diffuser soft glare free light complete with driver, holders & LED lamp suitable for roof ceiling including connecting up with driver three core flexible copper conductor cases of suitable size complete. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX 	21	
 cross-sectional area 3C 2.5sq. mm Make: POLYCAB / KEI / V-GAURD / HAVELLS. Cable jointing kit for 11 KV grade cable for indoor termination heat shrink type joint complete with jointing material and accessories suitable for 3 core XLPE armoured aluminum conductor cable of size 240 - 400 Sqmm. Supply and fixing LED Bay light 200 watt 230 V AC indoor type with thermal management in multiple optics and equipped with IP66 protection, with impact and corrosion resistant complete with driver and lamp. as directed by engineering in charge. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX Supply and fixing LED street light fitting 120 Watt 230 V AC outdoor type with high pressure die cast aluminum hosing and heat resistant complete with driver, lamp bracket with impact and corrosion resistant including thermal management in multiple optics complete with IP 65/66 protection complete MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX In Single Enclosure 2 No's 32A 4P MCB 'C' Curve With INDUSTRIAL SOCKET And 2 nosof 16A DP MCB 'C' Curve with INDUSTRIAL SOCKET. MAKE: LEGRAND/INDO ASIAN/ SCHINDER 750 mm Sweep Aircirulator 230V 50 Cycles 250 Watts 1440 rpm Single Phase Heavy Duty Industrial Fans. MAKE: ALMONARD/ HAVELLS Supply and fixing LED luminaries 600 mm x 600 mm, 35/36 watt, 220 V AC surface type with high efficiency PMMA diffuser soft glare free light complete with driver, holders & LED lamp suitable for roof ceiling including connecting up with driver three core flexible copper conductor cases of suitable size complete. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX 		cross-sectional area 3C 4sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS.
 cross-sectional area 3C 2.5sq. mm Make: POLYCAB / KEI / V-GAURD / HAVELLS. Cable jointing kit for 11 KV grade cable for indoor termination heat shrink type joint complete with jointing material and accessories suitable for 3 core XLPE armoured aluminum conductor cable of size 240 - 400 Sqmm. Supply and fixing LED Bay light 200 watt 230 V AC indoor type with thermal management in multiple optics and equipped with IP66 protection, with impact and corrosion resistant complete with driver and lamp. as directed by engineering in charge. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX Supply and fixing LED street light fitting 120 Watt 230 V AC outdoor type with high pressure die cast aluminum hosing and heat resistant complete with driver, lamp bracket with impact and corrosion resistant including thermal management in multiple optics complete with IP 65/66 protection complete MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX In Single Enclosure 2 No's 32A 4P MCB 'C' Curve With INDUSTRIAL SOCKET And 2 nosof 16A DP MCB 'C' Curve with INDUSTRIAL SOCKET. MAKE: LEGRAND/INDO ASIAN/ SCHINDER 750 mm Sweep Aircirulator 230V 50 Cycles 250 Watts 1440 rpm Single Phase Heavy Duty Industrial Fans. MAKE: ALMONARD/ HAVELLS Supply and fixing LED luminaries 600 mm x 600 mm, 35/36 watt, 220 V AC surface type with high efficiency PMMA diffuser soft glare free light complete with driver, holders & LED lamp suitable for roof ceiling including connecting up with driver three core flexible copper conductor cases of suitable size complete. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX 		
 cross-sectional area 3C 2.5sq. mm Make: POLYCAB / KEI / V-GAURD / HAVELLS. Cable jointing kit for 11 KV grade cable for indoor termination heat shrink type joint complete with jointing material and accessories suitable for 3 core XLPE armoured aluminum conductor cable of size 240 - 400 Sqmm. Supply and fixing LED Bay light 200 watt 230 V AC indoor type with thermal management in multiple optics and equipped with IP66 protection, with impact and corrosion resistant complete with driver and lamp. as directed by engineering in charge. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX Supply and fixing LED street light fitting 120 Watt 230 V AC outdoor type with high pressure die cast aluminum hosing and heat resistant complete with driver, lamp bracket with impact and corrosion resistant including thermal management in multiple optics complete with IP 65/66 protection complete MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX In Single Enclosure 2 No's 32A 4P MCB 'C' Curve With INDUSTRIAL SOCKET And 2 nosof 16A DP MCB 'C' Curve with INDUSTRIAL SOCKET. MAKE: LEGRAND/INDO ASIAN/ SCHINDER 750 mm Sweep Aircirulator 230V 50 Cycles 250 Watts 1440 rpm Single Phase Heavy Duty Industrial Fans. MAKE: ALMONARD/ HAVELLS Supply and fixing LED luminaries 600 mm x 600 mm, 35/36 watt, 220 V AC surface type with high efficiency PMMA diffuser soft glare free light complete with driver, holders & LED lamp suitable for roof ceiling including connecting up with driver three core flexible copper conductor cases of suitable size complete. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX 	22	XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade,
jointing material and accessories suitable for 3 core XLPE armoured aluminum conductor cable of size 240 - 400 Sqmm. Supply and fixing LED Bay light 200 watt 230 V AC indoor type with thermal management in multiple optics and equipped with IP66 protection, with impact and corrosion resistant complete with driver and lamp. as directed by engineering in charge. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX Supply and fixing LED street light fitting 120 Watt 230 V AC outdoor type with high pressure die cast aluminum hosing and heat resistant complete with driver, lamp bracket with impact and corrosion resistant including thermal management in multiple optics complete with IP 65/66 protection complete MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX In Single Enclosure 2 No's 32A 4P MCB 'C' Curve With INDUSTRIAL SOCKET And 2 nosof 16A DP MCB 'C' Curve with INDUSTRIAL SOCKET. MAKE: LEGRAND/INDO ASIAN/ SCHINDER 750 mm Sweep Aircirulator 230V 50 Cycles 250 Watts 1440 rpm Single Phase Heavy Duty Industrial Fans. MAKE: ALMONARD/ HAVELLS Supply and fixing LED luminaries 600 mm x 600 mm, 35/36 watt, 220 V AC surface type with high efficiency PMMA diffuser soft glare free light complete with driver, holders & LED lamp suitable for roof ceiling including connecting up with driver three core flexible copper conductor cases of suitable size complete. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX		
 size 240 - 400 Sqmm. Supply and fixing LED Bay light 200 watt 230 V AC indoor type with thermal management in multiple optics and equipped with IP66 protection, with impact and corrosion resistant complete with driver and lamp. as directed by engineering in charge. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX Supply and fixing LED street light fitting 120 Watt 230 V AC outdoor type with high pressure die cast aluminum hosing and heat resistant complete with driver, lamp bracket with impact and corrosion resistant including thermal management in multiple optics complete with IP 65/66 protection complete MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX In Single Enclosure 2 No's 32A 4P MCB 'C' Curve With INDUSTRIAL SOCKET And 2 nosof 16A DP MCB 'C' Curve with INDUSTRIAL SOCKET. MAKE: LEGRAND/INDO ASIAN/ SCHINDER 750 mm Sweep Aircirulator 230V 50 Cycles 250 Watts 1440 rpm Single Phase Heavy Duty Industrial Fans. MAKE: ALMONARD/ HAVELLS Supply and fixing LED luminaries 600 mm x 600 mm, 35/36 watt, 220 V AC surface type with high efficiency PMMA diffuser soft glare free light complete with driver, holders & LED lamp suitable for roof ceiling including connecting up with driver three core flexible copper conductor cases of suitable size complete. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX 	23	Cable jointing kit for 11 KV grade cable for indoor termination heat shrink type joint complete with
 Supply and fixing LED Bay light 200 watt 230 V AC indoor type with thermal management in multiple optics and equipped with IP66 protection, with impact and corrosion resistant complete with driver and lamp. as directed by engineering in charge. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX Supply and fixing LED street light fitting 120 Watt 230 V AC outdoor type with high pressure die cast aluminum hosing and heat resistant complete with driver, lamp bracket with impact and corrosion resistant including thermal management in multiple optics complete with IP 65/66 protection complete MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX In Single Enclosure 2 No's 32A 4P MCB 'C' Curve With INDUSTRIAL SOCKET And 2 nosof 16A DP MCB 'C' Curve with INDUSTRIAL SOCKET. MAKE: LEGRAND/INDO ASIAN/ SCHINDER 750 mm Sweep Aircirulator 230V 50 Cycles 250 Watts 1440 rpm Single Phase Heavy Duty Industrial Fans. MAKE: ALMONARD/ HAVELLS Supply and fixing LED luminaries 600 mm x 600 mm, 35/36 watt, 220 V AC surface type with high efficiency PMMA diffuser soft glare free light complete with driver, holders & LED lamp suitable for roof ceiling including connecting up with driver three core flexible copper conductor cases of suitable size complete. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX 		
 optics and equipped with IP66 protection, with impact and corrosion resistant complete with driver and lamp. as directed by engineering in charge. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX Supply and fixing LED street light fitting 120 Watt 230 V AC outdoor type with high pressure die cast aluminum hosing and heat resistant complete with driver, lamp bracket with impact and corrosion resistant including thermal management in multiple optics complete with IP 65/66 protection complete MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX In Single Enclosure 2 No's 32A 4P MCB 'C' Curve With INDUSTRIAL SOCKET And 2 nosof 16A DP MCB 'C' Curve with INDUSTRIAL SOCKET. MAKE: LEGRAND/INDO ASIAN/ SCHINDER 750 mm Sweep Aircirulator 230V 50 Cycles 250 Watts 1440 rpm Single Phase Heavy Duty Industrial Fans. MAKE: ALMONARD/ HAVELLS Supply and fixing LED luminaries 600 mm x 600 mm, 35/36 watt, 220 V AC surface type with high efficiency PMMA diffuser soft glare free light complete with driver, holders & LED lamp suitable for roof ceiling including connecting up with driver three core flexible copper conductor cases of suitable size complete. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX 		·
 and lamp. as directed by engineering in charge. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX Supply and fixing LED street light fitting 120 Watt 230 V AC outdoor type with high pressure die cast aluminum hosing and heat resistant complete with driver, lamp bracket with impact and corrosion resistant including thermal management in multiple optics complete with IP 65/66 protection complete MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX In Single Enclosure 2 No's 32A 4P MCB 'C' Curve With INDUSTRIAL SOCKET And 2 nosof 16A DP MCB 'C' Curve with INDUSTRIAL SOCKET. MAKE: LEGRAND/INDO ASIAN/ SCHINDER 750 mm Sweep Aircirulator 230V 50 Cycles 250 Watts 1440 rpm Single Phase Heavy Duty Industrial Fans. MAKE: ALMONARD/ HAVELLS Supply and fixing LED luminaries 600 mm x 600 mm, 35/36 watt, 220 V AC surface type with high efficiency PMMA diffuser soft glare free light complete with driver, holders & LED lamp suitable for roof ceiling including connecting up with driver three core flexible copper conductor cases of suitable size complete. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX 	24	
 Supply and fixing LED street light fitting 120 Watt 230 V AC outdoor type with high pressure die cast aluminum hosing and heat resistant complete with driver, lamp bracket with impact and corrosion resistant including thermal management in multiple optics complete with IP 65/66 protection complete MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX In Single Enclosure 2 No's 32A 4P MCB 'C' Curve With INDUSTRIAL SOCKET And 2 nosof 16A DP MCB 'C' Curve with INDUSTRIAL SOCKET. MAKE: LEGRAND/INDO ASIAN/ SCHINDER 750 mm Sweep Aircirulator 230V 50 Cycles 250 Watts 1440 rpm Single Phase Heavy Duty Industrial Fans. MAKE: ALMONARD/ HAVELLS Supply and fixing LED luminaries 600 mm x 600 mm, 35/36 watt, 220 V AC surface type with high efficiency PMMA diffuser soft glare free light complete with driver, holders & LED lamp suitable for roof ceiling including connecting up with driver three core flexible copper conductor cases of suitable size complete. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX 		optics and equipped with IP66 protection, with impact and corrosion resistant complete with driver
aluminum hosing and heat resistant complete with driver, lamp bracket with impact and corrosion resistant including thermal management in multiple optics complete with IP 65/66 protection complete MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX In Single Enclosure 2 No's 32A 4P MCB 'C' Curve With INDUSTRIAL SOCKET And 2 nosof 16A DP MCB 'C' Curve with INDUSTRIAL SOCKET. MAKE: LEGRAND/INDO ASIAN/ SCHINDER 750 mm Sweep Aircirulator 230V 50 Cycles 250 Watts 1440 rpm Single Phase Heavy Duty Industrial Fans. MAKE: ALMONARD/ HAVELLS Supply and fixing LED luminaries 600 mm x 600 mm, 35/36 watt, 220 V AC surface type with high efficiency PMMA diffuser soft glare free light complete with driver, holders & LED lamp suitable for roof ceiling including connecting up with driver three core flexible copper conductor cases of suitable size complete. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX		and lamp. as directed by engineering in charge. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX
resistant including thermal management in multiple optics complete with IP 65/66 protection complete MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX In Single Enclosure 2 No's 32A 4P MCB 'C' Curve With INDUSTRIAL SOCKET And 2 nosof 16A DP MCB 'C' Curve with INDUSTRIAL SOCKET. MAKE: LEGRAND/INDO ASIAN/ SCHINDER 750 mm Sweep Aircirulator 230V 50 Cycles 250 Watts 1440 rpm Single Phase Heavy Duty Industrial Fans. MAKE: ALMONARD/ HAVELLS Supply and fixing LED luminaries 600 mm x 600 mm, 35/36 watt, 220 V AC surface type with high efficiency PMMA diffuser soft glare free light complete with driver, holders & LED lamp suitable for roof ceiling including connecting up with driver three core flexible copper conductor cases of suitable size complete. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX	25	Supply and fixing LED street light fitting 120 Watt 230 V AC outdoor type with high pressure die cast
complete MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX In Single Enclosure 2 No's 32A 4P MCB 'C' Curve With INDUSTRIAL SOCKET And 2 nosof 16A DP MCB 'C' Curve with INDUSTRIAL SOCKET. MAKE: LEGRAND/INDO ASIAN/ SCHINDER 750 mm Sweep Aircirulator 230V 50 Cycles 250 Watts 1440 rpm Single Phase Heavy Duty Industrial Fans. MAKE: ALMONARD/ HAVELLS Supply and fixing LED luminaries 600 mm x 600 mm, 35/36 watt, 220 V AC surface type with high efficiency PMMA diffuser soft glare free light complete with driver, holders & LED lamp suitable for roof ceiling including connecting up with driver three core flexible copper conductor cases of suitable size complete. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX		aluminum hosing and heat resistant complete with driver, lamp bracket with impact and corrosion
 In Single Enclosure 2 No's 32A 4P MCB 'C' Curve With INDUSTRIAL SOCKET And 2 nosof 16A DP MCB 'C' Curve with INDUSTRIAL SOCKET. MAKE: LEGRAND/INDO ASIAN/ SCHINDER 750 mm Sweep Aircirulator 230V 50 Cycles 250 Watts 1440 rpm Single Phase Heavy Duty Industrial Fans. MAKE: ALMONARD/ HAVELLS Supply and fixing LED luminaries 600 mm x 600 mm, 35/36 watt, 220 V AC surface type with high efficiency PMMA diffuser soft glare free light complete with driver, holders & LED lamp suitable for roof ceiling including connecting up with driver three core flexible copper conductor cases of suitable size complete. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX 		resistant including thermal management in multiple optics complete with IP 65/66 protection
'C' Curve with INDUSTRIAL SOCKET. MAKE: LEGRAND/INDO ASIAN/ SCHINDER 750 mm Sweep Aircirulator 230V 50 Cycles 250 Watts 1440 rpm Single Phase Heavy Duty Industrial Fans. MAKE: ALMONARD/ HAVELLS Supply and fixing LED luminaries 600 mm x 600 mm, 35/36 watt, 220 V AC surface type with high efficiency PMMA diffuser soft glare free light complete with driver, holders & LED lamp suitable for roof ceiling including connecting up with driver three core flexible copper conductor cases of suitable size complete. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX		complete MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX
 750 mm Sweep Aircirulator 230V 50 Cycles 250 Watts 1440 rpm Single Phase Heavy Duty Industrial Fans. MAKE: ALMONARD/ HAVELLS Supply and fixing LED luminaries 600 mm x 600 mm, 35/36 watt, 220 V AC surface type with high efficiency PMMA diffuser soft glare free light complete with driver, holders & LED lamp suitable for roof ceiling including connecting up with driver three core flexible copper conductor cases of suitable size complete. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX 	26	In Single Enclosure 2 No's 32A 4P MCB 'C' Curve With INDUSTRIAL SOCKET And 2 nosof 16A DP MCB
Fans. MAKE: ALMONARD/ HAVELLS Supply and fixing LED luminaries 600 mm x 600 mm, 35/36 watt, 220 V AC surface type with high efficiency PMMA diffuser soft glare free light complete with driver, holders & LED lamp suitable for roof ceiling including connecting up with driver three core flexible copper conductor cases of suitable size complete. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX		'C' Curve with INDUSTRIAL SOCKET. MAKE: LEGRAND/INDO ASIAN/ SCHINDER
MAKE: ALMONARD/ HAVELLS Supply and fixing LED luminaries 600 mm x 600 mm, 35/36 watt, 220 V AC surface type with high efficiency PMMA diffuser soft glare free light complete with driver, holders & LED lamp suitable for roof ceiling including connecting up with driver three core flexible copper conductor cases of suitable size complete. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX	27	750 mm Sweep Aircirulator 230V 50 Cycles 250 Watts 1440 rpm Single Phase Heavy Duty Industrial
Supply and fixing LED luminaries 600 mm x 600 mm, 35/36 watt, 220 V AC surface type with high efficiency PMMA diffuser soft glare free light complete with driver, holders & LED lamp suitable for roof ceiling including connecting up with driver three core flexible copper conductor cases of suitable size complete. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX		
efficiency PMMA diffuser soft glare free light complete with driver, holders & LED lamp suitable for roof ceiling including connecting up with driver three core flexible copper conductor cases of suitable size complete. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX		·
roof ceiling including connecting up with driver three core flexible copper conductor cases of suitable size complete. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX	28	
suitable size complete. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX		
·		roof ceiling including connecting up with driver three core flexible copper conductor cases of
Supply and fixing round shape 12 watt 220 volts AC recessed type with high efficiency PMMA		suitable size complete. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX
	29	Supply and fixing round shape 12 watt 220 volts AC recessed type with high efficiency PMMA

diffuser soft glare free light complete with drivers, holders, LED lamp suitable for roof ceiling including connecting up with three core flexible copper conductor cable of suitable size complete. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX 30 Supply and fix exhaust fan made of sturdy Engineering plastic complete with louvers shutter, voltage 230V, 50 Hz, RPM 1200, Copper winding of sweep 300m. MAKE: HAVELLS//BAJAJ/HALONIX/EVERYDAY 31 Supply and fix ceiling fans, complete with three blade, down rod, accessories 230V, 1200mm sweep, with Squirrel cage induction motor. MAKE: HAVELLS//BAJAJ/HALONIX/CG 32 Wiring for circuit/sub main wiring along with earth wire with the following sizes of FR is PVC insulated copper conductor, single core cable in surface/recessed as required in 25mm Dia conduit. 2x2.5 sq. mm + 1x1.5 sq. mm earth wire. 33 Wiring for circuit/sub main wiring along with earth wire with the following sizes of FR is PVC insulated copper conductor, single core cable in surface/recessed as required in 25mm Dia conduit. 2x4 sq. mm + 1x2.5 sq. mm earth wire. 34 M & L for point wiring using 1.1 kV grade single core FR-LS flexible cable, conforming to IS 694: 2010, having multi-drawn thin strands of electrolytic copper conductors and insulation for phase, neutral, and earth continuity conductor connecting to earth dolly, colour-coded as per IS 11353: 1985, drawn in medium grade UPVC surface / recessed conduits, conforming to IS 9537 (Part- 3): 1983, of size not less than 20 mm NB, including cutting chases, factory made not less than 1.2 mm thick sunken, modular flush sheet galvanized metal enclosure having zinc coating not less than 120 GSM,, conforming to IS 14772: 2000, having top, bottom, side and back-wall knockouts for conduit entry from any direction, suitable modular cover-plates and making good of disturbed surfaces of wall / ceiling / floor, etc. complete all as specified in IS 732: 2019 and directed by the engineer-in-charge. One light/fan/exhaust fan point controlled by one switch, with cables 1.5 mm² size. 35 M & L for point wiring using 1.1 kV grade single core FR-LS flexible cable, conforming to IS 694: 2010, having multi-drawn thin strands of electrolytic copper conductors and insulation for phase, neutral, and earth continuity conductor connecting to earth dolly, colour-coded as per IS 11353: 1985, drawn in medium grade UPVC surface / recessed conduits, conforming to IS 9537 (Part- 3): 1983, of size not less than 20 mm NB, including cutting chases, factory made not less than 1.2 mm thick sunken, modular flush sheet galvanized metal enclosure having zinc coating not less than 120 GSM,, conforming to IS 14772: 2000, having top, bottom, side and back-wall knockouts for conduit entry from any direction, suitable modular cover-plates and making good of disturbed surfaces of wall / ceiling / floor, etc. complete all as specified in IS 732: 2019 and directed by the engineer-in-charge. Two light point controlled by one switch, with cables 1.5 mm² size. M & L for point wiring using 1.1 kV grade single core FR-LS flexible cable, conforming to IS 694: 2010, 36 having multi-drawn thin strands of electrolytic copper conductors and insulation for phase, neutral, and earth continuity conductor connecting to earth dolly, colour-coded as per IS 11353: 1985, drawn in medium grade UPVC surface / recessed conduits, conforming to IS 9537 (Part- 3): 1983, of size not less than 20 mm NB, including cutting chases, factory made not less than 1.2 mm thick sunken, modular flush sheet galvanized metal enclosure having zinc coating not less than 120 GSM,, conforming to IS 14772: 2000, having top, bottom, side and back-wall knockouts for conduit entry from any direction, suitable modular cover-plates and making good of disturbed surfaces of wall / ceiling / floor, etc. complete all as specified in IS 732: 2019 and directed by the engineer-in-charge. Three light point controlled by one switch, with cables 1.5 mm² size. M & L for point wiring using 1.1 kV grade single core FR-LS flexible cable, conforming to IS 694: 2010, 37 having multi-drawn thin strands of electrolytic copper conductors and insulation for phase, neutral, and earth continuity conductor connecting to earth dolly, colour-coded as per IS 11353: 1985, drawn in medium grade UPVC surface / recessed conduits, conforming to IS 9537 (Part- 3): 1983, of size not less than 20 mm NB, including cutting chases, factory made not less than 1.2 mm thick sunken, modular flush sheet galvanized metal enclosure having zinc coating not less than 120 GSM,, conforming to IS 14772: 2000, having top, bottom, side and back-wall knockouts for conduit entry from any direction, suitable modular cover-plates and making good of disturbed surfaces of wall /

