



BEML LIMITED

TENDER DOCUMENT

For

**EMCP/1004475120- Civil / 1004475164-Electricals /Construction for New
Defence Hanger, Store, Annexure, Hard Standing At EM Division KGF /Tender
Document Dt:12-07-2024**

**CIVIL & ELECTRICAL WORKS FOR CONSTRUCTION OF NEW DEFENCE HANGER,
STORE, ANNEXURE, HARD STANDING
AT BEML LIMITED EM Division, KGF COMPLEX**

**TENDER CONDITIONS
SCOPE OF WORK**

&

**BILL OF QUANTITY (BOQ)
SRM Bid No : 6300038952**

LAST DATE FOR SUBMISSION ONLINE : 05/08/2024 17.00 Hours

ISSUED BY

The Manager
Material Management
BEML Limited
EM Division, KGF Complex

Tender Document

Sub Contract For Civil & Electrical Works for Construction of New Defence Hanger, Store, Annexure, Hard Standing at BEML Limited, EM Division, KGF Complex.

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	27
4	Terms & Conditions	36
5	Commercial Bid	48
5.1	Schedule 'A' Bill of Quantities (Civil)	49
5.2	Schedule 'A' Bill of Quantities (Electricals)	81
	IP – Integrity Pact	98-104
	NIT Acceptance Letter	105
	Bid security Declaration format	106
	Format for Bidder Financial Standing	107
	Declaration-preference to MII	108
Total Number of Pages		108

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 Defence Hanger, Store, Annexure, Hard Standing at BEML Limited, EM Division, KGF Complex.

Sl.No.	Description	Details
1	Approximate value of contract	Rs.47.20 Crore (Including GST)
2	Duration of the contract	One year (12 Months)

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 3/108), 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 Construction for New Defence Hanger, Store , Annexure, Hard Standing in 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.99.46 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 PERSON	
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		
SL NO	DESCRIPTION	DETAIL
1	BANK NAME	SBI
2	BRANCH	BEML NAGAR, KGF 563115
3	ACCOUNT NO.	54029289872
4	IFSC code	SBIN0040168

Ref: EMCP/1004475120- Civil / 1004475164-Electricals / Construction for New Defence Hanger, Store , Annexure, Hard Standing in EM Division KGF /Tender Document Dt:12-07-2024

(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 (98-104) 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 ABOVE REQUIREMENTS WILL BE REJECTED

Pre-Bid Meeting is Mandatory. Firm s should visit our site works for better understanding of Site Location & site conditions at 11.00 AM as indicated in SRM and then should submit their quote. If Consultant/Firms submit their quote without attending pre-bid 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) Bidder may visit the site for better understanding of the area / work involved, etc., before quoting. Ignorance of site conditions at later stage will not be entertained by BEML.

(h) 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.

(i) Firm has to ensure updating their GST details at BEML WEB SITE www.bemlindia.com.

2.4 Technical Bid: Qualifying Criteria

Scanned copies of following documents are to be uploaded.

(BIDS NOT COMPLYING WILL BE REJECTED)

Sl No.	Description	Requirement Details	Additional Information
A1	EMD (Earnest Money Deposit)	EMD (Rs.94.4 Lakhs) is to be deposited & copy of receipt to be uploaded	For EMD Exemption, copy of NSIC/ Udyam certificate along with the bid security declaration (format at page no.105) to be uploaded
B1	NIT Acceptance Letter	Scanned copy of 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.1416 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) <u>One Similar work</u> of Minimum value: Rs.3776 Lakhs <u>Two Similar works</u> each of Minimum value: Rs.2360 Lakhs	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.

	Three Similar works each of Minimum value: Rs.1888 Lakhs.		
B4	3 Assessment Years IT returns Filing	Scanned copy to be uploaded	Latest 3 AYs (OR) for AY 2022-23 AY 2021-22 AY 2020-21
Note: Exemption towards Turnover & Experience for MSEs & Startups will not be considered.			
<p align="center">Bids without above indicated documents will be rejected.</p> <hr/>			

2.5	QUESTIONNAIRE : (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	

3. Scope of Work

Construction for New Defence Hanger, Store , Annexure, Hard Standing - 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.
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.
3	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.
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
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, labour charges, machine mixing, finishing the surface etc. complete."
6	Returning, Back filling Returning, filling in, including spreading, levelling, watering and well ramming in layers not exc 25 cm.
7	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
8	Anti Termite Treament 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
9	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
10	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.L.M & 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, equipments 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 B 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) includingdistance 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 galvatum 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 Surface 15mm 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 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 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 a coat of primer to the wall surfaces etc complete
34	M60 CONCRETE Concrete pavement :- Construction of unreinforced dowel jointe , plain concrete pavement over prepared subbase with OPC cement design M60 @ minimum 500 kg/ cum with 25 mm & downsize graded granite metal coarse aggregate @ 0.67 cum & fine aggregate @ 0.44 cum with superplasticizer 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 continuous operation including provision for contraction , expansion , construction & longitudinal joints , joint filler , separation membrane , sealant primer , joint sealant, debonding strip, dowel bars, tie rod, admixtures as approved curing compound , finishing to lines & grades as per drawing, complete as per MORTH specification NO 602 , with vacuum dewatering with vacuum pump & suction mat & compaction with skin floater clubbed with floating disc including cost of generator, HPM machinery screed 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 hessian 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.
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 tone) 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 murrum surface & compacting with 10 tonne vibratory roller to achieve desired density including all material ,labour ,machinery ,lighting barricading 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
39	Seperation Membrane of Minimum thickness of 150 micron polythene sheet etc complete
40	"UPVC WINDOWS -Providing and fixing factory made uPVC 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.)"
41	WINDOW GLASS 5.5 mm Sheet glass ordinary quality and glazing 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	Supplying & fixing 200mm dia 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.
46	RCC 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	S & F running rails for track (Fe-410-W(Gde-E-250)quality-B)
50	S & F turbo ventilator of 24" diameter all complete as per instructions & directions ofengg in charge .
51	Providing and fixing 6mm thick wire cast glass of approved make for North light glazing including supplying and fixing anodized aluminium glazing bars of standard sections with all the standard fittings complete including drilling necessary bolts in glazing runners etc, all as per directives of Engineer incharge.

52	Annexure building Excavation upto 1.5mExcavation over areas not exceeding 1.5m deep and getting out soft/ loose soil complete all as specified and as directed.
53	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
54	.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 meansn 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
55	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.
56	Returning, filling in, including spreading, levelling, watering and well ramming in layers not exc 25 cm.
57	Anti Termite Treatment for foundation -M&L for Treating the bottom and sides of excavation at the rate of 5 litres of emulsion per square meter of surface area.
58	Anti Termite Treatment for Filled Earth-M&L for Treating the top surface of filled earth at the rate of 5 litres of emulsion per square meter of surface.
59	"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 "
60	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.
61	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.
62	R.C.C. M30 Concrete for Columns UPTO G.LM & L for RCC 30 design mix as in Columns using 20mm graded stone aggregate.
63	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)
64	Form Work For R.C.C. COLUMNS-Formwork to sides of pillars,posts, struts, iers, columns and stanchions.
65	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.
66	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.
67	REINFORCEMENT STEEL 5-10mm dia -S & F TMT steel bars 5 to 10mm dia in stirrups Spacers & Binders.
68	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.
69	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.
70	R.C.C. M30 Concrete for Slab -R.C.C. M30 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

71	Brickwork 230 mm thickM& L Brickwork using B class bricks , straight /curved on plan in cement mortar 1:6 .
72	Brickwork 115 mm thickM& L BrickworkBrickwork using A class bricks , straight /curved on plan in half beick thick wall in cement mortar 1:6 .
73	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 but in Stirrups.
74	REINFORCEMENT STEEL 5-10mm diaS & F TMT steel bars 5 to 10mm dia in stirrups Spacers & Binders.
75	Form Work For R.C.C. COLUMNS -Formwork to sides of pillars,posts, struts, iers, columns and stanchions.
76	"Form Work For R.C.C. Beams Use & waste Formwork to sides and soffits of floor or roof beams, beam hunching, girders, bressummers, lintels, cantilevers, shelves including supports, overhangs, etc. also splays between floors and beams, etc. for flat surfaces."
77	Form Work For R.C.C. SlabsUse & wasteFormwork to soffits of suspended slabs such as roof slabs, floor slabs, landings and similar work; not exceeding 200mm thick (Horizontal or sloping)
78	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 .
79	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).
80	Ceiling PLASTER -M & L 10MM plaster in CM(1:3) on ceiling To be finished even and smooth (without using extra lime or cement).
81	Paint External surfacesMaterial & Labour for applying Two or more coatsof 100% Premium acrylic emulsion paint havingVOC 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.
82	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.
83	Concrete flooring M & L For 25mm Thick PCC type B-0, 1:2:4 (12.5mm graded aggregate)
84	Bedding Layer for flooring-M & L For Bedding layer of mortar CM(1:4) 15 mm thick for laying floor finishes.
85	"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"
86	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.
87	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.
88	"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.

89	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
90	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.
91	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.
92	"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, suppling & fixing in the frame at site as per specification & drawing"
93	"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.)"
94	"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)"
95	MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size
96	Aluminium Tower BoltsS & F 200mm long anodised barrel tower bolts of extruded section and fixed.
97	Aluminium HandelsS & F extruded aluminium alloy handels , fabricated type anodised, 150mm long.
98	Window Glass 5.5 mm Sheet glass ordinary quality and glazong in oil putty in square exceeding 0.5 sq m.
99	Door lock supplying & fixing brass Mortice lock vertical type size 100mm 4 levers etc complete
100	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 primum 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 polyester 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 wrinkles or folds on the reinforcement membrane 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 roller/brush as per the manufacturer's recommendations.
101	M & L for Screed bed or bedding layer of mortar CM(1:4) 15 mm thick Over Wall
102	PVC (SWR) Pipes Supply & Fixing 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.
103	PVC (SWR) Pipes Supply & Fixing 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.
104	GI PIPES Supply & Fixing Tubes, 'medium grade' galvanised, with all fitting and fixed complete to walls and ceilings or laid in floors 20mm dia.
105	GI Pipes Supply & Fixing Tubes, 'medium grade' galvanised, with all fitting and fixed complete to walls and ceilings or laid in floors 25mm dia.
106	GI Pipes Supply & Fixing Tubes, 'medium grade' galvanised, with all fitting and fixed complete to walls and ceilings or laid in floors 32mm dia.
107	GI Pipes Supply & Fixing Tubes, 'medium grade' galvanised, with all fitting and fixed complete to walls and ceilings or laid in floors 40mm dia.
108	GI Pipes Supply & Fixing Tubes, 'medium grade' galvanised, with all fitting and fixed complete to walls and ceilings or laid in floors 50mm dia.
109	Rain water pipes Supply & Fixing PVC (SWR) pipes 110mm dia single socketed in any length with rubber ring joints fixed to walls.
110	Gate Valve - Supply & Fixing Gun-metal, globe or gate valves, with iron wheel head, screwed both ends for iron pipe and fixed 20mm dia.
111	"Supply & Fixing 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"
112	Urinal Supply & Fixing Vitreous China bowl urinal flat back, size of 465 x 355 x 265 mm white (minimum), with grating and union for discharge pipe (excluding flushing cistern, flush pipe and waste pipe).
113	Flushing Cistern Supply & Fixing PVC valveless, syphonic action type, flushing cistern, low level, white, with inlet, ball valve, float and handle including brackets(10liters).
114	Water Closet Supply & Fixing 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).
115	Wash Basin Supply & Fixing Vitreous China wash basin, angle back, size 600x480mm white, excluding taps, waste, chain and plug and porcelain stopper but including brackets.
116	Nahani Trap Supply & Fixing P.V.C(S.W.R) gully trap 125/110mm, setting and jointing with solvent cement.
117	Bib Tap -Supply & Fixing 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).
118	Pillar Tap -Supply & Fixing 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.
119	Mirror - Supply & Fixing 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.
120	"Supply & Fixing Towel Rail 600mm long of PTMT fixed with and including Chromium plated brass screws and wooden/plastic cleats. (Minimum weight 190gms)"
121	Supply & Fixing Supply & Fixing Liquid soap container of PTMT fixed with and including Chromium plated brass screws and wooden/plastic cleats.(Minimum weight 105gms).

