

**VOLUME-III
PRICE SCHEDULE, REV-0**

PACKAGE 10V: PILE CAP (EXCEPT PILING), CIVIL FOUNDATION & SUPERSTRUCTURE, ARCHITECTURAL WORKS FOR AUX & BOP BUILDINGS, AC DUCTING, WEIGH BRIDGE AND MISC FINISHING WORKS FOR 2X660 MW MAITREE , RAMPAL PROJECT , BANGLADESH

Tender No: BHEL: MSTPP: AUX: 20: 09

PREAMBLE

01	This preamble forms part of tender document and schedule of items. The tenderer should read this preamble carefully before filling in rates for various items. Clauses under this preamble shall be read in conjunction with various volumes of tender and other tender sections as applicable and shall have precedence over any contrary statement mentioned anywhere in this document.
02	The work shall be carried out strictly as per specifications, description of the items in these schedule and / or engineer's instructions. Drawings enclosed with the tender are only preliminary and for tender purposes and giving some idea of the work involved. The work is to be executed as per drawings & documents, which shall be furnished during execution.
03	Items of work provided in this schedule but not covered in this specification shall be executed strictly as per instruction of the engineer.
04	Unless specifically mentioned otherwise in the tender document, the tenderer shall quote for the finished items and shall provide for the complete cost towards power, fuel, tools, tackles, equipment, constructional plants, temporary works, labour, dismantling of all temporary piping, structures, valves, pumps, tanks & other misc. equipment, strengthening of roads/culverts/bridges etc. including arranging all clearances etc. required for carrying out different activities & tests, materials, levies, taxes (except service tax), transport, layout, repairs, rectification, maintenance till handing over, supervisions, colonies, shops, establishments, overheads, profits and all incidental items not specifically mentioned but reasonably implied and necessary to complete the work according to the complete tender document and this schedule.
05	The quantities of the various items mentioned in this schedule of items are approximate, based on very preliminary information and may vary to any extent or be deleted altogether. The quoted rates of each item will remain firm throughout the period of execution including extension, for reasons whatsoever, as long as variation in the total value of work executed under any part of this contract including extra items, if any but excluding any price variation remains, within plus minus thirty percent ($\pm 30\%$) of the awarded price as per LOI.
06	ST No.A101 shall be operated for all type of excavation work except where steel sheet pile has been provided as per instruction of BHEL.
07	Prior written approval of BHEL shall be sought by the contractor in case quantity variation of any item crosses +50% (plus fifty percent) limit during execution and approval to be obtained before execution of further quantity for this item.
08	In case Sealed /Paper Price Bids are opened for finalisation of the tender, for any Item Rate/BOQ based contract, possibility of variation of quantity/ addition/deletion of items can not be ruled out. Under such circumstances, after execution of work, if it is observed that standing as L-1 is changed based on actual quantity executed, the bidder shall give suitable rebate to maintain your standing as L-1. Since this aspect can be assessed at the end of execution, necessary adjustment will be effected at the end of execution in final bill. This condition shall not be applicable where the tender is finalised through Reverse Auction.
09	BHEL reserve the right to rationalize the rates, quoted by L-1 bidder against unit rate items and/ or other optional items with respect to item-wise lowest rates (amongst the participating bidders), before placement of order.
10	The rates quoted shall be inclusive of clearing of site of any vegetation, dressing, clearing of old structures and leveling etc. including fixing of grid pillars, benchmarks etc. required for commencement of site activities. No separate payment will be made towards the same. However, if separate rate for such item is available in the rate schedule, the same shall be considered.
11	Rates shall be quoted in figures and in words in clear legible writing. No overwriting is allowed. All scoring and cancellations should be countersigned and in case of illegibility the interpretation of engineer shall be final. All entries shall be in English language.
12	All works item wise shall be measured upon completion and paid for at the rates quoted and accepted as per BHEL approved payment schedule/billing break-up.
13	The tender shall be deemed to have visited site and made himself aware of all the site conditions, studied the specifications and details of work to be done within the time schedule attached and to have acquainted himself of the conditions prevailing at site.
14	No splitting of the job is envisaged. Decision of BHEL in this regard shall be final and binding to the bidders.
15	Bidders are not allowed to alter the Price Schedule format including item description, quantity etc. and the offer is liable for rejection if the bidders submit their prices in Price Schedules modified by them. BHEL reserves the right to reject the offers of bidders who submit offers in Price Formats which are modified/ altered by them. Also putting any comments instead of rates/price in the designated column of the rate schedule shall make the offer liable for rejection.
16	Bidders to note that for Civil & Structural packages, against a particular item against a ST No. appearing in more than one schedule of the BOQ, same rate must be quoted in all schedules for that particular items with same descriptions. If by error, different rates are quoted in different schedules for same ST No. (i.e. item with same description), then the higher of the rates shall be considered for evaluation but awarding shall be done with the lower rate, if the bidder becomes L-1."
17	For Lumpsum Service Contract : The items/components indicated in the tender is indicative and may vary to any extent. No compensation shall be payable in case of any variation in the items/components listed in the bill of quantities if the executed weight remains within the variation limit. However, in case of deletion of any item or addition of new items over and above the items listed or variation of existing quantity beyond variation limit specified, adjustment (i.e. Payment or recovery as the case may be) shall be done on pro-rata basis based on the Rate per MT worked out from the quoted lump-sum Price and the total weight of components listed /indicated in price schedule plus 30% weight variation limit.
18	Engineer's decision shall be final and binding on the contractor regarding clarification of items in the schedule with respect to the other sections/volumes of the contract.
19	No interest, whatsoever, shall be payable by BHEL on the security deposit, any bank guarantee submitted or any amount due to successful bidder/contractor.
20	Size and weights of various items are mentioned in the attached BOQ cum rate/price schedule for reference purpose only & these shall not be taken into consideration for quoting/calculating amount in the rate schedule. These shall be utilised as per relevant sections of tender. Bidders shall quote for each item in the rate column, taking unit as mentioned in the quantity column. Rates shall be filled in both figures and words. Amount shall be calculated based upon these rates multiplied by the mentioned quantity for the respective items.
21	Bidder's Total price shall be considered for evaluation unless stated otherwise.
22	In case of BOP packages, if Bidder does not quote/indicate the price for freight charges against indicated rate schedule, the same shall be considered as 2% of basic price and adjusted with the total quoted price against each item keeping the total quoted price unaltered.
23	ST No.A101 shall be operated for all type of excavation work except where steel sheet pile has been provided as per instruction of BHEL.

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DUCTING,WEIGH BRIDGE AND MISC FINISHING WORKS FOR 2X660 MW MAITREE , RAMPAL PROJECT , BANGLADESH**

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SCH-1 : TOTAL PRICE

SL NO	DESCRIPTION	PRICE SCHEDULE REF	TOTAL QUOTED PRICE (IN USD)
1.0	PACKAGE 10V: PILE CAP (EXCEPT PILING), CIVIL FOUNDATION & SUPERSTRUCTUR,ARCHITECTURAL WORKS FOR AUX & BOP BUILDINGS,AC DUCTING,WEIGH BRIDGE AND MISC FINISHING WORKS FOR 2X660 MW MAITREE , RAMPAL PROJECT , BANGLADESH	SCH 2 - BREAK UP OF TOTAL PRICE	<u>IN FIGURES:-</u> <u>IN WORDS:-</u>
NOTE			
1.0	Bidder shall quote total price for total price of SCH-1- Part only at sl no 1 above. All other amounts/ rates of each item of works in respective schedules/ parts will be derived based on allocated percentages. As such, any uncalled figure/ amount noted at any other place/ schedule of Volume-III will not be reckoned & will stand null & void.		
2.0	Bidder to note that total price at sl no 1.0 above shall be considered for evaluation & awarding. As such grand total price should be complete in all respect for the full scope defined and considering all terms and conditions.		
3.0	Bidder to note that SCH-2 is Break-up of Total Price.		
3.1	Bidder to note that SCH-3 covers SERVICE of respective items, unless specified otherwise in the description of items.		
3.2	Bidder to note that SCH-4 is Break-up of SUPPLY unless specified otherwise in the description of items.		
4.0	Bidder's quoted total price at Sl. no 1 above respectively shall be apportioned into amount of various items of works based on allocated percentages against respective item, in respective schedules/ parts. As such, bidder shall not indicate/ quote any amount/ rate in these schedules/ parts and any amount/ rate quoted against any item shall not be taken into cognizance/ account and offer may be liable for rejection.		
5.0	Based on the itemwise percentage allocations, the amount for the individual items of the Bill of Quantity shall be arrived at. The rates of individual items shall be derived from the amount against each items after rounding off .		
6.0	Bidders to note that this is an item rate contract. Payment shall be made for the actual quantities of work executed at the unit rate arrived at as per Sl No.7 below.		
7.0	Unit rates of each item of works of respective schedules/ parts will be derived by dividing derived amount by corresponding quantities. In deriving the unit rates of each item in this manner, figures only upto 2 decimal places will be taken into account. Any adjustment, if required, due to such methodology, will be effected in final bill.		
8.0	Successful bidder shall draw a schedule of quantities of various items of work of SCH-5 and obtain BHEL's approval/ clearance in writing before procurement, supply, etc.		
9.0	Any item as per scope of work, if not included in the price quoted above and shown separately will not be taken cognizance of and the offer shall be liable for rejection.		
10.0	Price format shall not be changed by bidder in any case and it may lead to cancellation of their offer.		
11.0	The quantity of items may vary during execution mainly due to actual requirement etc. The unit rates work out from the overall amount quoted & accepted by BHEL shall be considered and no separate unit rates shall be allowed. Unit rates shall be valid throughout the contract period.		