	10 10
	ceiling / floor, etc. complete all as specified in IS 732: 2019 and directed by the engineer-in-charge. One 6 A socket outlet, on the same board with other switches, with cables 1.5 mm ² size.
38	M & L for point wiring using 1.1 kV grade single core FR-LS flexible cable, conforming to IS 694: 2010, having multi-drawn thin strands of electrolytic copper conductors and insulation for phase, neutral, and earth continuity conductor connecting to earth dolly, colour-coded as per IS 11353: 1985, drawn in medium grade UPVC surface / recessed conduits, conforming to IS 9537 (Part- 3): 1983, of size not less than 20 mm NB, including cutting chases, factory made not less than 1.2 mm thick sunken, modular flush sheet galvanized metal enclosure having zinc coating not less than 120 GSM, , conforming to IS 14772: 2000, having top, bottom, side and back-wall knockouts for conduit entry from any direction, suitable modular cover-plates and making good of disturbed surfaces of wall / ceiling / floor, etc. complete all as specified in IS 732: 2019 and directed by the engineer-in-charge. One 3 pin socket outlet. 15 amps, independent, with cables 4 sq. mm size.
39	S & F single pole & neutral, modular type, double door, metallic distribution board conforming to IEC 61439-3, suitable for flush / surface mounting with provision for DP RCCB / RCBO / Isolator / MCB as incomer and SP MCBs as outgoing, reversible metal door, 100 A copper bus bar, fully shrouded neutral bar, earth bar, wire set & cable ties for cable management, pre fitted masking sheet, etc. having IK 09 & IP 43 protection complete all as specified in IS 732: 2019 and directed by the engineer-in-charge. Triple pole& neutral double door DB, 4 way.
40	S & F single pole & neutral, modular type, double door, metallic distribution board conforming to IEC 61439-3, suitable for flush / surface mounting with provision for DP RCCB / RCBO / Isolator / MCB as incomer and SP MCBs as outgoing, reversible metal door, 100 A copper bus bar, fully shrouded neutral bar, earth bar, wire set & cable ties for cable management, pre fitted masking sheet, etc. having IK 09 & IP 43 protection complete all as specified in IS 732: 2019 and directed by the engineer-in-charge. 40A, 415 V, 50 Hz, FP MCB.
41	S & F single pole & neutral, modular type, double door, metallic distribution board conforming to IEC 61439-3, suitable for flush / surface mounting with provision for DP RCCB / RCBO / Isolator / MCB as incomer and SP MCBs as outgoing, reversible metal door, 100 A copper bus bar, fully shrouded neutral bar, earth bar, wire set & cable ties for cable management, pre fitted masking sheet, etc. having IK 09 & IP 43 protection complete all as specified in IS 732: 2019 and directed by the engineer-in-charge. 16A / 10A 415 V, 50 Hz, SP MCB.
42	S &F Earthing complete with galvanized steel pipe electrode, 40mm bore, medium grade, 2.5 meters length, buried directly and preferably vertically in ground with top edge not less than 1.25 meters below ground level connected with earthing lead of 4mm dia galvanized iron or steel wire all as shown in Plate No. 2 to the earthing test point all as specified and indicate including testing on completion.
43	S & F Dito, but using copper plate 60×60cm ×3.15mm thick electrode and 20×3mm copper strip as earthing lead.
44	S & F Ditto, but 25x4mm galvanized iron strip.
45	S & F Ditto, but 20x3mm copper strip.

Terms and Conditions:

- 1. All necessary documents for switch gear items to be produced after completion of work.
- 2. Service No. 1. Supply I & C HT VCB Panel

Service Text: For service line items No. 1

Sch. item No. 1 Specification: HT BREAKER PANEL- Supply, installation, testing & Commissioning of 11KV, Totally enclosed single bus bar, floor mounting metal clad, Indoor type extensible type, flush mounted, Horizontal withdrawn, Horizontal isolation, Vacuum Circuit Breaker panel

VCB: Rated Voltage: 11 kV, Rated Current: 630 A, No of Phases : 3, Frequency : 50 Hz, STC : 25

kA/3 Sec

Make: Schneider/CG/L&T/SIEMENS

Motor operated spring charging 230V AC, 50 Hz, 630A Capacity Copper bus bar for 3 Phase ,Breaker operated 6 NO + 6 NC contacts with AUX switch.

Resin cast CT's of 25kA STC for 1 SEC Ratio 630/5-5A, 0.2 Class for metering and 15 P10

Protections Class with suitable Burden. Make: KALPA /CG/VOLTAMP

3 phase, 11kV/110V, class-I, fixed, dry type PT's with suitable Burden and with Provision of HRC fuses on primary side. Make: KALPA /CG/VOLTAMP

Micro Controller based 3 O/C & 1 E/F Relay, Numerical Protection Relay for 50, 50N, 51, 51N,

Aux. supply: 230V AC, In=5A Make: ABB/CG/Schneider/GE

Master trip relay, Type: VAJH13, Aux. supply: 230V AC, 3NO+1NC Make:

ABB/CG/Schneider/Alstom/GE

Closing and tripping coils, 230V, AC

Digital Ammeter /Voltmeter, 144sqmm with selection option for all 3 Phases. Make:

AE/MECO/SECURE/L&T

LED Indication lamps for ON/OFF/TRIP CIRCUIT HEALTHY /SPRING CHARGING/ Breaker Service/ Breaker Test.

LOCAL REMOTE switch, MAKE: GE/KEYCEE/ RECOM/SALZER

Push Button type Trip circuit healthy system

Heater with Thermostat

Panel illumination lamp holder & bulb with switch.

 $15\text{A}\ 3$ pin socket with switch.

Control MCBs for Auxiliary supply

GENERAL TERMS & CONDITIONS

- 1. For all VCB panels provision to be made at bottom of the panels for entry of XLPE cables.
- 2. All Panels should be painted with SIEMENS Grey Texture paint (RAL 7032).
- 3. Firm has to submit the GA & single line diagram after Placing of purchase order for our approval.
- 4. Firm should supply Parts manual and operational manual in duplicate along with supply.
- 5. Firm should submit the necessary test certificates along with the panel.
- 6. Firm has to commission the VCBs at our works and prove the performance.
- 7. The following panel auxiliaries to be supplied along with the VCB Panel.
- 1. Breaker Rack In/Rack out Handle- 1 Nos.
- 2. Manual spring charging handle 1 Nos.
- 3. Breaker Isolation Trolley- 1 No.

Service No. 2. Supply I & C Transformer 11kV/433V

Service Text:

SPECIFICATION OF 1600KVA TRANSFORMER:

 1.
 KVA
 : 1600 KVA

 2.
 PHASES
 : THREE PHASE

 3.
 INPUT VOLTAGE
 : 11 KV

 4.
 OUTPUT VOLTAGE
 : 433V ± 5%

 5.
 FREQUENCY
 : 50 HZ

6. STANDARDS : a) TRANSFORMER: IS 2026

b) OIL: IS 335

c) BUSHING: IS 2099

7. PRIMARY WINDING : DELTA

8. SECONDARY WINDING: STAR

9. VECTOR GROUP : DYN 11

10. RATING : CONTINUOUS
11. APPLICATION : IN DOOR

12. CABLE BOXES : TO BE PROVIDED FOR L.V/H.V WINDINGS

13. L.V/H.V WINDINGS : COPPER WINDINGS

14. COOLING : OIL IMMERSED, NATURAL COOLING
 15. ACCESSORIES : BUCH HOLTZ RELAY, OIL/WINDING TEMP

GUAGES,

WITH ALARM/TRIP CONTACTS, OIL LEVEL GAUGE,

OTHER STANDARD FITTINGS.

TAP CHANGING : OFF LOAD TAP CHANGING

16. NO.OF TAPS : SEVEN

17. INSULATION LEVEL : a) PF TEST VOLTAGE(HV)-28KV

b) PF TEST VOLTAGE(LV)-3KV

19. REFERENCE AMBIENT TEMP: 50 DEG.C

20. TEMPERATURE RISE ABOVE : a) TOP OIL-50 DEG.C

50 DEG.C AMBIENT b) WINDING-55 DEG.C

21. INDUCED OVER VOLTAGE : a) HV-22KV

b)LV-0.866KV

22. IMPULSE WITH STAND IN : HV-75

KV PEAK FULL WAVE

23. IMPEDENCE VOLT IN : 5%

NORMAL TAPPING

24. NO LOAD CURRENT AT : 3%

RATING VOLTAGE

NOTE:

- 1. THE TRANSFORMER IS TO BE SPRAY PAINTED WITH 2 COATS OF LIGHT GRAY PAINT.
- 2. THE TRANSFORMER IS TO BE SUPPLIED WITH FIRST FILL OF OIL.
- HV & LV SIDE POWER CABLE CONNECTION ARE TO BE PROVIDED WITH CABLE BOXES.
- 4. FIRM HAS TO OBTAIN APPROVAL OF BEML, KGF, FOR DRAWINGS AFTER RELEASING PURCHASE ORDER.
- FIRM HAS TO SEND O&M MANUAL OF TRANSFORMER WITH TEST REPORTS (ROUTINE).
- 6. WARRANTY: 18 MONTHS FROM THE DATE OF SUPPLY OR 12 MONTHS FROM THE DATE OF COMMISSIONING

Ref: EMCP/1004471965- Civil / 1004473027-Electricals / Construction for Painting Hangar EM Division KGF /Tender Document Dt:28-06-2024 4.Terms & Conditions This contract comprises of full, final and entire completion of the subject work all as shown in Schedule "A" and as described in the particular specifications and also subject to the General conditions of contract. Work shall be completed as per the duration mentioned under Tender Notice, the time of completion is to be reckoned from the date of commencement mentioned in the Purchase Order. Please refer "ES/Terms & Conditions/Civil works dated 23-08-2018" (22 Pages) for General Conditions & Revised special conditions for civil works contract. 3 In the event of the Firm failing or neglecting to carry out the work as specified and as required by the Company, the Company shall be entitled to recover damages from the Firm, such damages being equivalent to the extra amount which the company is obliged to pay for hiring other labours and the incidental cost thereon, and in addition the Company shall also be entitled to forfeit to itself the Security Deposit OR any part thereof remaining to the Credit of the Firm and at its option also be entitled to terminate the contract. 3(a)-REVERSE ACTION: BEML reserves the right to conduct reverse action.if required. However, the Vender has to mandatorily confirms to participate in reverse action.All the Technically accepted bids will be eligible for Reverse action. Arbitration of Disputes: Venue of arbitration will be in India and in accordance with Arbitration & Conciliation Act, 1996 and the rules framed there under and modified or amended from time to time. Disputes, if any that may arise between the parties in any of the matter connected herein will be mutually discussed and amicably settled, failing which the same will be referred to a sole arbitrator to be appointed by BEML Limited. The Arbitration proceedings shall be conducted in English language and the Arbitration proceedings will be held in Bangalore. All the disputes and differences arising out of or in any way concerning this contract whatsoever shall be referred for decision to the Chief of the Division, whose decision shall be final and binding on the parties. In respect of dispute arising under this contract or connected there with the courts situated at KGF shall alone have exclusive jurisdiction to entertain and adjudicate thereon. Contractor has to make arrangements for providing requisite manpower to execute the work on time, support materials for undertaking the job and safety equipment for safe &

smooth approach for completion of work at heights/locations.

Labours deployed in the contract shall be ESI registered, Healthy &able bodied persons

8

capable of executing works. 9 Contractor has to submit work certification from Civil Maintenance department, EM Division, BEML Ltd., KGF, for processing of bills. Contractor has to submit the GST challan having submitted the GST and filing the return 10 (uploading the data into the GST portal) on monthly basis. 11 Contractor shall make his own arrangement for accommodation and to &fro transportation to BEML factory for his labours. On award of contract, firm shall execute an agreement in a bond paper of Rs 200/- as per 12 the format given by M/s BEML Limited to carry out the subject work as per terms and conditions as directed. Sub-contract/sub letting: Under any circumstances, this works contract awarded by BEML 13 Limited to the successful firm, shall not be sub contracted to any other party. 14 GST is applicable as per prevailing rates. Bidder has to produce the challans as proof of the payment to the tax authority. ACCIDENTS, INJURIES AND DAMAGES: From commencement to completion of the work, the 15 contractor shall take full responsibility, taking precautions to prevent loss or damage. Contractor shall be liable for any damage or loss that may occur during the progress of work. In addition the contractor shall also be responsible against all loss and claims of injuries or damages to any person, which may arise during the progress of work. For this purpose the contractor shall take an Insurance policy to cover the risk for the period of contract (Contractor all risk insurance Policy). In the event of any accident / injury / disablement to the labour, contractor shall arrange to pay the required compensation legally payable to the concerned workman / dependent in addition to the medical treatment / assistance. Contractor shall employ labour in sufficient number to achieve the required rate of progress 16 and ensure best workmanship of the degree required under various specifications and to satisfaction of Contract in-charge. The Contractor shall comply with all requirements under various administrative orders and statutes including but not limited to Contract Labour (Regulation and Abolition) Act, 1970, Employees Provident Fund and Misc. Provisions Act, 1952, Employees' State Insurance Act, 1948, Minimum Wages Act 1948, Payment of Wages Act, 1936, Payment of Bonus Act, 1965, Payment of Gratuity Act, 1972, Employees Compensation Act, 1923, Employers Liability Act 1938, Industrial Disputes Act, 1947, Factories Act, 1948, Shops & Establishment Act (relevant to the State), Child Labour (Prohibition & Regulation) Act, 1986, Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013, Mines Act, 1957 or any other relevant Acts or enactments relating thereto and its amendments (State/Central) and rules framed there under from time to time as may be relevant while performing the obligations under this agreement. In the event the contractor fails or neglects to pay amount, due to him under workmen's compensation act ESI Act or other labour laws. The company is entitled to withhold the same from any other amount condemned and remit the same to the authorities concerned such payment shall be binding on the contractor.

17 If the work is not carried out satisfactorily the contractor shall suspend the execution of the work or any part thereof whenever called up to in writing by the company and shall not resume work thereon until so intimated by the company. The contractor shall have no claim for any payment or compensation or otherwise whatsoever on account of suspension of work. The same will be borne by the contractor. 18 BEML reserves the right to short close the contract at any time, if so ordered by with assigning the reasons. Under all circumstances the Contractor will be fully responsible for any disruption of the 19 works. Such disruptions will be penalized as per the Management's directions. 20 All disputes arising out of this contract shall be referred to the decision of the Divisional chief of the Company whose decision shall be final and binding. **Security Deposit:** 21 a) Successful tenderer shall furnish security deposit for the fulfillment of the contract and security amount shall be to a value of 10% of contract sum (Including GST) within 30 days from the date of commencement of contract. Such Security Deposit shall not entail any interest payment on refund. No claim shall lie against BEML, in respect of interest o cash deposit or Govt. Securities depreciation thereof. b) Contractor on acceptance of the contract, deposit the difference between EMD & full security deposit amount. Payment of security deposit: Firm shall provide Bank Guarantee towards security deposit to 22 a value of 10% of contract value including GST Valid for contract period + defect liability period of one year from the date of completion of the project + claim period of 3 months. Options for security deposit payment are as under:a) Contractor on acceptance of the contract, deposit the security deposit amount through RTGS/NEFT to account No. 54029289872, M/s BEML Ltd., KGF (IFSC Code) SBIN0040168 (SBI BEML NAGAR). OR b) BANK GURANTEE from Indian public sector bank/ Scheduled Commercial bank authorized by RBI is to be deposited for security deposit. Note: a) Contractor may choose any one of the options and inform the same in writing while 23 submitting the tender. Failing which, it is presumed that option (b) is considered i.e., Security deposit will be furnished I the form of Bank Guarantee. b) in case of BG submitted towards SD it shall be valid for contract period + three months. c) The above deposit will be held by the Company as Security for the satisfactory performance of the contract. All compensation or other sums or money payable by deducted from this Security Deposit or from any sums that may be due, or may become due, to the contractor by the Company on any account what-so-ever, and in the event of the Security Deposit being reduced by reasons of any such deductions the contractor shall within 10 (TEN) days thereafter make good these deductions. **REFUND OF SECURITY DEPOSIT:**

24.1 After the defect liability period (i.e., one year from the date of completion + 3months 24 claim period), BG Provided towards security deposit will be released. Refund of SD will be based on the recommendations of Contract in-charge, Civil Maintenance. 24.2 SHOULD there be any over payments made inadvertently to the Contractor on this contract or in any other contract, the company shall recover such amount from the Contractor either by deducting the amount from any sums that may be due or may become due to the Contractor by the Company on any account whatsoever from this or from any other contract or from the Security deposit / Earnest money deposit made by the Contractor. 24.3 : Running Account Remittances (RAR): During the progress of work, contractor shall submit the claims giving complete details of work done, rate and value to the Contract incharge / Officer-in-charge. These claims are called RAR bills and RAR payments are made once in a calendar month or more depending upon the periodicity of contract/progress of work. Where the RAR payment is based on the measurements recorded in the MB, the recommendation for payment shall be stage-wise co-related with the bill of quantities. 25 COMPLETION CERTIFICATE: On completion of the work assigned to the Contractor, the same will be inspected and if found satisfactory will be taken over by Contract in-charge and a completion certificate will be issued to the Contractor within 30 days from the date of the contractor giving notice of such completion. If there are very minor defects which can be rectified even after taking over the work, the same will be listed out in the completion certificate and the Contractor shall rectify the same before the final bill is submitted. A copy of the Completion certificate should be attached to the final bill. 26 FINAL BILL PAYMENT TERMS: On completion of the work and the recording of measurements in the MBs, a final bill shall be submitted by the Contractor. On receipt of the final bill duly signed by the contractor, the same shall be scrutinized by the Contract incharge / Officer in-charge to see the claim is in order. Normally the final bill will be paid within 125 days from the date of completion of the work or claim from the Contractor whichever is later. 27 Over time wages: No labours shall be allowed for deployment on overtime work basis on whatsoever circumstances. Contractor/agency should deploy labours only for 8hours/day. Due to unavoidable circumstances if any labour is deployed on overtime work / on weekly day of rest / on any day including Sundays / Holidays, then the contractor / agency shall pay the overtime wages / extra allowances, as per the provisions of factories act and rules made there under wages act. Wages for their extra working for such time is to be regulated as per factory's act. BEML shall not reimburse the above said payment. Over time wages: No labours shall be allowed for deployment on overtime work basis on 28 whatsoever circumstances. Contractor/agency should deploy labours only for 8hours/day. Due to unavoidable circumstances if any labour is deployed on overtime work / on weekly day of rest / on any day including Sundays / Holidays, then the contractor / agency shall pay the overtime wages / extra allowances, as per the provisions of factories act and rules made there under wages act. Wages for their extra working for such time is to be regulated as per factory's act. BEML shall not reimburse the above said payment. 29 **Penalty Clause** Sl.No. Description Penalty

	1	To produce policy within 1 of receipt of Pu	5 days from	the date		of contract d/week subjec			be S.
30	BEML at free has to fix water meter, the ch	Electricity supply required for the work may be provided at a nearest available point by BEML at free of cost. Water will be provided at the nearest available point and contractor has to fix water meter. Accordingly, water charges will be deducted. In the absence of water meter, the charges towards water will be Rs 2.50/- per bag of cement, will be deducted. Contractor to note this aspect while quoting the rates.							
31		of contract labout to labour act in ce thereof.			•	•	•		
32		ly default on t ding the penal	-						
33	Contractor sh	it of workman nould strictly a d the rate quot	dhere to th	ne timings	of entry	and exit lai		-	- 1
34	required by the such damages hiring other label be entitled to	of the Firm fance Company, the being equivale abours and the forfeit to itse	e Company s nt to the ext incidental co If the Secur	shall be en ra amount ost thereor ity Deposi	titled to re t which the n, and in a t OR any	ecover damage e company is condition the Condition the Condition the Condition the Condition the Condition in the condition i	es from tobliged to empany s remainin	the Fir o pay f shall al	rm, for Iso
35	work on time	as to make arr , support mate pach for comple	rials for und	lertaking t	he job an	d safety equip			
36		all arrange for f the company i		-		-	curity ch	neck a	ind
37		es its right to r a contract at an	•			ctory past per	formand	ce in t	the
38	shall be anno	submission of to bunced as corr extended acco	gendum to		•	•		•	
39	thereof before negotiate, car	ecide to scrap re LOI/PO is c ncel or reject ar without incurri	ommitted. E ly tender or	BEML rese reject all t	erves the enders at	right to acce	pt, split r to the	, divid	de, I of

	inform affected tenderer, the grounds of such action.
	inform affected tenderer, the grounds of such action.
40	Correspondence exchanged against the tender from both tenderer and BEML through official email are considered as valid document legally though it is not signed. It is treated as valid confirmations made on behalf of the respective company and very much comes under the legal ambit of the business transaction and hence it is binding on both the parties to the business.
41	Bidders participating in the tender should declare in their offer that whether they have been black-listed / kept on hold for a specified period / given Business holiday for a specified period by any Public sector undertaking or Government departments. The reasons for such action with details and the current status of such hold shall be furnished to BEML. If no such details are mentioned in the offer then it will be construed that the subject bidder is not under any such hold. But at a later date if it comes to the notice of BEML about any such hold under enforcement on the subject bidder, BEML will have every right to reject the offer of such vendors at any point of time & also at any stage of finalization of the subject tender irrespective of status of the subject bidder in that tender. In case if purchase order is already issued by BEML, BEML reserves the right to cancel the order without assigning any reasons thereof. Such bidders will not be permitted to participate in the further tender proceedings & will be communicated suitably. They will not be considered for any ongoing tenders even if participated till the hold is officially lifted & confirmed in writing.
42	BEML reserves the right to verify, in its sole discretion, any information given by the bidders independently through any third party agencies. During this process, if it is found that any of the information given by the bidder is false / misleading, offers of such bidders would be out rightly rejected and their EMD would be forfeited.
43	BEML reserves the right to independently assess the capability and capacity of the bidder for execution of the contract. BEML's decision on any matter regarding short listing of bidders shall be final.
44	BEML is not obligated to contract for any of the services described in the Bid invitation /Notice Inviting Tender.
45	Bid invitation / Notice Inviting Tender is not an offer or a contract.
46	Proposals become BEML's property.
47	BEML reserves the rights to:
	Accept or reject any or all proposals.
	II. Waive any anomalies in proposals through an addendum.
	III .Modify or cancel Bid / Tender.
	III. BEML Ltd's decision is final for evaluation of the offers.
48	BEML Ltd's decision is final for evaluation of the offers.
49	Bidders will not be compensated or reimbursed for the costs incurred in preparing proposals.
50	Canvassing in any form including unsolicited letters on tenders submitted or post tender