122	.Supply & fixing Rotational moulded polyethylene water storage tanks 500 L Capacity(cylindrical vertical with closed top) hoisted and fixed in position.
123	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.
124	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.
125	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.
126	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 for each additional 1.5m or part thereof in depth beyond the first 1.5 m.
127	"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 "
128	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.
129	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.
130	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.
131	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)
132	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.
133	STORE 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.
134	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.
135	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.
136	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.
137	"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."
138	Returning,Back filling Returning, filling in, including spreading, levelling, watering and well ramming in layers not exc 25 cm.
139	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.
140	Anti Termite Treament 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.
141	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.
142	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.
143	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.
144	R.C.C. M30 Concrete for Columns UPTO G.LM & L for RCC 30 design mix as in Columns using 20mm graded stone aggregate.
145	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)
146	Form Work For R.C.C. COLUMNS -Formwork to sides of pillars,posts, struts, iers, columns and stanchions
147	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
148	REINFORCEMENT STEEL 5-10mm dia S & F TMT steel bars 5 to 10mm dia in stirrups Spacers & Binders.
149	Plate Load test Carrying out Plate Load Test 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 in duplicate.
150	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.
151	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
152	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.
153	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.
154	Brickwork 230 mm thick M& L Brickwork using A class bricks , straight /curved on plan in cement mortar 1:6 .
155	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.
156	REINFORCEMENT STEEL 5-10mm dia S & F TMT steel bars 5 to 10mm dia in stirrups Spacers & Binders.
157	Form Work For R.C.C. COLUMNS Formwork to sides of pillars,posts, struts, iers, columns and stanchions.
158	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.
159	Form Work For R.C.C. for Sunshades (Chajjas) Formwork to chullah hoods, chajjas, troughs and similar items including edges.
160	Structural Steel for columns, side purlins, roof. Supply & fixing structural steel for columns, 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, preparation of shop drawing etc all complete.
161	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 attachment etc including application of 2 coats of anti-corrosive paint on surface of member, preparation of shop drawing etc all complete.
162	Roofing & Side Cladding Supply & fixing Pre-painted galvatum 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.
163	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.
164	Plastering CM 1:4 on fair Surface 15mm 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).
165	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 priming coat of exterior primer applied @ 0.90 litre/ 10 sqm over new surfaces.
166	Preparing the new wall surface and applying two coats of putty for internal walls and applying two coats of plastic emulsion paint over a coat of primer to the wall surfaces etc complete.
167	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.
168	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
169	"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.
170	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.
171	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.
172	"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, suppling & fixing in the frame at site as per specification & drawing"
173	"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 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.)"
174	WINDOW GLASS 5.5 mm Sheet glass ordinary quality and glazong in oil putty in square exceeding 0.5 sq m.
175	"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"
176	GI PIPES Supply & Fxing Tubes, 'medium grade' galvanised, with all fitting and fixed completeto walls and ceilings or laid in floors 20mm dia.
177	GI Pipes Supply & Fxing Tubes, 'medium grade' galvanised, with all fitting and fixed completeto walls and ceilings or laid in floors 25mm dia.
178	GI Pipes Supply & Fxing Tubes, 'medium grade' galvanised, with all fitting and fixed completeto walls and ceilings or laid in floors 32mm dia.
179	GI Pipes Supply & Fxing Tubes, 'medium grade' galvanised, with all fitting and fixed completeto walls and ceilings or laid in floors 40mm dia.
180	GI Pipes Supply & Fxing Tubes, 'medium grade' galvanised, with all fitting and fixed completeto walls and ceilings or laid in floors 50mm dia
181	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.
182	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.
183	Gate Valve - Supply & Fxing Gun-metal, globe or gate valves,with iron wheel head, screwed both ends for iron pipe and fixed 20mm dia.
184	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 (conceaed type) 15mm.
185	UrinalSupply & Fxing Vitreous China bowl urinal flat back, size of 465 x 355 x 265 mm white (minimum), with grating and union for discharge pipe (excluding flushing cistern, flush pipe and waste pipe)
186	Flushing Cisteren Supply & Fxing PVC valveless, syphonic action type, flushing cistern, low level, white, with inlet, ball valve, float and handle including brackets(10liters)
187	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)

188	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.
189	Nahani Trap Supply & Fxing P.V.C(S.W.R) gully trap125/110mm, setting and jointing with solvent cement.
190	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).
191	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.
192	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.
193	"Supply & Fxing Towel Rail 600mm long of PTMT fixed with and including Chromium plated brass screws and wooden/plastic cleats. (Minimum weight 190gms)"
194	Supply & Fxing Supply & Fixing Liquid soap container of PTMT fixed with and including Chromium plated brass screws and wooden/plastic cleats.(Minimum weight 105gms)
195	Supply & fixing Rotational moulded polyethylene water storage tanks 500 L Capacity(cylindrical vertical with closed top) hoisted and fixed in position.
196	Rain water pipes PVC (SWR) pipes single socketed in any length with rubber ring joints fixed to walls.
197	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).
198	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.
199	RCC Hume Pipe Providing & laying 450 MM Reinforced concrete pipes, class NP3, laid and jointed complete with collars etc all complete.
200	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.
201	"Providing & lying 50 mm , medium grade'galvanised iron pipes ,with all fitting and fixed complete to walls and ceilings or laid in floors"
202	S & F turbo ventilator of 24" diameter all complete as per instructions & directions ofengg in charge .
203	"Providing and laying C.C. floor of mix M-30 with ready mixed concrete from RMC. The ready mixed concrete shall be laid and vibrated with a poker vibrator and finished with screedboard vibrator , vacuum dewatering process and finally finished by floating, brooming with wire brush etc. complete as per specifications and directions of Engineer-in-charge. The channel shuttering spaced 4m apart shall be included in this item.)"
204	"P&F in position Gypsum board false ceiling with 12.5mm th. Gypsum boards, screwed/ fixed to the under struct of suspended G.I. Grid const& suspended from the main ceiling of ceiling sectn at max c to c distance of 450 mm perimeter channel and intermediate channels at max c to c distance 1200 mm galvanised grid should be fixed to RF CC slab.The gypsum board should be fixed to galvanised iron grid with necessary screws.The boards should be taped and filled from underside to give smooth, seamless ceiling.The rate should include necessary additional ceiling sections and intermediate channels to be provided at openings for light fixtures, asbestos cement ducts, vertical drops, offsets etc.

	Additional intermediate channels should be fixed to strap hangers for additional support to prevent strapping at every 1200 mm item to be comp in all respect.(G.I. perimeter channel size- 27mmx0.5mm thk.,flange-20mm &30mm,intermediate channel. size-45mm & 0.9mm thk., hanger size-25mmx0.5mm thk.)complete."
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.	

3.1 Scope of Work - Electricals	
<p><u>Construction for New Defence Hanger, Store , Annexure, Hard Standing - Electricals works</u></p> <p>Note:</p> <p>(a) Contractor has to study and understand complete scope of Work and Terms & conditions before quoting the tender.</p> <p>(b) Subject contract comprises of full and satisfactory completion of the works as per the Bill of Quantities, Terms and conditions.</p> <p>(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.</p>	
1	Supplying & laying of XLPE insulated, armoured heavy duty electric cable with aluminium conductor, 1100 volts grade, cross-sectional area 3.5C X 400 sq. mm LT CABLE, confirming to latest IS STD Make : Polycab/ Havells/ KEI/Gloster only all as directed by the engineering in-charge.(UG laying as per standard practice) Test certificates to be produced
2	Supplying & laying of XLPE insulated, armoured heavy duty electric cable with aluminium conductor, 1100 volts grade, cross-sectional area 3.5C X 240 sq. mm LT CABLE, confirming to latest IS STD Make : Polycab /Havells/KEI only as directed by the engineering in charge.(UG laying as per standard practice)Test certificates to be produced.
3	Supplying & Laying of XLPE insulated, armoured heavy duty electric cable with aluminium conductor, 1100 volts grade, cross-sectional area 3.5C X 150 sq. mm LT CABLE confirming to latest IS STD Make: Polycab/ Havells/ KEI/Polycab/Havells/KEI as directed by the engineering in charge. Test certificates to be produced.
4	Supplying laying fixing of XLPE insulated, armoured heavy duty electric cable with aluminium conductor, 1100 volts grade, cross-sectional area 4C X 25 sq. mm LT CABLE-confirming to latest IS STD Make: Polycab/Havells/KEI all as directed by the engineering in-charge. Test certificates to be produced.
5	<p>DEFENCE HANGER MAIN LT PANEL-1</p> <p>Supply installation commission of ACB, EDO, 1250A,4P, 50kA, Microprocessor Based, OL, SC, EF, Releases , With Microprocessor Faile Alarm , Indicators , ST/UV, ST Coil with ON, OFF, TRIP</p> <p>Make: ABB, L&T, Schneider for ACB</p> <p>Contacts 2 no MCB 6A,4P,10kA C Curve, Indicating Lamp Red 230V AC Aux Supply</p> <p>Indicating Lamp Yellow 230V AC Aux Supply, Indicating Lamp Blue 230V AC Aux Supply</p> <p>Indicating Lamp Red 230V AC Aux Supply, Indicating Lamp Green 230V AC Aux Supply</p> <p>Indicating Lamp Amber 230V AC Aux Supply, MCB, 6A, 2P,10kA</p> <p>MFM Meter With Rs.485 Port-METSEEM6436HCL10RS,MCB 63A,4P,10kA C Curve SPD</p> <p>MPCB-MS132-6.3T</p> <p>L.V Moulded Case CT Ring Type Single Phase 50 Hz Ratio 2500/5A Class 0.5 @ Burden 5VA ILV 0.72/3 kV.</p> <p>Auto/Manual Switch</p> <p>Voltmeter 92X92 Analog/Digital, Ammeter 92X92 Analog/Digital</p> <p>Earth Leakage relay, panel Mounting, 300mA to 30A, Class 2FS along With Round CBCT: 250mmX100mm, Annunciator -8 Programmable Windows</p> <p>Output-A</p> <p>SFU 630 A, front handle, 50kA, with Ammeter & Voltmeter qty 1</p> <p>SFU 400 A, front handle, 50kA, with Ammeter & Voltmeter qty 4</p>