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SCH-2 : BREAK UP OF TOTAL PRICE SCHEDULE

SL NO	DESCRIPTION	PRICE SCHEDULE REF	WEIGHTAGE
1.0	SERVICE	SCH 3 -SERVICE	94.90%
2.0	SUPPLY	SCH 4-SUPPLY	5.10%
	TOTAL		100.00%

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SCHEDULE:4--SUPPLY

ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
	S400 REINFORCEMENT			
	Reinforcement work including all labour, material (unless otherwise specified in BOQ/contract specification), equipment, transportation, handling etc at all level as per specification, relevant laws of Bangladesh, relevant BS Standards or Equivalent International standards approved by BIFPCL/BHEL drawings and as directed by engineer - in - charge for the following			
S401	Providing of mild steel reinforcements conforming to Grade ASTM-Designation A615-80, grade: 40 / BST I (22/34) in concrete including cost of reinforcement and binding wire, labour, scaffolding, transportation to & from stores etc. all complete as per specifications & drawings.	MT	2.00	0.000281524
SA405	Providing of Rebar in existing concrete surface by inserting reinforcement bar with Epoxy based suitable bonding compound of Hilti or equivalent make (HIT-RE-500 of Hilti or equivalent make) for interconnection of new R.C. structure with existing R.C. structure. Depth of drilled hole should be suitable to develop maximum recommended strength as per approved manufacturer's recommendation. This item includes supply of all materials including bonding chemicals, T&P required to execute the work, cost of all labour, transportation of chemical, staging to reach work place etc. all complete as directed by Engineer - in - Charge. Random Pull out non destructive test as directed by engineer shall be conducted to ensure strength of bond and same is included in this item. Reinforcement bar shall be paid separately under item no. 402, 403, 405 as applicable.			
a	12mm Reinforcement bar	EACH	20.00	0.000011596
b	16mm Reinforcement bar	EACH	20.00	0.000018530
c	20mm Reinforcement bar	EACH	20.00	0.000026431
S407	Providing of high yield strength steel reinforcements in brickwork/Autoclave Aerated Concrete blocks including cost of reinforcement and binding wire, labour, scaffolding etc. complete all as per specifications & drawings.	MT	12.00	0.001819007
	700 MS EMBEDMENTS			
	Embedments including all labour, material (unless otherwise specified in BOQ/specification), equipment, transportation, handling etc. at any level as per specification, drawings, relevant laws of Bangladesh, relevant BS Standards or Equivalent International standards approved by BIFPCL/BHEL and as directed by engineer - in - charge.			
S701	Supply of mild steel embedments, inserts, pipe sleeves, angle pieces, rungs of various diameters, plates of dimensions as required etc. including welding, bolting, cutting, drilling, scaffolding, setting etc. all complete.	MT	69.40	0.009954619
S702	Supply of mild steel foundation bolt assembly conforming to relevant BS or equivalent international code in concrete along with nuts, lock nuts (as per relevant BS or equivalent international code), washers, anchor plates, stiffener plates, protective tape, pipe sleeves, templates etc. including welding, cutting, grinding, threading, drilling etc. all complete.	MT	7.50	0.001282279
S704	Supplying of following items in concrete/brickwall for all kind of works, including setting material in concrete, layout, scaffolding, cutting, forming, grinding, drilling, bolting, welding, jointing, testing etc. all complete.			
a	MS pipes of all diameters	Quintal	33.70	0.000622392
b	PVC pipes / conduits of all diameters	Quintal	17.50	0.001672584

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SCHEDULE:4--SUPPLY

ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
c	UPVC pipes / conduits of all diameters	Quintal	17.50	0.001619269
	S900 DOORS, WINDOWS, VENTILATORS, LOUVERS			
	Doors (including master key system), windows, ventilators, louvers, roof ventilators, rolling shutters, partitions including all labour, material (unless otherwise specified in BOQ/specification), equipments, transportation, handling, preparation of working drawings etc. at any level as per specification, drawings, relevant laws of Bangladesh, relevant BS Standards or Bangladesh National building code or Equivalent International standards approved by BIFPCL/BHEL and as directed by engineer - in - charge.			
S904	Providing of single or double steel door shutters with 45mm thk flush design shutter comprising of two outer sheets of 18 gauge steel sheets rigidly connected and reinforced inside with continuous vertical 20 gauge stiffeners, spot welded in position at not more than 150mm on centres including void filled with mineral wool (density as per specification), all fittings, Godrej or equivalent make mortice lock with handle on both sides, shop and final painting etc all complete as per specification.	SQM	450.78	0.003781717
S905	Providing of single or double steel door shutters with 18 gauge M.S. sheets shutter presenting a flush surface on the outside and inside stiffened with semitubular edge and central stiffening rail which shall convey the lock including fixtures, Godrej or equivalent make mortice lock with handle on both sides, shop and final painting etc all complete as per specification.	SQM	101.52	0.000925424
S907	Providing of fire proof steel doors (single or double shutter) with panic devices, panic trim shall be 45mm thk flush design comprising of two outer sheets of minimum 18 gauge steel sheets rigidly connected and reinforced inside with continuous vertical 20 gauge stiffeners, spot welded in position at not more than 150mm on centers including all fire rated hardware, fire rated fittings, vision panel with fire rated glass (fire proof classification G90), shop painting with approved post office/signal red color fire resistant paint and mineral wool insulation (minimum 64 kg/cum density) complete and shall be of fire proof classification T90 and tested as per BS EN 1634 or equivalent international code and as per specification. Fire door shall be tested at UL accredited Lab.	SQM	34.00	0.000461692
S907A	Providing of fire proof steel doors (single or double shutter) with panic devices, panic trim shall be 45mm thk flush design comprising of two outer sheets of minimum 18 gauge steel sheets rigidly connected and reinforced inside with continuous vertical 20 gauge stiffeners, spot welded in position at not more than 150mm on centers including all fire rated hardware, fire rated fittings, vision panel with fire rated glass (fire proof classification G120), shop painting with approved post office/signal red color fire resistant paint and mineral wool insulation (minimum 64 kg/cum density) complete and shall be of fire proof classification T120 and tested as per BS EN 1634 or equivalent international code and as per specification. Fire door shall be tested at UL accredited Lab.	SQM	70.00	0.001029701
S908	Providing of steel windows/ventilator with steel sections as per relevant BS code or equivalent international code including all fittings, metal beadings, hold fasts, shop and final painting ,glazing etc. all complete. (Glazing shall be paid separately)			
a	openable type	SQM	10.00	0.000031626
b	fixed type	SQM	10.00	0.000023710

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SCHEDULE:4--SUPPLY

ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
S910	Providing of aluminium composite panel (ACP) at all heights and elevations consisting of 3mm thick II B fire rated LDPE core mixed with mineral fibre sandwiched between 2 skins of 0.5mm thick aluminum alloy sheet making a total panel thickness of 4mm. The surface shall be finished with PVDF based coating of minimum 30 micron on the top & sides and polymer paint on reverse side. Coating shall conform to ECCA or AAMA. The surface shall be protected with self-adhesive peel of masking foil. The system shall include aluminum framing, Stainless Steel straps/nuts/ bolts/rivets/washers, EPDM gaskets, backer rods, weather sealant, fastening material and hardware, hot dipped galvanised clamps/brackets/anchor fasteners for fixing the panels/frame to wall (Hot dip galvanization to be minimum 80 microns thick) conforming to relevant BS or equivalent international standard for internal wall cladding at all heights and elevation complete with all labour, material, equipment, handling, transportation, workmanship, preparation of working drawings, staging, scaffolding, etc.as per drawings, specifications, manufacturer's recommendations, relevant BS or equivalent international standards and/or as approved by BIFPCL/BHEL. (All aluminium frames to be used should be with 10-15% of recycled content meeting the required strength for frame work as per engineer incharge. The contractor should provide the material cutsheet/ declaration from manufacturer mentioning the recycled content used in maufacturing of frames to be used.)	SQM	250.00	0.001836276
S910A	Providing of aluminium composite panel (ACP) at all heights and elevations consisting of 3mm thick II B fire rated LDPE core mixed with mineral fibre sandwiched between 2 skins of 0.5mm thick aluminum alloy sheet making a total panel thickness of 4mm. The surface shall be finished with PVDF based coating of minimum 30 micron on the top & sides and polymer paint on reverse side. Coating shall conform to ECCA or AAMA. The surface shall be protected with self-adhesive peel of masking foil. The system shall including aluminum framing, Stainless Steel straps/nuts/ bolts/rivets/washers, EPDM gaskets, backer rods, weather sealant, fastening material and hardware, designing the system to withstand wind pressure, hot dipped galvanised clamps/brackets/anchor fasteners for fixing the panels/frame to wall (Hot dip galvanization to be minimum 80 microns thick) conforming to relevant BS or equivalent international standard for external wall cladding at all heights and elevation complete with all labour, material, equipment, handling, transportation, workmanship, preparation of working drawings, staging, scaffolding, etc.as per drawings, specifications, manufacturer's recommendations, relevant BS or equivalent international standards and/or as approved by BIFPCL/BHEL. (All aluminium frames to be used should be with 10-15% of recycled content meeting the required strength for frame work as per engineer incharge. The contractor should provide the material cutsheet/ declaration from manufacturer mentioning the recycled content used in maufacturing of frames to be used.)	SQM	250.00	0.002020197
SA912	Providing of pressed steel frames fabricated from 16 gauge M.S sheet mortised, reinforced drilled and tapped for hinges and locks bolts strikes, hold fasts adjustable floor anchors, floor tiles/weather bars, paintings etc all complete as per specifications.	Kg	4,200.00	0.001195554

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SCHEDULE:4--SUPPLY

ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
S913	Providing of rolling shutter of hot rolled double dipped galvanised steel double walled hollow sections interlocked together through their entire length and jointed together at the end by end locks mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation including wire springs, top cover, primer & shop coats of approved enamel paint etc, all complete as per relevant BS code or equivalent international code and specification of approved make of following types: The bottom lath shall be coupled to a lock plate fabricated from 3mm thick galvanised steel plate and securely rivetted with stiffening angles.			
a	Hand Operated	SQM	6.00	0.000037641
b	Mechanically Operated	SQM	237.00	0.002062985
c	Electrically operated including Hand crank with continuous chain reel for emergency operation	SQM	430.00	0.003993072
	S1500 ROOFING / SIDE CLADDING			
	Roofing / side cladding work including all labour, material (unless otherwise specified in BOQ/specification), equipment, transportation, handling, scaffolding, laps, hooks, washers, corner pieces etc. at any level as per relevant laws of Bangladesh, relevant BS Standards or Equivalent International standards approved by BIFPCL/BHEL, specification, drawings and as directed by engineer - in - charge.			
S1501	Designing & providing permanently color coated galvanised MS troughed metal sheet decking plate of approved colour and conforming to relevant BS or equivalent international code over roof purlins for cast-in-situ roof slab as per relevant BS or equivalent international code and			
a	Span Upto 1800mm	SQM	245.00	0.000844345
b	Span Exceeding 1800mm and upto 2500 mm	SQM	810.00	0.003008071
S1502	Providing and fixing shear connectors of mild steel studs having 16mm dia and minimum 75 mm projected length above purlin passing through metal decking as per relevant BS code or equivalent international code and specification.	QUINTAL	4.00	0.000161141
1601	Providing of glass fibre reinforced gypsum plaster board (GRG) ceiling (having gypsum core mixed with glass fibre) system consisting of metal supporting grid system forming panels of specified size, suspended from RCC slab/structural steel or catwalkway grid above with 4 mm (minimum) galvanised wires (rods) with special height adjustment clips, including preparation of working drawing, providing openings for AC ducts, return air grills, light fixtures etc (but excluding the cost of catwalkway grid) all complete as per drawings, specification and instructions of the engineer. The false ceiling should have minimum noise reduction factor of 0.5.			
a	12 mm thick GRG board with galvanised light gauge steel load bearing supporting GI frame and finished flat (seamless).	SQM	1,435.00	0.001559646
b	12 mm thick GRG board in profile (dome ,curved profiled etc.) with galvanised light gauge steel load bearing supporting GI frame and finished smooth (seamless).	SQM	220.00	0.000358794