cases between themselves and BEML Ltd, pending before the Court / Arbitrator or initiate litigations/arbitrations in connection with any contract / tender issued by BEML Ltd and an contractor has defaulted against the BEML's orders are not eligible to participate in thi tender. 52 Uploaded documents in the SRM should be legible & readable. If required, entire origina documents (Uploaded Documents in SRM) have to be submitted, if asked for, within tim frame specified at that time. If Original documents are not submitted when asked for, the Bid will be liable for rejection. 53 A person signing the tender or any other document in respect of the Purchase Order shall be deemed to have power to do so on behalf of the Supplier. 54 Only GST registered vendor needs to quote. Firm has to update registered GST details in BEML website. 55 No representation would be entertained on any error(s) if found in the NIT after tender closing date. However, vendor(s) shall bring such errors / omissions to notice of BEML for necessary corrective action(s) before tender closing date. Vendor's time and expenses has to be borne by vendor(s). 56 Public Procurement — Preference to Make in India Policy: Procurement and placement or order is subject to Public Procurement (Preference to Make in India) Order 2017 issued be the Ministry of Commerce and Industry, Department of Industrial Policy & Promotion Government of India vide No. P-45021/2/2017-B-E-II dt 15 th June 2017. The full details of the order can be seen at http://dipp.nic.in/whats-new/public-procurement-preference-make india-order-2017 57 Supplier shall send Order Acceptance within two weeks from the date of LOI / LOA Purchase Order or such other period as specified / agreed by the Purchaser. Purchase reserves the right to revoke the order placed if the order confirmation differs from the agreed explicitly in writing to be in agreement with the deviation. Purchase Order will be de		
cases between themselves and BEML Ltd, pending before the Court / Arbitrator or initiate litigations/arbitrations in connection with any contract / tender issued by BEML Ltd and an contractor has defaulted against the BEML's orders are not eligible to participate in thi tender. 52 Uploaded documents in the SRM should be legible & readable. If required, entire origina documents (Uploaded Documents in SRM) have to be submitted, if asked for, within tim frame specified at that time. If Original documents are not submitted when asked for, the Bid will be liable for rejection. 53 A person signing the tender or any other document in respect of the Purchase Order shall b deemed to have power to do so on behalf of the Supplier. 54 Only GST registered vendor needs to quote. Firm has to update registered GST details in BEML website. 55 No representation would be entertained on any error(s) if found in the NIT after tender closing date. However, vendor(s) shall bring such errors / omissions to notice of BEML for necessary corrective action(s) before tender closing date. Vendor's time and expenses has to be borne by vendor(s). 56 Public Procurement – Preference to Make in India Policy: Procurement and placement or order is subject to Public Procurement (Preference to Make in India) Order 2017 issued be the Ministry of Commerce and Industry, Department of Industrial Policy & Promotion Government of India vide No. P-45021/2/2017-B-E-II dt 15 th June 2017. The full details of the order can be seen at http://dipp.nic.in/whats-new/public-procurement-preference-make india-order-2017 57 Supplier shall send Order Acceptance within two weeks from the date of LOI / LOA Purchase Order or such other period as specified / agreed by the Purchaser. Purchase reserves the right to revoke the order placed if the order confirmation differs from the original Purchase Order placed and the Purchaser shall only be legally bound after it ha agree		corrections shall render their tenders liable for summarily rejection.
documents (Uploaded Documents in SRM) have to be submitted, if asked for, within tim frame specified at that time. If Original documents are not submitted when asked for, the Bid will be liable for rejection. 3 A person signing the tender or any other document in respect of the Purchase Order shall be deemed to have power to do so on behalf of the Supplier. 5 Only GST registered vendor needs to quote. Firm has to update registered GST details in BEML website. 5 No representation would be entertained on any error(s) if found in the NIT after tender closing date. However, vendor(s) shall bring such errors / omissions to notice of BEML for necessary corrective action(s) before tender closing date. Vendor's time and expenses has to be borne by vendor(s). 5 Public Procurement – Preference to Make in India Policy: Procurement and placement or order is subject to Public Procurement (Preference to Make in India) Order 2017 issued by the Ministry of Commerce and Industry, Department of Industrial Policy & Promotior Government of India vide No. P-45021/2/2017-B-E-II dt 15 June 2017. The full details of the order can be seen at http://dipp.nic.in/whats-new/public-procurement-preference-make india-order-2017 5 Supplier shall send Order Acceptance within two weeks from the date of LOI / LOA Purchase Order or such other period as specified / agreed by the Purchaser. Purchase reserves the right to revoke the order placed if the order confirmation differs from the original Purchase Order placed and the Purchaser shall only be legally bound after it ha agreed explicitly in writing to be in agreement with the deviation. Purchase Order will be deemed to have been accepted if no communication to the contrary is received within two weeks (or the time limit as specified / agreed by the Purchaser) of the receipt of the order. 5 Indicated period of contract shall be from the date of commencement as per the Servic Purchase order with an	51	In case any Person/Persons, Company, Firm, Associations having any litigations, arbitration cases between themselves and BEML Ltd, pending before the Court / Arbitrator or initiated litigations/arbitrations in connection with any contract / tender issued by BEML Ltd and any contractor has defaulted against the BEML's orders are not eligible to participate in this tender.
deemed to have power to do so on behalf of the Supplier. 54 Only GST registered vendor needs to quote. Firm has to update registered GST details in BEML website. 55 No representation would be entertained on any error(s) if found in the NIT after tender closing date. However, vendor(s) shall bring such errors / omissions to notice of BEML for necessary corrective action(s) before tender closing date. Vendor's time and expenses has to be borne by vendor(s). 56 Public Procurement – Preference to Make in India Policy: Procurement and placement of order is subject to Public Procurement (Preference to Make in India) Order 2017 issued by the Ministry of Commerce and Industry, Department of Industrial Policy & Promotion Government of India vide No. P-45021/2/2017-B-E-II dt 15 th June 2017. The full details of the order can be seen at http://dipp.nic.in/whats-new/public-procurement-preference-make-india-order-2017 57 Supplier shall send Order Acceptance within two weeks from the date of LOI / LOA Purchase Order or such other period as specified / agreed by the Purchaser. Purchase reserves the right to revoke the order placed if the order confirmation differs from thoriginal Purchase Order placed and the Purchaser shall only be legally bound after it ha agreed explicitly in writing to be in agreement with the deviation. Purchase Order will be deemed to have been accepted if no communication to the contrary is received within two weeks (or the time limit as specified / agreed by the Purchaser) of the receipt of the order. 58 Indicated period of contract shall be from the date of commencement as per the Servic Purchase order with an option for the company to extend for a further period on the sam terms and conditions with the mutual consent with the contractor & satisfactory execution of the contract. Notwithstanding anything contained herein, the company reserves the right to terminate the contract by giving one month noti	52	Uploaded documents in the SRM should be legible & readable. If required, entire original documents (Uploaded Documents in SRM) have to be submitted, if asked for, within time frame specified at that time. If Original documents are not submitted when asked for, their Bid will be liable for rejection.
BEML website. 55 No representation would be entertained on any error(s) if found in the NIT after tender closing date. However, vendor(s) shall bring such errors / omissions to notice of BEML for necessary corrective action(s) before tender closing date. Vendor's time and expenses has to be borne by vendor(s). 56 Public Procurement – Preference to Make in India Policy: Procurement and placement or order is subject to Public Procurement (Preference to Make in India) Order 2017 issued by the Ministry of Commerce and Industry, Department of Industrial Policy & Promotion Government of India vide No. P-45021/2/2017-B-E-II dt 15 th June 2017. The full details of the order can be seen at http://dipp.nic.in/whats-new/public-procurement-preference-make india-order-2017 57 Supplier shall send Order Acceptance within two weeks from the date of LOI / LOA Purchase Order or such other period as specified / agreed by the Purchaser. Purchase reserves the right to revoke the order placed if the order confirmation differs from the original Purchase Order placed and the Purchaser shall only be legally bound after it has agreed explicitly in writing to be in agreement with the deviation. Purchase Order will be deemed to have been accepted if no communication to the contrary is received within two weeks (or the time limit as specified / agreed by the Purchaser) of the receipt of the order. 58 Indicated period of contract shall be from the date of commencement as per the Servic Purchase order with an option for the company to extend for a further period on the sam terms and conditions with the mutual consent with the contractor & satisfactory execution of the contract. Notwithstanding anything contained herein, the company reserves the right to terminate the contract by giving one month notice to the contractor. Contractor shall not be entitled to claim any compensation or any damages for such termination. 59 Accepting officer reserv	53	A person signing the tender or any other document in respect of the Purchase Order shall be deemed to have power to do so on behalf of the Supplier.
closing date. However, vendor(s) shall bring such errors / omissions to notice of BEML for necessary corrective action(s) before tender closing date. Vendor's time and expenses has to be borne by vendor(s). 56	54	· · · · · · · · · · · · · · · · · · ·
order is subject to Public Procurement (Preference to Make in India) Order 2017 issued be the Ministry of Commerce and Industry, Department of Industrial Policy & Promotion Government of India vide No. P-45021/2/2017-B-E-II dt 15 th June 2017. The full details of the order can be seen at http://dipp.nic.in/whats-new/public-procurement-preference-make-india-order-2017 Supplier shall send Order Acceptance within two weeks from the date of LOI / LOA Purchase Order or such other period as specified / agreed by the Purchaser. Purchase reserves the right to revoke the order placed if the order confirmation differs from the original Purchase Order placed and the Purchaser shall only be legally bound after it has agreed explicitly in writing to be in agreement with the deviation. Purchase Order will be deemed to have been accepted if no communication to the contrary is received within two weeks (or the time limit as specified / agreed by the Purchaser) of the receipt of the order. Indicated period of contract shall be from the date of commencement as per the Service Purchase order with an option for the company to extend for a further period on the sam terms and conditions with the mutual consent with the contractor & satisfactory execution of the contract. Notwithstanding anything contained herein, the company reserves the right to terminate the contract by giving one month notice to the contractor. Contractor shall not be entitled to claim any compensation or any damages for such termination. Accepting officer reserve the right to place order as a whole or part of any service a deemed fit.	55	closing date. However, vendor(s) shall bring such errors / omissions to notice of BEML for necessary corrective action(s) before tender closing date. Vendor's time and expenses has
Purchase Order or such other period as specified / agreed by the Purchaser. Purchaser reserves the right to revoke the order placed if the order confirmation differs from the original Purchase Order placed and the Purchaser shall only be legally bound after it has agreed explicitly in writing to be in agreement with the deviation. Purchase Order will be deemed to have been accepted if no communication to the contrary is received within two weeks (or the time limit as specified / agreed by the Purchaser) of the receipt of the order. Indicated period of contract shall be from the date of commencement as per the Servic Purchase order with an option for the company to extend for a further period on the same terms and conditions with the mutual consent with the contractor & satisfactory execution of the contract. Notwithstanding anything contained herein, the company reserves the right to terminate the contract by giving one month notice to the contractor. Contractor shall not be entitled to claim any compensation or any damages for such termination. Accepting officer reserve the right to place order as a whole or part of any service a deemed fit.	56	Public Procurement – Preference to Make in India Policy: Procurement and placement of order is subject to Public Procurement (Preference to Make in India) Order 2017 issued by the Ministry of Commerce and Industry, Department of Industrial Policy & Promotion, Government of India vide No. P-45021/2/2017-B-E-II dt 15 th June 2017. The full details of the order can be seen at http://dipp.nic.in/whats-new/public-procurement-preference-make-india-order-2017
Purchase order with an option for the company to extend for a further period on the sam terms and conditions with the mutual consent with the contractor & satisfactory executio of the contract. Notwithstanding anything contained herein, the company reserves the right to terminate the contract by giving one month notice to the contractor. Contractor shall not be entitled to claim any compensation or any damages for such termination. 59 Accepting officer reserve the right to place order as a whole or part of any service a deemed fit.	57	Supplier shall send Order Acceptance within two weeks from the date of LOI / LOA / Purchase Order or such other period as specified / agreed by the Purchaser. Purchaser reserves the right to revoke the order placed if the order confirmation differs from the original Purchase Order placed and the Purchaser shall only be legally bound after it has agreed explicitly in writing to be in agreement with the deviation. Purchase Order will be deemed to have been accepted if no communication to the contrary is received within two weeks (or the time limit as specified / agreed by the Purchaser) of the receipt of the order.
deemed fit.	58	Indicated period of contract shall be from the date of commencement as per the Service Purchase order with an option for the company to extend for a further period on the same terms and conditions with the mutual consent with the contractor & satisfactory execution of the contract. Notwithstanding anything contained herein, the company reserves the right to terminate the contract by giving one month notice to the contractor. Contractor shall not be entitled to claim any compensation or any damages for such termination.
60 Risk purchase clause: 60.1 In case of non-performance in the PO, BEML will take alternate	59	Accepting officer reserve the right to place order as a whole or part of any service as deemed fit.
action at your risks and cost apart from levying liquidated damages as deemed fit.	60	Risk purchase clause: 60.1 In case of non-performance in the PO, BEML will take alternate

60.2 For re-purchase or risk purchase at the expense of defaulting Supplier the following conditions shall be applied: 60.2.1 Re-purchase shall be made within a reasonable time after the date of breach or within the time stipulated in the contract. 60.2.2 Defaulting Contractor shall be served with notice of re-purchase. 60.2.3 Risk purchase loss shall be recovered only after the re-purchase contract has been executed. Price & Invoicing: Agreed prices are fixed prices in the currency as specified in the Purchase Order. They shall include all the charges specified by the Purchaser and are inclusive of all applicable taxes, duties etc. except for those specifically agreed between the supplier and purchaser. Method of invoicing shall be without prejudice to the parties; agreement as to the place of performance. Invoices shall be submitted bearing the Purchase Order number & date, item number (s) and supporting documents as called for in the Purchase Order. 62 There will be cases where the cancellation of the order is due to factors beyond the control of the Buyer like labour strike in the factory of the Buyer, act of God, war etc. In such cases, Supplier has to accept the cancellation. BEML Ltd. shall be entitled and it shall be lawful on its part to forfeit the security deposit of the bidder in whole or in part in the event of any default, failure or neglect on the part of the contract in the fulfilment or performance in all respect of the Purchase Order. 63 Purchase Order Cancellation Clause: In the event of any situation arising out of or caused by any act which is beyond the control of BEML, may necessitate cancellation of purchase order by giving one month notice in advance to the supplier. BEML can terminate the Purchase Order without prejudice to the right of parties, accrued to the date of termination. 64 If a Supplier fails to perform in accordance with the contract conditions, he commits breach of contract. Breach generally gives the Buyers right to cancel the Order, besides claim for damages. Where the order is cancelled, the Buyer can in addition sue the Supplier for the damages as per the terms of contract. Buyer subsequently purchases / executes the contract from elsewhere. Damages are generally limited to the difference between the contract price and the price paid to the new supplier for execution of the contract. Non-disclosure and information obligations: Supplier shall provide Purchaser with all 65 information pertaining to the service rendered in so far as it could be of importance to Purchaser. Supplier shall not reveal confidential information to its own employees not involved with the tender / Contract & its execution or to third parties. Supplier shall not be entitled to use the Purchaser's name in advertisements and other commercial publications without prior written permission from Purchaser. Tax conditions: TDS (Tax deducted at source) will be applicable for domestic supplies 66 including service purchase orders and will be deducted as per law of land. SAC (Service Account code) shall be indicated for Service/NRC that will be carried out. Works to be carried on with expedition failing which the Company may employ other Contractor(s) without vitiating the contract: Contractor shall commence to carry on the woks with due diligence and as much expedition as the Engineer may reasonably expect having regard to the specified time of the whole of the works as mentioned in the "Scope of the contract". In case the contractors fail to do so or neglect to provide proper and sufficient materials, or to employ sufficient number of workmen to execute the work, then the company shall have full power without vitiating the contract to take the works wholly or in part of the hands of the contractor to engage or employ any other person or workmen and to procure all the requisite materials and implement for the due execution and completion of the said works and the costs and charges incurred by the company in doing so shall be ascertained by the competent authority and be paid for or allowed to the company by the contractor and it shall be competent for the company, to reduce the amount of such costs and charges along with overheads out of any sum or sums due to or to become due from the company to the contractor under this or any other contract.

- Valuation of Deviations: Every deviation shall be subject to the limits specified as under:

 (a) The net value of all deviations (additions and deductions) including non-tendered items, of the value of work completed, shall not exceed 20% of the approved contract value and 40% in respect of any individual item, indicated in schedule A-BOQ.
 - (b) In case of non-tendered items, the total value of such non-tendered items shall not exceed 5% of the approved contract value.

The basis for ascertaining the non-tendered items shall be as follows:

- (i) The value of all deviations shall be ascertained by measurements, on the basis of the rates or prices for similar work in the bill of quantities of the same contract in so far as such rates or prices apply.
- (ii) Where the rates or prices in Bill of Quantities do not apply, the value shall be based upon rates or prices deduced there from to the extent practicable to do so.
- (iii) The rates for NT items shall be based on the SSR rates after proportionate adjustment in comparison with the tendered rates of like items in the contract. The basis to be adopted for working out the NT rate is the comparison of the NT item with similar trade item in the bill of Quantity for which the contractor has quoted.
- (iv) Wherever NT items cannot be deduced from the like items quoted in the tender of SSR rates, market rate shall be allowed based on vouchers/invoices as per the actual including transportation, labour etc., plus 10% Overheads and the labour rate shall be taken as per minimum wages in force, based on the recommendations of the Chief Engineer.
- (v) As a latest resort a tender shall be floated to ascertain the rate for NT items. All Deviations in contracts for works including non-tendered items shall be approved by the Competent Authority as per DoP within the limits prescribed in the contract. The deviations and NT items shall be technically checked and processed by the respective "Engineer-in-charge" in concurrence with Finance Department of the respective division.
- Secrecy: All the information, know-how, technical data, specification and drawing models or specimens furnished by BEML for the purpose of or in connection with the execution of the services hereby tendered constitute the property of BEML and the supplier shall keep them in strict confidence and he shall not divulge the same to anyone else except under the authority and for the purpose of BEML. All such documents, data, drawing, models and specimens are the property of BEML and shall be returned when done with or when demanded by BEML. BEML shall be entitled to prevent a breach of the above and to

	damages in case of breach.
70	Drawing and Documents: Drawings, technical documents or other technical information received by one party shall not, without the consent of the other party, be used for any other purpose than that for which they were provided. They may not, without the consent of the submitting party, otherwise be used or copied, reproduced, transmitted or communicated to third parties. The supplier shall, as per agreed date/s but not later than the date of delivery, provide free of charge information and drawings which are necessary to permit the Purchaser to erect, commission, operate and maintain the product. All intellectual properties, including designs, drawings and product information etc. exchanged during the formation and execution of the Contract shall continue to be the property of the submitting party.
71	All claims arising by OR at the instance of the labourers or their heirs or successors, including claims under the Employee's Compensation Act from time to time shall be met by the firm on his own account and the Company shall have no liability in that behalf and shall be kept duly indemnified by the firm.
72	Contractor shall ensure that all the rules of the factory concerning discipline, safety, security and conduct are observed by his staff while working. In case of any noncompliance, the contractor shall be responsible for the consequence.
73	Appropriation: BEML Ltd., shall be entitled to recover by appropriating in part or full any sum of money payable by the contractor under this contract or any other contract including contracts with other divisions of BEML. Shall the sum of amount recovered is not sufficient to cover the total amount due, BEML is entitled to recover such amount from the bills that becomes due or the contractor shall pay BEML the balance due.
74	Contractor shall guarantee that the services rendered are performed by personnel of required capacity and that new materials are used. Contractor shall guarantee that the services rendered correspond exactly with the provisions of the agreement, the reasonable expectations of Purchaser regarding the characteristics, quality and reliability of service rendered. Contractor shall guarantee that the service rendered complies with legal requirements applicable in India and other (international) Government regulations, as applicable. Contractor shall guarantee that the service rendered complies with the customary norms and standards in the relevant branch of trade or industry. Contractor shall be responsible for compliance with applicable technical, safety, quality, environmental requirements and other regulations in relation to his product, packaging and raw and ancillary materials.
75	Prices charged for the services rendered under this P.O by the supplier shall in no event exceed the lowest price at which the supplier render the service of identical description to any other BEML Office / Division during the pendency of this PO.
76	If at any time, during the said period, the supplier reduces the price of such services or render such services to any other BEML Office / Division at a price lower than the price chargeable under this P.O and the price payable under this PO for the services rendered after the date of coming into force of such reduction shall stand correspondingly reduced.
77	Non-waiver of defaults: If any individual provision of the Contract is invalid, the other provisions shall not be affected. Failure of BEML to insist upon performance of the Contract

to enforce any of the terms and conditions of this Contract or to exercise any right or privilege granted to BEML under this Contract or under law shall not be construed as a waiver and the same shall continue in full force and effect.

- 78 Integrity commitment in the execution of contracts:
 - (a) Commitment by Purchaser: Purchaser commits to take all necessary steps to prevent corruption in connection with the execution of the Contract.
 - (b) Commitment by the Contractor: Contractor (s) commit (s) to take all measures to prevent corruption and will not directly or indirectly try to influence any decision for the benefit for which he is not legally entitled. Contractor (s) will not commit any offence under the relevant Acts. Contractor(s) will not use improperly, for purpose of competition or personal gain or pass on to others, any information or documents provided by Purchaser as part of business relationship. Contractor (s) will not enter with other Bidder(s) / Contractor(s) into any undisclosed agreement or understanding or any actions to restrict competition. If the Contractor (s), before award or during execution of the Contract commit (s) a transgression of the above or in any other manner such as to put his reliability or credibility in question, Purchaser is entitled to disqualify the contractor (s) from the tender process or terminate the contract and / or take suitable actions as deemed fit.
- Intellectual property rights; licenses: If any Patent design, trademark or any other intellectual property rights apply to the service rendered or accompanying documentation, Purchaser shall be entitled to the legal use thereof free of charge by means of anon-exclusive, worldwide, perpetual license. All intellectual property rights that arise due to the execution of the contract by the Supplier and by its employees or third parties involved by the Supplier for performance of the agreement belong to Purchaser. Supplier shall be obligated to do everything necessary to obtain or establish the above mentioned rights. Supplier guarantees that the service rendered does not infringe on any of the intellectual property rights of third parties. Supplier shall also be obligated to do everything necessary to obtain or establish the alternate acceptable arrangement pending resolution of any (alleged) claims by third parties.