	<p>SFU 250 A, front handle, 36kA, with Ammeter & Voltmeter qty 2 Make: L&T/Siemens/Havells/Schneider for SFU Panel Size: 2000x4000x1000 (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, Hardwares etc. CTTBS, Control Tbs, Aux Tbs etc Documents, Assembly , Testing etc (Refer SLD) Make as directed by engineering in charge\ Documents , Assembly , Testing etc. Panel confirming to Latest IS standards Detailed Scope of supply : Cubical type, free standing, floor mounting, sheet steel enclosed dust and vermin proof fixed type LT auxiliary distribution panel comprising of 1250 Amps ACB, 01 No. 630Amps SFU, 04 Nos. of 400A SFU & 02 Nos.250Amps SFU Front handle with ammeter with each SFU, L&T ACRUS energy meter, digital voltmeter, digital ammeter & indicating lamps etc. System: 415V 50Hz, 3Ph, 4wire Bus bar: material: Aluminum Rating: 1250A Paint finish: Siemens Grey RAL 7032, powder coating Construction: indoor, EDO for ACB Sheet thickness: shell: 14SWG (2mm) Cable entry: ACB- from bottom, individual cable entry from bottom.</p>
6	<p>Supplying and 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 aluminium conductor cable of size 400 Sqmm-. Make: RAYCHEM RPG. as directed by the engineering in charge.</p>
7	<p>DEFENCE HANGER MAIN LT PANEL-2 Supply installation commission of ACB, EDO, 1250A,4P, 50kA, Microprocessor Based, OL, SC, EF, Releases , With Microprocessor Failed Alarm , Indicators , ST/UV, ST Coil with ON, OFF, TRIP Contacts 2 no Make:ABB/Schneider/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 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 Sw Voltmeter 92X92 Analog/Digital Ammeter 92X92 Analog/Digital Earth Leakage relay , panel Mounting ,300mA to 30A, Class 2FS along With Round CBCT:250mmX100mm Annuciator -8 Programmable Windows</p>

	<p>Output-A</p> <p>SFU 400 A, front handle, with Ammeter & Voltmeter qty 02</p> <p>SFU 200 A, front handle, with Ammeter & Voltmeter qty 02</p> <p>SFU 250 A, front handle, with Ammeter & Voltmeter qty 02</p> <p>Make: L&T/Siemens/Havells/Schneider for SFU</p> <p>Panel Size: 2000x3500x1000 (HXWxD)</p> <p>Bus Bars -TP+N AL-E Grade , C/D@0.8Amps /Sq mm</p> <p>Power & Control Wires U-8 Cable , 6Sq mm</p> <p>FRP, Sleeves, Ferrules, Spiral, Cable Tie, Tie Base, Trough, Din, Lugs, Hardwares etc.</p> <p>CTTBS, Control Tbs, Aux Tbs etc</p> <p>Documents, Assembly, Testing etc</p> <p>Detailed scope:</p> <p>Cubical type, free standing, floor mounting, sheet steel enclosed dust and vermin proof fixed type LT auxiliary distribution panel comprising of 1250 Amps ACB, 02 No. 400Amps SFU, 02 Nos. of 250A SFU & 02 Nos.200Amps SFU. Front handle with ammeter with each SFU, L&T ACRUS energy meter, digital voltmeter, digital ammeter & indicating lamps etc.</p> <p>System: 415V 50Hz, 3Ph, 4wire</p> <p>Bus bar: material: Aluminum</p> <p>Rating: 1250A</p> <p>Paint finish: Siemens Grey RAL 7032, powder coating</p> <p>Construction: indoor, EDO for ACB</p> <p>Sheet thickness: shell: 14SWG (2mm)</p> <p>Cable entry: ACB- from bottom, individual cable entry from bottom.</p> <p>Panel confirming to latest Is STD</p> <p>(Refer SLD and make list) Make as directed by engineering in charge</p>
8	<p>DEFENCE HANGER SDB-PANEL 2</p> <p>Supply installation commission of</p> <p>MCCB, 250A, 4P, 36kA, TMD, Xt4</p> <p>RHE XT2-XT4 F/P STANDARD (250mm)</p> <p>KIT ES XT1-XT4</p> <p>AUX-C 2Q+1SY 250VAC/DC XT1..XT4 F/P</p> <p>MCB,6A,SP,10kA</p> <p>Indicating Lamp Red 230V AC Aux Supply</p> <p>Indicating Lamp Yellow 230V AC Aux Supply</p> <p>Indicating Lamp Blue 230V AC Aux Supply</p> <p>Indicating Lamp Red 230V AC Aux Supply</p> <p>Indicating Lamp Green 230V AC Aux Supply</p> <p>Indicating Lamp Amber 230V AC Aux Supply</p> <p>MCB, 6A, 2P, 10kA</p> <p>MFM Meter with Rs.485 Port-METSEEM6436HCL10RS</p> <p>CT, 250A/5A, 5VA</p> <p>Earth Leakage relay, panel Mounting ,300mA to 30A, Class 2FS along With Round</p> <p>CBCT:250mmX100mm</p> <p>Shunt opening release - SOR,220...240 V ac-220...250 V DC F/P</p> <p>MCCB, 10A,25KA,FP,XT1,TMD -1No</p> <p>MCB, 63A,18KA, -28Nos</p> <p>KIT ES XT1 8pcs,</p> <p>RHE XT1-XT3 F/P STANDARD (250mm),</p> <p>MCCB, 40A,25KA,FP,XT1,TMD</p> <p>KIT ES XT1 8pcs,</p> <p>RHE XT1-XT3 F/P STANDARD (250mm),</p> <p>MCB,20A,SP,10kA,C Curved</p>

	10Sq mm TB (Refer SLD make list) Make: ABB/Schneider for MCCB as directed by engineering in charge.
9	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 color and fixed with M.S. clamps, bolts and nuts of approved size, for LT, 20x15cm size. Approved from ESCOM /SPTCL.
10	Supply installation commission of Lightning arresters expulsion type complete with all fittings, 30 kilo amp discharge capacity, and distribution class. Make: ABB/Indelec/Ericas all as directed by engineering in charge. Approved from ESCOM /SPTCL.
11	Synthetic Rubber insulated mats 2.5 mm thick for voltage up to 11 kV for electrical purpose as per IS 15652-2006, (superseding IS 5424) suitable for preventing electrical shock of sizes 2m x 1m. Make all as directed by engineering in charge or approved from ESCOM /SPTCL.
12	Supplying laying fixing of XLPE insulated, armoured heavy duty electric cable with aluminium conductor, 1100 volts grade, cross-sectional area 4C 10 sq. mm. Polycab/ Havells/ KEI/ etc. make as directed by engineering in charge.
13	Supplying laying fixing of XLPE insulated, armoured heavy duty electric cable with aluminium conductor, 1100 volts grade, cross-sectional area 4C 10 sq. mm. Polycab/ Havells/ KEI/ etc. make as directed by engineering in charge.
14	Supplying laying & fixing of XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 4sq. Mm. Make as directed by engineering in charge, Polycab/ Havells/ KEI/ etc.
15	XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 2.5sq. Mm. Make as directed by engineering in charge, Polycab/ Havells/ KEI/ etc.
16	Supply and fixing LED Bay light 200 watt 230 V AC outdoor type with thermal management in multiple optics and equipped with IP66 protection, with impact and corrosion resistant complete with driver and lamp. make: Havells/Philips/Bajaj/Wipro as directed by engineering in charge.
17	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. Make: Havells/Philips/Bajaj/Wipro/India bulls.etc. as directed by engineering in charge.
18	In Single Enclosure 1 no 63A 4P MCB 'C' Curve With INDUSTRIAL SOCKET And 2 nos of 16A DP MCB 'C' Curve with INDUSTRIAL SOCKET. MAKE: Legrand/ Schneider/as directed by the engineering in charge.
19	Supplying and fixing of 750 mm Sweep Air Circulator 230V 50 Cycles 250 Watts 1440 rpm Single Phase Heavy Duty Industrial Fans.(Energy efficient) Almonard /Crompton/Havells/as directed by engineering in charge.
20	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/Wipro/India bulls.etc. as directed by engineering in charge.
21	Supply and fixing LED street light fitting 70Watt 230 V AC outdoor type with high pressure die cast aluminum housing 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/Wipro/India bulls.etc. as directed by engineering in charge.
22	Supply of LED 120 Watts flood light luminaries with pressure die cast aluminium housing body for optimal thermal dissipation lamp compartment comprising of anti glare clear diffuser with Injection moulded polycarbonate/clear glass material, delivering superior light output Rated life Burning Hrs

	50000hr@Lumen Maintenance of 70%, CCT > 5500K, IP66 optical and electrical compartment & impact resistance of complete luminaires > IK08. Power Factor > 0.9 with mains, Surge Protection - Min 5kV along with Over voltage/Overload, short circuit/ miss-wiring protection. Compatible for pole mounting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60 Hz application. Compliance to IS 10322/IEC 60598, LM79 & LM80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site. location with minimized minimal tools. LED Light fixture with.....W System Power consumption. LED Efficiency > 130lm/w, nominal ICRI > 75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008. Housing with supplier word mark / name shall be Engraved / Embossing on the diecast housing / Body part Warranty of 2 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree / Nichia / Lumileds/ Osram. Make LED Source.
23	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.
24	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 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
25	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 directed By the and directed by the engineer-in-charge/Legrand/Schneider/ABB/Erco/ Triple pole & neutral double door DB, 8 way.
26	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 directed By the and directed by the engineer-in-charge/Legrand/Schneider/ABB/Erco Triple pole & neutral double door DB, 12 way.
27	Triple pole and earth enclosure with a three pin and earth plug with.
28	16A / 10A 415 V, 50 Hz, SP MCB.
29	"S & F Earthing complete with galvanized steel pipe electrode, 40mm bore, medium grade, 2.5 metres length, buried directly and preferably vertically in ground with top edge not less than 1.25 metres 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. Make as directed by the engineering in charge. Ashok/Global/Erco."
30	"S & F Dilto, but using copper plate 60x60cm x 3.15mm thick electrode and 20x3mm copper strip as earthing lead. Make as directed by the engineering in charge. Ashok/Global/Erco."
31	. S & F Ditto, but 25x4mm galvanized iron strip. Make as directed by the engineering in charge. Ashok/Global/Erco.
32	S & F Ditto, but 20x3mm copper strip Make as directed by the engineering in charge. Ashok/Global/Erco.

33	Supplying & Fixing of 2 mm thick perforated cable GI tray with on existing MS angle suport using necessary GI bolts/nuts and washer or welding as required 300 X 50mm complete. Puspak / Profab/ as directed by engineering in charge.
34	Supply and fixing LED lights fitting 1x 20W, 220V, AC decorative box type with driver, holder including LED tube light connecting up with three core flexible copper conductor cable of suitable size from ceiling rose complete. Havells /Philips/Bajaj/Wipro. etc. make as directed by engineering in charge
35	Supply and fixing of 1x5W LED light fitting mirror type with high output diffuser 2 feet, 10 watt 220 V AC decorative type with driver holder and LED lamp including connecting up with three core flexible copper conductor cable of suitable size complete. Havells/Philips/Bajaj/Wipro etc. make as directed by engineering in charge.
36	Supply and fix exhaust fan made of sturdy Engineering plastic complete with louvers shutter, voltage 230V, 50 Hz, RPM 1200, Copper winding of sweep 300mm Havells/Philips/Bajaj/Wipro/Usha.etc. make as directed by engineering in charge.
37	Supply and fix ceiling fans, complete with three blade, down rod, accessories 230V, 1200mm sweep, with Squirrel cage induction motor. Havell's/Philips/Bajaj/Wipro/Usha.etc. make as directed by engineering in charge.
38	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 Polycab/KEI/Havell's/as directed by the engineering in charge. 2x2.5 sq. mm + 1x1.5 sq. mm earth wire.
39	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 Polycab/KEI/Havell's/as directed by the engineering in charge.
40	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 make directed by the engineer-in-charge. a)One light/fan/exhaust fan point controlled by one switch, with cables 1.5 mm ² size.
41	(b) Two light point controlled by one switch, with cables 1.5 mm ² size.
42	(c) Three light point controlled by one switch, with cables 1.5 mm ² size.
43	(d) One 6 A socket outlet, on the same board with other switches, with cables 1.5 mm ² size.
44	(e) One 3 pin socket outlet. 15 amps, independent, with cables 4 sq. mm size.
45	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 busbar, 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. Legrand/Schneider/ ABB as directed by the engineer-in-charge. a)Triple pole & neutral double door DB, 4 way
46	(b) "Triple pole and earth enclosure with a three pin and earth plug with socket complete with one triple pole MCB 63A, 415 V, 50 Hz, FP MCB"