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ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
1602	Providing of light weight mineral fiber tile false ceiling of minimum thickness 15 mm and exposed surface semi-perforated with depth of perforation as 4 mm and humid resistance of 95% RH and fire performance of class 0/1 as per BS 476 with metal suspension grid system with galvanized Tees of section 24 X 38 mm for main runners of approved colour and make as per specification and relevant BS or equivalent international code..Additional hangers and height adjustment clips shall be provided for return air grills, light fixtures. A.C. ducts etc. suitable M.S. channel (minimum MC 75 @ 1.2m) grid shall also be provided above the false ceiling level for movement of personnel to facilitate maintenance of lighting fixtures, AC ducts etc. complete with cut-outs etc.The size of tiles shall be 600 X 600 mm or 600 X 1200 mm. Required MS channel shall be measured & paid extra under respective item unit rate.	SQM	200.00	0.000505873
1604	Providing of permanently colour coated aluminium false ceiling of approved colour with stove enamel finish of approved make in LINEAR or SQUARE type with corrosion resistance aluminium alloys panels of minimum thickness 0.5mm as per specification and relevant BS or equivalent international code. Additional hangers and height adjustment clips shall be provided for return air grills, light fixtures. A.C. ducts etc. suitable M.S. channel (minimum MC 75) grid 1200 c/c maximum shall also be provided above the false ceiling level for movement of personnel to facilitate maintenance of lighting fixtures, AC ducts etc.The work to be complete as per specifications, drawings and direction of engineer.(Materials for structural platform grid for movement made up of MS Channels/ Beams / Angles shall be supplied by BHEL and shall be paid under ST No 2301) The false ceiling should have minimum noise reduction factor of 0.5.	SQM	1,465.00	0.006884784
1606	Providing of 12mm thick Gypsum board plain/perforated false ceiling tiles(600x600mm) of India Gypsum or equivalent make in plan or elevation with aluminium grid, metal suspension system, anchor fastener adjustable hangers etc. including two or more coats of acrylic emulsion paint of approved colour to give an even shade with smooth finish all complete as per architectural design and detail and as per specification and relevant BS or equivalent international code. Metal suspension system as per ASTM C-635 shall be hot dipped M.S.galvanized. Nominal size of T-section shall be 24 x 38 mm or 24 x 25 mm cross runners. 24mm wide exposed flange surface shall be permanently color coated. Suspension system shall be as per manufacturer's specification supported over movement platform.The work to be complete as per specifications, drawings and direction of engineer.(Materials for structural platform grid for movement made up of MS Channels/ Beams / Angles shall be supplied by BHEL and shall be paid under ST No 2301)	SQM	30.00	0.000072999
	1800 MISCELLANEOUS WORKS			
	Miscellaneous works including all labour, material (unless otherwise specified in BOQ/specification), equipment etc. at any level unless otherwise specified as per relevant laws of Bangladesh, relevant BS Standards or Equivalent International standards approved by BIFPCL/BHEL, specification, drawings and as directed by engineer - in - charge.			
S1810	Providing, laying and fixing rails and guide rails in concrete for transformer, rail track including cutting of rails, joining of rails, anchoring lugs etc all complete.	MT	5.00	0.000824791
	S2000 FENCING AND GATES			

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SCHEDULE:4--SUPPLY

ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
	Fencing and gates including all labour, material (unless otherwise specified in BOQ/specification), equipment etc at any level as per relevant laws of Bangladesh, relavant BS Standards or Equivalent International standards approved by BIFPCL/BHEL, specification, drawings and as directed by engineer - in - charge.			
S2009	Supply & febrication of galvanised MS Gates out of channels, joists, angles, flats, plates, pipes, welded steel wire mesh & sheets including stiffners, bracings, fabricated hinges, MS Aldrops with locking arrangement, tempered steel pivot, guide track of MS Tee, bronze aluminium ball bearing arrangements, castor wheels, paintings etc. all complete.	MT	5.00	0.000924838
S2009A	Supply & febrication of PVC coated galvanised MS Gates out of rectangular hollow sections, channels, joists, angles, flats, plates, pipes including stiffners, bracings, fabricated hinges, MS Aldrops with locking arrangement, tempered steel pivot, guide track of MS Tee, bronze aluminium ball bearing arrangements, castor wheels etc. all complete (mesh & barbed wire to be paid seperately uner item no 2001).	MT	6.00	0.001165265
	TOTAL WEIGHTAGE			0.051018373

PACKAGE 10V: PILE CAP (EXCEPT PILING), CIVIL FOUNDATION & SUPERSTRUCTURE, ARCHITECTURAL WORKS FOR AUX & BOP BUILDINGS, AC DUCTING, WEIGH BRIDGE AND MISC FINISHING				
Tender No: BHEL:MSTPP:AUX:20:09				
SCHEDULE:3--SERVICE				
ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
	100 EARTH WORK			
	Earth work In excavation, backfilling and disposal including necessary men/women, materials, equipment, loading, transportation, unloading, dewatering etc as per specification, drawing, relevent laws of Bangladesh, relevant BS (or equivalent international standard) Standards approved by BIFPCL/BHEL and as directed by engineer- in-charge for the following.			
A101	Earth work in excavation in all types of soil including ash which can be excavated by any means including setting out, levelling, dewatering (but excluding special type of dewatering viz. well point method), shoring & strutting (wherever required, except using of temporary Steel sheet piling work. If shoring is required with temporary Steel sheet piling work as per BHEL's approved excavation scheme then it will be paid separately as per item No. 2516), dressing the sides & bottom, all lifts, ramming/compacting the excavated bottom, stacking, disposal of surplus excavated materials within a lead up to 1 km, spreading/levelling of disposed materials etc. all complete for following depths below ground level.			
a	Depth from ground level but not exceeding 2 m	CUM	51,700	0.020738229
b	Depth exceeding 2 m but not exceeding 4 m	CUM	29,100	0.015158965
c	Depth exceeding 4 m but not exceeding 6 m	CUM	10,600	0.008494008
A107	Earthwork in back filling upto any depth below ground level around foundations, plinths, trenches, drains etc to proper grade and level in layers not exceeding 250 mm thickness using/with selected approved materials from compulsorily excavated earth available within a lead upto 1 Km and compacted as specified including re-excavation of stacked earth, watering, ramming/compaction by manual/mechanical means, dressing etc all complete.for the following.			
a	Each layer compacted so as to achieve at least 98% maximum dry density as per ASTM D-1557.	CUM	100	0.000022946
e	Each layer compacted so as to achieve at least 85% relative density as per ASTM D-4253 & ASTM D-4254	CUM	36,125	0.007512159
A108	Earthwork in Back filling upto any depth below ground level around foundations, plinths, trenches, drains etc to proper grade and level in layers not exceeding 250 mm thickness using/with selected earth directly from excavation within a lead upto 1 Km and compacted as specified including watering, ramming/ compaction by manual/mechanical means, dressing etc all complete for the following.			
a	Each layer compacted so as to achieve at least 98% maximum dry density as per ASTM D-1557.	CUM	100	0.00001298
b	Each layer compacted so as to achieve at least 95% maximum dry density as per ASTM D-1557.	CUM	100	0.000011743
e	Each layer compacted so as to achieve at least 85% relative density as per ASTM D-4253 & ASTM D-4254	CUM	34,111	0.003708866
A109	Extra over ST No. 101 and 103 to 108 for carriage of material/earth for every 500 m or part thereof beyond an initial lead of 1 Km.	CUM	12,700	0.000241653
A111	Supplying and filling sand (grading limits as per specification) upto any depth under floors, around foundations, plinths etc. in layers not exceeding 250 mm thickness and compacted so as to achieve at least 85% relative density as per ASTM D-4253 & ASTM D-4254 including spreading, watering, ramming/compaction by manual / mechanical means, dressing, royalty (if any) etc. all complete.	CUM	400	0.001404795
A 200	CONCRETE WORKS (EXCEPT ROAD WORKS)			
	Providing and placing concrete work including cost of labour, materials (unless otherwise specified in BOQ/contract specification) and equipment for handling, transportation, batching, mixing, placing, vibrating and curing, cleaning and rendering the exposed surface with cement sand mortar to give a smooth and even surface (excluding cost of centering, shuttering and reinforcement) with mechanised equipments like batching plant, transit mixer, concrete pump etc, preparation of scheme for concreting, getting it approved by engineer, maintaining and submitting records of concreting. complete as per drawing, specifications, relevant laws of Bangladesh, manufacturer's recommendation, relevant BS standards/equivalent international standards and as approved by BIFPCL/BHEL and as per direction of engineer in charge for the following. [Type –I cement as per ASTM C150-16 with C3A content limited to 5 to 8 % shall be used. Supply of cement is in the scope of contractor. No separate payment shall be given against supply of cement by contractor]			

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Tender No: BHEL:MSTPP:AUX:20:09				
SCHEDULE:3--SERVICE				
ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
AA211	Providing and encasing of structural steel member with concrete as per BS EN-206 and BS 8500 or equivalent International code using nominal aggregate size of 12.5mm down. Encased member shall be wrapped with welded wire mesh/chicken wire mesh with proper lap etc. complete as per specification for the following grades. (Payment of welded wire mesh, chicken wire mesh shall be made separately)			
b	C20/25 grade	CUM	100	0.002010859
AA212	Screed concrete conforming to relevant BS code or equivalent international code with coarse sand and graded hard stone aggregate 12.5mm/6 mm nominal size on the roof at any level or thickness, drains etc complete as per following.			
a	1:2:4 (1 part cement, 2 part sand, 4 parts of aggregate by volume)	CUM	100	0.001919782
A220	Providing & laying Plum cement concrete 1:3:6 with 75% graded metal of maximum size 40 mm and 25% plums of maximum size 150 mm.	CUM	30	0.000543813
C 200	CONCRETE WORKS			
	Placing of concrete work including cost of labour, materials (unless otherwise specified in BOQ/ contract specification) and equipment for handling, transportation, placing, vibrating and curing, cleaning and rendering the exposed surface with cement sand mortar to give a smooth and even surface (excluding cost of centering, shuttering and reinforcement) with mechanised equipments like transit mixer, concrete pump etc, preparation of scheme for concreting, getting it approved by engineer, maintaining and submitting records of concreting. complete as per drawing, specifications, relevant laws of Bangladesh, manufacturer's recommendation, relevant BS standards/equivalent international standards and as approved by BIFPCL/ BHEL and as per direction of engineer in charge for the following. (RMC SHALL BE PROVIDED BY BHEL AT BATCHING PLANT IN PROJECT PREMISES. TRANSPORTATION FROM THE BATCHING PLANT UP TO THE POURING POINT SHALL BE UNDER THE SCOPE OF CONTRACTOR)			
C201	Concrete of grade C8/10 as per BS EN-206 and BS 8500 or equivalent international standard (with well graded picked jhama birck chips conforming to ASTM C33 including breaking chips and screening) as mass filling course, lean concrete, leveling course, mud mat, under and around foundation/floors at any depth below finished floor level etc.	CUM	50	0.000116273
C203	Concrete of grade C12/15 as per BS EN-206 and BS 8500 or equivalent international standard (with 40 mm graded aggregate) as lean concrete, leveling course, mud mat, under and around foundation/floors at any depth below finished floor level etc.	CUM	3,561	0.0087069
C204	Concrete under floors, paving, plinth protection, pipe encasing etc complete with 20 mm nominal size graded aggregate at any depth below finished floor level for the following grades.			
b	Grade C16/20 as per BS EN-206 and BS 8500 or equivalent international standard	CUM	60	0.000189843
C205	Providing and laying Design Mix cement concrete conforming to BS EN-206 and BS 8500 or equivalent international standard for reinforced concrete works with coarse sand and graded hard stone aggregate of 20mm nominal size in foundations/substructure, grade slab, paving, drains, under floors etc at any level below finished floor level, any shape, position or thickness etc complete including use of plasticizer/ superplasticizer conforming to BS EN 934 (latest) or equivalent international standard to achieve required slump in concrete all complete as per specification & drawing for the following.			
a	Grade C20/25	CUM	2,589	0.00907016
b	Grade C25/30	CUM	1,625	0.005857163
c	Grade C30/37	CUM	15,125	0.056017315