Supplier shall indemnify the Purchaser against any (alleged) claims by third parties in this regard & shall reimburse Purchaser for any damages suffered as a result thereof.

- Bribes and gifts: Any bribe, commissions, gift or advantage given, promised or offered by or on behalf of the supplier or his partner, agent or servant or anyone on his or on their behalf to any officer, servant, representative or agent of BEML or any person on his or their behalf in relation to the obtaining or to the execution of or any other contract with BEML Ltd., shall in addition to any criminal liability which the supplier, may incur, subject the supplier to the cancellation of this and all other contracts with BEML and also for payment of any loss or damage resulting from any such cancellation to like extent, as is provided in case of cancellation under clause 39 hereof. Any question or dispute as on the commissions of any offence under the present clause shall be settled by BEML in such manner and on such evidence of information as they may think fit and sufficient and their decision shall be final and conclusive.
- Force Majeure Clause: Notwithstanding anything contained in the Contract, neither the Supplier nor the Purchaser shall be held responsible for total or partial non-execution of any of the contractual obligations, shall the obligation become unreasonably onerous or impossible due to occurrence of a `Force Majeure' conditions which directly affect the

obligations to be performed by the Purchaser or the Supplier. Such events include war, military operations of any nature, blockages, revolutions, insurrections, riots, civil commotions, insurgency, sabotage, acts of public enemy, fires, explosion, epidemics, quarantine restrictions, floods, earthquake, or acts of God, restrictions by Govt. authorities over which the Supplier or the acts on which the Purchaser has no control. Party claiming to be affected by Force Majeure shall notify the other party in writing without delay, within two weeks on the intervention and on the cessation of such circumstance. Extension of time sought by the Supplier along with supporting evidence and so granted by the Purchaser for the supply/work affected, if any, shall not be construed as waiver in respect of remaining deliveries. Notwithstanding above provisions, Purchaser shall reserve the right to cancel the order/Contract, wholly or partly, in order to meet the overall delivery schedule and make alternative arrangements including arrangements with third party for completion of deliveries and other schedules. Purchase may takeover partly processed material at a mutually agreed price.

82 **Non-Disclosure Clauses of Contract for preventing of Data theft/ leakage:** During the contract period, the Consultant, Contractor, Personnel of vendor will have restricted access to sensitive confidential information of BEML Limited such as IT infrastructure, business data, software information, etc.

The vendor or its personnel shall not disclose at any point of time to any other person / third party the information so received and use the same degree of care to maintain the confidentiality of the information as if the information is their own. Also, the vendor may use the information only for serving BEML's interest and restrict disclosure of information solely to those employees of vendor having a need to know such information in order to accomplish the purpose stated above, advise each such employee, before he or she receives access to information, of the obligation of vendor under this agreement and require such employees to maintain these obligations. Violation of NDA will lead to legal action, forfeiture of PBG and blacklisting.

83 | **Penalty for LD**:LD is applicable as per SRM GTC.

BEML LIMITED

KOLAR GOLD FIELDS - 56311

(A Govt. of India Mini Ratna Company under Ministry of Defence) EM Division, BEML Nagar Post, Kolar Gold Fields - 563 115.

Phone: 08153 – 279365 Fax: 08153 - 263274

Sub: Contract for Civil & Electrical works for construction of New Painting Hangar at EM

Division, BEML Ltd, KGF.

5. COMMERCIAL BID

NOTE: 1. FIRM HAS TO QUOTE UNIT RATE WITH APPLICABLE GST FOR EACH LINE ITEMS OF BOQ-CIVIL & BOQ-ELECTRICALS PROVIDED IN EXCEL SHEET IN SRM C-FOLDER. (ATTACHED)

- 2. INDIVIDUAL BREAK UP UNIT PRICES (CIVIL & ELECTRICAL) FOR ALL LINE ITEMS PROVIDED IN EXCEL SHEET IN SRM C-FOLDER TO BE FILLED AND UPLOADED IN FINANCIAL BID ONLY. IF ANY FIRM/CONTRACTOR ATTACHES COMMERCIAL DETAILS IN THEIR TECHNICAL BID, THEIR TECHNICAL BID WILL BE REJECTED. FIRM/CONTRACTOR HAS TO NOTE THIS WHILE QUOTING THEIR BID.
- 3. Selection of L-1 firm will be based on least Total quoted rate including GST considering all line items of BOQ of technically accepted bids. L-1 will be considered for award of contract.
- 3(a) **REVERSE ACTION**: Firm has to quote in reverse action process (after technically Qualified) All the Technically accepted bids will be eligible for Reverse action.
- 4. Intending bidders should acquaint themselves with the site conditions and nature of work involved before quoting. Bidders are advised to visit the work areas, consult the concerned officer and get clarified and then quote. Ignorance of site conditions at a later stage will not be entertained by BEML.
- 5. Bid should be for the complete scope of work specified.
- 6. Rate quoted shall inclusive of all expenditures like expenses towards labour wages, supply of materials, etc.
- 7. Payment will be on RAR basis against certification by Contract in-charge, Civil Maintenance, EM Division for satisfactory completion of work.
- 8. Contractor has to study and understand complete scope, work involved / to be carried out and terms & conditions before quoting the tender.
- 9. In case of any doubt regarding submitting the quote, don't assume but contact the concerned officer as indicated in the tender and quote correctly.
- 10. Subject contract comprises of full and satisfactory completion of the works as per the Bill of Quantities and Terms & Conditions.
- 11. For any clarifications regarding Scope of work/Terms and Conditions, please contact In-charge, Civil Maintenance, EM Division, BEML Ltd-KGF.
- 12. Contractor has to keep record for establishing satisfactory performance of job, obtaining necessary certification from Contract in-charge.

5.1 SCHEDULE 'A' BILL OF QUANTITIES - CIVIL WORKS

SI No	Description	Qty	UO M	Unit Rate (Rs)	Extended Value (Rs.)
а	b	С	d	е	f = c X e
1	HANGAR SUB & SUPER STRUCTURE -Excavation upto 1.5m - Excavation over areas not exceeding 1.5m deep and getting out soft/ loose soil complete all as specified and as directed.	3200	M3		
2	Excavation in trenches upto 1.5m- Excavating in trenches, in loose soil/hard soil//hard rock and removal of water by mechanical means, not exc 1.5 m in depth; for foundation, etc. or for shafts, wells, cesspits, manholes, pier holes, etc. n exc 10 sq m on plan and n. exc 1.5 m in depth and getting out etc complete	2500	M3		
3	Excavation in trenches upto 1.5m - 3M - Excavating in trenches, in loose soil/hard soil//hard rock and removal of water by mechanical means, not exc 1.5 m in depth; for foundation, etc. or for shafts, wells, cesspits, manholes, pier holes, etc. n exc 10 sq m on plan and n. exc 1.5 m in depth and getting out for each additional 1.5m or part thereof in depth beyond the first 1.5 m etc complete.	2400	M3		
4	Excavation in trenches upto 3M - 4.5M Excavating in trenches, in loose soil/hard soil//hard rock and removal os water by mechanical means, not exc 1.5 m in depth; for foundation, etc. or for shafts, wells, cesspits, manholes, pier holes, etc. n exc 10 sq m on plan and n exc 1.5 m in depth and getting out for each additional 1.5m or part thereof in depth beyond the first 1.5 m etc complete	550	М3		
5	"Plum Concrete -Providing & Laying Plum concrete consisting of 80% P.C.C. mix (1:3:6) and 20% Rubble stone of maximum size of 150 mm laid in layers with ramming consolidating,watering including dewatering cost,seigniorage& conveyance of all materials,labourcharges,machine mixing, finishing the surface etc. complete."	50	M3		
6	Returning, Back filling Returning, filling in, including spreading, levelling, watering and well ramming in layers not exc 25 cm.	7500	M3		

		ı	1	1	
7	Anti Termite Treament for foundation M&L for	1850	M2		
	Treating the bottom and sides of excavation at				
	the rate of 5 litres of emulsion per square				
	meter of surface area				
8	Anti Termite Treament for Filled Earth M&L for	2150	M2		
	Treating the top surface of filled earth at the				
	rate of 5 litres of emulsion per square meter of				
	surface				
9	Hardcore for Flooring M& L Hardcore of gauge	170	M3		
	n exc. 63 mm, deposited, spread and levelled in				
	layers n exc. 15cm thick, watered and rammed				
	to a true surface below plinth protection				
10	P.C.C (1:3:6) M&L for Cement Concrete in	130	М3		
	Foundation, Filling and mass concrete 1:36				
	type C2 using 40mm Graded aggregate				
11	R.C.C. M 30 Concrete for foundation M & L for	1357	M3		
	RCC M-30design mix as in foundation footings,	1337	11.5		
	plinth beams, foundation beams, bases of col,				
	basements slabs, under-reamed piles & mass				
	concrete using 20mm graded stone aggregate.				
12	R.C.C. M30 Concrete for Columns UPTO	125	M3		
	G.LM& L for RCC 30 design mix as in Columns	123	1013		
	using 20mm graded stone aggregate.				
13	Form Work for foundation -Formwork to sides	1625	M2		
15	of concrete foundations, footings, bases of	1023	IVIZ		
	columns, raft and raft beams, sides and soffits				
	(if any) of foundation and plinth beamsand				
	similar work; vertical or to batter(Fair Finished)				
14	Form Work For R.C.C. COLUMNS -Formwork to	510	M2		
14	sides of pillars, posts, struts, Piers, columns and	310	IVIZ		
	stanchions.				
15	REINFORCEMENT STEEL 10mm & over dia S & F	91962	KG		
13	TMT steel bars 10mm dia and over cut to	91902	KG		
	length bent to shape required, including				
	cranking bending spirally for hooping for				
	columns, hooking ends and binding with and				
	including MS wire (annealed) not less than				
	0.9mm dia or securing with clips				
16	REINFORCEMENT STEEL 5-10mm dia S & F TMT	2200	ИС		
10		3388	KG		
	steel bars 5 to 10mm dia in stirrups Spacers & Binders				
17		4	NO		
1/	Plate Load test Carrying out Plate Load Test	1	NO		
	complete with necessary and adequate				
	Kentledge loads, equipments and instruments				
	etc. as per specifications for ascertaining of				
	bearing capacity of soil etc. complete as				
	specified and directed and submitting reports				
10	in duplicate.				
18	Super structure -R.C.C. M30 Concrete for	126	M3		
	Columns above G.L.M & L for RCC M-30 design				
	mix as in Columns using 20mm graded stone				
	aggregate.				

				1		
19	R.C.C. M30 Concrete for beams, lintels, brackets	43	M3			
	M & L for RCC M-30 design mix as in Lintels					
	Beams, Cantilevers, bressummers, lintels over					
	1.50m Span using 20mm Graded aggregate					
20	R.C.C. M30 Concrete for Sunshades above	7	M3			
	Openings M & L for RCC M-30 design mix as in					
	Slabs supported on walls, beams and columns					
	in floors, roofs, landings, balconies,					
	canopies, deck slabs and in shelves and the					
	like Sunshades &Chajjas.					
21	Brickwork 230 mm thick M& L Brickwork using	122	M3			
21	A class bricks, straight /curved on plan in	122	IVIS			
	cement mortar 1:6.					
22	REINFORCEMENT STEEL 10mm & over dia. S &	72722	ИС			-
22		72722	KG			
	F TMT steel bars 10mm dia and over cut to					
	length bent to shape required, including					
	cranking bending spirally for hooping for					
	columns, hooking ends and binding with and					
	including MS wire (annealed) not less than					
	0.9mm dia or securing with clips but in Stirrups.					
23	REINFORCEMENT STEEL 5-10mm dia S & F TMT	1885	KG			
	steel bars 5 to 10mm dia in stirrups Spacers					
	&Binders .					
24	Form Work For R.C.C. COLUMNS Formwork to	675	M2			
	sides of pillars, posts, struts, piers, columns and					
	stanchions.					
25	Form Work For R.C.C. Beams Formwork to	265	M2			
	sides and soffits of floor or roof beams, beam					
	haunchings, girders, bressummers, lintels,					
	cantilevers, shelves including supports,					
	overhangs, etc. also splays between floors and					
	beams, etc. for flat surfaces.					
26	Form Work For R.C.C. for Sunshades (Chajjas)	33	M2			
	Formwork to chullah hoods, chajjas,troughs					
	and similar items including edges.					
27	Structural Steel for columns, side purlins, roof.	405894	KG			
- '	Supply & fixing structural steel for columns,	+03034				
	Roof trusses (framed), trussed, purlins, crane					
	gantries, rails and fastenings and heavy bracket					
	framing (Beam, tee, angle, channel or flat					
	sections) including distance pieces, cleats etc					
	including application of 2 coats of anti-					
	corrosive paint on surface of member ,					
	1					
20	preparation of shop drawing etc all complete.	02025	1/0		+	-
28	Structural Steel for chequered plates Supply &	93925	KG			
	fixing structural steel for Plates (plain or					
	chequered) channels, square cut or notched					
	(ordinary and counter sunk) forming holes,					
	without any attachment etc including					
	application of 2 coats of anti- corrosive paint					
	on surface of member , preparation of shop					
	drawing etc all complete .					

	T					
29	Roofing & Side Cladding Supply& fixing Pre-	4500	M2			
	painted galvatume aluminum zinc coating GI					
	based corrugated steel sheet 0.50mm thick of					
	an colour having tensile strength of 550 Mpa as					
	in roof covering/cladding to wall, fixed with self					
	tapping screws as specified					
30	Plastering CM 1:6 on Fair Surface 10mm	700	M2			
	Thick(Internal) M & L Plaster 10mm thick with					
	CM 1:6 on brickwork or concrete surfaces on					
	walls in even without using extra cement .					
31	Plastering CM 1:4 on fair Surface15mm	625	M2			
	Thick(External) M & L Rendering 15mm thick					
	with CM 1:4 in 2 layers (5MM mm thick)over					
	10mm thick cement plaster in 1:4 on fair faces					
	of brickwork or concrete surfaces all as					
	specified. To be finished even and smooth					
	(without using extra lime or cement).					
32	Paint External surfaces Material & Labour for	625	M2			
	applying Two or more coatsof 100% Premium					
	acrylic emulsion paint having VOC less than 50					
	gm/litre and UV resistance asper IS					
	15489:2004, Alkali & fungal resistance, dirt					
	resistance exterior paint of required					
	shade(Company Depot T nted) with silicon					
	additives@ 1.43 litre/ 10 sqm over and					
	including primingcoat of exterior primer					
	applied @ 0.90 litre/ 10 sqm over new surfaces					
33	preparing the new wall surface and applying	700	M2			1
	two coats of putty for internal walls and					
	applying two coats of plastic emulsion paint					
	over acoat of primer to the wall surfaces etc					
	complete					
34	M60 CONCRETE Concrete pavement :-	1000	М3			
	Construction of un reinforced dowel jointe ,					
	plain concrete pavement over prepared sub					
	base with OPC cement design M60 @ minimum					
	500 kg/ cum with 25 mm & downsize grded					
	granite metal coarse aggrgate @ 0.67cum &					
	fine aggregae @0.44 cum with super plastizer					
	at 3 lts confirming to IS :383 , mixed in batching					
	& mixing plant as per approved mix design ,					
	transported to site , laid with fixed form ,					
	spread & compacted in continious operation					
	including provision for contraction, expansion,					
	construction & longitudunal joints , joint filler ,					
	seperation membrane , sealant primer , joint					
	sealant, debonding strip, dowel bars, tie rod,					
	admixuures as approved curing compound ,					
	finishing to lines & grades as per drawing,					
	complete as per MORTH specification NO 602,					
	With vaccum dewatering with vaccum pump &					
	suction mat & compaction with skin floater					1
	Tatalon mat a compaction with skin houter			<u> </u>	1	

			1	I		
	clubbed with floating disc including cost of					
	generator, HOM machinery screed vibratory,					
	power floater , blade with all lead & lift (
	including formwork)					1
35	DLC -Providing and laying Dry Lean Concrete	275	M3			
	base including providing coarse and fine					
	aggregate to the specified gradation using					
	minimum cement content 150 kg/cum of					
	concrete with OPC 43 grade cement, mixing of					
	concrete as per approved design mix using					
	mechanised batch mix plant of appropriate					
	capacity, transporting and laying with self					
	propelled paver with electronic sensor device					
	and compacting with vibratory roller of					
	minimum 80- 100 KN static weight to give					
	desired compacted density and average					
	compressive strength of 10 MPa at 7 days and					
	curing with liquid curing compound and					
	sprinkling water and covering with moist					
	hesian cloth of water for 7 days including					
	providing construction joints, including all					
	material, labour, machinery with all leads and					
	lifts etc. complete as specified and as directed					
	by the Engineer. B) Laying by paver with					
	electronic sensor device					-
36	"WBM- Providing & laying, spreading &	500	M3			
	compacting graded crushed stone aggregate to					
	wet mix macadam to the satisfaction of					
	Engineer including premixing the material with					
	water					
	to OMC in mechanical mix (pug mill) carriage of					
	mix material by tipper to site, laying in					
	uniform layer of 75 mm to 100 mm (compacted					
	thickness each) with sensor paver					
	finisher on prepared subbase & compacting					
	with vibratory roller (10 tonne) to achieve					
	desired density including lighting, guarding					
	barricading & maintenance of diversion etc.					
	as directed by the Engineer, (Rebate for not					
	using sensor paver should be taken,(metal					
	gradation from 53 mm to 75 micron as per					
	MORTH Specifications					
37	GSB- Providing & laying, spreading &	500	M3			1
	compacting specified crushed stone in granular					
	subbase course including premixing the					
	material in mechanical mixer (pugmill or					
	approved type), spreading of mixed material in					
	uniform layer of 100 mm to 75mm (compacted					
	thickness each) with motor grader or paver on					
	prepared murum surface & compacting with 10					
	tonne vibratory roller to achieve desired					
	density including all material ,labour					
	machinery ,lighing barricating to all lifts & lead				<u> </u>	

	maintenance of diversion etc. complete (metal				
	gradation from 75 mm to 75 mm micron as per				
	MORTH Specifications				
38	Moorum -"P/L earth work in embankments &/	500	M3		
	filling low-lying ground in layers not exceeding				
	25 cm. in loose thickness & compacting each				
	layer with a 10/12 tonnes power roller				
	including levelling watering etc. complete in				
	conformity with the required lines, grades &				
	cross sections & also cleaning & grubbing the				
	ground etc. complete as per prevailing MORTH				
	specifications for Road works				
39	Seperation Membrane of Minimum thickness	1800	M2		
39	of 150 micron polythene sheet etc complete	1000	IVIZ		
40	"UPVC WINDOWS -Providing and fixing factory	140	N 4 2		
40		140	M2		-
	made uPVG white colour Sliding window Three				
	track made of extruded profiles with wall				
	thickness of 2.3mm (+ -0.2mm). Window				
	profile with hollow section with multi chamber.				
	Frame (88mm x 52mm), sliding sash (42mm x				
	67mm). Sliding mesh Sash (42mm x 57mm)				
	Sliding interlock (One vertical length in each				
	shutters) (45.5mm x 28mm), Glazing bead				
	(24.5mm x 16mm) will be miterd cut and fusion				
	welded at all corners, including drilling of holes				
	for fixing hardware and drainage of water				
	etc., making arrangement for fixing of				
	hardware. EPDM gasket, 1.2+ -0.2mm thick				
	galvanised steel Frame (30mm x 18mm) 2 nos,				
	sliding sash (30mm x18mm), sliding mesh sash				
	(26mm x 10mm) profile to be inserted in				
	required profile, frame will be fixed to the wall				
	with 8mm x 100mm long fasteners, Hardware				
	[Touch Lock of zinc alloyed (white powder				
	coated),				
	steel roller system. Stainless steel wire cloth				
	0.36mm nominal dia of wire and average width				
	of aperture 1.40mm and required accessories.				
	(Note: The unit rate quoted by contractor				
	excludes				
	cost of glass and includes all other connected				
	accessories. Net Opening will be measured lor				
	payment purpose.)"				
41	WINDOW GLASS 5.5 mm Sheet glass ordinary	140	M2		
	quality and glazong in oil putty in square				
	exceeding 0.5 sq m.				