47	(c) 16A / 10A 415 V, 50 Hz, SP MCB.
48	Supplying of Fixing of TR split Air conditioners suitable for operation on A/C supply single phase 50 Hz 230 Volts with hermetically sealed compressor with air cooled condenser, motor capacitor and start run capacitors, relay and over load protector internal unit, with one indoor and one outdoor unit. The condenser unit will be placed outside the room on the terrace to avoid noise including standard length of suitable size copper tubing covered with insulation tube.(High wall chorded/cordless) suitable capacity 3 core sheathed/ PVC copper cable and a battery operated wireless remote unit. 5 Star 2 ton capacity. Make list are as directed by engineer-in-charge. Godrej/Haier/voltas/ only
49	Installation charges for split type air conditioner with allied works for one indoor and one outdoor unit is to be mounted on suitable Angle Iron support up to 3.0 ton split/cassette type A/C.Make list are as directed by engineer-in-charge.
50	Supplying laying fixing of XLPE insulated, armoured heavy duty electric cable with aluminium conductor, 1100 volts grade, cross-sectional area 3.5C X 240 sq. mm LT CABLE. Polycab/Havell's/KEI /gloster/as directed by the engineering in charge.
51	<p>DEFENCE STORE SDB-PANEL</p> <p>Supply installation commission of MCCB,400A,4P,36kA,TMD,Xt4</p> <p>RHE XT2-XT4 F/P STANDARD (250mm)</p> <p>KIT ES XT1-XT4</p> <p>AUX-C 2Q+1SY 250VAC/DC XT1..XT4 F/P</p> <p>MCB,6A,SP,10kA</p> <p>Indicating Lamp Red 230V AC Aux Supply</p> <p>Indicating Lamp Yellow 230V AC Aux Supply</p> <p>Indicating Lamp Blue 230V AC Aux Supply</p> <p>Indicating Lamp Red 230V AC Aux Supply</p> <p>Indicating Lamp Green 230V AC Aux Supply</p> <p>Indicating Lamp Amber 230V AC Aux Supply</p> <p>MCB, 6A, 2P,10kA</p> <p>MFM Meter With Rs.485 Port-METSEEM6436HCL10RS</p> <p>CT, 250A/5A,5VA</p> <p>Earth Leakage relay , panel Mounting ,300mA to 30A, Class 2FS along With Round</p> <p>CBCT:250mmX100mm</p> <p>Shunt opening release - SOR,220...240 V ac-220...250 V DC F/P</p> <p>2 Nos SFU 100 A, front handle,36kA,TMD,Xt4 with Ammeter & Voltmeter</p> <p>MCB, 63A,25KA,FP,XT1,TMD -15Nos</p> <p>KIT ES XT1 8pcs,</p> <p>RHE XT1-XT3 F/P STANDARD (250mm),</p> <p>MCCB, 40A,25KA,FP,XT1,TMD</p> <p>KIT ES XT1 8pcs,</p> <p>RHE XT1-XT3 F/P STANDARD (250mm),</p> <p>MCB,20A,SP,10kA,C Curved</p> <p>10Sq mm TB</p> <p>(Refer SLD - Make list /as directed by the engineering in charge.)</p>
52	Supplying installation Commission of MCCB 3 Pole, 415 V, fixed type, 100 Amps with breaking capacity 16 KA. ABB/Schneider/L&T/as directed by engineering in charge. Approved from Bescom.
53	Supplying 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 Approved from Bescom.
54	Supply, laying, fixing of XLPE insulated, armoured heavy duty electric cable with aluminium conductor, 1100 volts grade, cross-sectional area 4C 10 sq. mm. Polycab/Havell's/KEI /as directed by the engineering in charge.

55	Supply, laying, fixing of XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 4C 6sq. Mm. Polycab/Havell's/KEI /as directed by the engineering in charge.
56	Supply, laying& fixing of XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 4sq. Mm. Polycab/Havell's/KEI /as directed by the engineering in charge.
57	Supply and fixing LED Bay light 200 watt 230 V AC outdoor type with thermal management in multiple optics and equipped with IP66 protection, with impact and corrosion resistant complete with driver and lamp. Philips/Havell's/Bajaj Wipro/as directed by engineering in charge.
58	In Single Enclosure 2 no's 32A 4P MCB 'C' Curve With INDUSTRIAL SOCKET And 2 nos of 16A DP MCB 'C' Curve with INDUSTRIAL SOCKET. Legrand/Schneider/as directed by the engineering in charge.
59	Supply and Fixing In Single Enclosure 1 no 63A 4P MCB 'C' Curve With INDUSTRIAL SOCKET And 2 nos of 16A DP MCB 'C' Curve with INDUSTRIAL SOCKET. Legrand/Schneider/as directed by the engineering in charge.
60	Supply and Fixing 750 mm Sweep Air circulator 230V 50 Cycles 250 Watts 1440 rpm Single Phase Heavy Duty Industrial Fans. Almonard /Crompton/Havells/as directed by engineering in charge.
61	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. Philips/Havells/Bajaj Wipro/as directed by engineering in charge.
62	Supply and fix ceiling fans, complete with three blade, down rod, accessories 230V, 1200mm sweep, with Squirrel cage induction motor(BLDC).Usha/Havell's/Bajaj/as directed by engineering in charge.
63	2x2.5 sq. mm + 1x1.5 sq. mm earth wire Supply and fix 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. Anchor/ Polycab/Havell's/KEI. as directed by engineering in charge.
64	2x4 sq. mm + 1x2.5 sq. mm earth wire Supply and fix 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. Anchor/ Polycab/Havell's/KEI. as directed by engineering in charge.
65	Supply & Fixing 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.make list Legrand/Schneider/ ABB as directed by the engineer-in-charge. a)Triple pole & neutral double door DB, 4 way
66	(b) 40A, 415 V, 50 Hz, FP MCB.
67	(c) 16A / 10A 415 V, 50 Hz, SP MCB.
68	Supply & Fixing 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 poin all as specified and indicate including testing on completion"
69	"Supply & Fixing Dilto, but using copper plate 60x60cm x3.15mm thick electrode and 20x3mm copper strip as earthing lead"
70	Supply & Fixing Ditto, but 25x4mm galvanized iron strip.

71	Supplying of TR split Air conditioners suitable for operation on A/C supply single phase 50 Hz 230 Volts with hermetically sealed compressor with air cooled condenser, motor capacitor and start run capacitors, relay and over load protector internal unit, with one indoor and one outdoor unit. The condenser unit will be placed outside the room on the terrace to avoid noise including standard length of suitable size copper tubing covered with insulation tube.(High wall chorded/cordless) suitable capacity 3 core sheathed/ PVC copper cable and a battery operated wireless remote unit. with Stabilizer and Stand, 5 Star 2 ton capacity. Make list are as directed by engineer-in-charge. Godrej/Haier/Blue star only.
72	Installation charges for split type air conditioner with allied works for one indoor and one outdoor unit is to be mounted on suitable Angle Iron support up to 3.0 ton split/cassette type A/C. as directed by the engineering in charge.

Note: SI No 1 to 33 Related to Defence hangar
SI No 34 to 49 Related to Defence Hangar Annexure
SI No 50 to 72 Related To Defence Store

Terms and Conditions:

1. All necessary documents for switchgear items to be produced after completion of work
2. warranty/guarantee certificates related AC, LED luminaries, Fans, exhaust, Breakers etc to be produced after completion of work.
3. All Test certificates for cables, panels and for switchgear Items confirming to Latest IS STD to be produced,
4. Energy Efficient Fans/LED Luminaries/AC to be provided confirming to BEE Std
5. All necessary safety precautions to be taken while execution of the work.
6. The firm should have valid Class-I Electrical license to carry out the work.
7. The firm should provide guarantee of workmanship/materials for a period of 18 months from the date of commissioning.

4.Terms & Conditions

1	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.
2	Please refer "ES/Terms & Conditions/Civil works dated 23-08-2018" (22 Pages) for General Conditions & Revised special conditions for civil works contract.
3	<p>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.</p> <p>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.</p>
4	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.
5	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.
6	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.
7	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.

8	Labours deployed in the contract shall be ESI registered, Healthy & able bodied persons capable of executing works.
9	Contractor has to submit work certification from Civil Maintenance department, EM Division, BEML Ltd., KGF, for processing of bills.
10	Contractor has to submit the GST challan having submitted the GST and filing the return (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.
12	On award of contract, firm shall execute an agreement in a bond paper of Rs 200/- as per the format given by M/s BEML Limited to carry out the subject work as per terms and conditions as directed.
13	Sub-contract/sub letting: Under any circumstances, this works contract awarded by BEML 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.
15	ACCIDENTS, INJURIES AND DAMAGES: From commencement to completion of the work, the 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.
16	Contractor shall employ labour in sufficient number to achieve the required rate of progress 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.
19	Under all circumstances the Contractor will be fully responsible for any disruption of the 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.
21	Security Deposit:
	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.
22	Payment of security deposit: Firm shall provide Bank Guarantee towards security deposit to 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.
23	Note: a) Contractor may choose any one of the options and inform the same in writing while 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	<p>24.1 After the defect liability period (i.e., one year from the date of completion + 3months 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.</p> <p>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.</p> <p>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 in-charge / 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.</p>
25	<p>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.</p>
26	<p>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 in-charge / 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.</p>
27	<p>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.</p> <p>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.</p>
28	<p>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.</p> <p>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.</p>

29	Penalty Clause		
	Sl.No.	Description	Penalty
	1	To produce Contractors All Risk policy within 15 days from the date of receipt of Purchase Order (PO)	0.1% of contract bill will be deducted/week subject to max of 1%.
30	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	In the event of contract labour, the contractor is responsible for implementing the provision of the contract labour act in total and also responsible for any repression arising there from non compliance thereof.		
32	If there is any default on the part of the contractor an estimated amount towards ESI liability including the penalty, will be recovered by the company from the bills of the contractor.		
33	Entry and exit of workman are controlled by the security authorities of the company. Contractor should strictly adhere to the timings of entry and exit laid down by the authorities and the rate quoted is deemed to include for the same.		
34	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.		
35	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.		
36	Contractor shall arrange for the work in shift assigned rules subject to security check and instructions of the company rules laid down from time to time.		
37	BEML reserves its right to reject a tender due to unsatisfactory past performance in the execution of a contract at any of BEML projects / units.		
38	Due date for submission of tenders may be extended by BEML, in its sole discretion , which shall be announced as corrigendum to original NIT . Validity of bids submitted shall be deemed to be extended accordingly.		
39	BEML may decide to scrap the tender/refloat the tender without assigning any reasons		

	thereof before LOI/PO is committed. BEML reserves the right to accept, split, divide, negotiate, cancel or reject any tender or reject all tenders at any time prior to the award of the contract without incurring any liability to the affected tenderers or any obligation to 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: <ul style="list-style-type: none"> I. Accept or reject any or all proposals. II. Waive any anomalies in proposals through an addendum. III .Modify or cancel Bid / Tender. <p>III. BEML Ltd's decision is final for evaluation of the offers.</p>
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 corrections shall render their tenders liable for summarily rejection.
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.
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.
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 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 15th 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. 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.
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.