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Tender No: BHEL:MSTPP:AUX:20:09				
SCHEDULE:3--SERVICE				
ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
C206	Providing and laying Design Mix cement concrete conforming to BS EN-206 and BS 8500 or equivalent international standard for reinforced concrete works with coarse sand and graded hard stone aggregate of 20mm nominal size in superstructure at all level above finished floor level, any shape, position or thickness etc complete including use of plasticizer/ superplasticizer conforming to BS EN 934 (latest) or equivalent international standard to achieve required slump in concrete all complete as per specification & drawing for the following.			
a	Grade C20/25	CUM	60	0.00022026
b	Grade C25/30	CUM	170	0.00061506
c	Grade C30/37	CUM	6,920	0.027448979
C211	Providing and encasing of structural steel member with concrete as per BS EN-206 and BS 8500 or equivalent International code using nominal aggregate size of 12.5mm down. Encased member shall be wrapped with welded wire mesh/chicken wire mesh with proper lap etc. complete as per specification for the following grades. (Payment of welded wire mesh, chicken wire mesh shall be made separately)			
b	C20/25 grade	CUM	121	0.000388326
C212	Screed concrete conforming to relevant BS code or equivalent international code with coarse sand and graded hard stone aggregate 12.5mm/6 mm nominal size on the roof at any level or thickness, drains etc complete as per following.			
a	1:2:4 (1 part cement, 2 part sand, 4 parts of aggregate by volume)	CUM	566	0.001776393
C213	Providing and laying Design Mix cement concrete as per BS 8500 and BS EN 206 or equivalent International code for reinforced concrete works using graded aggregate for Concrete in precast works like roof slabs/trench covers, fins, lintels, chajjas, beams, columns, wall panels, facias, concrete jali, etc.at all levels in all kinds of work including formwork/moulds, curing, rendering the top exposed surface with cement sand mortar (1:3), handling, storing, transporting, all leads, erection without damage, setting in position with cement sand mortar (1:3), filling the gaps between adjacent precast units with concrete or cement sand mortar (1:3) and including making of holes for bolts for fixing, welding etc.complete with graded aggregate and as per specification and drawing for following grades.			
c	C 40/50 grade	CUM	1,445	0.006906317
C214	Providing and laying Design Mix cement concrete as per BS 8500 and BS EN 206 or equivalent International code for reinforced concrete works using graded aggregate for Concrete in water retaining/ conveying structures including addition of suitable plastisizer cum waterproofing cement additives confirming to BS 934 or equivalent international standard to achieve a slump more than 125 mm in concrete as per manufacturers recommendation and conforming to limits of permeability as per relevant BS code or equivalent international code and specification with 20 mm nominal size graded aggregate for following grades. Watertightness is to be ensured including structural grouting if required.			
b	C 30/37 grade	CUM	10,430	0.048835308
	MISC. CONCRETE RELEATED WORKS			
A210	Extra over ST Nos. C205/D205 to C207/D205 for conducting UPV test for concrete at all levels including all equipments, making necessary arrangements, staging, submission of report etc. all complete as directed by engineer in charge, as per BS EN 12504 and as per specification.	CUM	100	0.000122729
215	Dismantling concrete work for all types of structures at all levels including stacking of servicable material to a lead of 500 m and disposal of unservicable material upto a lead of 2 km, cutting of reinforcement, labour, equipment, safety precautions etc all complete as per drawings, specification and instructions of engineer in charge.			
a	Plain cement concrete of all grades	CUM	20	0.000052602
b	Reinforced cement concrete of all grades	CUM	20	0.000080097

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SCHEDULE:3--SERVICE				
ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
216	Chipping of concrete in reinforced concrete work, cutting pockets, making openings at all levels and according to shapes, disposal of waste materials upto a lead of 2 km as directed by engineer including equipment, safety precautions, making good the broken surface etc all complete as per specification, drawing, instructions of engineer in charge but excluding cutting of reinforcement .	CUM	17	0.000002131
217	Extra over and above St No 216 for cutting of reinforcement, all sizes and types including labour, equipment, return of cut reinforcement to store etc all complete as per specification, drawings and instructions of engineer in charge. Measurement shall be on the cross sectional area of reinforcement cut.	SQM	110	0.000001172
218	Cutting Reinforced concrete with mechanised tools like Core drilling machine etc. for cutting pockets, holes, cores in slab, beam, column or foundation as per direction of engineer in charge.	CUM	15	0.000008912
A222	Extra over items C203/D205 to C213/D213 for providing and mixing approved Bipolar Concrete penetrating Corrosion inhibiting admixture in concrete as per detail specification of manufacturer etc. all complete and and as approved by BIFPCL/BHEL.	Kg	100	0.000038954
	300 FORM WORKS			
	Providing, fixing and removing formwork at any elevations for all structures, as per specifications and including all labour, material, scaffoldings and centering complete including pockets, rubbing the fairfaced concrete with carborundum stone to make smooth finish etc. complete as per drawing, specifications, relevant laws of Bangladesh, relevant BS Standards or Equivalent International standards approved by BIFPCL/BHEL and as per direction of engineer in charge for the following.			
A301	Fairface form work with good quality water proof ply wood (Plywood lining for form shall be of timber, which is resin bonded and water repellant) of minimum 12 mm thickness and smooth surface below finished ground floor level for foundations, footings, base of columns, walls, columns, pilasters, beams, mass concrete, trenches etc including providing 25mmx25mm chamfer at all exterior corners.	SQM	25,845	0.031965325
A302	Fairface form work with good quality water proof ply wood (Plywood lining for form shall be of timber, which is resin bonded and water repellant) of minimum 12 mm thickness and smooth surface above finished ground floor level for columns, beams, suspended floors, roofs, lintels, cantilevers, staircases, landings, balconies etc. for all heights including providing 25mmx25mm chamfer at all exterior corners.	SQM	37,226	0.057881192
A304	Providing, fixing and removing formwork in block-outs/pockets and openings (below 0.1 sqm plan area) at all elevations including cutting, formation of all shapes and all other operations required for making the required shape and size all complete as per specification, drawing and instruction of engineer in charge.		-	
a	Upto 150 mm depth	Each	103.00	0.000065986
b	Pockets of depths more than 150mm and upto 300 mm depth	Each	187.00	0.000217955
c	Pockets of depths more than 300mm and upto 600 mm depth	Each	439.00	0.000966624
d	Pockets of depths more than 600mm and upto 1000 mm depth	Each	142.00	0.000506067
e	Pockets of depths more than 1000mm and upto 1500 mm depth	Each	20	0.000104275
305	Extra over item no. 301 and 302 for curved formwork for foundations, footings, beams, walls, trenches, domes, arches etc as per specification			
a	Extra for curve shuttering for item no. A301	SQM	1600.00	0.000395513
b	Extra for curve shuttering for item no. A302	SQM	6200.00	0.001698216
	400 REINFORCEMENT			

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Tender No: BHEL:MSTPP:AUX:20:09				
SCHEDULE:3--SERVICE				
ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
	Reinforcement work including all labour, material (unless otherwise specified in BOQ/contract specification), equipment, transportation, handling etc at all level as per specification, relevant laws of Bangladesh, relevant BS Standards or Equivalent International standards approved by BIFPCL/BHEL drawings and as directed by engineer - in - charge for the following			
401	Straightening, cutting, bending, placing in position at any level, binding of mild steel reinforcements conforming to Grade ASTM-Designation A615-80, grade: 40 / BST I (22/34) in concrete including cost of reinforcement and binding wire, labour, scaffolding, transportation to & from stores etc. all complete as per specifications & drawings.	MT	2	0.000070381
402	Straightening, cutting, bending, placing in position at any level, binding in position of steel reinforcements of grade B500B confirming to BS 4449:2005+A:2009 including cost of reinforcement steel, binding wire, labour, scaffolding, transportation to & from stores etc complete all as per specifications, drawings and as directed by Engineer. (REINFORCEMENT STEEL SHALL BE PROVIDED BY BHEL AS PER TCC)	MT	3,237	0.067417903
A405	Fixing of Rebar in existing concrete surface by inserting reinforcement bar with Epoxy based suitable bonding compound of Hilti or equivalent make (HIT-RE-500 of Hilti or equivalent make) for interconnection of new R.C. structure with existing R.C. structure. Depth of drilled hole should be suitable to develop maximum recommended strength as per approved manufacturer's recommendation. This item includes supply of all materials including bonding chemicals, T&P required to execute the work, cost of all labour, transportation of chemical, staging to reach work place etc. all complete as directed by Engineer - in - Charge. Random Pull out non destructive test as directed by engineer shall be conducted to ensure strength of bond and same is included in this item. Reinforcement bar shall be paid separately under item no. 402, 403, 405 as applicable.			
a	12mm Reinforcement bar	EACH	20	0.000004978
b	16mm Reinforcement bar	EACH	20	0.000007967
c	20mm Reinforcement bar	EACH	20	0.000011351
407	Straightening, cutting, bending, placing in position at any level, binding in position high yield strength steel reinforcements in brickwork/Autoclave Aerated Concrete blocks including cost of reinforcement and binding wire, labour, scaffolding etc. complete all as per specifications & drawings.	MT	12	0.000454752
	500 WATER PROOFING WORKS			
	Water proofing works including all labour, material, (unless otherwise specified in BOQ/contract specification) equipment, transportation, handling, curing, sampling, testing etc at any level as per specification, drawings, relevant laws of Bangladesh, relevant BS Standards or Equivalent International standards approved by BIFPCL/BHEL and as directed by engineer - in - charge.			
501	Providing and laying underbed grading plaster with cement mortar 1:4 (1 cement : 4 sand) and average thickness of 15 mm including preparation of surface, batching, mixing, leveling etc. all complete.	SQM	8,054	0.002435348
A502	Providing and laying rigid insulation (extruded polystyrene blocks) having maximum heat transmission coefficient of 0.45 W/(sqm K) as per relevant BS Code or equivalent international code in suitable panels over roofs and providing of expansion joint at intervals and filling with sealant in both directions as per the recommendation of manufacturer. The block shall be strong enough to withstand without deformation the workload and standard loads expected on the roof. Cost shall include making of fillets, cleaning & preparation of surface, expansion joints including filling with sealants at suitable intervals etc all complete as per specification for following. All insulation used should be CFC & HCFC free.			
a	Average 75 mm thickness	SQM	8,054	0.007091286