			,	
42	"WINDOW SILL-M& L Marble work 18 to 20mm	50	M2	
	thick (table rubbed and polished) in steps,			
	windowcills, cooking platforms and like			
	incement mortar (1:4) including pointing in			
	white cement (1:2) using marble dust with			
	admixture of pigment to match with marble			
	shade of following type. Green Marble"			
43	Rain water pipes PVC (SWR) pipes single	600	M	
	socketed in any length with rubber ring joints			
	fixed to walls			
44	GI Gutter, ridge supplying & fixing Plain,	300	M	
	galvanised, steel sheeting 2.5mm, in			
	ridges,hips, valley gutters, drip and straight			
	flashings (length and girth as fixed)			
45	Rolling Shutters Electrically Operated Providing	220	M2	
43	and fixing rolling shutters made out of 18	220	IVIZ	
	gauge steel sheets for curtains, including			
	bottom rail, 100 mm wide guide channels for			
	opening width up to 4.0m and 150mm wide			
	guide channel for opening width more than			
	4.0m, lock plates, locking arrangement on both			
	sides, fixing bolts, pulling handles, MS hood of			
	appropriate size, rolling arrangement, standard			
	make springs in brackets etc. including fixing of			
	frames with rag bolts, grouting of parts in			
	position etc. and also including two coats of red			
	oxide zinc chromate primer and two coats of			
	synthetic enamel paint of approved colour,			
	shade and brand etc. complete as per IS:6248 /			
	specifications and as directed by Engineer In			
	Charge. The shutter should withstand wind			
	pressure of 47meters per second, including			
	Electrically operated (motorised) with switch &			
	cable			
	460RCC Hume Pipe Providing & laying 450 MM			
	Reinforced concrete pipes, class NP3, laid and			
	jointed complete with collars etc all complete			
10	i i i i i i i i i i i i i i i i i i i	100	8.4	1
46	ORCC Hume Pipe Providing & laying 450 MM	100	M	
	Reinforced concrete pipes, class NP3, laid and			
	jointed complete with collars etc all complete.			
47	GI PIPE FOR COMPRESSED AIR- Providing &lying	220	M	
	20 mm, medium grade galvanised iron pipes			
	,with all fitting and fixed complete to walls and			
	ceilings or laid in floors.			
48	"Providing &lying 50 mm , medium grade'	110	М	1
	galvanised iron pipes ,with all fitting and fixed	110	'*'	
	complete to walls and ceilings or laid in floors".			
40		250	N 40	
49	Annexure building + sump Excavation upto	350	M3	
	1.5mExcavation over areas not exceeding 1.5m			
	deep and getting out soft/ loose soil complete			
	all as specified and as directed.			
50	Excavating in trenches, in loose soil/hard	550	M3	
		_		_

		1		1	1	_
	soil//hard rock and removal os water by					
	mechanical means, n exc 1.5 m wide and n exc					
	1.5 m in depth; for foundation, etc. or for					
	shafts, wells, cesspits, manholes, pier holes,					
	etc. n exc 10 sq m on plan and n exc 1.5 m in					
	depth and getting out etc, complete.					
51	Excavation in trenches upto 1.5mExcavation in	475	M3			
	trenches upto 1.5m - 3M -Excavating in					
	trenches, in loose soil/hard soil//hard rock and					
	removal os water by mechanical meansnexc					
	1.5 m wide and n exc 1.5 m in depth; for					
	foundation, etc. or for shafts, wells, cesspits,					
	manholes, pier holes, etc. n exc 10 sq m on					
	plan and n exc 1.5 m in depth and getting out					
	for each additional 1.5m or part thereof in					
	depth beyond the first 1.5 m					
52	Excavation in trenches upto 3M -	120	M3			
	4.5MExcavating in trenches, in loose soil/hard					
	soil//hard rock and removal os water by					
	mechanical means n exc 1.5 m wide and n exc					
	1.5 m in depth; for foundation, etc. or for					
	shafts, wells, cesspits, manholes, pier holes,					
	etc. n exc 10 sq m on plan and n exc 1.5 m in					
	depth and getting out for each additional					
	1.5m or part thereof in depth beyond the first					
	1.5 m.					
53	Returning, filling in, including spreading,	1118	M3			
	levelling, watering and well ramming in layers					
	not exc 25 cm.					
54	Anti TermiteTreament for foundation -M&L for	423	M2			
	Treating the bottom and sides of excavation at					
	the rate of 5 litres of emulsion per square					
	metre of surface area					
55	Anti TermiteTreament for Filled Earth-M&L for	504	M2			
	Treating the top surface of filled earth at the					
	rate of 5 litres of emulsion per square metre of					
	surface					
56	"Hardcore for Flooring M & L Hardcore of	125	M3			
	gauge n exc. 63 mm, deposited, spread and					
	levelled in layers n exc. 15cm thick, watered					
	and rammed to a true surface below plinth					
	protection "		_			
57	P.C.C (1:3:6)M&L for Cement Concrete in	41	M3			
	Foundation, Filling and mass concrete 1:3:6					
F.0	type C2 using 40mm Graded aggregate	2=-				4
58	R.C.C. M 30 Concrete for foundation -M & L for	251	M3			
	RCC M-30design mix as in foundation footings,					
	plinth beams, foundation beams, bases of col,					
	basements slabs, under-reamed piles & mass					
F0	concrete using 20mm graded stone aggregate.	4.5	P 40			
59	R.C.C. M30 Concrete for Columns UPTO	15	M3			
	G.LM& L for RCC 30 design mix as in Columns		l			

	using 20mm graded stone aggregate.				
60	Form Work for foundation -Formwork to sides	420	M2		
30	of concrete foundations, footings, bases of	0			
	columns, raft and raft beams, sides and soffits				
	(if any) of foundation and plinth beams and				
	similar work; vertical or to batter(Fair Finished)				
61	Form Work For R.C.C. COLUMNS-Formwork to	115	M2		
01	sides of pillars, posts, struts, Piers, columns and	113	1712		
	stanchions				
62	Form Work For R.C.C. Beams -Use & waste	415	M2		
02	Formwork to sides and soffits of floor or roof	713	1412		
	beams, beam haunchings, girders,				
	bressummers, lintels, cantilevers, shelves				
	including supports, overhangs, etc. also splays				
	between floors and beams, etc. for flat				
	surfaces.				
63	REINFORCEMENT STEEL 10mm & over dia S & F	20424	KG		
03	TMT steel bars 10mm dia and over cut to	20424	NO		
	length bent to shape required, including				
	cranking bending spirally for hooping for				
	columns, hooking ends and binding with and				
	including MS wire (annealed) not less than				
	0.9mm dia or securing with clips				
64	REINFORCEMENT STEEL 5-10mm dia -S & F	3604	KG		
04	TMT steel bars 5 to 10mm dia in stirrups	3004	1.0		
	Spacers & Binders				
65	R.C.C. M30 Concrete for Columns above G.L	26	M3		
03	M & L for RCC M-30 design mix as in Columns		14.5		
	using 20mm graded stone aggregate.				
66	R.C.C. M30 Concrete for beams,	58	M3		
	lintels,brackets-M & L for RCC M-30 design mix				
	as in Lintels Beams, Cantilevers,				
	bressummers, lintels over 1.50m Span using				
	20mm Graded aggregate				
67	R.C.C. M30 Concrete for Slab -R.C.C. M30	181	M3		
	Concrete for Slab -M & L for RCC M-30 design				
	mix as in Slabs supported on walls, beams and				
	columns in floors, roofs, landings, balconies,				
	canopies, deck slabs and in shelves and the				
	like Roof Slabs.				
68	Brickwork 230 mm thick M& L Brickwork using	57	M3		
	A class bricks , straight /curved on plan in				
	cement mortar 1:6.				
69	Brickwork 115 mm thick M & L Brickwork using	20	M2		
	A class bricks , straight /curved on plan in half				
	brick thick wall in cement mortar 1:6				
70	REINFORCEMENT STEEL 10mm & over dia S& F	20284	KG		
	TMT steel bars 10mm dia and over cut to				
	length bent to shape required, including				
	cranking bending spirally for hooping for				
	columns, hooking ends and binding with and				
	including MS wire (annealed) not less than				

	0.0mm dia or cocuring with aline but in China				
74	0.9mm dia or securing with clips but in Stirrups.	2570	1/0		
71	REINFORCEMENT STEEL 5-10mm dia S& F TMT	3579	KG		
	steel bars 5 to 10mm dia in stirrups Spacers & Binders				
70	Form Work For R.C.C. COLUMNS -Formwork to	220	N 4 2		
72		239	M2		
	sides of pillars, posts, struts, piers, columns and				
	stanchions				
73	"Form Work For R.C.C. Beams Use& waste	720	M2		
	Formwork to sides and soffits of floor or roof				
	beams, beam haunchings, girders,				
	bressummers, lintels, cantilevers, shelves				
	including supports, overhangs, etc. also splays				
	between floors and beams, etc. for flat				
7.4	surfaces." Form Work For R.C.C. Slabs Use &waste	400	1.42		
74		480	M2		
	Formwork to soffits of suspended slabs such as				
	roof slabs, floor slabs, landings and similar				
	work; not exceeding 200mm thick (Horizontal				
	or sloping)	760	1.42		
75	Plastering CM 1:6 on Fair Surface 15mm	760	M2		
	Thick(Internal) M & L Plaster 15mm thick with CM 1:6 on brickwork or concrete surfaces on				
7.0	walls in even without using extra cement .	000	N 42		
76	Plastering CM 1:4 on fair Surface20 mm	900	M2		
	Thick(External) -M & L Rendering 20mm thick				
	with CM 1:4 in 2 layers (5MM mm thick)over				
	10mm thick cement plaster in 1:4 on fair faces of brickwork or concrete surfaces all as				
	specified. To be finished even and smooth				
	(without using extra lime or cement).	F00	N 42		
77	Ceiling PLASTER -M &L 10MM plaster in	500	M2		
	CM(1:3) on ceiling To be finished even and				
70	smooth (without using extra lime or cement).	000	N 4 2	-	
78	Paint External surfaces Material & Labour for	900	M2		
	applying Two or more coats of 100% Premium				
	acrylic emulsion paint having VOC less than 50				
	gm/litre and UV resistance as per IS				
	15489:2004, Alkali & fungal resistance, dirt				
	resistance exterior paint of required				
	shade(Company Depot T nted) with silicon				
	additives@ 1.43 litre/ 10 sqm over and				
	including priming coat of exterior primer				
	applied @ 0.90 litre/ 10 sqm over new				
70	surfaces.	1360	B 40		+
79	Paint Internal surfaces preparing the new wall	1260	M2		
	surface and applying two coats of putty for				
	internal walls and applying two coats of plastic				
	emulsion paint over acoat of primer to the wall				
0.0	surfaces etc complete				
80	Concrete flooring M & L For 25mm Thick PCC	88	M2		
	type B-0, 1:2:4 (12.5mm graded aggregate)				
81	Bedding Layer for flooring-M & L For Bedding	150	M2		

				T	
	layer of mortar CM(1:4) 15 mm thick for laying				
	floor finishes				
82	"Vitrified Tile Flooring M& L for Vitrified	150	M2		
	Ceramic tiles 10 mm thick (square/ rectangular)				
	polished, area of each tiles not exceeding 0.36				
	sqm, in floors etc. set and jointed in				
	neat cement slurry and pointed in white or				
	coloured cement to match"				
83	Non skid ceramic tile- M & L Non - skid Ceramic	32	M2		
	tiles 7 to 8 mm thick (square/rectangular) area				
	of each tile exceeding 0.18 sqm but not				
	exceeding 0.38 sqm, in neat cement slurry and				
	floors etc. set and jointed in floors etc. set and				
	jointed in pointed in white or coloured cement				
	to match with shade of tile all as specified and				
	directed. Laying 15mm thick C.M on screed bed				
	(1:4) and jointed in neat cement slurry and				
	pointed in white/ coloured cement .				
84	Vitrified Tile Skirting -M & L Vitrified Ceramic	10	M2		1
	tiles 10 mm thick (square/ rectangular)	10	1412		
	polished, area of each tiles not exceeding 0.36				
	sqm, in floors etc. set and jointed in neat				
	cement slurry and pointed in white or coloured				
	cement to match FOR SKIRTING.				
85	"Kota Stone Skirting -M &L Kota stone slab 20-	4	M2		
83	25mm thick in riser of steps, skirting, dado and	4	IVIZ		
	pillar laid over cement screed and jointed				
	properly.				
86	Dado-M & L Non Skid ceramic tiles in vertical	225	M2		1
80	surface 350x 250x 7 mm/ 450X 350X 7mm thick	223	IVIZ		
	set and jointed in neat cement slurry and				
	pointed in white or colour cement to match				
	with 12 mm thk backing coat in C:M 1:3.				
0.7	Wooden Doors-S &F of 1st Class Hard wood for	1 5	142		
87		1.5	M3		
	door Frames (Chowkats) from Plain, solid,				
	straight chowkats and frames, wrought,				
	framed rebated on the solid, rounded or				
	chamfered, put together with glue pinned at				
00	joints, supplied and fixed.	4.4	2.42		1
88	Factory Made Wooden Shutters(35mm	14	M2		
	thick)Plain framed, panelled shutter (two				
	panel) with lock rail and panel of 9 mm B.W.P.				
	commercial ply or 12 mm veneered particle				
	board with commercial veneering on both				
	faces. The size of rail and stile as per IS: 1003				
	(Part I), kiln seasoned and chemically pressure				
	treated.	_			
89	"PVC DOOR - S & F Factory made solid panel	9	M2		
	PVC door shutter 30 mm thick (style) consisting				
	of frame made out of M.S. tubes for top &				
	bottom rails. M.S. frame shall be covered with				
	heat moulded plain colour PVC 'C' channel				