59	Accepting officer reserve the right to place order as a whole or part of any service as deemed fit.
60	Risk purchase clause: 60.1 In case of non-performance in the PO, BEML will take alternate action at your risks and cost apart from levying liquidated damages as deemed fit.
	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.
61	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.
65	Non-disclosure and information obligations: Supplier shall provide Purchaser with all 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.
66	Tax conditions: TDS (Tax deducted at source) will be applicable for domestic supplies 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.
67	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 works 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.
68	<p>Valuation of Deviations: Every deviation shall be subject to the limits specified as under:</p> <p>(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.</p> <p>(b) In case of non-tendered items, the total value of such non-tendered items shall not exceed 5% of the approved contract value.</p> <p><u>The basis for ascertaining the non-tendered items shall be as follows:</u></p> <p>(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.</p> <p>(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.</p> <p>(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.</p> <p>(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.</p> <p>(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</p>

	division.
69	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	<p>Integrity commitment in the execution of contracts:</p> <p>(a) Commitment by Purchaser: Purchaser commits to take all necessary steps to prevent corruption in connection with the execution of the Contract.</p> <p>(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.</p>
79	<p>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 a non-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.</p> <p>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.</p>
80	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

	<p>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.</p>
81	<p>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.</p>
82	<p>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.</p> <p>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.</p>
83	<p>Penalty for LD :LD is applicable as per SRM GTC.</p>

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 Defence Hanger, Store, Annexure, Hard Standing at BEML Limited, EM Division, KGF Complex.
------	---

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

Sl No	Description	Qty	UOM	Unit Rate (Rs)	Extended Value (Rs.)
a	b	C	d	e	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.	6000	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.	2815	M3		
3	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.	3125	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	530	M3		

	part thereof in depth beyond the first 1.5 m etc complete.				
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, labour charges, machine mixing, finishing the surface etc. complete.	250	M3		
6	Returning,Back filling Returning, filling in, including spreading, levelling, watering and well ramming in layers not exc 25 cm.	9433	M3		
7	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.	3540	M2		
8	Anti Termite Treament 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.	4270	M2		
9	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 .	607	M3		
10	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	201	M3		
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.	2229	M3		
12	R.C.C. M30 Concrete for Columns UPTO G.LM & L for RCC 30 design mix as in Columns using 20mm graded stone	93	M3		

	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)	6720	M2		
14	Form Work For R.C.C. COLUMNS - Formwork to sides of pillars,posts, struts, iers, columns and stanchions	570	M2		
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	189264.6	KG		
16	REINFORCEMENT STEEL 5-10mm dia S & F TMT steel bars 5 to 10mm dia in stirrups Spacers & Binders	13746	KG		
17	Plate Load test Carrying out Plate Load Test 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 in duplicate.	1	NO		
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.	238	M3		
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	7	M3		
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	14	M3		

	shelves and the like Sunshades & Chajjas				
21	Brickwork 230 mm thick M& L Brickwork using B class bricks , straight /curved on plan in cement mortar 1:6 .	135	M3		
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.	166311.6	KG		
23	REINFORCEMENT STEEL 5-10mm dia S & F TMT steel bars 5 to 10mm dia in stirrups Spacers & Binders	336	KG		
24	Form Work For R.C.C. COLUMNS Formwork to sides of pillars,posts, struts, iers, columns and stanchions	695	M2		
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.	70	M2		
26	Form Work For R.C.C. for Sunshades (Chajjas) Formwork to chullah hoods, chajjas,troughs and similar items including edges	90	M2		
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) includingdistance pieces, cleats etc including application of 2 coats of anti- corrosive paint on surface of member , preparation of shop drawing etc all complete .	974847	KG		
28	Structural Steel for chequered plates Supply & fixing structural steel for Plates (plain or chequered) channels, square cut or notched (ordinary and counter sunk)	128079	KG		

	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 .				
29	Roofing & Side Cladding Supply & fixing Pre- painted galvatum 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	9850	M2		
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 .	1020	M2		
31	Plastering CM 1:4 on fair Surface 15mm 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).	1065	M2		
32	Paint External surfaces Material & Labour for applying Two or more coatsof 100% Premium acrylic emulsion paint havingVOC 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	1065	M2		
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	1020	M2		
34	M60 CONCRETE Concrete pavement :- Construction of un reinforced dowel jointe , plain concrete pavement over prepared subbase with OPCcement design M60 @	2100	M3		

	<p>minimum 500 kg/ cum with 25 mm & downsize graded granite metal coarse aggregate @ 0.67cum & fine aggregate @ 0.44 cum with superplasticizer 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 continuous operation including provision for contraction , expansion , construction & longitudinal joints , joint filler , separation membrane , sealant primer , joint sealant, debonding strip, dowel bars, tie rod, admixtures as approved curing compound , finishing to lines & grades as per drawing, complete as per MORTH specification NO 602 , with vacuum dewatering with vacuum pump & suction mat & compaction with skin floaters clubbed with floating disc including cost of generator, H.M. machinery screed vibratory , power floaters , blade with all lead & lift (including formwork)</p>					
35	<p>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 hessian 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</p>	630	M3			

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 .	1050	M3			
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 ,lighting barricating to all lifts & lead maintenance of diversion etc. complete (metal gradation from 75 mm to 75 mm micron as per MORTH Specifications	1050	M3			
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	1050	M3			

	conformity with the required lines, grades & cross sections & also cleaning & grubbing the ground etc. complete as per prevailing MORTH specifications for Roadworks					
39	Seperation Membrane of Minimum thickness of 150 micron polythene sheet etc complete	4200	M2			
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 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	250	M2			

	excludes cost of glass and includes all other connected accessories. Net Opening will be measured for payment purpose.)				
41	WINDOW GLASS 5.5 mm Sheet glass ordinary quality and glazed in oil putty in square exceeding 0.5 sq m.	250	M2		
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	175	M2		
43	Supplying & fixing 200mm dia Rain water pipes PVC (SWR) pipes single socketed in any length with rubber ring joints fixed to walls	575	M		
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)	500	M		
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	212	M2		

	pressure of 47meters per second, including Electrically operated (motorised) with switch & cable				
46	RCC Hume Pipe Providing & laying 450 MM Reinforced concrete pipes, class NP3, laid and jointed complete with collars etc all complete.	80	M		
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	225	M		
48	Providing & lying 50 mm , medium grade' galvanised iron pipes ,with all fitting and fixed complete to walls and ceilings or laid in floors	150	M		
49	S & F running rails for track (Fe-410-W(Gde-E-250)quality-B)	12000	KG		
50	S & F turbo ventilator of 24" diameter all complete as per instructions & directions ofengg in charge .	28	NO		
51	Providing and fixing 6mm thick wire cast glass of approved make for North light glazing including supplying and fixing anodized aluminium glazing bars of standard sections with all the standard fittings complete including drilling necessary bolts in glazing runners etc, all as per directives of Engineer incharge.	1350	M2		
52	Annexure building Excavation upto 1.5mExcavation over areas not exceeding 1.5m deep and getting out soft/ loose soil complete all as specified and as directed.	274	M3		
53	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	416	M3		
54	Excavation in trenches upto 1.5mExcavation in trenches upto 1.5m -	416	M3		

	3M -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 for each additional 1.5m or part thereof in depth beyond the first 1.5 m				
55	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	106	M3		
56	Returning, filling in, including spreading, levelling, watering and well ramming in layers not exc 25 cm.	940	M3		
57	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	381	M2		
58	Anti Termite Treament 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	396	M2		
59	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	127	M3		
60	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	42	M3		
61	R.C.C. M 30 Concrete for foundation -M &	116	M3		

	L for RCC M-30 design mix as in foundation footings, plinth beams, foundation beams, bases of col, basements slabs, under-reamed piles & mass concrete using 20mm graded stone aggregate.				
62	R.C.C. M30 Concrete for Columns UPTO G.L.M & L for RCC 30 design mix as in Columns using 20mm graded stone aggregate.	20	M3		
63	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)	150	M2		
64	Form Work For R.C.C. COLUMNS- Formwork to sides of pillars,posts, struts, iers, columns and stanchions	157	M2		
65	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.	275	M2		
66	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	12764.64	KG		
67	REINFORCEMENT STEEL 5-10mm dia -S & F TMT steel bars 5 to 10mm dia in stirrups Spacers & Binders	3191.16	KG		
68	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.	29	M3		
69	R.C.C. M30 Concrete for beams, lintels,brackets-M & L for RCC M-30 design mix as in Lintels Beams,	56	M3		

	Cantilevers, bressummers,lintels over 1.50m Span using 20mm Graded aggregate				
70	R.C.C. M30 Concrete for Slab -R.C.C. M30 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	174	M3		
71	Brickwork 230 mm thickM& L Brickwork using B class bricks , straight /curved on plan in cement mortar 1:6 .	71	M3		
72	Brickwork 115 mm thickM& L BrickworkBrickwork using A class bricks , straight /curved on plan in half beick thick wall in cement mortar 1:6 .	42	M2		
73	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 but in Stirrups.	40924.8	KG		
74	REINFORCEMENT STEEL 5-10mm diaS & F TMT steel bars 5 to 10mm dia in stirrups Spacers & Binders	10231.2	KG		
75	Form Work For R.C.C. COLUMNS - Formwork to sides of pillars,posts, struts, iers, columns and stanchions	256	M2		
76	Form Work For R.C.C. BeamsUse & 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.	673	M2		
77	Form Work For R.C.C. SlabsUse & wasteFormwork to soffits of suspended slabs such as roof slabs, floor slabs, landings and similar work; not exceeding	525	M2		

	200mm thick (Horizontal or sloping)				
78	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 .	960	M2		
79	Plastering CM 1:4 on fair Surface 20 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).	1015	M2		
80	Ceiling PLASTER -M & L 10MM plaster in CM(1:3) on ceiling To be finished even and smooth (without using extra lime or cement).	400	M2		
81	Paint External surfacesMaterial & 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 priming coat of exterior primer applied @ 0.90 litre/ 10 sqm over new surfaces.r.	1015	M2		
82	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 a coat of primer to the wall surfaces etc complete	1360	M2		
83	Concrete flooring M & L For 25mm Thick PCC type B-0, 1:2:4 (12.5mm graded aggregate)	155	M2		
84	Bedding Layer for flooring-M & L For Bedding layer of mortar CM(1:4) 15 mm thick for laying floor finishes	340	M2		
85	Vitrified Tile FlooringM & L for Vitrified Ceramic tiles 10 mm thick (square/ rectangular) polished, area of each tiles	185	M2		

	not exceeding 0.36 sqm, in floors etc. set and jointed in neat cement slurry and pointed in white or coloured cement to match				
86	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	42	M2		
87	Vitrified Tile Skirting -M & L Vitrified 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	12	M2		
88	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 with ditto as per item 13015	6	M2		
89	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	253	M2		
90	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	1.5	M3		
91	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	12	M2		

	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					
92	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, suppling & fixing in the frame at site as per specification & drawing	23.4	M2			
93	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)	32	M2			