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SCHEDULE:3--SERVICE				
ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
506	Providing and applying PU based water proofing treatment with one coat of polyurethane or any other equivalent material based primer with an application rate of minimum 6 sq.m per litre and two successive liquid coatings of high solids content urethane pre-polymers or equivalent material based finish coats as per relevant ASTM standards to form an elastomeric membrane with overall dry film thickness 1.5 mm subject to minimum 500 gm/sqm/coat application rate. Item includes surface preparation, polyscrim cloth /fabric, polymerised mortar base preparation etc all complete as per specifications and directions of engineer in charge.	SQM	8,054	0.016761303
507	Providing and laying wearing course consisting of 25mm thick plain cement concrete (1 part cement, 2 part sand, 4 parts of aggregate by volume) with graded aggregate of 12.5mm size cast in panels of maximum size 1.2mx1.2m and reinforced with 0.56 mm dia. galvanised chicken wire mesh and sealing of joints (in grooves of 6mm X 6mm) using polysulphide compound etc all complete.	SQM	8,054	0.008939387
508	Providing and laying cement concrete chequered flooring tiles of 22 mm thickness and size 300x300 mm conforming to relevant BS or equivalent international code with 8 mm thick 1:4 cement mortar over the top most layer of roofing treatment in pathway or entire area with fine joints including sealing of joints (polysulphide sealant) and providing expansion gap in both directions filled up with polysulphide joint sealant, underbed (as per drawings) etc all complete. (Water proofing paid elsewhere) (including cost of cement for tiles making)	SQM	933	0.001236385
A509	Providing and applying two coats of bitumen of suitable grade as per relevant BS or equivalent international code @ 1.7kg/sqm with 1% antistripping compound in foundation, wall, column etc on concrete surfaces exposed to soil / ash including surface preparation etc. all complete.	SQM	20932.08	0.013116244
511	Providing and mixing water proofing compound conforming to relevant BS code or equivalent international code in concrete or cement mortar all complete.	KG	10.00	0.000002115
512	Anti termite chemical treatment of soil with Chloropyrifos emulsifiable concentrates (1%) conforming to relevant BS code or equivalent international code all complete.	SQM	100	0.000031308
513	Providing and applying concrete structures two coats of ERPB (Epoxy resin based anticorrosive and chemical resistant paint, FOSROC OR equivalent make) over a coat of CPCI (concrete penetrating bipolar corrosion inhibitor) with 300 to 325 micron DFT for protection of concrete against carbonation and chloride penetration in saline/marine environment all complete of approved make and as per manufacturer's recommendation	SQM	10	0.000005407
A515	Providing and fixing water proof polymer membrane coating of approved make over walls, slab of water retaining structures bonded with epoxy with RC surface to make a complete leak proof surface as per drawings, specifications, manufacturer's recommendations, relevant BS or equivalent international standards and/or as approved by BIFPCL/BHEL.	SQM	100	0.00014568
	600 JOINTS AND FILLERS			
	Joints & fillers including all labour, material, equipment, transportation, handling etc at any level as per specification, drawings, relevant laws of Bangladesh, relevant BS Standards or Equivalent International standards approved by BIFPCL/BHEL and as directed by engineer - in - charge.			
601	Supplying & installation of bitumen impregnated fibre board conforming to relevant BS code or equivalent international code as joint filler at joints in concrete including nailing, coating of both faces with coal tar pitch/bitumin etc. all complete.			

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SCHEDULE:3--SERVICE

ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
a	12 mm wide joints.	SQM	132	0.000186649
b	20 mm wide joints.	SQM	125	0.00025901
c	25 mm wide joints	SQM	166	0.000452258
d	50 mm wide joints	SQM	200	0.000980797
601A	Supply and instalation of Polystyrene flexible board (CFC & HCFC free) confirming to relevant BS code or equivalent international code (min density 25Kg/Cum) as joint filler at joint of concrete including nailing, installation as per manufacturers instruction etc. all complete.			
c	25 mm wide joints	SQM	5	0.000001192
d	50 mm wide joints	SQM	5	0.000002544
601B	Supplying and installation of Dura board HD100 or its equivalent as approved by the Engineer, as filler material in joints including nailing, installation as per manufacturer's recommendation etc. all complete.			
a	12 mm wide joints.	SQM	5	0.000008386
b	20 mm wide joints.	SQM	5	0.000017868
c	25 mm wide joints	SQM	5	0.000021158
d	50 mm wide joints	SQM	5	0.000025775
602	Providing and applying polysulphide based sealant conforming to relevant BS code or equivalent international code in expansion joints in concrete including cleaning of joints, raking out groove, application of primer, scaffolding etc. all complete (The sealant should have VOC content limited to 250 grams per litre) for following size grooves:			
a	12mm X 25mm	RM	40	0.000031776
b	20mmX25mm	RM	50	0.00007692
c	25mmX25mm	RM	282	0.000447429
d	50mmX25mm	RM	190	0.000584335
603	Supplying and filling in position hot applied bitumin sealing compund confirming to relevant BS code or equivalent international code including cleaning, mixing, heating, pouring/injecting sealing compound in gaps in joints including application of primer etc. all complete.			
a	12mm X 25mm	RM	172	0.000020808
b	20mmX25mm	RM	260	0.000043474
c	25mmX25mm	RM	1,096	0.000263175
d	50mmX25mm	RM	400	0.000133761
605	Providing and sealing of joints with premium grade silicon sealant (Silpruf of GE silicon or approved equivalent) conforming to relevant BS code or equivalent international code including cleaning of joints, raking out groove, joint filler tapes, application of primer, curing, scaffolding etc. all complete as per manufacturer's recommendation (The sealant should have VOC content limited to 250 grams per litre) for following size groove:			
a	25mmX25mm	RM	26	0.000036122
b	50mmX25mm	RM	10	0.000026859
606	Providing and fixing PVC water stops in joints conforming to relevant BS code or equivalent international code all complete for the following:			
b	230 mm wide and 8 mm thick	RM	1625.00	0.001538971

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SCHEDULE:3--SERVICE

ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
c	150 mm wide and 6 mm thick	RM	10	0.000009409
d	230 mm wide and 6 mm thick	RM	330.00	0.000449243
	700 MS EMBEDMENTS			
	Embedments including all labour, material (unless otherwise specified in BOQ/specification), equipment, transportation, handling etc. at any level as per specification, drawings, relevant laws of Bangladesh, relavant BS Standards or Equivalent International standards approved by BIFPCL/BHEL and as directed by engineer - in - charge.			
701	Fabricating and fixing of mild steel embedments, inserts, pipe sleeves, angle pieces, rungs of various diameters, plates of dimensions as required etc. including welding, bolting, cutting, drilling, scaffolding, setting etc. all complete.	MT	69.40	0.004266237
702	Fabrication, transportation, delivery at site and erection, installation and alignment of mild steel foundation bolt assembly conforming to relevant BS or equivalent international code in concrete along with nuts, lock nuts (as per relevant BS or equivalent international code), washers, anchor plates, stiffner plates, protective tape, pipe sleeves, templates etc. including welding, cutting, grinding, threading, drilling etc. all complete.	MT	8	0.000549549
703	Same as above items 701 & 702 with BHEL supplied material free of cost including loading, transportation, unloading etc. all complete from BHEL store to plant site.			
a	Mild steel embedments, inserts, pipe sleeves, angle pieces, rungs of various diameters, plates of dimensions as required etc.	MT	31.50	0.001239649
b	Mild steel foundation bolt assembly conforming to relevant BS or equivalent international code in concrete along with nuts, lock nuts (as per relevant BS or equivalent international code), washers, anchor plates, stiffner plates, protective tape, pipe sleeves, templates etc.	MT	38.50	0.001460674
704	Fabricating, erecting and installing following items in concrete/brickwall for all kind of works, including setting material in concrete, layout, scaffolding, cutting, forming, grinding, drilling, bolting, welding, jointing, testing etc. all complete.			
a	MS pipes of all diameters	Quintal	33.70	0.000109818
b	PVC pipes / conduits of all diameters	Quintal	17.50	0.000295162
c	UPVC pipes / conduits of all diameters	Quintal	17.50	0.000285757
d	Expansion anchor fasteners (galvanised) of HILTI make(HUD-1 Universal Fastners) or equivalent of safe tensile capacity as specified below for brick work with expansion sleeve of A6 polyamide:			
i	8mm Dia	Each	20	0.000002599
ii	10mm Dia	Each	20	0.000003312
iii	12mm Dia	Each	20	0.000004058
iv	14mm Dia	Each	20	0.000005306
e	Expansion fasteners (mechanical galvanised) of HILTI make or equivalent of safe tensile capacity as specified below for concrete work with expansion sleeve of stainless steel:			
i	HST M8	EACH	20	0.000005367
ii	HST M10	EACH	20	0.000007652
iii	HST M12	EACH	20	0.000011905
iv	HST M16	EACH	20	0.000020773
v	HST M20	EACH	20	0.000039949
vi	HST M24	EACH	20	0.00005236
f	Chemical Expansion fasteners (galvanised)of HILTI make or equivalent of safe tensile capacity as specified below for concrete work with anchoring rod,nuts,washers,chemicals all complete,etc:			

PACKAGE 10V: PILE CAP (EXCEPT PILING), CIVIL FOUNDATION & SUPERSTRUCTURE, ARCHITECTURAL WORKS FOR AUX & BOP BUILDINGS, AC DUCTING, WEIGH BRIDGE AND MISC FINISHING				
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SCHEDULE:3--SERVICE				
ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
i	HAS-E5.8 M8	EACH	20	0.000018495
ii	HAS-E5.8 M10	EACH	20	0.000022801
iii	HAS-E5.8 M12	EACH	20	0.000029426
iv	HAS-E5.8 M16	EACH	20	0.000043006
v	HAS-E5.8 M20	EACH	20	0.000073567
vi	HAS-E5.8 M24	EACH	20	0.000099972
705	Placing, locking and releasing of Vibration Isolation spring modules over the foundation at all elevations including providing all assistance under the supervision of the supplier, transportation from BHEL store, necessary staging, platforms, leveling, alignment etc. all complete.	Each	10	0.000025387
	800 GROUTING			
	Grouting including all labour, material (unless otherwise specified in BOQ/specification), equipment, roughening surface, cleaning, ramming, curing etc. at any level unless otherwise specified as per specification, drawings, relevant laws of Bangladesh, relevant BS Standards or Equivalent International standards approved by BIFPCL/BHEL and as directed by engineer - in - charge.			
801	Providing & grouting with cement slurry mix of approved ratio using pressure pump for water retaining concrete structures as per approved procedure including cost of nipples/ nozzles, cement, admixture, curing, pressure pumps, slurry agitator etc. all complete. Cost shall include fixing of nipples at maximum 500 mm centre to centre spacing, cutting of nipples after completing of grouting, making good of the nipple hole with appropriate non-shrink cement paste, water tightness test etc. all complete wherever specified in the drawing.	SQM	920.00	0.001477379
802	Providing & grouting of pocket holes, pipe sleeves under base plates, machinery, pipe supporting structures etc. with mix 1:1 (1 cement :1 sand) using non shrink admixture etc. all Complete.	CUM	26.20	0.00176331
803	Providing & grouting of pocket holes, pipe sleeves and under base plate of structural steel work/ machinery/ pipe supporting structures including roughening of surface, cleaning, ramming, curing etc. all complete with mix 1:1:2 (1 cement : 1 coarse sand : 2 aggregate of 6 mm down graded stonechips) using non shrink admixture. (Cost of all material and cleaning the pocket by compressed air shall be in the scope of the contractor).	CUM	6.00	0.000378892
804	Providing & grouting of pocket holes, pipe sleeves and under base plates of structural steel work/ machinery/ pipe supporting structures including roughening of surface, cleaning, ramming, curing etc. all complete with ConbextraGP-1 or equivalent. (Cost of all material and cleaning of the pockets by compressed air shall be in the scope of the contractor).	CUM	5.00	0.000894107
805	Providing & grouting of pocket holes, pipe sleeves and under base plates of structural steel work/ machinery/ pipe supporting structures including roughening of surface, cleaning, ramming, curing, etc. all complete with Conbextra GP-2 or equivalent. (Cost of all material and cleaning of the pockets by compressed air shall be in the scope of the contractor).	CUM	5.00	0.000894109
	900 DOORS, WINDOWS, VENTILATORS, LOUVERS			
	Doors (including master key system), windows, ventilators, louvers, roof ventilators, rolling shutters, partitions including all labour, material (unless otherwise specified in BOQ/specification), equipments, transportation, handling, preparation of working drawings etc. at any level as per specification, drawings, relevant laws of Bangladesh, relevant BS Standards or Bangladesh National building code or Equivalent International standards approved by BIFPCL/BHEL and as directed by engineer - in - charge.			