having a PVC Sheet Strip of 20mm width stuck inside with solvent cement for stiles and plain colour PVC sheets for top rail, lock rail & bottom rail on either side & as gap insert for top rail & bottom rail Panelling of plain colour PVC sheet to be fitted in the M.S. frame welded / sealed to the stiles & rails with suitable PVC sheet beading, and joined together with solvent cement. 90 "Providing and fixing factory made uPVG white colour Sliding window Three track made of extruded profiles with wall thickness of 2.3mm (+-0.2mm). Window profile with hollow section with multi chamber. Frame (88mm x 52mm), sliding sash (42mm x 67mm). Sliding mesh Sash (42mm x 57mm) Sliding interlock (One vertical length in each shutters) (45.5mm x 28mm), Glazing bead (24.5mm x 16mm) will be miterd cut and fusion welded at all corners, including drilling of holes for fixing hardware and drainage of water etc., making arrangement for fixing of hardware. EPDM gasket, 1.2+-0.2mm thick galvanised steel Frame (30mm x 18mm) 2 nos, sliding sash (30mm x 18mm), sliding mesh sash (26mm x 10mm) profile to be inserted in required profile, frame will be fixed to the wall with 8mm x 100mm long fasteners, Hardware [Touch Lock of zina elloyed (white powder coated), steel roller system. Stainless steel wire cloth 0.36mm nominal dia of wire and average width of aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Net Opening will be measured for payment purpose." 91 "Window Silis -M&L Marble work 18 to 20mm thick (table rubbed and polished) in steps, window cilis, cooking platforms and like increment mortar (1.4) including pointing in white cement (1.2) using marble floats with admixture of pigment to match with marble shade of following type "Creen marble)" 92 MS Butt Hinges S& F MS Butt hinges with SS 33 NO pins 100mm size 34 Aluminium Thandels S& F extruded aluminium alloy handels, fabricated type anodized, 150mm long.		11 1 200 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1	1	T	
plain colour PVC sheets for top rail, lock rail & bottom rail on either side & as gap insert for top rail & bottom rail Panelling of plain colour PVC sheet to be fitted in the M.S. frame welded / sealed to the stiles & rails with suitable PVC sheet beading, and joined together with solvent cement. 90 "Providing and fixing factory made uPVG white colour Sliding window Three track made of extruded profiles with wall thickness of 2.3mm (+-0.2mm). Window profile with hollow section with multi chamber. Frame (88mm x 5.2mm), sliding sash (42mm x 67mm). Sliding mesh Sash (42mm x 67mm). Sliding interlock (One vertical length in each shutters) (45.5mm x 28mm), Glazing bead (24.5mm x 16mm) will be miterd cut and fusion welded at all corners, including drilling of holes for fixing hardware and drainage of water etc., making arrangement for fixing of hardware. EPDM gasket, 1.2+-0.2mm thick galvanised steel Frame (30mm x 18mm) 2 nos, sliding sash (30mm x 18mm), sliding mesh sash (26mm x 10mm) profile to be inserted in required profile, frame will be fixed to the wall with 8mm x 100mm long fasteners, Hardware [Touch Lock of zinc alloyed (white powder coated), steel roller system. Stainless steel wire cloth 0.36mm nominal dia of wire and average width of aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Net Opening will be measured lor payment purpose.)" 91 "Window Sills- M&R. Unarble work 18 to 20mm thick (table rubbed and polished) in steps, window cills, cooking platforms and like increment mortar (1:4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F pomm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Tower Bolts S& F extruded aluminium alloy handels , fabricated type ano		having a PVC sheet strip of 20mm width					
bottom rail on either side & as gap insert for top rail & bottom rail Panelling of plain colour PVC sheet to be fitted in the M.S. frame welded / sealed to the stiles & rails with suitable PVC sheet beading, and joined together with solvent cement. 90 "Providing and fixing factory made uPVG white colour Sliding window Three track made of extruded profiles with wall thickness of 2.3mm (+-0.2mm). Window profile with hollow section with multi chamber. Frame (88mm x 52mm), sliding sash (42mm x 67mm). Sliding mesh Sash (42mm x 67mm). Sliding interlock (One vertical length in each shutters) (45.5mm x 28mm), Glazing bead (24.5mm x 16mm) will be miterd cut and fusion welded at all corners, including drilling of holes for fixing hardware and drainage of water etc., making arrangement for fixing of hardware. EPDM gasket, 1.2+-0.2mm thick galvanised steel Frame (30mm x 18mm) 2 nos, sliding sash (30mm x 18mm), sliding mesh sash (26mm x 10mm) profile to be inserted in required profile, frame will be fixed to the wall with 8mm x 100mm long fasteners, Hardware [Touch Lock of zinc alloyed (white powder coated), steel roller system. Stainless steel wire cloth 0.36mm nominal dia of wire and average width of aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Net Opening will be measured for pawnet purpose." 91 "Window Sills -M& L Marble work 18 to 20mm thick (table rubbed and polished) in steeps, window cills, cooking platforms and like increment mortar (1.4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS butt Hinges S & F MS Butt hinges solt hS you but hinge to but have allowed section and fixed. 94 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed.							
top rail & bottom rail Panelling of plain colour PVC sheet to be fitted in the M.S. frame welded / sealed to the stiles & rails with suitable PVC sheet beading, and joined together with solvent cement. 90 "Providing and fixing factory made uPVG white colour Sliding window Three track made of extruded profiles with wall thickness of 2.3mm (+-0.2mm). Window profile with hollow section with multi chamber. Frame (88mm x 52mm), sliding assh (42mm x 67mm). Sliding mesh Sash (42mm x 67mm). Sliding interlock (One vertical length in each shutters) (45.5mm x 28mm), Glazing bead (24.5mm x 16mm) will be miterd cut and fusion welded at all corners, including drilling of holes for fixing hardware and drainage of water etc., making arrangement for fixing of hardware. EPDM gasket, 1.2+-0.2mm thick galvanised steel Frame (30mm x 18mm) 2 nos, silding sash (30mm x 18mm), sliding mesh sash (26mm x 10mm) profile to be inserted in required profile, frame will be fixed to the wall with 8mm x 100mm long fasteners, Hardware [Touch Lock of zinc alloyed (white powder coated), steel roller system. Stainless steel wire cloth 0.36mm nominal dia of wire and average width of aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Net Opening will be measured lor payment purpose.)" 91 "Window Silis -M& L Marble work 18 to 20mm thick (table rubbed and polished) in steps, window cills, cooking platforms and like increment mortar (1.4) including pointing in white cement (1.2 using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butth hinges S & F MS But		plain colour PVC sheets for top rail, lock rail &					
PVC sheet to be fitted in the M.S. frame welded / sealed to the stiles & rails with suitable PVC sheet beading, and joined together with solvent cement. 90 "Providing and fixing factory made uPVG white colour Sliding window Three track made of extruded profiles with wall thickness of 2.3mm (+-0.2mm). Window profile with hollow section with multi chamber. Frame (88mm x 52mm), sliding sash (42mm x 67mm). Sliding mesh Sash (42mm x 67mm) Sliding interlock (One vertical length in each shutters) (45.5mm x 28mm), Glazing bead (24.5mm x 16mm) will be miterd cut and fusion welded at all corners, including drilling of holes for fixing hardware and drainage of water etc., making arrangement for fixing of hardware. EPDM gasket, 1.2+-0.2mm thick galvanised steel Frame (30mm x 18mm) 2 nos, sliding sash (30mm x 18mm), sliding mesh sash (26mm x 10mm) profile to be inserted in required profile, frame will be fixed to the wall with 8mm x 100mm long fasteners, Hardware [Trouch Lock of zinc alloyed (white powder coated), steel roller system. Stainless steel wire cloth 0.36mm nominal dia of wire and average width of aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Net Opening will be measured lor payment purpose.)" 91 "Window Sills -M& L Marble work 18 to 20mm thick (table rubbed and polished) in steps, window cills, cooking platforms and like increment mortar (1.4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with S pins 100mm size 93 Aluminium Tower Bolts S & F extruded aluminium alloy handels, fabricated type anodized,		bottom rail on either side & as gap insert for					
/ sealed to the stiles & rails with suitable PVC sheet beading, and joined together with solvent cement. 90 "Providing and fixing factory made uPVG white colour Sliding window Three track made of extruded profiles with wall thickness of 2.3mm (+-0.2mm). Window profile with hollow section with multi chamber. Frame (88mm x 52mm), sliding sash (42mm x 67mm). Sliding mesh Sash (42mm x 57mm) Sliding interlock (One vertical length in each shutters) (45.5mm x 28mm), Glazing bead (24.5mm x 16mm) will be miterd cut and fusion welded at all corners, including drilling of holes for fixing hardware and drainage of water etc., making arrangement for fixing of hardware. EPDM gasket, 1.2+-0.2mm thick galvanised steel Frame (30mm x 18mm) 2 nos, sliding sash (30mm x 18mm), sliding mesh sash (26mm x 10mm) profile to be inserted in required profile, frame will be fixed to the wall with 8mm x 100mm long fasteners, Hardware [Touch Lock of zinc alloyed (white powder coated), steel roller system. Stainless steel wire cloth 0.36mm nominal dia of wire and average width of aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Net Opening will be measured for payment purpose.)" 91 "Window Sills-M& L Marble work 18 to 20mm thick (table rubbed and polished) in steps, window cills, cooking platforms and like increment mortar (1.4) including pointing in white cement (1.2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with S pins 100mm size 93 Aluminium Tower Bolts S & F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels, fabricated type anodized,		top rail & bottom rail Panelling of plain colour					
sheet beading, and joined together with solvent cement. 90 "Providing and fixing factory made uPVG white colour Sliding window Three track made of extruded profiles with wall thickness of 2.3mm (+-0.2mm). Window profile with hollow section with multi chamber. Frame (88mm x 52mm), sliding sash (42mm x 67mm). Sliding mesh Sash (42mm x 67mm). Sliding interlock (One vertical length in each shutters) (45.5mm x 28mm), Glazing bead (24.5mm x 16mm) will be miterd cut and fusion welded at all corners, including drilling of holes for fixing hardware and drainage of water etc., making arrangement for fixing of hardware. EPDM gasket, 1.2+-0.2mm thick galvanised steel Frame (30mm x 18mm) 2 nos, sliding sash (30mm x 18mm), sliding mesh sash (26mm x 10mm) profile to be inserted in required profile, frame will be fixed to the wall with 8mm x 100mm long fasteners, Hardware [Touch Lock of zinc alloyed (white powder coated), steel roller system. Stainless steel wire cloth 0.36mm nominal dia of wire and average width of aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Note: The unit rate quoted by contractor excludes to the connected accessories. Note: The unit rate quoted		PVC sheet to be fitted in the M.S. frame welded					
sheet beading, and joined together with solvent cement. 90 "Providing and fixing factory made uPVG white colour Sliding window Three track made of extruded profiles with wall thickness of 2.3mm (+-0.2mm). Window profile with hollow section with multi chamber. Frame (88mm x 52mm), sliding sash (42mm x 67mm). Sliding mesh Sash (42mm x 67mm). Sliding interlock (One vertical length in each shutters) (45.5mm x 28mm), Glazing bead (24.5mm x 16mm) will be miterd cut and fusion welded at all corners, including drilling of holes for fixing hardware and drainage of water etc., making arrangement for fixing of hardware. EPDM gasket, 1.2+-0.2mm thick galvanised steel Frame (30mm x 18mm) 2 nos, sliding sash (30mm x 18mm), sliding mesh sash (26mm x 10mm) profile to be inserted in required profile, frame will be fixed to the wall with 8mm x 100mm long fasteners, Hardware [Touch Lock of zinc alloyed (white powder coated), steel roller system. Stainless steel wire cloth 0.36mm nominal dia of wire and average width of aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Note: The unit rate quoted by contractor excludes to the connected accessories. Note: The unit rate quoted		/ sealed to the stiles & rails with suitable PVC					
Solvent cement. Providing and fixing factory made uPVG white colour Sliding window Three track made of extruded profiles with wall thickness of 2.3mm (+-0.2mm). Window profile with hollow section with multi chamber. Frame (88mm x 52mm), sliding sash (42mm x 57mm). Sliding mesh Sash (42mm x 57mm) Sliding interlock (One vertical length in each shutters) (45.5mm x 28mm), Glazing bead (24.5mm x 16mm) will be miterd cut and fusion welded at all corners, including drilling of holes for fixing hardware and drainage of water etc., making arrangement for fixing of hardware. EPDM gasket, 1.2+-0.2mm thick galvanised steel Frame (30mm x 18mm) 2 nos, sliding sash (30mm x 18mm) 2 nos, sliding sash (30mm x 18mm) 2 nos, sliding sash (30mm x 10mm) profile to be inserted in required profile, frame will be fixed to the wall with 8mm x 100mm long fasteners, Hardware [Touch Lock of zinc alloyed (white powder coated), steel roller system. Stainless steel wire cloth 0.36mm nominal dia of wire and average width of aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Net Opening will be measured lor payment purpose.)" 91 "Window Sills-M& L Marble work 18 to 20mm thick (table rubbed and polished) in steps, window cills, cooking platforms and like increment mortar (1.4) including pointing in white cement (1.2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with S pins 100mm size 93 Aluminium Tower Bolts S & F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S & F extruded aluminium alloy handels, fabricated type anodized,		sheet beading, and joined together with					
"Providing and fixing factory made uPVG white colour Sliding window Three track made of extruded profiles with wall thickness of 2.3mm (+-0.2mm). Window profile with hollow section with multi chamber. Frame (88mm x 52mm), sliding sash (42mm x 57mm) Sliding mesh Sash (42mm x 57mm) Sliding interlock (One vertical length in each shutters) (45.5mm x 28mm), Glazing bead (24.5mm x 16mm) will be miterd cut and fusion welded at all corners, including drilling of holes for fixing hardware and drainage of water etc., making arrangement for fixing of hardware. EPDM gasket, 1.2+0.2mm thick galvanised steel Frame (30mm x 18mm) 2 nos, sliding sash (30mm x 18mm), sliding mesh sash (26mm x 10mm) profile to be inserted in required profile, frame will be fixed to the wall with 8mm x 100mm long fasteners, Hardware [Touch Lock of zinc alloyed (white powder coated), steel roller system. Stainless steel wire cloth 0.36mm nominal dia of wire and average width of aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Net Opening will be measured lor payment purpose.)" 91 "Window Sills -M& L Marble work 18 to 20mm thick (table rubbed and polished) in steps, window cills, cooking platforms and like increment mortar (1:4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS butt hinges with SS pins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded aluminium alloy handels, fabricated type anodized,							
colour Sliding window Three track made of extruded profiles with wall thickness of 2.3mm (+-0.2mm). Window profile with hollow section with multi chamber. Frame (88mm x 52mm), sliding sash (42mm x 67mm). Sliding mesh Sash (42mm x 57mm). Sliding interlock (One vertical length in each shutters) (45.5mm x 28mm), Glazing bead (24.5mm x 16mm) will be miterd cut and fusion welded at all corners, including drilling of holes for fixing hardware and drainage of water etc., making arrangement for fixing of hardware. EPDM gasket, 1.2+-0.2mm thick galvanised steel Frame (30mm x 18mm) 2 nos, sliding sash (30mm x 18mm), sliding mesh sash (26mm x 10mm) profile to be inserted in required profile, frame will be fixed to the wall with 8mm x 100mm long fasteners, Hardware [Touch Lock of zinc alloyed (white powder coated), steel roller system. Stainless steel wire cloth 0.36mm nominal dia of wire and average width of aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Net Opening will be measured lor payment purpose.)" 91 "Window Sills-M& L Marble work 18 to 20mm thick (table rubbed and polished) in steps, window cills, cooking platforms and like increment mortar (1.4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size 93 Aluminium Tower Bolts S& F extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels, fabricated type anodized,	an		36	N/2			
extruded profiles with wall thickness of 2.3mm (+-0.2mm). Window profile with hollow section with multi chamber. Frame (88mm x 52mm), sliding sash (42mm x 67mm). Sliding mesh Sash (42mm x 57mm) Sliding interlock (One vertical length in each shutters) (45.5mm x 28mm), Glazing bead (24.5mm x 16mm) will be miterd cut and fusion welded at all corners, including drilling of holes for fixing hardware and drainage of water etc., making arrangement for fixing of hardware. EPDM gasket, 1.2+-0.2mm thick galvanised steel Frame (30mm x 18mm) 2 nos, sliding sash (30mm x 18mm), sliding mesh sash (26mm x 10mm) profile to be inserted in required profile, frame will be fixed to the wall with 8mm x 100mm long fasteners, Hardware [Trouch Lock of zinc alloyed (white powder coated), steel roller system. Stainless steel wire cloth 0.36mm nominal dia of wire and average width of aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Net Opening will be measured for payment purpose.)" 91 "Window Sills - M& L Marble work 18 to 20mm thick (table rubbed and polished) in steps, window cills, cooking platforms and like increment mortar (1:4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels, fabricated type anodized,			30	1412			
(+-0.2mm). Window profile with hollow section with multi chamber. Frame (88mm x 52mm), sliding sash (42mm x 67mm). Sliding mesh Sash (42mm x 57mm) Sliding interlock (One vertical length in each shutters) (45.5mm x 28mm), Glazing bead (24.5mm x 16mm) will be miterd cut and fusion welded at all corners, including drilling of holes for fixing hardware and drainage of water etc., making arrangement for fixing of hardware. EPDM gasket, 1.2+-0.2mm thick galvanised steel Frame (30mm x 18mm) 2 nos, sliding sash (30mm x 18mm), sliding mesh sash (26mm x 10mm) profile to be inserted in required profile, frame will be fixed to the wall with 8mm x 100mm long fasteners, Hardware [Touch Lock of zinc alloyed (white powder coated), steel roller system. Stainless steel wire cloth 0.36mm nominal dia of wire and average width of aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Net Opening will be measured for payment purpose.)" 91 "Window Sills-M& L Marble work 18 to 20mm thick (table rubbed and polished) in steps, window cills, cooking platforms and like increment mortar (1.4) including pointing in white cement (1.2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size 93 Aluminium Twoer Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels, fabricated type anodized,							
section with multi chamber. Frame (88mm x 52mm), sliding sash (42mm x 57mm). Sliding mesh Sash (42mm x 57mm) Sliding interlock (One vertical length in each shutters) (45.5mm x 28mm), Glazing bead (24.5mm x 16mm) will be miterd cut and fusion welded at all corners, including drilling of holes for fixing hardware and drainage of water etc., making arrangement for fixing of hardware. EPDM gasket, 1.2+0.2mm thick galvanised steel Frame (30mm x 18mm) 2 nos, sliding sash (30mm x 18mm), sliding mesh sash (26mm x 10mm) profile to be inserted in required profile, frame will be fixed to the wall with 8mm x 100mm long fasteners, Hardware [Touch Lock of zinc alloyed (white powder coated), steel roller system. Stainless steel wire cloth 0.36mm nominal dia of wire and average width of aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Net Opening will be measured for payment purpose.)" 91 "Window Sills -M& L Marble work 18 to 20mm thick (table rubbed and polished) in steps, window cills, cooking platforms and like increment mortar (1:4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels, fabricated type anodized,		·					
52mm), sliding sash (42mm x 67mm). Sliding mesh Sash (42mm x 57mm) Sliding interlock (One vertical length in each shutters) (45.5mm x 28mm), Glazing bead (24.5mm x 16mm) will be miterd cut and fusion welded at all corners, including drilling of holes for fixing hardware and drainage of water etc., making arrangement for fixing of hardware. EPDM gasket, 1.2+ -0.2mm thick galvanised steel Frame (30mm x 18mm) 2 nos, sliding sash (30mm x 18mm), sliding mesh sash (26mm x 10mm) profile to be inserted in required profile, frame will be fixed to the wall with 8mm x 100mm long fasteners, Hardware [Touch Lock of zinc alloyed (white powder coated), steel roller system. Stainless steel wire cloth 0.36mm nominal dia of wire and average width of aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Net Opening will be measured lor payment purpose.)" 91 "Window Sills -M& L Marble work 18 to 20mm thick (table rubbed and polished) in steps, window cills, cooking platforms and like increment mortar (1:4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels , fabricated type anodized,							
mesh Sash (42mm x 57mm) Sliding interlock (One vertical length in each shutters) (45.5mm x 28mm), Glazing bead (24.5mm x 16mm) will be miterd cut and fusion welded at all corners, including drilling of holes for fixing hardware and drainage of water etc., making arrangement for fixing of hardware. EPDM gasket, 1.2+ -0.2mm thick galvanised steel Frame (30mm x 18mm) 2 nos, sliding sash (30mm x 18mm), sliding mesh sash (26mm x 10mm) profile to be inserted in required profile, frame will be fixed to the wall with 8mm x 100mm long fasteners, Hardware [Touch Lock of zinc alloyed (white powder coated), steel roller system. Stainless steel wire cloth 0.36mm nominal dia of wire and average width of aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Net Opening will be measured lor payment purpose.)" 91 "Window Sills -M& L Marble work 18 to 20mm thick (table rubbed and polished) in steps, window cills, cooking platforms and like increment mortar (1:4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels , fabricated type anodized,		-					
(One vertical length in each shutters) (45.5mm x 28mm), Glazing bead (24.5mm x 16mm) will be miterd cut and fusion welded at all corners, including drilling of holes for fixing hardware and drainage of water etc., making arrangement for fixing of hardware. EPDM gasket, 1.2+ -0.2mm thick galvanised steel Frame (30mm x 18mm) 2 nos, sliding sash (30mm x 18mm), sliding mesh sash (26mm x 10mm) profile to be inserted in required profile, frame will be fixed to the wall with 8mm x 100mm long fasteners, Hardware [Touch Lock of zinc alloyed (white powder coated), steel roller system. Stainless steel wire cloth 0.36mm nominal dia of wire and average width of aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Net Opening will be measured lor payment purpose.)" 91 "Window Sills -M& L Marble work 18 to 20mm thick (table rubbed and polished) in steps, window cills, cooking platforms and like increment mortar (1:4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels , fabricated type anodized,							
x 28mm), Glazing bead (24.5mm x 16mm) will be miterd cut and fusion welded at all corners, including drilling of holes for fixing hardware and drainage of water etc., making arrangement for fixing of hardware. EPDM gasket, 1.2+-0.2mm thick galvanised steel Frame (30mm x 18mm) 2 nos, sliding sash (30mm x 18mm), sliding mesh sash (26mm x 10mm) profile to be inserted in required profile, frame will be fixed to the wall with 8mm x 100mm long fasteners, Hardware [Touch Lock of zinc alloyed (white powder coated), steel roller system. Stainless steel wire cloth 0.36mm nominal dia of wire and average width of aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Net Opening will be measured lor payment purpose.)" 91 "Window Sills -M& L Marble work 18 to 20mm thick (table rubbed and polished) in steps, window cills, cooking platforms and like increment mortar (1:4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels, fabricated type anodized,		, ,					
Glazing bead (24.5mm x 16mm) will be miterd cut and fusion welded at all corners, including drilling of holes for fixing hardware and drainage of water etc., making arrangement for fixing of hardware. EPDM gasket, 1.2+-0.2mm thick galvanised steel Frame (30mm x 18mm) 2 nos, sliding sash (30mm x 18mm), sliding mesh sash (26mm x 10mm) profile to be inserted in required profile, frame will be fixed to the wall with 8mm x 100mm long fasteners, Hardware [Touch Lock of zinc alloyed (white powder coated), steel roller system. Stainless steel wire cloth 0.36mm nominal dia of wire and average width of aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Net Opening will be measured lor payment purpose.)" 91 "Window Sills -M& L Marble work 18 to 20mm thick (table rubbed and polished) in steps, window cills, cooking platforms and like increment mortar (1:4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels , fabricated type anodized,							
cut and fusion welded at all corners, including drilling of holes for fixing hardware and drainage of water etc., making arrangement for fixing of hardware. EPDM gasket, 1.2+ -0.2mm thick galvanised steel Frame (30mm x 18mm) 2 nos, sliding sash (30mm x 18mm), sliding mesh sash (26mm x 10mm) profile to be inserted in required profile, frame will be fixed to the wall with 8mm x 100mm long fasteners, Hardware [Touch Lock of zinc alloyed (white powder coated), steel roller system. Stainless steel wire cloth 0.36mm nominal dia of wire and average width of aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Net Opening will be measured lor payment purpose.)" 91 "Window Sills -M& L Marble work 18 to 20mm thick (table rubbed and polished) in steps, window cills, cooking platforms and like increment mortar (1:4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with SS jins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium 44 NO alloy handels , fabricated type anodized,		· · · · · · · · · · · · · · · · · · ·					
drilling of holes for fixing hardware and drainage of water etc., making arrangement for fixing of hardware. EPDM gasket, 1.2+-0.2mm thick galvanised steel Frame (30mm x 18mm) 2 nos, sliding sash (30mm x 18mm), sliding mesh sash (26mm x 10mm) profile to be inserted in required profile, frame will be fixed to the wall with 8mm x 100mm long fasteners, Hardware [Touch Lock of zinc alloyed (white powder coated), steel roller system. Stainless steel wire cloth 0.36mm nominal dia of wire and average width of aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Net Opening will be measured lor payment purpose.)" 91 "Window Sills -M& L Marble work 18 to 20mm thick (table rubbed and polished) in steeps, window cills, cooking platforms and like increment mortar (1:4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels , fabricated type anodized,		,					
drainage of water etc., making arrangement for fixing of hardware. EPDM gasket, 1.2+-0.2mm thick galvanised steel Frame (30mm x 18mm) 2 nos, sliding sash (30mm x 18mm), sliding mesh sash (26mm x 10mm) profile to be inserted in required profile, frame will be fixed to the wall with 8mm x 100mm long fasteners, Hardware [Touch Lock of zinc alloyed (white powder coated), steel roller system. Stainless steel wire cloth 0.36mm nominal dia of wire and average width of aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Net Opening will be measured lor payment purpose.)" 91 "Window Sills -M& L Marble work 18 to 20mm thick (table rubbed and polished) in steps, window cills, cooking platforms and like increment mortar (1:4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium 44 NO alloy handels , fabricated type anodized,							
fixing of hardware. EPDM gasket, 1.2+ -0.2mm thick galvanised steel Frame (30mm x 18mm) 2 nos, sliding sash (30mm x 18mm), sliding mesh sash (26mm x 10mm) profile to be inserted in required profile, frame will be fixed to the wall with 8mm x 100mm long fasteners, Hardware [Touch Lock of zinc alloyed (white powder coated), steel roller system. Stainless steel wire cloth 0.36mm nominal dia of wire and average width of aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Net Opening will be measured lor payment purpose.)" 91 "Window Sills -M& L Marble work 18 to 20mm thick (table rubbed and polished) in steps, window cills, cooking platforms and like increment mortar (1:4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels , fabricated type anodized,							
thick galvanised steel Frame (30mm x 18mm) 2 nos, sliding sash (30mm x 18mm), sliding mesh sash (26mm x 10mm) profile to be inserted in required profile, frame will be fixed to the wall with 8mm x 100mm long fasteners, Hardware [Touch Lock of zinc alloyed (white powder coated), steel roller system. Stainless steel wire cloth 0.36mm nominal dia of wire and average width of aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Net Opening will be measured lor payment purpose.)" 91 "Window Sills -M& L Marble work 18 to 20mm thick (table rubbed and polished) in steps, window cills, cooking platforms and like increment mortar (1:4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels , fabricated type anodized,							
nos, sliding sash (30mm x 18mm), sliding mesh sash (26mm x 10mm) profile to be inserted in required profile, frame will be fixed to the wall with 8mm x 100mm long fasteners, Hardware [Touch Lock of zinc alloyed (white powder coated), steel roller system. Stainless steel wire cloth 0.36mm nominal dia of wire and average width of aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Net Opening will be measured lor payment purpose.)" 91 "Window Sills -M& L Marble work 18 to 20mm thick (table rubbed and polished) in steps, window cills, cooking platforms and like increment mortar (1:4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels , fabricated type anodized,		fixing of hardware. EPDM gasket, 1.2+ -0.2mm					
sash (26mm x 10mm) profile to be inserted in required profile, frame will be fixed to the wall with 8mm x 100mm long fasteners, Hardware [Touch Lock of zinc alloyed (white powder coated), steel roller system. Stainless steel wire cloth 0.36mm nominal dia of wire and average width of aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Net Opening will be measured lor payment purpose.)" 91 "Window Sills -M& L Marble work 18 to 20mm thick (table rubbed and polished) in steps, window cills, cooking platforms and like increment mortar (1:4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels , fabricated type anodized,		thick galvanised steel Frame (30mm x 18mm) 2					
required profile, frame will be fixed to the wall with 8mm x 100mm long fasteners, Hardware [Touch Lock of zinc alloyed (white powder coated), steel roller system. Stainless steel wire cloth 0.36mm nominal dia of wire and average width of aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Net Opening will be measured lor payment purpose.)" 91 "Window Sills -M& L Marble work 18 to 20mm thick (table rubbed and polished) in steps, window cills, cooking platforms and like increment mortar (1:4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels , fabricated type anodized,		nos, sliding sash (30mm x 18mm), sliding mesh					
with 8mm x 100mm long fasteners, Hardware [Touch Lock of zinc alloyed (white powder coated), steel roller system. Stainless steel wire cloth 0.36mm nominal dia of wire and average width of aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Net Opening will be measured lor payment purpose.)" 91 "Window Sills -M& L Marble work 18 to 20mm thick (table rubbed and polished) in steps, window cills, cooking platforms and like increment mortar (1:4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels , fabricated type anodized,		sash (26mm x 10mm) profile to be inserted in					
[Touch Lock of zinc alloyed (white powder coated), steel roller system. Stainless steel wire cloth 0.36mm nominal dia of wire and average width of aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Net Opening will be measured lor payment purpose.)" 91 "Window Sills -M& L Marble work 18 to 20mm thick (table rubbed and polished) in steps, window cills, cooking platforms and like increment mortar (1:4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels , fabricated type anodized,		required profile, frame will be fixed to the wall					
coated), steel roller system. Stainless steel wire cloth 0.36mm nominal dia of wire and average width of aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Net Opening will be measured lor payment purpose.)" 91 "Window Sills -M& L Marble work 18 to 20mm thick (table rubbed and polished) in steps, window cills, cooking platforms and like increment mortar (1:4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels , fabricated type anodized,		with 8mm x 100mm long fasteners, Hardware					
coated), steel roller system. Stainless steel wire cloth 0.36mm nominal dia of wire and average width of aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Net Opening will be measured lor payment purpose.)" 91 "Window Sills -M& L Marble work 18 to 20mm thick (table rubbed and polished) in steps, window cills, cooking platforms and like increment mortar (1:4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels , fabricated type anodized,		[Touch Lock of zinc alloyed (white powder					
cloth 0.36mm nominal dia of wire and average width of aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Net Opening will be measured lor payment purpose.)" 91 "Window Sills -M& L Marble work 18 to 20mm thick (table rubbed and polished) in steps, window cills, cooking platforms and like increment mortar (1:4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels , fabricated type anodized,							
aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Net Opening will be measured lor payment purpose.)" 91 "Window Sills -M& L Marble work 18 to 20mm thick (table rubbed and polished) in steps, window cills, cooking platforms and like increment mortar (1:4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels , fabricated type anodized,							
aperture 1.40mm and required accessories. (Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Net Opening will be measured lor payment purpose.)" 91 "Window Sills -M& L Marble work 18 to 20mm thick (table rubbed and polished) in steps, window cills, cooking platforms and like increment mortar (1:4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels , fabricated type anodized,		nominal dia of wire and average width of					
(Note: The unit rate quoted by contractor excludes cost of glass and includes all other connected accessories. Net Opening will be measured lor payment purpose.)" 91 "Window Sills -M& L Marble work 18 to 20mm thick (table rubbed and polished) in steps, window cills, cooking platforms and like increment mortar (1:4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels , fabricated type anodized,							
excludes cost of glass and includes all other connected accessories. Net Opening will be measured lor payment purpose.)" 91 "Window Sills -M& L Marble work 18 to 20mm thick (table rubbed and polished) in steps, window cills, cooking platforms and like increment mortar (1:4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels , fabricated type anodized,							
connected accessories. Net Opening will be measured lor payment purpose.)" 91 "Window Sills -M& L Marble work 18 to 20mm thick (table rubbed and polished) in steps, window cills, cooking platforms and like increment mortar (1:4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels , fabricated type anodized,							
measured lor payment purpose.)" 91 "Window Sills -M& L Marble work 18 to 20mm thick (table rubbed and polished) in steps, window cills, cooking platforms and like increment mortar (1:4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels , fabricated type anodized,							
91 "Window Sills -M& L Marble work 18 to 20mm thick (table rubbed and polished) in steps, window cills, cooking platforms and like increment mortar (1:4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels , fabricated type anodized,		·					
thick (table rubbed and polished) in steps, window cills, cooking platforms and like increment mortar (1:4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels , fabricated type anodized,	01		28	NAO			1
steps, window cills, cooking platforms and like increment mortar (1:4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels , fabricated type anodized,			20	1412			
increment mortar (1:4) including pointing in white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels , fabricated type anodized,					1		
white cement (1:2) using marble dust with admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels , fabricated type anodized,							
admixture of pigment to match with marble shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels , fabricated type anodized,					1		
shade of following type "Green marble)" 92 MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels , fabricated type anodized,							
92 MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels , fabricated type anodized,					1		
pins 100mm size 93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels , fabricated type anodized,	03		22	NIC			
93 Aluminium Tower Bolts S& F 200mm long anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels , fabricated type anodized,	92		33	NO	1		
anodised barrel tower bolts of extruded section and fixed. 94 Aluminium Handels S& F extruded aluminium alloy handels , fabricated type anodized,	0.5	·					
and fixed. 94 Aluminium Handels S& F extruded aluminium 44 NO alloy handels , fabricated type anodized,	93	_	22	NO			
94 Aluminium Handels S& F extruded aluminium 44 NO alloy handels , fabricated type anodized,					1		
alloy handels , fabricated type anodized,							
	94		44	NO	1		
150mm long.							
		150mm long.					