	<p>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.</p> <p>(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.)</p>				
94	<p>Window Sills -M& L Marble work 18 to 20mm thick</p> <p>(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 9Green marble)</p>	25	M2		
95	<p>MS Butt Hinges S & F MS Butt hinges with SS pins 100mm size</p>	54	NO		
96	<p>Aluminium Tower BoltsS & F 200mm long anodised barrel tower bolts of extruded section and fixed.</p>	18	NO		
97	<p>Aluminium HandelsS & F extruded aluminium alloy handels , fabricated type anodised, 150mm long</p>	36	NO		
98	<p>Window Glass 5.5 mm Sheet glass ordinary quality and glazong in oil putty in square exceeding 0.5 sq m.</p>	32	M2		
99	<p>Door lock supplying & fixing brass Mortice lock vertical type size 100mm 4 levers etc complete</p>	18	NO		
100	<p>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</p>	530	M2		

	completely. Providing & applying of premium 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 polyester reinforcement with 100mm 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 wrinkles or folds on the reinforcement membrane 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 roller/brush as per the manufacturer's recommendations.				
101	M & L for Screed bed or bedding layer of mortar CM(1:4) 15 mm thick Over Wall	530	M2		
102	PVC (SWR) Pipes Supply & Fixing 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.	25	M		
103	PVC (SWR) Pipes Supply & Fixing 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.	25	M		
104	GI PIPES Supply & Fixing Tubes, 'medium grade' galvanised, with all fitting and fixed completely to walls and ceilings or laid in floors 20mm dia	25	M		
105	GI Pipes Supply & Fixing Tubes, 'medium grade' galvanised, with all fitting and fixed completely to walls and ceilings or laid in floors 25mm dia	25	M		
106	GI Pipes Supply & Fixing Tubes, 'medium grade' galvanised, with all fitting and fixed completely to walls and ceilings or laid in floors 32mm dia	25	M		
107	GI Pipes Supply & Fixing Tubes, 'medium	20	M		

	grade' galvanised, with all fitting and fixed completeto walls and ceilings or laid in floors 40mm dia				
108	GI Pipes Supply & Fxing Tubes, 'medium grade' galvanised, with all fitting and fixed completeto walls and ceilings or laid in floors 50mm dia	15	M		
109	Rain water pipesSupply & Fxing PVC (SWR) pipes 110mm dia single socketed in any length with rubber ring joints fixed to walls	150	M		
110	Gate Valve - Supply & Fxing Gun-metal, globe or gate valves,with iron wheel head, screwed both ends for iron pipe and fixed 20mm dia	2	NO		
111	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 (conceaed type) 15mm	2	NO		
112	UrinalSupply & Fxing Vitreous China bowl urinal flat back, size of 465 x 355 x 265 mm white (minimum), with grating and union for discharge pipe (excluding flushing cistern, flush pipe and waste pipe)	9	NO		
113	Flushing Cisteren Supply & Fxing PVC valveless, syphonic action type, flushing cistern, low level, white, with inlet, ball valve, float and handle including brackets(10liters)	13	NO		
114	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)	13	NO		
115	Wash Basin Supply & Fxing Vitreous Cliina wash basin, angle back, size 600x480mm white, excluding taps, waste, chain and plug and orcelain stopper but	13	NO		

	including brackets				
116	Nahani Trap Supply & Fxing P.V.C(S.W.R) gully trap125/110mm, setting and jointing with solvent cement.	13	NO		
117	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)	13	NO		
118	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	13	NO		
119	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	8	NO		
120	Supply & Fxing Towel Rail 600mm long of PTMT fixed with and including Chromium plated brass screws and wooden/plastic cleats. (Minimum weight 190gms)	8	NO		
121	Supply & Fxing Supply & Fixing Liquid soap container of PTMT fixed with and including Chromium plated brass screws and wooden/plastic cleats.(Minimum weight 105gms)	8	NO		
122	Supply & fixing Rotational moulded polyethylene water storage tanks 500 L Capacity(cylindrical vertical with closed top) hoisted and fixed in position	4	NO		
123	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	22	M2		

	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				
124	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.	4000	M3		
125	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	2370	M3		
126	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 for each additional 1.5m or part thereof in depth beyond the first 1.5 m	1825	M3		
127	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	675	M3		
128	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	475	M3		
129	Hardstanding P.C.C (1:2:4) M&L for Cement Concrete in Foundation, Filling and mass concrete 1:2:4 type C2 using	500	M3		

	40mm Graded aggregate.				
130	R.C.C. M 30 Concrete for drain M & L for RCC M-30 design mix as in foundation footings, plinth beams, foundation beams, bases of col, basements slabs, under-reamed piles & mass concrete using 20mm graded stone aggregate.	1325	M3		
131	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).	3800	M2		
132	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.	135000	KG		
133	STORE 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.	1125	M3		
134	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	2865	M3		
135	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.	2865	M3		
136	Excavation in trenches upto 3M - 4.5M 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	575	M3		

	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				
137	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.	250	M3		
138	Returning,Back filling Returning, filling in, including spreading, levelling, watering and well ramming in layers not exc 25 cm.	13700	M3		
139	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.	2025	M2		
140	Anti Termite Treament 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.	3625	M2		
141	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.	1205	M3		
142	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	395	M3		
143	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.	1239	M3		
144	R.C.C. M30 Concrete for Columns UPTO G.LM & L for RCC 30 design mix as in Columns using 20mm graded stone aggregate.	216	M3		
145	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	2755	M2		

	beams;and similar work; vertical or to batter(Fair Finished)				
146	Form Work For R.C.C. COLUMNS -Formwork to sides of pillars,posts, struts, iers, columns and stanchions.	910	M2		
147	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.	130281	KG		
148	REINFORCEMENT STEEL 5-10mm dia S & F TMT steel bars 5 to 10mm dia in stirrups Spacers & Binders	6480	KG		
149	Plate Load test Carrying out Plate Load Test 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 in duplicate.	1	NO		
150	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.	85	M3		
151	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.	63	M3		
152	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.	735	M3		
153	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	19	M3		
154	Brickwork 230 mm thick M& L Brickwork using A class bricks , straight /curved on plan in cement mortar 1:6 .	120	M3		

155	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.	62985	KG		
156	REINFORCEMENT STEEL 5-10mm dia S & F TMT steel bars 5 to 10mm dia in stirrups Spacers & Binders	1275	KG		
157	Form Work For R.C.C. COLUMNS Formwork to sides of pillars, posts, struts, iers, columns and stanchions.	465	M2		
158	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.	510	M2		
159	Form Work For R.C.C. for Sunshades (Chajjas) Formwork to chullah hoods, chajjas, troughs and similar items including edges.	155	M2		
160	Structural Steel for columns, side purlins, roof. Supply & fixing structural steel for columns, 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 , preparation of shop drawing etc all complete .	623449	KG		
161	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 attachment etc including application of 2 coats of anti- corrosive paint on surface of member , preparation of shop drawing etc all complete .	105770	KG		
162	Roofing & Side Cladding Supply & fixing Pre-painted galvatum 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.	5700	M2		

163	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.	515	M2		
164	Plastering CM 1:4 on fair Surface 15mm 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).	900	M2		
165	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 priming coat of exterior primer applied @ 0.90 litre/ 10 sqm over new surfaces.	900	M2		
166	preparing the new wall surface and applying two coats of putty for internal walls and applying two coats of plastic emulsion paint over a coat of primer to the wall surfaces etc complete.	515	M2		
167	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	50	M2		
168	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	150	M2		
169	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 with ditto as per item 13015.	246	M2		
170	Wooden Doors-S & F of 1st Class Hard wood	0.15	M3		

	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.				
171	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.	5	M2		
172	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, suppling & fixing in the frame at site as per specification & drawing	20	M2		
173	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	165	M2		

	<p>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.)</p>				
174	WINDOW GLASS 5.5 mm Sheet glass ordinary quality and glazing in oil putty in square exceeding 0.5 sq m.	165	M2		
175	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	65	M2		
176	GI PIPES Supply & Fxing Tubes, 'medium grade' galvanised, with all fitting and fixed completeto walls and ceilings or laid in floors 20mm dia	25	M		
177	GI Pipes Supply & Fxing Tubes, 'medium grade' galvanised, with all fitting and fixed completeto walls and ceilings or laid in floors 25mm dia.	25	M		
178	GI Pipes Supply & Fxing Tubes, 'medium grade' galvanised, with all fitting and fixed completeto walls and ceilings or laid in floors 32mm dia.	20	M		
179	GI Pipes Supply & Fxing Tubes, 'medium grade' galvanised, with all fitting and fixed completeto walls and ceilings or laid in floors 40mm dia	15	M		

180	GI Pipes Supply & Fxing Tubes, 'medium grade' galvanised, with all fitting and fixed completeto walls and ceilings or laid in floors 50mm dia.	15	M		
181	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.	50	M		
182	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.	50	M		
183	Gate Valve - Supply & Fxing Gun-metal, globe or gate valves,with iron wheel head, screwed both ends for iron pipe and fixed 20mm dia.	2	NO		
184	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.	2	NO		
185	UrinalSupply & Fxing Vitreous China bowl urinal flat back, size of 465 x 355 x 265 mm white (minimum), with grating and union for discharge pipe (excluding flushing cistern, flush pipe and waste pipe)	4	NO		
186	Flushing Cisteren Supply & Fxing PVC valveless, syphonic action type, flushing cistern, low level, white, with inlet, ball valve, float and handle including brackets(10liters)	11	NO		
187	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).	7	NO		
188	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.	7	NO		
189	Nahani Trap Supply & Fxing P.V.C(S.W.R) gully trap125/110mm, setting and jointing with solvent cement.	5	NO		
190	Bib Tap -Supply & Fxing Bib taps 15mm dia, cast copper alloy with crutch or butterfly	13	NO		

	handle, screwed down, screwed for iron pipe or for brass ferrule and fixed(chromium plated).				
191	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	7	NO		
192	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.	5	NO		
193	Supply & Fxing Towel Rail 600mm long of PTMT fixed with and including Chromium plated brass screws and wooden/plastic cleats. (Minimum weight 190gms)	5	NO		
194	Supply & Fxing Supply & Fixing Liquid soap container of PTMT fixed with and including Chromium plated brass screws and wooden/plastic cleats.(Minimum weight 105gms)	5	NO		
195	Supply & fixing Rotational moulded polyethylene water storage tanks 500 L Capacity(cylindrical vertical with closed top) hoisted and fixed in position.	3	NO		
196	Rain water pipes PVC (SWR) pipes single socketed in any length with rubber ring joints fixed to walls.	360	M		
197	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)	220	M		
198	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	225	M2		

	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				
199	RCC Hume Pipe Providing & laying 450 MM Reinforced concrete pipes, class NP3, laid and jointed complete with collars etc all complete.	100	M		
200	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.	200	M		
201	Providing & lying 50 mm , medium grade' galvanised iron pipes ,with all fitting and fixed complete to walls and ceilings or laid in floors.	10	M		
202	S & F turbo ventilator of 24" diameter all complete as per instructions & directions of engg in charge .	84	NO		
203	Providing and laying C.C. floor of mix M-30 with ready mixed concrete from RMC. The ready mixed concrete shall be laid and vibrated with a poker vibrator and finished with screedboard vibrator , vacuum dewatering process and finally finished by floating, brooming with wire brush etc. complete as per specifications and directions of Engineer-in-charge. The channel shuttering spaced 4m apart shall be included in this item.)	551	M3		
204	P&F in position Gypsum board false ceiling with 12.5mm th. Gypsum boards, screwed/ fixed to the under struct of suspended G.I. Grid const& suspended from the main ceiling of ceiling sectn at max c to c distance of 450 mm perimeter channel and intermediate channels at max c to c distance 1200 mm galvanised grid should be fixed to RF CC slab.The gypsum board should be fixed to galvanised iron grid with necessary screws.The boards should be taped and filled from underside to give smooth, seamless ceiling.The rate should include necessary additional ceiling sections and intermediate channels to be provided at openings for light fixtures, asbestos cement ducts, vertical drops, offsets etc. Additional intermediate channels should be	90	M2		

	fixed to strap hangers for additional support to prevent strapping at every 1200 mm item to be comp in all respect.(G.I. perimeter channel size-27mmx0.5mm thk.,flange-20mm &30mm,intermediate channel. size-45mm & 0.9mm thk., hanger size-25mmx0.5mm thk.)complete.				