PACKAGE 10V: PILE CAP (EXCEPT PILING), CIVIL FOUNDATION & SUPERSTRUCTURE, ARCHITECTURAL WORKS FOR AUX & BOP BUILDINGS, AC DUCTING, WEIGH BRIDGE AND MISC FINISHING				
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SCHEDULE:3--SERVICE				
ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
901	Providing and fixing wooden frame conforming to relevant BS standard or Bangladesh National Building Code or equivalent International standard made of best quality seasoned CP teakwood free from large or loose knots, cracks or other defects including sand paper smoothening, hold fasts, beading, primer and finish painting / polishing etc. all complete with proper wood joinery, accurately set to required lines or levels and rigidly secured in place. (finish painting/polishing paid seperately)	CUM	2.00	0.000977768
902	Providing and fixing teakwood frame panel door shutter as per relevant BS standard or Bangladesh National Building Code or equivalent International standard with 35 mm x 150 mm vertical rail & 35mm x 125 mm horizontal rail and 12 mm thick interlocked panels of teakwood with proper wood joinery including beading, preperation of working drawings,godrej or equivalent make mortice lock with handels on both sides,approved anodised fittings like door stopper, 300mm long tower bolts,16x300mm long aldrops ,125mm long handles on both sides etc. butt hinges, sliding bolt ,knobs, (all fitting shall be anodised aluminium color dyed), screws, primer and finish painting / polishing etc. all complete. (finish painting/polishing paid seperately)	SQM	10	0.000101193
903A	Providing, fitting and fixing solid core flush door shutter as per relevant BS standard or Bangladesh National Building Code or equivalent International standard, 35mm thick pre-laminated homogenous particle board bonded with BWP type phenolformaldehyde synthetic resin, partical board core conforming to relevant BS standard or Bangladesh National Building Code or equivalent International standard, 35x12 mm thick teakwood beading all around including preparation of working drawings. godrej or equivalent make mortice lock with handels on both sides,approved anodised fittings like door stopper,300mm long tower bolts,16x300mm long aldrops ,125mm long handles on both sides etc. butt hinges, sliding bolt, knobs, (all fittings shall be anodised aluminium color dyed), finish synthetic paint over primer, screws etc. all complete as per drawing, specification and instruction of engineer in charge. with prelaminated faces and teak wood edges.	SQM	75.00	0.00
904	Fixing single or double steel door shutters with 45mm thk flush design shutter comprising of two outer sheets of 18 gauge steel sheets rigidly connected and reinforced inside with continuous vertical 20 gauge stiffeners, spot welded in position at not more than 150mm on centres including void filled with mineral wool (density as per specification), all fittings, Godrej or equivalent make mortice lock with handle on both sides, shop and final painting etc all complete as per specification.	SQM	451	0.000663097
905	Fixing single or double steel door shutters with 18 gauge M.S. sheets shutter presenting a flush surface on the outside and inside stiffened with semitubular edge and central stiffening rail which shall convey the lock including fixtures, Godrej or equivalent make mortice lock with handle on both sides, shop and final painting etc all complete as per specification.	SQM	102	0.000162163
906	Providing and fixing anodized extruded aluminium doors (single or double shutter) conforming to relevant BS code or equivalent international code fabricated from extruded sections of HINDALCO/JINDAL or equivalent make having minimum 3mm wall thickness as per relevant BS standard or Bangladesh National building code or equivalent international standard and anodized and electro color coating of required shade as per relevant BS standard or Bangladesh National building code or equivalent international standard (minimum anodized coating of grade AC15). fixed with rawl plugs, expansion fasteners,SS screws / fixing clips necessary filling of gaps at Junctions, at top, bottom & sides with required PVC / neoprene felt for bi-metallic protection etc. Glazing shall be clear float glass of 6mm thickness including snap fit type beading, concealed screws, fixtures, Godrej or equivalent make Mortice lock with handle on both sides, etc all complete. Aluminium section shall be smooth, free of stains, straight, mitred & jointed mechanically wherever required. (Glazing shall be paid separately)	Kg	1297.52	0.00

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Tender No: BHEL:MSTPP:AUX:20:09				
SCHEDULE:3--SERVICE				
ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
907	Fixing fire proof steel doors (single or double shutter) with panic devices, panic trim shall be 45mm thk flush design comprising of two outer sheets of minimum 18 gauge steel sheets rigidly connected and reinforced inside with continuous vertical 20 gauge stiffeners, spot welded in position at not more than 150mm on centers including all fire rated hardware, fire rated fittings, vision panel with fire rated glass (fire proof classification G90), shop painting with approved post office/signal red color fire resistant paint and mineral wool insulation (minimum 64 kg/cum density) complete and shall be of fire proof classification T90 and tested as per BS EN 1634 or equivalent international code and as per specification. Fire door shall be tested at UL accredited Lab.	SQM	34	0.000115395
907A	Fixing fire proof steel doors (single or double shutter) with panic devices, panic trim shall be 45mm thk flush design comprising of two outer sheets of minimum 18 gauge steel sheets rigidly connected and reinforced inside with continuous vertical 20 gauge stiffeners, spot welded in position at not more than 150mm on centers including all fire rated hardware, fire rated fittings, vision panel with fire rated glass (fire proof classification G120), shop painting with approved post office/signal red color fire resistant paint and mineral wool insulation (minimum 64 kg/cum density) complete and shall be of fire proof classification T120 and tested as per BS EN 1634 or equivalent international code and as per specification. Fire door shall be tested at UL accredited Lab.	SQM	70	0.000257356
908	Fixing steel windows/ventilator with steel sections as per relevant BS code or equivalent international code including all fittings, metal beadings, hold fasts, shop and final painting ,glazing etc. all complete. (Glazing shall be paid separately)			
a	openable type	SQM	10	0.000007898
b	fixed type	SQM	10	0.000005939
A909	Providing and fixing anodised aluminium work of Jindal, Hindalco or other equivalent approved make for door frames,doors, windows, ventilators, partitions, railing, skylight frames etc with extruded standard tubular and other sections including all fittings & fixtures and accessories of approved make conforming to relevant BS standard or equivalent international standard anodised and electro color dyed to required shade according to relevant BS standard or equivalent international standard (minimum anodic coating of grade AC15), fixed with rawl plugs, expansion fasteners, SS screws or with fixing clips, including necessary filling of gaps at junctions, at top, bottom and sides with required PVC/neoprene felt for bi-metallc protection etc.including preperation of working drawings, aluminium cleat angle, aluminium snap-on-beading for glazing/panelling, stair case tread nosing, with all fittings and fixtures (like tower bolts, handles, door stopper with rubber shoes, 'L' drops, stays, floor springs, hydraulic door closures etc.), CP brass/stainless steel screws, providing and fixing hinges/pivots, and making provision for fixing of fitting wherever required including cost of PVC/neoprene gasket, all complete as per drawing, specification and instructions of engineer in charge (Glazing and panelling shall be paid seperately).Weight of aluminium section only shall be measure.	Kg	12691.84	0.02
910	Fixing of aluminium composite panel (ACP) at all heights and elevations consisting of 3mm thick II B fire rated LDPE core mixed with mineral fibre sandwiched between 2 skins of 0.5mm thick aluminum alloy sheet making a total panel thickness of 4mm. The surface shall be finished with PVDF based coating of minimum 30 micron on the top & sides and polymer paint on reverse side. Coating shall conform to ECCA or AAMA. The surface shall be protected with self-adhesive peel of masking foil. The system shall include aluminum framing, Stainless Steel straps/nuts/ bolts/rivets/washers, EPDM gaskets, backer rods, weather sealant, fastening material and hardware, hot dipped galvanised clamps/brackets/anchor fasteners for fixing the panels/frame to wall (Hot dip galvanization to be minimum 80 microns thick) conforming to relevant BS or equivalent international standard for internal wall cladding at all heights and elevation complete with all labour, material, equipment, handling, transportation, workmanship, preparation of working drawings, staging, scaffolding, etc.as per drawings, specifications, manufacturer's recommendations, relevant BS or equivalent international standards and/or as approved by BIFPCL/BHEL. (All aluminium frames to be used should be with 10-15% of recycled content meeting the required strength for frame work as per engineer incharge. The contractor should provide the material cutsheet/ declaration from manufacturer mentioning the recycled content used in maufacturing of frames to be used.)	SQM	250	0.000459279