				Ī		1
95	Window Glass 5.5 mm Sheet glass ordinary	35.78	M2			
	quality and glazing in oil putty in square					
	exceeding 0.5 sq m.					
96	Door lock supplying & fixing brass Mortice lock	15	NO			
	vertical type size 100mm 4 levers etc complete					
97	Providing water proofing treatment by	485	M2			
	preparing the surfaces by scraping and clearing					
	of all foreign matter by wire brushing and					
	applying of premium quality acrylic					
	waterproofing primer @250 grams per square					
	meter after diluting as per the manufacturer's					
	recommendation. Allow 3 to 4 hours for the					
	primer to dry completely. Providing & applying					
	of primium quality acrylic water proofing					
	coating 350 grams per square meter using					
	roller/brush after diluting as per the					
	manufacturer's recommendation and					
	simultaneously over this install 80 GSM					
	thermally stabilized polyster reinforcement					
	with 100mmm side laps and 150mm end laps					
	and apply additional coat of premium qualitiy					
	acrylic water proofing coating @ 350 grams per					
	square meter using roller/brush. Ensure there					
	are no wrinkless or folds on the reinforcement					
	memberane and allow it to dry for 24 hours.					
	After 24 hours, apply the final coat of premium					
	quality acrylic water proofing system @ 350					
	grams per square meter using using					
	roller/brush as per the manufacturer's					
	recomendations.					
98	M & L for Screed bed or bedding layer of	485	M2			
	mortar CM(1:4) 15 mm thick Over Wall					
99	PVC (SWR) Pipes Supply & Fxing PVC (SWR)	70	М			
	pipes(100mm Dia) in Single socketed in any					
	length with rubber rings laid in trenches &					
	floors with all necessary fittings i.e., elbows,					
	collars, bends etc.					
100	PVC (SWR) Pipes Supply & Fxing PVC (SWR)	50	М			
	pipes(70mm Dia) in Single socketed in any					
	length with rubber rings laid in trenches &					
	floors with all necessary fittings i.e., elbows,					
	collars, bends etc.					
101	GI PIPES Supply &Fxing Tubes, 'medium grade'	70	М			
	galvanised, with all fitting and fixed complete					
	to walls and ceilings or laid in floors 20mm dia					
102	GI Pipes Supply & Fxing Tubes, 'medium grade'	30	М			
	galvanised, with all fitting and fixed complete					
	to walls and ceilings or laid in floors 25mm dia					
103	GI Pipes Supply &Fxing Tubes, 'medium grade'	30	М			
	galvanised, with all fitting and fixed complete					
	to walls and ceilings or laid in floors 32mm dia					
104	GI Pipes Supply &Fxing Tubes, 'medium grade'	10	М			
				ı	-1	1

	galvanised, with all fitting and fixed complete			
	to walls and ceilings or laid in floors 40mm dia			
105	GI Pipes Supply & Fxing Tubes, 'medium grade'	10	М	
103	galvanised, with all fitting and fixed completeto	10	141	
	walls and ceilings or laid in floors 50mm dia			
106	Rain water pipesSupply&Fxing PVC (SWR) pipes	111	М	
100	110mm dia single socketed in any length with	111	IVI	
	rubber ring joints fixed to walls			
107	Gate Valve - Supply &Fxing Gun-metal, globe	2	NO	
107	or gate valves, with iron wheel head, screwed	2	INO	
	both ends for iron pipe and fixed 20mm dia			
108	"Supply &Fxing Stop valves, cast copper alloy,	20	NO	
100	Screwed down, high pressure, with crutch or	20	NO	
	butterfly handle, screwed both ends for iron			
	pipe or for unions and fixed fancy			
	type, chromium plated with long shank and cup			
	(concealed type) 15mm"			
100	Urinal :Suppl & Fxing Vitreous China bowl	4	NO	
109	urinal flat back, size of 465 x 355 x 265 mm	4	NO	
	white (minimum), with grating and union for			
	discharge pipe (excluding flushing cistern, flush			
	pipe and waste pipe)			
110	Flushing Cisteren Supply &Fxing PVC valveless,		NO	
110	syphonic action type, flushing cistern, low level,	5	NO	
	white, with inlet, ball valve, float and handle			
	including brackets(10liters)			
111	Water Closelet Supply & Fxing Vitreous China	5	NO	
111	squatting pan of pattern "long pan", size 580	3	NO	
	mm white with 'P' or 'S" trap, front or back			
	inlet and foot rests, any pattern (excluding			
	flushing cistern and flush pipe)			
112	Wash Basin Supply & Fxing Vitreous China	4	NO	
112	wash basin, angle back, size 600x480mm white,	4	NO	
	excluding taps, waste, chain and plug and			
	Porcelain stopper but including brackets			
113	Nahani Trap Supply & Fxing P.V.C(S.W.R) gully	8	NO	
113	trap125/110mm, setting and jointing with	0	NO	
	solvent cement.			
114	Bib Tap -Supply &Fxing Bib taps 15mm dia,	10	NO	
114	cast copper alloy with crutch or butterfly	10	NO	
	handle, screwed down, screwed for iron pipe			
	or for brass ferrule and fixed(chromium plated)			
115	Pillar Tap -Supply & Fxing Fancy Type Pillar	4	NO	
113	taps, cast copper alloy, with capstan heads,	4	NO	
	chromium plated, screwed down high pressure,			
	with or without lettered 'Hot' or 'Cold' with			
	long screwed shanks and fly-nuts, crewed for			
	iron pipe and fixed			
116	Mirror - Supply &Fxing 600mmx450mm	А	NO	
116		4	NO	
	bevelled edge mirror of selected quality glass, mounted on 6mm thick AC building board or			
	commercial plywood and fixed to wooden			
	commercial prywood and fixed to wooden		1	

	plugs with chromium.			
117	"Supply & Fxing Towel Rail 600mm long of	4	NO	1
11/	PTMT fixed with and including Chromium	4	NO	
	plated brass screws and wooden/plastic cleats.			
	(Minimum weight 190gms)"			
118	Supply & Fixing Supply& Fixing Liquid soap	4	NO	1
110	container of PTMT fixed with and including	4	NO	
	Chromium plated brass screws and			
	wooden/plastic cleats.(Minimum weight			
	105gms)			
119	Supply & fixing Rotational moulded	2	NO	
119	polyethylene water storage tanks 500 L	2	NO	
	capacity(cylindrical vertical with closed top)			
	hoisted and fixed in position			
120	Supply & fixing structural steel for Plates (plain	34000	KG	1
120	or chequered) channels, square cut or notched	34000	KG	
	(ordinary and counter sunk) forming holes,			
	without any attachment etc including			
	application of 2 coats of anti- corrosive paint			
	on surface of member , preparation of shop			
	drawing etc all complete .			
121	Providing and fixing rolling shutters made out	65	M2	1
121	of 18 gauge steel sheets for curtains, including	05	1412	
	bottom rail, 100 mm wide guide channels for			
	opening width up to 4.0m and 150mm wide			
	guide channel for opening width more than			
	4.0m, lock plates, locking arrangement on both			
	sides, fixing bolts, pulling handles, MS hood of			
	appropriate size, rolling arrangement, standard			
	make springs in brackets etc. including fixing of			
	frames with rag bolts, grouting of parts in			
	position etc. and also including two coats of red			
	oxide zinc chromate primer and two coats of			
	synthetic enamel paint of approved colour,			
	shade and brand etc. complete as per IS:6248 /			
	specifications and as directed by Engineer In			
	Charge. The shutter should withstand wind			
	pressure of 47meters per second, including			
	Electrically operated (motorized) with switch &			
	cable.			
122	For HARD STANDING Excavation upto 1.5m -	2780	M3	
	Excavation over areas not exceeding 1.5m deep			
	and getting out soft/ loose soil complete all as			
	specified and as directed.			1
123	Excavation in trenches upto 1.5m Excavating in	450	M3	
	trenches, n. exc 1.5 m wide and n. exc 1.5 m in			
	depth; for foundation, etc. or for shafts, wells,			
	cesspits, manholes, pier holes, etc. n. exc 10 sq			
	m on plan and n. exc 1.5 m in depth and getting			
	out.			1
124	"Hardcore for Flooring M & L Hardcore of	502	M3	
	gauge n exc. 63 mm, deposited, spread and			

	levelled in layers n exc. 15cm thick, watered				\neg
	and rammed to a true surface below plinth				
	•				
40-	protection "	200			_
125	Bed P.C.C (1:4:8) M&L for Cement Concrete in	300	M3		
	Foundation, Filling and mass concrete 1:4:8				
	type C2 using 40mm Graded aggregate				
126	Hard standing P.C.C (1:2:4) M&L for Cement	310	M3		
	Concrete in Foundation, Filling and mass				
	concrete 1:2:4 type C2 using 40mm Graded				
	aggregate				
127	R.C.C. M 30 Concrete for drain M & L for RCC	150	M3		
	M-30design mix as in foundation footings,				
	plinth beams, foundation beams, bases of col,				
	basements slabs, under-reamed piles & mass				
	concrete using 20mm graded stone aggregate.				
128	REINFORCEMENT STEEL 10mm & over dia S & F	7100	KG		\neg
	TMT steel bars 10mm dia and over cut to				
	length bent to shape required, including				
	cranking bending spirally for hooping for				
	columns, hooking ends and binding with and				
	including MS wire (annealed) not less than				
	0.9mm dia or securing with clips.				
1	ora or securing their cops.				

EM Div	EM Division KGF /Tender Document Dt:28-06-2024							
	5.2 SCHEDULE 'A' BILL OF QUANTITIE	S – ELEC	TRICAL	<u>WORKS</u>				
SI No	Description	Qty	UOM	Unit Rate (Rs)	Extended Value (Rs.)			
a	b	С	d	е	f = c X e			
1	HT BREAKER PANEL- Supply, installation, testing & Commissioning of 11KV, Totally enclosed single bus bar, floor mounting metal clad, Indoor type extensible type, flush mounted, Horizontal withdrawn, Horizontal isolation, Vacuum Circuit Breaker panel HT 11 KV, 3 phase, 50 cycles of rating up to 630 Amp all as per the detailed specification attached. Make: SCHNEIDER / ABB / SIEMENS / LT.	1	JOB					
2	Supply ,installation & commissioning of 11/0.433 kV, Step-down Transformer complete, outdoor/indoor, copper wound capacity 1600 KVA. Make: VIJAY VIDHYUTH / BESCOM APPROVED. As per Latest IS Standard & all as per the detailed specification attached.	1	JOB					
3	Supply and Laying of XLPE insulated, screen thermoplastic, tape inner sheathed, galvanized steel strip, armoured heavy duty electric power cable with stranded aluminum conductor, & over all PVC ST2 Sheathed 11kV(E) grade, cross-sectional area 3C X 240 sq. mm HT CABLE confirming to IS-7098 (Part-2)-2011 or Latest IS Standard. Make: POLYCAB / V-GAURD./GLOSTER/UNIVERSAL/RPG	650	M					
4	Supplying and laying of XLPE insulated, armoured heavy duty electric cable with aluminum conductor, 1100 volts grade, cross-sectional area 3.5C X 400 sq. mm LT CABLE confirming to Latest IS Standard. Make: POLYCAB / V-GAURD/GLOSTER/HAVELLS.	240	M					
5	Supplying and laying of XLPE insulated, armoured heavy duty electric cable with aluminum conductor, 1100 volts grade, cross-sectional area 3.5C X 240 sq. mm LT CABLE confirming to Latest IS Standard.	300	M					

	Make: POLYCAB / V-				\neg
	GAURD/GLOSTER/HAVELLS.				
	GAONDY GEOSTERY HAVELES.				
6	Suppying & providing Cable jointing kit for 1100V grade cable for indoor termination heat shrink type joint complete with jointing material and accessories suitable for 3.5 core XLPE armoured aluminum conductor cable of size 400 Sqmm. Make: RAYCHEM RPG.	32	JOB		
7	Supplying &Providing Cable jointing kit for 11 KV grade cable for indoor termination heat shrink type joint complete with jointing material and accessories suitable for 3 core XLPE armoured aluminum conductor cable of size 240 - 400 Sqmm. Make: RAYCHEM RPG	4	JOB		
8	PAINTING HANGER LT KIOSK: (1 NO) Supply, installation, testing & commissioning of ACB, 2500A, 4P, 415V, 50kA, MP based LSIG Releases, MDO, Closing Coil, Opening Coil, Shunt Coil Etc. Make: SCHNEIDER / ABB / SIEMENS / L&T. MCB 6A,4P,10kA C Curve Indicating Lamp Red 230V AC Aux Supply Indicating Lamp Yellow 230V AC Aux Supply Indicating Lamp Blue 230V AC Aux Supply Indicating Lamp Blue 230V AC Aux Supply Indicating Lamp Green 230V AC Aux Supply Indicating Lamp Amber 230V AC Aux Supply Indicating Lamp Amber 230V AC Aux Supply Indicating Lamp Amber 230V AC Aux Supply MCB, 6A, 2P,10kA MFM Meter With Rs.485 Port-METSEEM6436HCL10RS MPCB-MS132-6.3T L.V Moulded Case CT Ring Type Single Phase 50 Hz Ratio 2500/5A Class 0.5 @ Burden 5VA ILV 0.72/3 kV. Panel Size: 2000x1000x1000 (HxWxD) Bus Bars -TP+N AL-E Grade , C/D@0.8Amps /Sq mm Power & Control Wires U-8 Cable , 6Sq mm FRP, Sleeves, Ferrules, Spiral, Cable Tie, Tie Base, Trough, Din, Lugs, Hardware's etc. CTTBS, ConTrol Tbs, Aux Tbs etc Documents , Assembly , Testing etc. Panel confirming to Latest IS standards (Refer SLD and Make: Refer Make List for items).	1	JOB		

	DAMESTIC	_			—
9	PAINTING HANGER MAIN LT PANEL (1 No.)	1	JOB		
	Supply, installation, testing & commissioning				
	of ACB, EDO, 2500A,4P, 50kA, Microprocessor				
	Based, OL, SC, EF, Releases , With				
	Microprocessor Fail Alarm , Indicators , ST/UV,				
	ST Coil with ON, OFF, TRIP Contacts 2 no.				
	Make: SCHNEIDER / ABB / SIEMENS / LT.(1 No.)				
	MCB 6A,4P,10kA C Curve				
	Indicating Lamp Red 230V AC Aux Supply				
	Indicating Lamp Yellow 230V AC Aux Supply				
	Indicating Lamp Blue 230V AC Aux Supply				
	Indicating Lamp Red 230V AC Aux Supply				
	Indicating Lamp Green 230V AC Aux Supply				
	Indicating Lamp Amber 230V AC Aux Supply				
	MCB, 6A, 2P,10kA				
	MFM Meter With Rs.485 Port-				
	METSEEM6436HCL10RS				
	MCB 63A,4P,10kA C Curve				
	SPD				
	MPCB-MS132-6.3T				
	L.V Moulded Case CT Ring Type Single Phase 50				
	Hz Ratio 2500/5A Class 0.5 @ Burden 5VA ILV				
	0.72/3 kV.				
	Auto/Manual Switch				
	Voltmeter 92X92 Analog/Digital				
	Ammeter 92X92 Analog/Digital				
	Earth Leakage relay, panel Mounting ,300mA to				
	30A, Class 2FS along With Round				
	CBCT:250mmX100mm				
	Annunciation -8 Programmable Windows				
	Output-A				
	SFU 630 A, front handle,36kA, (6 Nos) with				
	Ammeter & Voltmeter				
	SFU 400 A, front handle,36kA (4 Nos)with				
	Ammeter & Voltmeter				
	SFU 250 A, front handle,36kA, (4 Nos)with				
	Ammeter & Voltmeter				
	SFU 125 A, front handle,36kA,(4 Nos)with				
	Ammeter & Voltmeter				
	Panel Size: 2000x7000x1000 (HxWxD)				
	Bus Bars -TP+N AL-E Grade , C/D@0.8Amps /Sq				
	mm				
	Power & Control Wires U-8 Cable , 6Sq mm				
	FRP, Sleeves, Ferrules, Spiral, Cable Tie, Tie				
	Base, Trough, Din, Lugs, Hardware's etc.				
	CTTBS, Control TBS, Aux TBS etc				
	Documents , Assembly , Testing etc. Panel				
	confirming to Latest IS standards				
	(Refer SLD and Make: Refer Make List for				
	items).				

	10	DAINTING HANGED COD DANIEL 4 /4 No.)	_	100	I	I	_
	10	PAINTING HANGER SDB-PANEL 1 (1 No.)	1	JOB			
		Supply, installation, testing & commissioning					
		of MCCB,250A,4P,36kA,TMD,Xt4					
		RHE XT2-XT4 F/P STANDARD (250mm) Panel					
		confirming to Latest IS standards					
		KIT ES XT1-XT4					
		AUX-C 2Q+1SY 250VAC/DC XT1XT4 F/P					
		MCB,6A,SP,10kA					
		Indicating Lamp Red 230V AC Aux Supply					
		Indicating Lamp Yellow 230V AC Aux Supply					
		Indicating Lamp Blue 230V AC Aux Supply					
		Indicating Lamp Red 230V AC Aux Supply					
		Indicating Lamp Green 230V AC Aux Supply					
		Indicating Lamp Amber 230V AC Aux Supply					
		MCB, 6A, 2P,10kA					
		MFM Meter With RS 485 Port-					
		METSEEM6436HCL10RS					
		CT, 250A/5A,5VA					
		Earth Leakage relay , panel Mounting ,300mA					
		to 30A, Class 2FS along With Round					
		CBCT:250mmX100mm					
		Shunt opening release - SOR,220240 V ac-					
		220250 V DC F/P					
		MCCB, 63A,25KA,FP,XT1,TMD					
		KIT ES XT1 8pcs,					
		RHE XT1-XT3 F/P STANDARD (250mm),					
		MCCB, 40A,25KA,FP,XT1,TMD					
		KIT ES XT1 8pcs,					
		RHE XT1-XT3 F/P STANDARD (250mm),					
		MCB, 20A, SP, 10kA, C Curved					
		10Sq mm TB					
		(Refer SLD and Make List for other items).					
	11	PAINTING HANGER SDB-PANEL 2 (1 No.)	1	JOB			
		Supply, installation, testing & commissioning of					
		MCCB, 250A, 4P, 36kA, TMD, Xt4					
		RHE XT2-XT4 F/P STANDARD (250mm) Panel					
		confirming to Latest IS standards					
		KIT ES XT1-XT4					
		AUX-C 2Q+1SY 250VAC/DC XT1XT4 F/P					
		MCB, 6A, SP, 10kA					
		Indicating Lamp Red 230V AC Aux Supply					
		Indicating Lamp Red 230V AC Aux Supply Indicating Lamp Yellow 230V AC Aux Supply					
		_ ,					
		Indicating Lamp Blue 230V AC Aux Supply					
		Indicating Lamp Red 230V AC Aux Supply					
		Indicating Lamp Green 230V AC Aux Supply					
		Indicating Lamp Amber 230V AC Aux Supply					
		MCB, 6A, 2P,10kA					
		MFM Meter With Rs.485 Port-					
		METSEEM6436HCL10RS					
		CT, 250A/5A,5VA					
		Earth Leakage relay , panel Mounting ,300mA					
1.1		to 30A, Class 2FS along With Round	ĺ	1	1	1	1

	CDCT-250		ı		1	1
	CBCT:250mmX100mm Shunt opening release - SOR,220240 V ac- 220250 V DC F/P					
	MCCB, 63A, 25KA, FP, XT1, TMD					
	KIT ES XT1 8pcs, RHE XT1-XT3 F/P STANDARD (250mm),					
	MCCB, 40A, 25KA, FP, XT1, TMD					
	KIT ES XT1 8pcs, RHE XT1-XT3 F/P STANDARD (250mm),					
	MCB, 20A, SP, 10kA, C Curved					
	10Sq mm TB (Refer SLD and Make List for other items).					
	(Nerel 323 and Make 235 for other reems).					
12	Supply, installation, testing & commissioning of Automatic Power Factor Correction (APFC)	1	JOB			
	Panel for 3 Phase, 415 V & 50 Hz system of					
	capacity with incoming MCCBs 480 KVAR. As					
	per latest IS STANDARDs Make: DUCATI/L&T/EPCOS					
- 10		_				
13	Supply, installation, testing & commissioning of ACB 4 Pole, 415 V, with Thermal Magnetic	1	JOB			
	Release (Manual Draw out type) of capacity					
	630 Amps, with cubical and panel including all accessories.					
	MAKE: ABB/L&T/Schneider					
1.1						
14	Supply, installation, testing & commissioning of MCCB 3 Pole, 415 V, fixed type, 25 to 100 Amps	25	JOB			
	with breaking capacity 16 KA.					
	MAKE: LEGRAND/Schneider/ABB/L&T					
15	Supply installation & fixing of Danger notice plate of 1.6mm thick mild steel sheet, vitreous	5	JOB			
	enameled white, with letters, figures and					
	conventional skull and bones in signal red					
	colour and fixed with M.S. clamps, bolts and nuts of approved size, for LT, 20x15cm size.					
16	Supply installation commission of Danger notice plate of 1.6mm thick mild steel sheet,	5	JOB			
	vitreous enameled white, with letters, figures					
	and conventional skull and bones in signal red colour and fixed with M.S. clamps, bolts and					
	nuts of approved size, for HT, 25x20cm size.					
17	Supply installation commission of Lightning	2	100			
17	Supply installation commission of Lightning arresters expulsion type complete with all	2	JOB			
	fittings, 30 kilo amp discharge capacity,					
	distribution class.					
	<u>I</u>	l .	1	1	1	

40	10 11 11 11 11 11 11 11		T	ı	1	
18	Synthetic Rubber insulated mats 2.5 mm thick for voltage upto 11 kv for electrical purpose as per IS 15652-2006, (superseding IS 5424) suitable for electrical shock safety of sizes 2m x 1m.	8	NO			
19	XLPE insulated, armoured heavy duty electric cable with aluminum conductor, 1100 volts grade, cross-sectional area 4C 10 sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS	50	M			
20	XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 4C 6sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS.	1000	M			
21	XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 4sq. mm. Make: POLYCAB / KEI / V-GAURD / HAVELLS.	2000	M			
22	XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 2.5sq. mm Make: POLYCAB / KEI / V-GAURD / HAVELLS.	2000	M			
23	Cable jointing kit for 11 KV grade cable for indoor termination heat shrink type joint complete with jointing material and accessories suitable for 3 core XLPE armoured aluminum conductor cable of size 240 - 400 Sqmm.	4	JOB			
24	Supply and fixing LED Bay light 200 watt 230 V AC indoor type with thermal management in multiple optics and equipped with IP66 protection, with impact and corrosion resistant complete with driver and lamp. as directed by engineering in charge. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX	27	JOB			
25	Supply and fixing LED street light fitting 120 Watt 230 V AC outdoor type with high pressure die cast aluminum hosing and heat resistant complete with driver, lamp bracket with impact and corrosion resistant including thermal management in multiple optics complete with IP 65/66 protection complete MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX	20	JOB			
26	In Single Enclosure 2 No's 32A 4P MCB 'C' Curve With INDUSTRIAL SOCKET And 2 nosof 16A DP MCB 'C' Curve with INDUSTRIAL SOCKET.	25	NO			