Ref: EMCP/1004475120- Civil / 1004475164-Electricals / Construction for New Defence Hanger, Store , Annexure, Hard Standing in EM Division KGF /Tender Document Dt:12-07-2024

5.2 SCHEDULE 'A' BILL OF QUANTITIES – ELECTRICAL WORKS

Sl No	Description	Qty	UOM	Unit Rate (Rs)	Extended Value (Rs.)
a	b	C	d	e	f = c X e
1	Supplying & laying of XLPE insulated, armoured heavy duty electric cable with aluminium conductor, 1100 volts grade, cross-sectional area 3.5C X 400 sq. mm LT CABLE, confirming to latest IS STD Make : Polycab/ Havells/ KEI/Gloster only all as directed by the engineering in-charge.(UG laying as per standard practice).Test certificates to be produced.	M	800		
2	Supplying & laying of XLPE insulated, armoured heavy duty electric cable with aluminium conductor, 1100 volts grade, cross-sectional area 3.5C X 240 sq. mm LT CABLE, confirming to latest IS STD Make : Polycab /Havell's/KEI only as directed by the engineering in charge.(UG laying as per standard practice)Test certificates to be produced	M	600		
3	Supplying & Laying of XLPE insulated, armoured heavy duty electric cable with aluminium conductor, 1100 volts grade, cross-sectional area 3.5C X 150 sq. mm LT CABLE confirming to latest IS STD Make: Polycab/ Havells/ KEI/Polycab/Havells/KEI as directed by the engineering in charge. Test certificates to be produced	M	130		
4	Supplying laying fixing of XLPE insulated, armoured heavy duty electric cable with aluminium conductor, 1100 volts grade, cross-sectional area 4C X 25 sq. mm LT CABLE- confirming to latest IS STD.Make: Polycab/Havells/KEI all as directed by the engineering in-charge. Test certificates to be produced	M	150		

5	<p>DEFENCE HANGER MAIN LT PANEL-1 : Supply installation commission of ACB, EDO, 1250A,4P, 50kA, Microprocessor Based, OL, SC, EF, Releases , With Microprocessor Faile Alarm , Indicators , ST/UV, ST Coil with ON, OFF, TRIP... Make: ABB, L&T, Schneider for ACB. Contacts 2 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, Annunciator -8 Programmable Windows..Output-A. SFU 630 A, front handle, 50kA, with Ammeter & Voltmeter qty 1. SFU 400 A, front handle, 50kA, with Ammeter & Voltmeter qty 4. SFU 250 A, front handle, 36kA, with Ammeter & Voltmeter qty 2..Make: L&T/Siemens/Havells/Schneider for SFU.. Panel Size: 2000x4000x1000 (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, Hardwares etc. CTTBS, Control Tbs, Aux Tbs etc. Documents, Assembly , Testing etc..(Refer SLD) Make as directed by engineering in charge\..Documents , Assembly , Testing etc. Panel confirming to Latest IS standard..Detailed Scope of supply : Cubical type, free standing, floor mounting, sheet steel enclosed dust and vermin proof fixed type LT auxiliary distribution panel comprising of 1250 Amps ACB, 01 No. 630Amps SFU, 04 Nos. of 400A SFU & 02 Nos.250Amps SFU Front handle with ammeter with each</p>	JOB	1			
---	---	-----	---	--	--	--

	SFU, L&T ACRUS energy meter, digital voltmeter, digital ammeter & indicating lamps etc..System: 415V 50Hz, 3Ph, 4wire..Bus bar: material: Aluminum. Rating: 1250A..Paint finish: Siemens Grey RAL 7032, powder coating. Construction: indoor, EDO for ACB. Sheet thickness: shell: 14SWG (2mm). Cable entry: ACB- from bottom, individual cable entry from bottom.				
6	Supplying and 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 aluminium conductor cable of size 400 Sqmm-. Make: RAYCHEM RPG. as directed by the engineering in charge.	EA	16		
7	DEFENCE HANGER MAIN LT PANEL-2 ..Supply installation commission of..ACB, EDO, 1250A,4P, 50kA, Microprocessor Based, OL, SC, EF, Releases , With Microprocessor Failed Alarm , Indicators , ST/UV, ST Coil with ON, OFF, TRIP Contacts 2 no..Make:ABB/Schneider/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..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..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 Sw..Voltmeter 92X92 Analog/Digital.. Ammeter 92X92 Analog/Digital.. Earth Leakage relay , panel Mounting ,300mA to 30A, Class 2FS along With Round CBCT:250mmX100mm..Annunciator -8 Programmable Windows.. Output-A..SFU 400 A, front handle, with Ammeter & Voltmeter qty	JOB	1		

	<p>02..SFU 200 A, front handle, with Ammeter & Voltmeter qty 02..SFU 250 A, front handle, with Ammeter & Voltmeter qty 02..Make: L&T/Siemens/Havells/Schneider for SFU..Panel Size: 2000x3500x1000 (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, Hardwares etc..CTTBS, Control Tbs, Aux Tbs etc.. Documents, Assembly, Testing etc.. Detailed scope:Cubical type, free standing, floor mounting, sheet steel enclosed dust and vermin proof fixed type LT auxiliary distribution panel comprising of 1250 Amps ACB, 02 No. 400Amps SFU, 02 Nos. of 250A SFU & 02 Nos.200Amps SFU. Front handle with ammeter with each SFU, L&T ACRUS energy meter, digital voltmeter, digital ammeter & indicating lamps etc.. System: 415V 50Hz, 3Ph, 4wire..Bus bar: material: Aluminum..Rating: 1250A..Paint finish: Siemens Grey RAL 7032, powder coating..Bus bar: material: Aluminum..Rating: 1250A..Paint finish: Siemens Grey RAL 7032, powder coating</p>				
8	<p>DEFENCE HANGER SDB-PANEL 2 Supply installation commission of..MCCB, 250A, 4P, 36kA, TMD, Xt4..RHE XT2-XT4 F/P STANDARD (250mm)..RHE XT2-XT4 F/P STANDARD (250mm)..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, 10A,25KA,FP,XT1,TMD -1No..MCB,</p>	JOB	2		

	63A,18KA, -28Nos..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 make list) Make: ABB/Schneider for MCCB..as directed by engineering in charge..Shunt opening release - SOR,220...240 V ac-220...250 V DC F/P..MCCB, 10A,25KA,FP,XT1,TMD -1No..MCB, 63A,18KA, -28Nos..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 make list) Make: ABB/Schneider for MCCB..as directed by engineering in charge				
9	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 color and fixed with M.S. clamps, bolts and nuts of approved size, for LT, 20x15cm size. Approved from ESCOM /SPTCL.	NO	5		
10	Supply installation commission of Lightning arresters expulsion type complete with all fittings, 30 kilo amp discharge capacity, and distribution class. Make: ABB/Indelec/Ericas all as directed by engineering in charge. Approved from ESCOM /SPTCL.	NO	2		
11	Synthetic Rubber insulated mats 2.5 mm thick for voltage up to 11 kV for electrical purpose as per IS 15652-2006, (superseding IS 5424) suitable for preventing electrical shock of sizes 2m x 1m. Make all as directed by engineering in charge or approved from ESCOM /SPTCL.	NO	8		

12	Supplying laying fixing of XLPE insulated, armoured heavy duty electric cable with aluminium conductor, 1100 volts grade, cross-sectional area 4C 10 sq. mm. Polycab/ Havells/ KEI/ etc. make as directed by engineering in charge.	M	50		
13	Supplying laying fixing of XLPE insulated, armoured heavy duty electric cable with aluminium conductor, 1100 volts grade, cross-sectional area 4C 10 sq. mm. Polycab/ Havells/ KEI/ etc. make as directed by engineering in charge.	M	4000		
14	Supplying laying & fixing of XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 4sq. Mm. Make as directed by engineering in charge, Polycab/ Havells/ KEI/ etc.	M	300		
15	XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 2.5sq. Mm. Make as directed by engineering in charge, Polycab/ Havells/ KEI/ etc.	M	300		
16	Supply and fixing LED Bay light 200 watt 230 V AC outdoor type with thermal management in multiple optics and equipped with IP66 protection, with impact and corrosion resistant complete with driver and lamp. make: Havells/Philips/Bajaj/Wipro as directed by engineering in charge.	NO	52		
17	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. Make: Havells/Philips/Bajaj/Wipro/India bulls.etc. as directed by engineering in charge.	NO	30		
18	In Single Enclosure 1 no 63A 4P MCB 'C' Curve With INDUSTRIAL SOCKET And 2 nos of 16A DP MCB 'C' Curve with INDUSTRIAL SOCKET. MAKE: Legrand/ Schneider/as directed by the	NO	6		

	engineering in charge.				
19	Supplying and fixing of 750 mm Sweep Air Circulator 230V 50 Cycles 250 Watts 1440 rpm Single Phase Heavy Duty Industrial Fans.(Energy efficient) Almonard /Crompton/Havells/as directed by engineering in charge.	NO	26		
20	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/Wipro/India bulls.etc. as directed by engineering in charge.	NO	24		
21	Supply and fixing LED street light fitting 70Watt 230 V AC outdoor type with high pressure die cast aluminum housing 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/Wipro/India bulls.etc. as directed by engineering in charge.	NO	56		
22	Supply of LED 120 Watts flood light luminaries with pressure die cast aluminium housing body for optimal thermal dissipation lamp compartment comprising of anti glare clear diffuser with Injection moulded polycarbonate/clear glass material, delivering superior light output Rated life Burning Hrs 50000hr@Lumen Maintenance of 70%, CCT > 5500K, IP66 optical and electrical compartment & impact resistance of complete luminaries > IK08. Power Factor > 0.9 with mains, Surge Protection-Min 5KV along with Over voltage/Overload, short circuit/ miss-wiring protection. Compatible for pole mounting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60 Hz application.	NO	20		

	Compliance to IS10322/IEC60598, LM79 & LM80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site. location with minimized minimal tools. LED Light fixture with..... W System. Power consumption. LED Efficiency > 130 lm/w, nominal ICRI > 75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008. Housing with supplier word mark / name shall be Engraved / Embossing on the diecast housing / Body part Warranty of 2 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED manufacturer & Cree / Nichia / Lumileds / Osram. Make LED Source				
23	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	M	1500		
24	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 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	M	2000		
25	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.	EA	1		

	having IK 09 & IP 43 protection complete all as specified in IS 732: 2019directd By the and directed by the engineer-in-charge/Legrand/Schneider/ABB/Erco/Tripole pole & neutral double door DB, 8 way				
26	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: 2019directd By the and directed by the engineer-in-charge/Legrand/Schneider/ABB/Erco Triple pole & neutral double door DB, 12 way	EA	1		
27	"Triple pole and earth enclosure with a three pin and earth plug with	EA	2		
28	16A / 10A 415 V, 50 Hz, SP MCB	EA	60		
29	S & F Earthing complete with galvanized steel pipe electrode, 40mm bore, medium grade, 2.5 metres length, buried directly and preferably vertically in ground with top edge not less than 1.25 metres 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. Make as directed by the engineering in charge. Ashok/Global/Erco."	EA	16		
30	S & F Ditto, but using copper plate 60×60cm ×3.15mm thick electrode and 20×3mm copper strip as earthing lead. Make as directed by the engineering in charge. Ashok/Global/Erco."	EA	16		
31	S & F Ditto, but 25x4mm galvanized iron strip. Make as directed by the engineering in charge. Ashok/Global/Erco.	M	200		