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SCHEDULE:3--SERVICE				
ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
910A	Fixing of aluminium composite panel (ACP) at all heights and elevations consisting of 3mm thick II B fire rated LDPE core mixed with mineral fibre sandwiched between 2 skins of 0.5mm thick aluminum alloy sheet making a total panel thickness of 4mm. The surface shall be finished with PVDF based coating of minimum 30 micron on the top & sides and polymer paint on reverse side. Coating shall conform to ECCA or AAMA. The surface shall be protected with self-adhesive peel of masking foil. The system shall including aluminum framing, Stainless Steel straps/nuts/ bolts/rivets/washers, EPDM gaskets, backer rods, weather sealant, fastening material and hardware, designing the system to withstand wind pressure, hot dipped galvanised clamps/brackets/anchor fasteners for fixing the panels/frame to wall (Hot dip galvanization to be minimum 80 microns thick) conforming to relevant BS or equivalent international standard for external wall cladding at all heights and elevation complete with all labour, material, equipment, handling, transportation, workmanship, preparation of working drawings, staging, scaffolding, etc.as per drawings, specifications, manufacturer's recommendations, relevant BS or equivalent international standards and/or as approved by BIFPCL/BHEL. (All aluminium frames to be used should be with 10-15% of recycled content meeting the required strength for frame work as per engineer incharge. The contractor should provide the material cutsheet/ declaration from manufacturer mentioning the recycled content used in manufacturing of frames to be used.)	SQM	250	0.000504711
911	Providing and fixing of door closers as per relevant BS code or equivalent international code of approved make & quality all complete of following type :			
a	Over head hydraulic door closures	Each	59	0.000140527
b	Floor mounted Hydraulic door closers	Each	49	0.000360498
A912	Fixing pressed steel frames fabricated from 16 gauge M.S sheet mortised, reinforced drilled and tapped for hinges and locks bolts strikes, hold fasts adjustable floor anchors, floor tiles/weather bars, paintings etc all complete as per specifications.	Kg	4200.00	0.000300782
913	Fixing in position rolling shutter of hot rolled double dipped galvanised steel double walled hollow sections interlocked together through their entire length and jointed together at the end by end locks mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation including wire springs, top cover, primer & shop coats of approved enamel paint etc, all complete as per relevant BS code or equivalent international code and specification of approved make of following types: The bottom lath shall be coupled to a lock plate fabricated from 3mm thick galvanised steel plate and securely rivetted with stiffening angles.			
a	Hand Operated	SQM	6	0.000018548
b	Mechanically Operated	SQM	237.00	0.000884192
c	Electrically operated including Hand crank with continuous chain reel for emergency operation	SQM	430.00	0.001711322
914	Providing and fixing solid core PVC Frame with solid core PVC door Shutters (25 thk) of sintex or equivalent make including all fitting & fixtures as per specification, drawing and instructions of engineer in charge.	SQM	151.03	0.00123886
915	Providing, fixing and fitting of glazing of first grade class in steel/aluminium/wooden frames, where ever required, cleaning after fixing including hardware, gaskets, clips, beadings etc. all complete.			
c	5.5 mm thick clear float glass	SQM	381.52	0.001493089
e	6mm thick Polycarbonate sheet multi (twin) wall fire retardant and ultra violet resistant with sealed open edges.	SQM	20	0.00010932
f	4 mm thick ground glass	SQM	176.84	0.000641787
h	6 mm thick clear toughened safety glass	SQM	320.00	0.001486141
hA	Two nos. 4 mm thick clear float glass hermetically sealed and separated by 16 mm thick air gap for thermal insulation (only single elevation area to be measured)	SQM	1101.00	0.007994803

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SCHEDULE:3--SERVICE				
ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
hB	8 mm thick clear toughened safety glass	SQM	20	0.000092884
i	Two nos. 6 mm thick clear toughened glass hermetically sealed and separated by 12 mm thick air gap for thermal insulation (only single elevation area to be measured)	SQM	1605.30	0.015545275
k	One outer 6mm thick reflective toughened glass and one inner 6mm thick clear toughened glass hermetically sealed and seperated by 12 mm thick gap for thermal insulation (only single elevation area to be measured).	SQM	5	0.000052356
m	One outer 6mm thick tinted heat-reflecting type toughened glass and one inner 6mm thick plain float glass hermetically sealed and seperated by 12 mm thick gap for thermal insulation (only single elevation area to be measured).The glazing to be used in all exterior walls shall be of Saint Gobain Saint Gobain ,Glavebel or equivalent . The glazing to be used should comply to mentioned standards (VLT (Visible Light Transmittance) $\geq 62\%$, SHGC/ SF (Solar Heat Gain Coefficient/ Solar Factor) ≤ 0.36 and U- Value ≤ 1.77 W/m2K. The values varies as per detail engineering.	SQM	5	0.000060094
n	Composite double glazing, 24 mm thick, with one outer 6mm thick tinted heat-reflecting type toughened glass and one inner 6mm thick clear toughened glass hermetically sealed and seperated by 12 mm thick gap for thermal insulation (only single elevation area to be measured).Outer glass of 6mm thickness shall have following technical characteristics: Solar factor 25% or less, U-value less than 2.268 W/ SQMK,VLT min 30%: The glass to be used should be from the manufacturers of glass like Saint Gobain ,Glavebel Or equivalent. The glass should be free from distortion and thermal stress.The values varies as per detail engineering.	SQM	5	0.00006422
A915	Providing and fixing G.I. Mosquito Net of 1.5mm x 1.5mmx 27 Gauge of any size, any shape, any color in steel/Aluminum/wooden frames, where ever required, cleaning after fixing including hardware, gaskets, clips, beadings etc. all complete as directed by Engineer -in - Charge. (Frame cost is excluded and shall be paid separately in other item).	SQM	5	0.000003629
916	Supplying and fixing weather stripping of approved make and quality to doors as per instructions of engineer in charge and specification complete.	RM	5	0.000001805
917	Providing and fixing 12 mm thick BWP particle board, decorative veneer (prelaminated) on both sides, as panels in aluminium framed door shutter, fixed with necessary snap-on-beading etc. all complete (excluding aluminium works).	SQM	959	0.003810691
918	Providing and fixing steel louvered window with ISMC 100 frame all round including verticals with 18G pressed steel louvers, painting etc. all complete.	SQM	25	0.000242973
921	Providing and fixing of wooden panels of veneered BWP grade (19 mm thick) plywood including teakwood baton grid for interior partition including fittings, fixtures etc all complete as per specification.	SQM	5	0.000024831
922	Providing and fixing MS double sheet folding doors with motor drive shutters with frame including painting etc. all complete as per drawings, specifications, manufacturer's recommendations relevant BS or equivalent international standards and and/or as approved by BIFPCL/BHEL.	SQM	5	0.000078558
	1000 BRICKWORK			
	Brickwork masonry including all labour, material (unless otherwise specified in BOQ/specification), equipment, transportation, handling, scaffolding etc. at all levels as per relevant laws of Bangladesh, relavant BS Standards or Equivalent International standards approved by BIFPCL/BHEL, specification, drawings and as directed by engineer - in - charge.			
1001	Providing brick work in cement mortar 1:6 (1 part cement 6 parts coarse sand) in walls, chambers etc. in thickness varying from 230mm to 460mm at all depths, places and positions below plinth including raking out joints, curing, scaffolding etc. complete excluding plastering and painting.			
c	Using burnt clay bricks as per relevant BS code or equivalent international code with crushing strength of 75 Kg/cm2	CUM	482.00	0.008834577
1002	Providing brick work in cement mortar 1:6 (1 cement 6 coarse sand) in walls, chambers etc. in thickness 230mm at all heights, places and position above plinth including raking out joints, curing, scaffolding etc complete excluding plastering and painting.			
c	Using burnt clay bricks as per relevant BS code or equivalent international code with crushing strength of 75 Kg/cm2	CUM	3537.00	0.071454758

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SCHEDULE:3--SERVICE				
ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
1002A	Providing masonry work with Autoclaved Aerated Concrete (AAC) block [600 mm x 200 mm, thickness ranging from 100 mm to 200 mm, maximum thermal conductivity of 0.18 W/(mK) and conforming to Category I of BS EN 771-4] in cement mortar 1:6 (1 part cement, 6 part sand of fineness 1.1) in walls, chambers etc. at all depths, places and positions above plinth including raking out joints, curing, scaffolding etc complete (excluding plastering and painting) complete as per relevant BS or equivalent international standards, drawings, specifications, manufacturer's recommendations.	CUM	100.00	0.002555161
1002AA	Providing masonry work with Autoclaved Aerated Concrete (AAC) block [600 mm x 200 mm, thickness ranging from 201 mm to 400 mm, maximum thermal conductivity of 0.18 W/(mK) and conforming to Category I of BS EN 771-4] in cement mortar 1:6 (1 part cement, 6 part sand of fineness 1.1) in walls, chambers etc. at all depths, places and positions above plinth including raking out joints, curing, scaffolding etc complete (excluding plastering and painting) complete as per relevant BS or equivalent international standards, drawings, specifications, manufacturer's recommendations.	CUM	1,100	0.028748435
1002B	Providing masonry work with Autoclaved Aerated Concrete (AAC) block [600 mm x 200 mm, thickness ranging from 100 mm to 200 mm, maximum thermal conductivity of 0.18 W/(mK) and conforming to Category I of BS EN 771-4] in cement mortar 1:6 (1 part cement, 6 part sand of fineness 1.1) in walls, chambers etc. at all depths, places and positions above plinth including raking out joints, curing, scaffolding etc complete (excluding plastering and painting) complete as per relevant BS or equivalent international standards, drawings, specifications, manufacturer's recommendations. (All AAC blocks should have flyash content more than 40%. The contractor should submit the documents certifying the percentage of flyash content of required quality in AAC blocks.)	CUM	6	0.000160366
1002BA	Providing masonry work with Autoclaved Aerated Concrete (AAC) block [600 mm x 200 mm, thickness ranging from 201 mm to 400 mm, maximum thermal conductivity of 0.18 W/(mK) and conforming to Category I of BS EN 771-4] in cement mortar 1:6 (1 part cement, 6 part sand of fineness 1.1) in walls, chambers etc. at all depths, places and positions above plinth including raking out joints, curing, scaffolding etc complete (excluding plastering and painting) complete as per relevant BS or equivalent international standards, drawings, specifications, manufacturer's recommendations. (All AAC blocks should have flyash content more than 40%. The contractor should submit the documents certifying the percentage of flyash content of required quality in AAC blocks.)	CUM	20	0.000556034
1003	Providing brick work in cement mortar 1:4 (1 cement 4 coarse sand) in partition walls, chambers etc. in thickness 115mm at all heights, places and position above or below plinth/graded level including raking out joints, curing, scaffolding etc complete excluding plastering and painting as per specification.			
c	Using burnt clay bricks as per relevant BS code or equivalent international code with crushing strength of 75 Kg/cm2	SQM	500.00	0.001257873
1004	Providing brick soling including spreading of earth, ramming, watering including 25mm thick cushion of sand complete but excluding excavation and disposal of surplus earth (excavation and disposal of surplus earth shall be measured under applicable item). Using brick on edge.			
c	Using burnt clay bricks as per relevant BS code or equivalent international code with crushing strength of 75 Kg/cm2	SQM	210	0.000408649
1005	Providing brick soling including spreading of earth, ramming, watering including 25mm thick cushion of sand complete but excluding excavation and disposal of surplus earth (excavation and disposal of surplus earth shall be measured under applicable item.).- Using flat bricks.			
c	Using burnt clay bricks as per relevant BS code or equivalent international code with crushing strength of 75 Kg/cm2	SQM	140	0.000163364
1006	Breaking of existing brick work at all levels including plastering, removing the rubbish up to a distance of 500 m including transportation, loading, unloading etc. all complete as directed by the engineer.	CUM	25	0.0000659
1006A	Breaking of existing masonry work of autoclave aerated concrete blocks at all levels including plastering, removing the rubbish up to a distance of 500 m including transportation, loading, unloading etc. all complete as directed by the engineer.	CUM	40	0.00011064