	MAKE: LEGRAND/INDO ASIAN/ SCHINDER				
27	750 mm Sweep Air cirulator 230V 50 Cycles 250 Watts 1440 rpm Single Phase Heavy Duty Industrial Fans. MAKE: ALMONARD/ HAVELLS	8	NO		
28	Supply and fixing LED luminaries 600 mm x 600 mm, 35/36 watt, 220 V AC surface type with high efficiency PMMA diffuser soft glare free light complete with driver, holders & LED lamp suitable for roof ceiling including connecting up with driver three core flexible copper conductor cases of suitable size complete. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX	16	JOB		
29	Supply and fixing round shape 12 watt 220 volts AC recessed type with high efficiency PMMA diffuser soft glare free light complete with drivers, holders, LED lamp suitable for roof ceiling including connecting up with three core flexible copper conductor cable of suitable size complete. MAKE: HAVELLS/PHILIPS/BAJAJ/HALONIX	12	JOB		
30	Supply and fix exhaust fan made of sturdy Engineering plastic complete with louvers shutter, voltage 230V, 50 Hz, RPM 1200, Copper winding of sweep 300m. MAKE: HAVELLS//BAJAJ/HALONIX/EVERYDAY	3	JOB		
31	Supply and fix ceiling fans, complete with three blade, down rod, accessories 230V, 1200mm sweep, with Squirrel cage induction motor. MAKE: HAVELLS//BAJAJ/HALONIX/CG	8	JOB		
32	Wiring for circuit/sub main wiring along with earth wire with the following sizes of FR is PVC insulated copper conductor, single core cable in surface/ recessed as required in 25mm Dia conduit. 2x2.5 sq. mm + 1x1.5 sq. mm earth wire.	200	М		
33	Wiring for circuit/sub main wiring along with earth wire with the following sizes of FR is PVC insulated copper conductor, single core cable in surface/ recessed as required in 25mm Dia conduit. 2x4 sq. mm + 1x2.5 sq. mm earth wire.	200	M		
34	M & L for point wiring using 1.1 kV grade single core FR-LS flexible cable, conforming to IS 694: 2010, having multi-drawn thin strands of	25	JOB		

	electrolytic copper conductors and insulation for phase, neutral, and earth continuity conductor connecting to earth dolly, JOB colour-coded as per IS 11353: 1985, drawn in medium grade UPVC surface / recessed conduits, conforming to IS 9537 (Part- 3): 1983, of size not less than 20 mm NB, including cutting chases, factory made not less than 1.2 mm thick sunken, modular flush sheet galvanized metal enclosure having zinc coating not less than 120 GSM, , conforming to IS 14772: 2000, having top, bottom, side and back-wall knockouts for conduit entry from any direction, suitable modular cover-plates and making good of disturbed surfaces of wall / ceiling / floor, etc. complete all as specified in IS 732: 2019 and directed by the engineer-incharge. One light/fan/exhaust fan point controlled by one switch, with cables 1.5 mm² size.				
35	M & L for point wiring using 1.1 kV grade single core FR-LS flexible cable, conforming to IS 694: 2010, having multi-drawn thin strands of electrolytic copper conductors and insulation for phase, neutral, and earth continuity conductor connecting to earth dolly, colour-coded as per IS 11353: 1985, drawn in medium grade UPVC surface / recessed conduits, conforming to IS 9537 (Part- 3): 1983, of size not less than 20 mm NB, including cutting chases, factory made not less than 1.2 mm thick sunken, modular flush sheet galvanized metal enclosure having zinc coating not less than 120 GSM, , conforming to IS 14772: 2000, having top, bottom, side and back-wall knockouts for conduit entry from any direction, suitable modular cover-plates and making good of disturbed surfaces of wall / ceiling / floor, etc. complete all as specified in IS 732: 2019 and directed by the engineer-in-charge. Two light point controlled by one switch, with cables 1.5 mm² size.	8	JOB		
36	M & L for point wiring using 1.1 kV grade single core FR-LS flexible cable, conforming to IS 694: 2010, having multi-drawn thin strands of electrolytic copper conductors and insulation for phase, neutral, and earth continuity conductor connecting to earth dolly, colourcoded as per IS 11353: 1985, drawn in medium grade UPVC surface / recessed conduits, conforming to IS 9537 (Part- 3): 1983, of size	6	JOB		

				1	
	not less than 20 mm NB, including cutting chases, factory made not less than 1.2 mm thick sunken, modular flush sheet galvanized metal enclosure having zinc coating not less than 120 GSM, , conforming to IS 14772: 2000, having top, bottom, side and back-wall knockouts for conduit entry from any direction, suitable modular cover-plates and making good of disturbed surfaces of wall / ceiling / floor, etc. complete all as specified in IS 732: 2019 and directed by the engineer-in-charge. Three light point controlled by one switch, with cables 1.5 mm² size.				
37	M & L for point wiring using 1.1 kV grade single core FR-LS flexible cable, conforming to IS 694: 2010, having multi-drawn thin strands of electrolytic copper conductors and insulation for phase, neutral, and earth continuity conductor connecting to earth dolly, colour-coded as per IS 11353: 1985, drawn in medium grade UPVC surface / recessed conduits, conforming to IS 9537 (Part- 3): 1983, of size not less than 20 mm NB, including cutting chases, factory made not less than 1.2 mm thick sunken, modular flush sheet galvanized metal enclosure having zinc coating not less than 120 GSM, , conforming to IS 14772: 2000, having top, bottom, side and back-wall knockouts for conduit entry from any direction, suitable modular cover-plates and making good of disturbed surfaces of wall / ceiling / floor, etc. complete all as specified in IS 732: 2019 and directed by the engineer-in-charge. One 6 A socket outlet, on the same board with other switches, with cables 1.5 mm² size.	6	JOB		
38	M & L for point wiring using 1.1 kV grade single core FR-LS flexible cable, conforming to IS 694: 2010, having multi-drawn thin strands of electrolytic copper conductors and insulation for phase, neutral, and earth continuity conductor connecting to earth dolly, colourcoded as per IS 11353: 1985, drawn in medium grade UPVC surface / recessed conduits, conforming to IS 9537 (Part- 3): 1983, of size not less than 20 mm NB, including cutting chases, factory made not less than 1.2 mm thick sunken, modular flush sheet galvanized metal enclosure having zinc coating not less than 120 GSM, , conforming to IS 14772: 2000, having top, bottom, side and back-wall knockouts for conduit entry from any direction,	10	JOB		

	suitable modular cover-plates and making good of disturbed surfaces of wall / ceiling / floor, etc. complete all as specified in IS 732: 2019 and directed by the engineer-in-charge. One 3 pin socket outlet. 15 amps, independent, with cables 4 sq. mm size.				
39	S & F single pole & neutral, modular type, double door, metallic distribution board conforming to IEC 61439-3, suitable for flush / surface mounting with provision for DP RCCB / RCBO / Isolator / MCB as incomer and SP MCBs as outgoing, reversible metal door, 100 A copper bus bar, fully shrouded neutral bar, earth bar, wire set & cable ties for cable management, pre fitted masking sheet, etc. having IK 09 & IP 43 protection complete all as specified in IS 732: 2019 and directed by the engineer-in-charge. Triple pole& neutral double door DB, 4 way.	34	NO		
40	S & F single pole & neutral, modular type, double door, metallic distribution board conforming to IEC 61439-3, suitable for flush / surface mounting with provision for DP RCCB / RCBO / Isolator / MCB as incomer and SP MCBs as outgoing, reversible metal door, 100 A copper bus bar, fully shrouded neutral bar, earth bar, wire set & cable ties for cable management, pre fitted masking sheet, etc. having IK 09 & IP 43 protection complete all as specified in IS 732: 2019 and directed by the engineer-in-charge. 40A, 415 V, 50 Hz, FP MCB	1	NO		
41	S & F single pole & neutral, modular type, double door, metallic distribution board conforming to IEC 61439-3, suitable for flush / surface mounting with provision for DP RCCB / RCBO / Isolator / MCB as incomer and SP MCBs as outgoing, reversible metal door, 100 A copper bus bar, fully shrouded neutral bar, earth bar, wire set & cable ties for cable management, pre fitted masking sheet, etc. having IK 09 & IP 43 protection complete all as specified in IS 732: 2019 and directed by the engineer-in-charge. 16A / 10A 415 V, 50 Hz, SP MCB.	12	NO		
42	S &F Earthing complete with galvanized steel pipe electrode, 40mm bore, medium grade, 2.5 meters length, buried directly and preferably vertically in ground with top edge not less than 1.25 meters below ground level connected	8	JOB		

	with earthing lead of 4mm dia galvanized iron or steel wire all as shown in Plate No. 2 to the earthing test point all as specified and indicate including testing on completion.					
43	S & F Dito, but using copper plate 60×60cm ×3.15mm thick electrode and 20×3mm copper strip as earthing lead.	8	JOB			
44	S & F Ditto, but 25x4mm galvanized iron strip.	450	М			
45	S & F Ditto, but 20x3mm copper strip.	450	М			
	Sum total (T) of Sl. No.	<mark>(01 to 12</mark>	<mark>8 + 01 t</mark>	<mark>o 45)</mark>	1	

This Grand Total Amount (Including applicable GST) has to be quoted in SRM portal

(Excel sheet is attached in C-Folder)

L-1 will be decided based on Final amount arrived after Reverse Action process Completion only (Including applicable GST for all BOQ line items indicated above)

Note:

1. All types of required safety appliances like safety belt, helmet, etc., are to be used wherever necessary.

2. The labourers/workers engaged for the work should be covered under ESI. 3. All risk insurance policy to be taken & total responsibility lies on the contractor in case of any Un toward incident to the workers/company structures, etc.

Annexure J

(To be executed on plain paper and applicable for all tenders of value _ Rs 1 Crore)

INTEGRITY PACT

Between BEML Limited (BEML) hereinafter referred to as "The Principal" andhereinafter referred to as "The Bidder/Contractor"

Preamble

The Principal intends to award, under laid down organizational procedures, for Contract for Civil & Electrical works for construction of New Painting Hangar at EM Division, BEML Ltd, KGF.

The Principal values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness / transparency in its relations with its Bidder(s) and / or Contractor(s).

In order to achieve these goals, the Principal will appoint an independent External Monitor (IEM), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

Section 1 – Commitments of the Principal

- (1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:
- a. No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
- b. The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential/ additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
- c. The Principal will exclude from the process all known prejudiced persons.
- (2) If the principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC/PC Act, or it there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

Section 2 – Commitment of the Bidder(s)/contractor(s)

- (1) The Bidder(s)/ Contractor(s) commit themselves to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
- **a.** The Bidder(s)/ Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
- **b.** The Bidder(s)/ Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- **c.** The Bidder(s)/ Contractor(s) will not commit any offence under the relevant IPC/PC Act; further, the Bidder(s) / Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or documents provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- **d.** The Bidder(s)/ Contractor(s) of foreign origin shall disclose the name and address of the Agents/ Representatives in India, if any. Similarly, the Bidder(s)/ Contractor(s) of Indian Nationality shall furnish the name and address of the foreign Principals, if any. Further, as mentioned in the "Guidelines on Indian Agents of Foreign Suppliers" shall be disclosed by the Bidder(s)/Contractor(s). Further, as mentioned in the Guidelines all the payments made to the Indian agent/representative have to be in Indian Rupees only. Copy of the "Guidelines on Indian Agents of Foreign Suppliers" is placed at **Annexure J-1.**
- **e.** The Bidder(s) / Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- (2) The Bidder(s)/Contactor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3 – Disqualification from tender process and exclusion from future contracts

If the Bidder(s)/Contractor(s), before award or during execution has committed a transgression through a violation of Section 2, above or any other form such as to put his

reliability or creditability in question, the Principal is entitled to disqualify the Bidder(s)/Contractor(s) from the tender process or take action as per the procedure mentioned in the "Guidelines on Banning of business dealings".

Section 4 – Compensation for Damages

- (1) If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/ Bid Security.
- (2) If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages of the contract value or the amount equivalent to Performance Bank Guarantee.

Section 5 – Previous Transgression

- (1) The Bidders declares that no previous transgressions occurred in the last three years with any other Company in any country conforming to the anti corruption approach or with any other Public Sector Enterprises in India that could justify his exclusion from the tender process.
- (2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or action can be taken as per the procedure mentioned in "Guidelines on Banning of business dealings".

Section 6 – Equal treatment of all Bidders /Contractors /Sub-contractors

- (1) The Bidder(s)/ Contractor(s) undertaker(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.
- (2) The Principal will enter into agreement with identical conditions as this one with all Bidders, Contractors and subcontractors.
- (3) The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section 7-Criminal charges against violating Bidder(s)/Contractor(s)/Subcontractor(s)

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or of the Principal has substantive suspicion in this regard, the Principal will inform the same to the Chief Vigilance Officer.

Section 8 – Independent External Monitor / Monitors

- (1) The Principal appoints competent and credible Independent External Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- (2) The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. It will be obligatory for him to treat the information and documents of the Bidders/Contractors as confidential. He reports to the CMD, BEML.
- (3) The Bidder(s)/ Contractor(s) accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder(s) / Contractor(s) / Subcontractor(s) with confidentiality.
- (4) The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.
- (5) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.
- (6) The Monitor will submit a written report to the CMD, BEML, within 8 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise submit proposals for correcting problematic situations.
- (7) If the Monitor has reported to the CMD, BEML, a substantiated suspicion of an offence under relevant IPC/PC Act, and the CMD, BEML has not, within the reasonable time taken visible

action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.

(8) The word 'Monitor' would include both singular and plural.

Section 9 - Pact Duration

This pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the contract, and for all other Bidders 6 months after the contract has been awarded.

If any claim is made/lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/ determined by CMD of BEML.

Section 10 – Other provisions

- (1) This agreement is subject to Indian Law. Place of performance and jurisdiction is the Corporate Office of the Principal, i.e. Bangalore.
- (2) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- (3) If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- (4) Should one or several provisions of this agreement turn out to be invalid, the reminder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intensions.
- (5) The bidder shall not approach the courts while representing the matters to IEMs and he/ she will await their decision in the matter.
- (6) In case of joint venture all the partners of the joint venture should sign the Integrity Pact. In case of sub-contracting, the principal contractor shall take the responsibility of the adoption of IP by the sub-contractor. It is to be ensured that all sub-contractors also sign IP.

KGF /Tender Document	Dt:28-06-2024					
(7) In the event of any dispute between the management and the contractor relating to contracts where Integrity Pact is applicable, in case, both the parties are agreeable, they may to settle dispute through mediation before the panel of IEMs in a time bound mannarequired, the organization may adopt any mediation rules for this purpose.						
In case, the dispute remains unresolved even after mediation by the panel of IEMs, organization may take further action as per the terms and conditions of the contract.						
The fees /expenses on dispute resolution shall	be equally shared by both the parties.					
(8) In the event of any contradiction between the Integrity Pact will prevail.	n the Integrity Pact and its Annexure, the clause in					
(For & On behalf of the Principal) (Office Seal) Place Date	(For & On behalf of Bidder/Contractor) (Office Seal) Place Date					
Witness 1: (Name & Address)	Witness 1: (Name & Address)					
Witness 2: (Name & Address)	<i>Witness 2:</i> (Name & Address)					
	6/7					

Annexure J-1

GUIDELINES FOR INDIAN AGENTS OF FOREIGN SUPPLIERS.

- 1.0 There shall be compulsory registration of agents for all Global (Open) Tender and Limited Tender. An agent who is not registered with BEML LTD shall apply for registration in the prescribed **Application-Form** available on **www.bemlindia.in**.
- 1.1 Registered agents will file an authenticated Photostat copy duly attested by a Notary Public/Original certificate of the principal confirming the agency agreement and giving the status being enjoyed by the agent and the commission/remuneration/salary/ retainer ship being paid by the principal to the agent before the placement of order by BEML LTD.
- 1.2 Wherever the Indian representatives have communicated on behalf of their principals and the foreign parties have stated that they are not paying any commission to the Indian agents, and the Indian representative is working on the basis of salary or as retainer, a written declaration to this effect should be submitted by the party (i.e. Principal) before finalizing the order.

2.0 DISCLOSURE OF PARTICULARS OF AGENTS/ REPRESENTATIVES IN INDIA, IF ANY:

- 2.1 Tenderers of Foreign nationality shall furnish the following details in their offer:
- 2.1.1 The name and address of the agents/representatives in India, if any and the extent of authorization and authority given to commit the Principals. In case the agent/representative be a foreign Company, it shall be confirmed whether it is real substantial Company and details of the same shall be furnished.
- 2.1.2 The amount of commission/remuneration included in the quoted price(s) for such agents/representatives in India.
- 2.1.3 Confirmation of the Tenderer that the commission/ remuneration if any, payable to his agents/ representatives in India, may be paid by BEML LTD in Indian Rupees only.
- 2.2 Tenderers of Indian Nationality shall furnish the following details in their offers:
- 2.2.1 The name and address of the foreign principals indicating their nationality as well as their status. i.e., whether manufacturer or agents of manufacturer holding the Letter of Authority of the Principal specifically authorizing the agent to make an offer in India in response to tender either directly or through the agents/representatives.
- 2.2.2 The amount of commission/remuneration included in the price (s) quoted by the Tenderer for himself.
- 2.2.3 Confirmation of the foreign principals of the Tenderer that the commission / remuneration, if any, reserved for the Tenderer in the quoted price (s), may be paid by BEML LTD in India in equivalent Indian Rupees on satisfactory completion of the Project or supplies of Stores and Spares in case of operation items.
- 2.3 In either case, in the event of contract materializing, the terms of payment will provide for payment of the commission /remuneration, if any payable to the agents/representatives in India in Indian Rupees on expiry of 90 days after the discharge of the obligations under the contract.
- 2.4 Failure to furnish correct and detailed information as called for in paragraph-2.0 above will render the concerned tender liable to rejection or in the event of a contract materializing, the same liable to termination by BEML LTD. Besides this there would be a penalty of banning business dealings with BEML LTD. or damage or payment of a named sum.

Signature

(For & On behalf of Bidder/Contractor

NIT Acceptance Letter

Ref: EMCP/1004471965- Civil / 1004473027-Electricals / Construction for Painting Hangar EM Division KGF /NAL

To: Manager - Contract Purchase

EM Division

BEML Ltd

BEML Nagar

KGF - 563 115.

Sub: Civil & Electrical works for construction of New Painting Hangar at EM Division, BEML Ltd, KGF.

Ref: EMCP/1004471965- Civil / 1004473027-Electricals / Construction for Painting Hangar EM Division KGF /Tender Document Dt:28-06-2024

Bid Invitation No. 6300038942

I hereby declare that I have gone through the complete Tender document referred above and attached to bid published in SRM and additional terms & conditions in SRM.

I agree to abide by all Terms and Conditions indicated in the above referred tender document and additional terms & conditions in SRM.

Contractor Sign with seal

Note: Above letter need to be signed with seal and to be uploaded in SRM as technical bid document.

FORMAT OF DECLARATION IN LIEU OF EMD/BID SECURITY

(To be submitted on the Bidder's Letter Head)

I/We(Insert Name and Address of Bidder) am/are submitting this declaration in
lieu of Bid Security/Earnest Money Deposit for the Tender for(Insert Title of the
Tender) (Tender No), thereby fully accepting that I/We will be suspended and shall
not be eligible to participate in the Tenders invited by BEML Ltd, KGF, for a period of Two
years from the date of such Suspension Orders, under the following circumstances:-
a) If after the opening of Tender, I/We withdraw or modify my/our Tender during the period of validity specified in the Bid Documents (including extended validity, if any) or do not accept the correction of the Tender Price pursuant to any arithmetical errors.
b) If after the award of work, I/We fail to furnish the required Performance Security or sign the Contract, within the time limits specified in the Departmental Tender Document.

Signature of the Tenderer with seal

FORMAT FOR BIDDER LEGAL & FINANCIAL STANDING CERTIFICATE

(To be submitted on the Bidder's Letter Head)

We, (Firm Name), having registered Address (Firm's address), are declaring that

- 1. We are not under any liquidation, court receivership or similar proceedings and we are not bankrupted.
- 2. We are not having any involvement in illegal activities or financial frauds.
- 3. There is no case with Police/court/regulatory authorities against us.
- 4. We have not been prosecuted or suffered any penalty for violation of any statutory laws by any Authority
- 5. We have not been suspended/delisted/blacklisted by any organization on any grounds.

Authorized signatory with seal

Format for Self Certification under Preference to "MAKE IN INDIA" Policy

(To be submitted on the Bidder's Letter Head)

CERTIFICATE

In line with Government Public Procurement Order No. P-45021/2/2017-BE-II dt. 15.06.2017,				
as amended from time to time along with clarifications/amendments and other references as issued from time to time and as applicable on the date of submission of tender, we hereby certify that				
requirement of Minimum Local content as per below declaration. (Class-I Supplier (50%) or Class-II				
Supplier (20%) or Non-Local Supplier (Less than20%)) as defined in above				
orders/circulars/clarifications/amendments for the services/material against Tender No				
Details of location at which local value addition will be made is as follows:				
We have also read the clarification issued vide Circular No.: P-45021/102/2019-BE-II-Part (1) (E-				
50310), Dtd.: 04.03.2021 and any other subsequent circular/amendment/order as issued by				
competent authority.				
Total Value of local content addition/manufacturing for offered service is as per below				
declaration:				
Accordingly, we declare to be (Tick One)				
a. Class-I Supplier (50% or more local content)				
b. Class-II Supplier (20% to 50% local content)				
c. Non Local Supplier (less than 20% local content)				
We also understand, false declarations will be in breach of the Code of Integrity under Rule				
175(1)(i)(h) of the General Financial Rule for which a bidder or its successors can be debarred				
for up two years as per Rule 151 (iii) of the General Financial Rules along with such other				

Seal and Signature of Authorized Signatory

actions as may be permissible under law.