32	S & F Ditto, but 20x3mm copper strip Make as directed by th engineering in charge. Ashok/Global/Erco.	M	150		
33	Supplying & Fixing of 2 mm thick perforated cable GI tray with on existing MS angle suport using necessary GI bolts/nuts and washer or welding as required 300 X 50mm complete. Puspak / Profab/ as directed by engineering in charge.	M	300		
34	DEFENCE HANGAR ANNEXTURE DETAILS. Supply and fixing LED lights fitting 1x 20W, 220V, AC decorative box type with driver, holder including LED tube light connecting up with three core flexible copper conductor cable of suitable size from ceiling rose complete. Havells /Philips/Bajaj/Wipro. etc. make as directed by engineering in charge	NO	48		
35	Supply and fixing of 1x5W LED light fitting mirror type with high output diffuser 2 feet, 10 watt 220 V AC decorative type with driver holder and LED lamp including connecting up with three core flexible copper conductor cable of suitable size complete. Havells/Philips/Bajaj/Wipro etc. make as directed by engineering in charge	NO	2		
36	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 Havells/Philips/Bajaj/Wipro/Usha.etc. make as directed by engineering in charge	NO	8		
37	Supply and fix ceiling fans, complete with three blade, down rod, accessories 230V, 1200mm sweep, with Squirrel cage induction motor. Havell's/Philips/Bajaj/Wipro/Usha.etc. make as directed by engineering in charge.	NO	12		

38	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 Polycab/KEI/Havell's/as directed by the engineering in charge. 2x2.5 sq. mm + 1x1.5 sq. mm earth wire	M	300		
39	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 Polycab/KEI/Havell's/as directed by the engineering in charge.	M	300		
40	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 make directed by the engineer-in-charge. 40 (a) One light/fan/exhaust fan point controlled by one switch, with cables 1.5 mm ² size.	EA	57		
41	41 (b) Two light point controlled by one switch, with cables 1.5 mm ² size	EA	5		
42	42 (c) Three light point controlled by one switch, with cables 1.5 mm ² size	EA	1		
43	43 (d) One 6 A socket outlet, on the same	EA	6		

	board with other switches, with cables 1.5 mm ² size				
44	44 (e) One 3 pin socket outlet. 15 amps, independent, with cables 4 sq. mm size	EA	12		
45	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 busbar, 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. Legrand/Schneider/ ABB as directed by the engineer-in-charge. (a)Triple pole & neutral double door DB, 4 way	EA	1		
46	Triple pole and earth enclosure with a three pin and earth plug with socket complete with one triple pole MCB 63A, 415 V, 50 Hz, FP MCB"	NO	1		
47	16A / 10A 415 V, 50 Hz, SP MCB	NO	12		
48	Supplying of Fixing of TR split Air conditioners suitable for operation on A/C supply single phase 50 Hz 230 Volts with hermetically sealed compressor with air cooled condenser, motor capacitor and start run capacitors, relay and over load protector internal unit, with one indoor and one outdoor unit. The condenser unit will be placed outside the room on the terrace to avoid noise including standard length of suitable size copper tubing covered with insulation tube.(High wall chorded/cordless) suitable capacity 3 core sheathed/ PVC copper cable and a battery operated wireless remote unit. 5 Star 2 ton capacity. Make list are as directed by engineer-in-charge. Godrej/Haier/voltas/ only.	NO	6		
49	Installation charges for split type air conditioner with allied works for one indoor	NO	6		

	and one outdoor unit is to be mounted on suitable Angle Iron support up to 3.0 ton split/cassette type A/C. Make list as directed by engineer-in-charge.				
50	DEFENCE STORES DETAILS Supplying laying fixing of XLPE insulated, armoured heavy duty electric cable with aluminium conductor, 1100 volts grade, cross-sectional area 3.5C X 240 sq. mm LT CABLE. Polycab/Havell's/KEI /gloster/as directed by the engineering in charge.	M	300		
51	DEFENCE STORE SDB-PANEL : Supply installation commission of MCCB,400A,4P,36kA,TMD,Xt4 .. RHE XT2-XT4 F/P STANDARD (250mm)..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 ..2 Nos SFU 100 A, front handle,36kA,TMD,Xt4 with Ammeter & Voltmeter..MCB, 63A,25KA,FP,XT1,TMD -15Nos. .KIT ES XT1 8pcs .. RHE XT1-XT3 F/P STANDARD (250mm)..MCB,20A,SP,10kA,C Curved..10Sq mm TB. (Refer SLD - Make list /as directed by the engineering in charge.)	JOB	1		
52	Supplying installation Commission of MCCB 3 Pole, 415 V, fixed type, 100 Amps with breaking capacity 16 KA. ABB/Schneider/L&T/as directed by engineering in charge. Approved from Bescom.	NO	3		
53	Supplying installation Commission of Danger notice plate of 1.6mm thick mild steel sheet,	M	1		

	<p>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 Approved from Bescom.</p>				
54	<p>Supply, laying, fixing of XLPE insulated, armoured heavy duty electric cable with aluminium conductor, 1100 volts grade, cross-sectional area 4C 10 sq. mm. Polycab/Havell's/KEI /as directed by the engineering in charge</p>	M	50		
55	<p>Supply, laying, fixing of XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 4C 6sq. Mm. Polycab/Havell's/KEI /as directed by the engineering in charge.</p>	M	150		
56	<p>Supply, laying& fixing of XLPE insulated, Un armoured heavy duty electric cable with Copper conductor, 1100 volts grade, cross-sectional area 3C 4sq. Mm. Polycab/Havell's/KEI /as directed by the engineering in charge.</p>	M	100		
57	<p>Supply and fixing LED Bay light 200 watt 230 V AC outdoor type with thermal management in multiple optics and equipped with IP66 protection, with impact and corrosion resistant complete with driver and lamp. Philips/Havell's/Bajaj Wipro/as directed by engineering in charge.</p>	NO	102		
58	<p>In Single Enclosure 2 no's 32A 4P MCB 'C' Curve With INDUSTRIAL SOCKET And 2 nos of 16A DP MCB 'C' Curve with INDUSTRIAL SOCKET. Legrand/Schneider/as directed by the engineering in charge.</p>	NO	30		
59	<p>Supply and Fixing In Single Enclosure 1 no 63A 4P MCB 'C' Curve With INDUSTRIAL SOCKET And 2 nos of 16A DP MCB 'C' Curve with INDUSTRIAL SOCKET. Legrand/Schneider/as directed by the engineering in charge.</p>	EA	2		

60	Supply and Fixing 750 mm Sweep Air circulator 230V 50 Cycles 250 Watts 1440 rpm Single Phase Heavy Duty Industrial Fans. Almonard /Crompton/Havells/as directed by engineering in charge.	NO	12		
61	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. Philips/Havells/Bajaj Wipro/as directed by engineering in charge.	NO	6		
62	Supply and fix ceiling fans, complete with three blade, down rod, accessories 230V, 1200mm sweep, with Squirrel cage induction motor(BLDC).Usha/Havell's/Bajaj/as directed by engineering in charge.	NO	2		
63	2x2.5 sq. mm + 1x1.5 sq. mm earth wire Supply and fix 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. Anchor/ Polycab/Havell's/KEI. as directed by engineering in charge.	M	280		
64	2x4 sq. mm + 1x2.5 sq. mm earth wire. Supply and fix 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. Anchor/ Polycab/Havell's/KEI. as directed by engineering in charge.	M	200		
65	Supply & Fixing 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.	EA	4		

	having IK 09 & IP 43 protection complete all as specified in IS 732: 2019.make list Legrand/Schneider/ ABB as directed by the engineer-in-charge. a)Triple pole & neutral double door DB, 4 way.				
66	b) 40A, 415 V, 50 Hz, FP MCB	EA	4		
67	c) 16A / 10A 415 V, 50 Hz, SP MCB	EA	48		
68	Supply & Fixing 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"	EA	6		
69	Supply & Fixing Ditto, but using copper plate 60x60cm x3.15mm thick electrode and 20x3mm copper strip as earthing lead"	EA	6		
70	Supply & Fixing Ditto, but 25x4mm galvanized iron strip	M	180		
71	Supplying of TR split Air conditioners suitable for operation on A/C supply single phase 50 Hz 230 Volts with hermetically sealed compressor with air cooled condenser, motor capacitor and start run capacitors, relay and over load protector internal unit, with one indoor and one outdoor unit. The condenser unit will be placed outside the room on the terrace to avoid noise including standard length of suitable size copper tubing covered with insulation tube.(High wall chorded/cordless) suitable capacity 3 core sheathed/ PVC copper cable and a battery operated wireless remote unit. with Stabilizer and Stand, 5 Star 2 ton capacity. Make list are as directed by engineer-in-charge. Godrej/Haier/Blue star only	NO	2		
72	Installation charges for split type air conditioner with allied works for one indoor	NO	2		

	and one outdoor unit is to be mounted on suitable Angle Iron support up to 3.0 ton split/cassette type A/C. as directed by the engineering in charge.				
Sum total (T) of Sl. No. (01 to 204 + 01 to 72)					
This Grand Total Amount (Including applicable GST) has to be quoted in SRM portal					
L-1 will be decided based on Final amount arrived after Reverse Action process Completion only					
<p>Note:</p> <ol style="list-style-type: none"> 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. <p>-----</p>					

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”

and

.....hereinafter referred to as “The Bidder/Contractor”

Preamble

The Principal intends to award, under laid down organizational procedures, **for Construction for New Defence Hanger, Store , Annexure, Hard Standing in 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)/Contractor(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 intentions.

(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.

(7) In the event of any dispute between the management and the contractor relating to those contracts where Integrity Pact is applicable, in case, both the parties are agreeable, they may try to settle dispute through mediation before the panel of IEMs in a time bound manner. If required, the organization may adopt any mediation rules for this purpose.

In case, the dispute remains unresolved even after mediation by the panel of IEMs, the 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 and its Annexure, the clause in the Integrity Pact will prevail.

(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) -----

Witness 2:

(Name & Address) -----

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

Ref: EMCP/1004475120- Civil / 1004475164-Electricals / Construction for New Defence Hanger, Store , Annexure, Hard Standing in EM Division KGF /Tender Document Dt:12-07-2024

NIT Acceptance Letter

Ref: EMCP/1004475120- Civil / 1004475164-Electricals / Construction for New Defence Hanger, Store , Annexure, Hard Standing in EM Division KGF /NAL

To: Manager - Contract Purchase

EM Division

BEML Ltd

BEML Nagar

KGF – 563 115.

Sub: Contract For Civil & Electrical Works for Construction of New Defence Hanger, Store, Annexure, Hard Standing at BEML Limited, EM Division, KGF Complex.

Ref: EMCP/1004475120- Civil / 1004475164-Electricals / Construction for New Defence Hanger, Store , Annexure, Hard Standing in EM Division KGF /Tender Document Dt:12-07-2024

Bid Invitation No. 6300038952

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 we M/s _____ (supplier name) are supplier meeting the requirement of Minimum Local content as per below declaration. (Class-I Supplier (50%) or Class-II Supplier (20%) or Non-Local Supplier (Less than 20%)) 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) | <input type="checkbox"/> |
| b. Class-II Supplier (20% to 50% local content) | <input type="checkbox"/> |
| c. Non Local Supplier (less than 20% local content) | <input type="checkbox"/> |

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 to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.

Seal and Signature of Authorized Signatory