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SCHEDULE:3--SERVICE				
ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
1007	Providing and encasing of structural steel member with brick masonry work around flanges, webs etc. and filling the gap between steel and masonry by minimum 12mm thick mortar. Encased member shall be wrapped with chicken wire mesh with 50mm lap etc. complete as per specification. (Chicken wire mesh to paid separately)	CUM	18.00	0.000350035
1007A	Providing and encasing of structural steel member with autoclave aerated concrete block masonry work around flanges, webs etc. and filling the gap between steel and masonry by minimum 12mm thick mortar. Encased member shall be wrapped with chicken wire mesh with 50mm lap etc. complete as per specification. (Chicken wire mesh to paid separately)	CUM	20	0.000405514
1007B	Providing and encasing of structural steel member with autoclave aerated concrete block masonry work around flanges, webs etc. and filling the gap between steel and masonry by minimum 12mm thick mortar. Encased member shall be wrapped with chicken wire mesh with 50mm lap etc. complete as per specification. (Chicken wire mesh to paid separately) (All AAC blocks should have flyash content more than 40%. The contractor should submit the documents certifying the percentage of flyash content of required quality in AAC blocks.)	CUM	2	0.000044408
1008	Providing and laying 75 mm thick bed of dry brick aggregate including of excavation, disposal of surplus earth spreading of earth, ramming, watering etc. complete in all respects as directed by the engineer.	SQM	30	0.000016433
1009	Making openings in existing brick wall or partition wall including making good the broken edges/surface with cement mortar etc. complete.	CUM	17.00	0.000053819
1009A	Making openings in existing masonry work of autoclave aerated concrete blocks in wall or partition wall including making good the broken edges/surface with cement mortar etc. complete.	CUM	6	0.000019808
1010	Supply and placing in position mild steel wire fabric of square mesh 25 mm size and wire diameter of 2 mm for plaster, encasing of steel sections in brick/autoclave concrete blocks/concrete including cutting, bending, fixing etc. complete.	SQM	1300.00	0.000428231
1011	Filling existing brick wall/ partition wall opening at all level including making good the broken edges/surface with cement mortar, painting, finishing to match with existing finishing, scaffolding/supporting at any level, removal of debris upto a lead of 1 km including loading, unloading, transportation etc. all complete.	SQM	25	0.000066618
1011A	Filling existing autoclave aerated concrete wall/ partition wall opening at all level including making good the broken edges/surface with cement mortar, painting, finishing to match with existing finishing, scaffolding/supporting at any level, removal of debris upto a lead of 1 km including loading, unloading, transportation etc. all complete.	SQM	25	0.000069596
1011B	Filling existing autoclave aerated concrete wall/ partition wall opening at all level including making good the broken edges/surface with cement mortar, painting, finishing to match with existing finishing, scaffolding/supporting at any level, removal of debris upto a lead of 1 km including loading, unloading, transportation etc. all complete. (All AAC blocks should have flyash content more than 40%. The contractor should submit the documents certifying the percentage of flyash content of required quality in AAC blocks.)	SQM	2	0.000005814
1012	Providing and filling brick bats in soak pits all complete.	CUM	10	0.000036929
	1100 DAMP PROOF COURSE			
	Damp proof course including all labour, material (unless otherwise specified in BOQ/specification), equipment, transportation, handling, shuttering, centering, curing etc at any level as per relevant laws of Bangladesh, relevant BS Standards or Equivalent International standards approved by BIFPCL/BHEL, specification, drawings and as directed by engineer - in - charge.			
1101A	Providing Damp Proof Course 40mm thick 1:1.5:3 concrete (10mm and down graded aggregate) with 2% of approved admixture of water proofing compound all complete. Two layers of hot bitumen coating conforming to BS 6398 or equivalent international code shall be applied one before & one after the DPC.	SQM	892.00	0.001228028
	1200 CEMENT MORTAR PLASTER			

PACKAGE 10V: PILE CAP (EXCEPT PILING), CIVIL FOUNDATION & SUPERSTRUCTURE, ARCHITECTURAL WORKS FOR AUX & BOP BUILDINGS, AC DUCTING, WEIGH BRIDGE AND MISC FINISHING				
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SCHEDULE:3--SERVICE				
ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
	Cement mortar plaster including making grooves wherever required including all labour, material (unless otherwise specified in BOQ/specification), scaffolding, curing etc at any level as per relevant laws of Bangladesh, relavant BS Standards or Equivalent International standards approved by BIFPCL/BHEL, specification, drawings and as directed by engineer - in - charge.			
1201	Providing 18mm thick plaster in two layers outside the building/boundary wall in cement mortar 1:6 on walls, finished to a smooth finish including providing 3mmx3mm size grooves at junctions of two dissimilar materials all complete.	SQM	15557.00	0.008856796
1202	Providing 12mm thick plaster inside the building/boundary wall in cement mortar 1:6 on walls finished to a smooth finish as per specification all complete.	SQM	18378.50	0.007337362
1204	Providing 6mm thick plaster on ceiling in cement mortar 1:4 finished to a smooth all complete.	SQM	8,033	0.002789953
1206	Providing and making decorative plaster of all types and design on walls, ceilings, arcs, columns with various thickness upto 18 mm including finishing all complete.	SQM	160	0.000090508
1207	Forming groove of uniform size from 12X12 mm upto 25X15 mm in plastered surface as per approved pattern, using wooden battens nailed to the under layer, including removal of wooden battons, repair of the edges of plaster panel and finishing the groove etc. complete as per specification, drawing and the instructions of engineer in charge.	RM	782	0.000048683
1208	Providing drip coarse on plastered surface at all elevations for all type of work such as chajjas, parapet, projections etc. including scaffolding, finishing etc. complete with all labour, tools and plants as per specification, drawing and instructions of engineer in charge.	RM	867	0.000054309
1209	Providing and laying encasement to box type steel beams at all levels with lath plaster 50 mm nominal thickness with cement plaster (1:4) over chicken wire mesh including all labour, materials, equipment, handling, transporting, mixing, placing, leveling, curing and cleaning, finishing the exposed surfaces etc including centering and shuttering all complete as per specification, drawing and instructions of enginner in charge (chicken wire mesh to be paid separately)	SQM	30	0.000036469
1210	Ruled pointing in masonry in CM 1:3 (1 cement and 3 fine sand) including raking out joints, curing etc. complete.	SQM	569	0.000169108
	1300 FINISHES TO CONCRETE / PLASTERED SURFACES			
	Finishes, painting to concrete, plastered surfaces including all primer, labour, material (unless otherwise specified in BOQ/specification), equipment, surface preparation, scaffolding etc. at any level as per relevant laws of Bangladesh, relavant BS Standards or Equivalent International standards approved by BIFPCL/BHEL, specification, drawings and as directed by engineer - in - charge.			
1301	Two or more coats of white wash/ colour wash of approved brand and manufacture to give an even shade including a priming coat as per specifications.	SQM	5,100	0.000335671
1303	Providing and applying two or more coats of oil bound destemper of approved brand, shade and manufacture to give smooth, hard, durable & glossy finish over a coat of primer over prepared plaster surface as per manufacturers guideline.	SQM	100	0.000019389
1304B	Two or more coats of acrylic distemper of approved brand and manufacture to give an even shade including a priming coat with distemper primer complete.	SQM	18,912	0.003690373
1305	Providing and applying two or more coats of acrylic emulsion paint of approved brand, shade and manufacture to give smooth, hard, durable & glossy finish including a coat of primer over prepared plaster surface as per manufacturers guideline.	SQM	2,299	0.000641973
1306	Providing and applying 2 or more coats of chlorinated rubber acid/alkali resistant paint of approved brand and colour to floors, walls and ceiling including preparation of surface to receive paint, providing and applying chlorinated rubber zinc phosphate primer, complete all as per manufacturer's recommendations and as approved by engineer, at all heights above or below grade level, inclusive of intermediate coat of titanium dioxide/micaceous iron oxide complete as per specifications.	SQM	3,230	0.002063292

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Tender No: BHEL:MSTPP:AUX:20:09				
SCHEDULE:3--SERVICE				
ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
1307	Two or more coats of fire resistant transparent paint (@3.5 liter per sqm per coat) on all woodwork over french polish or flat oil paint of approved grade and manufacture to give an even shade as per specifications. (french polish payment shall be made seperately)	SQM	30	0.000022199
1308	Two or more coats of black anti-corrosive bitumastic painting of approved brand and manufacture to give an even shade complete.	SQM	30	0.000006403
1309	Two or more coats of synthetic enamel paint of approved make made from synthetic resins and drying oil with rutile titanium dioxide and other selected pigments to give smooth, hard, durable & glossy finish to all interior and exterior surfaces complete.	SQM	30	0.000005283
1310	Providing and applying 3 coats of water proof cement paint of approved make and color on exterior surface at all heights including material, labour, scaffolding, curing etc including primer coat complete as per specification.	SQM	300	0.000070896
1310B	Providing and applying clear silicon water repellent of approved make on concrete surface at all heights including material, labour, scaffolding, curing etc including primer coat complete as per specification.	SQM	300	0.000252938
1311	Providing and applying resin bonded granular textured finish, for external applications shall consist of crushed stone/quartz chips of .5 mm to 2.5 mm size and of approved natural color/shade and bonded with synthetic resins, adhesives and additives altogether in a single pack mix, applied on cured and dried plaster surface with a dry film thickness of minimum 2 mm. The final finish shall have UV resistance, fungus, bacterial resistance properties all complete with grooves filled with poly sulfide sealant of matching color and shade as per specification/drawing/approval of engineer in charge.	SQM	3,000	0.003517735
1312A	Providing and applying 2 mm thick polymer based water resistant putty (wall putty) on walls including preparation of surface, staging, etc. to achieve a smooth even surface all complete as per specification and as directed by Engineer.	SQM	19,260	0.003965327
1313	Providing and applying ready made Epoxy Paint over areas other than steel structure with suitable pigments of approved shade as per specification and direction of Engineer. The epoxy paint shall be a two pack material and shall be resistant to water, splash, spillage & acidic environment. The epoxy paint coating shall be of 150micron thickness over epoxy primer.	SQM	200	0.000150711
1315	Providing and applying two or more coats of Acrylic based weather coat paint of approved brand and manufacture and required shade including one coat of primer after necessary cleaning/ washing, preparing the surface using coir brush/ wire brush, sand paper, including filling of cracks with putty wherever required etc. all complete to give smooth, hard, durable & glossy finish over a coat of primer over prepared plaster surface as per manufacturers guidelines. The final finished coating shall be fungus resistant, UV resistant, water repellent and extremely durable with color fastness as per specification.	SQM	13,557	0.004344522
1316	One coats of cement wash (minimum 2 Kg cement mixed with 1 liter of water) of approved brand and manufacture to give an even shade including a priming coat as per specifications.	SQM	8,000	0.001647069
A1317	Providing and applying french polish (minimum 2 coats) on wood surface made from best quality shelac, denatured spirit and other suitable alcohol soluble ingredients and made by a well known approved manufacturer including required base preparation etc. all complete as per specification	SQM	30	0.000013498
1400 FLOORING AND SKIRTING				
	Flooring and skirting at any level including base layer, labour, material (unless otherwise specified in BOQ/specification), equipments, transportation, handling, curing, polishing etc. at any level as per relevant laws of Bangladesh, relavant BS Standards or Equivalent International standards approved by BIFPCL/BHEL, specification, drawings and as directed by engineer - in - charge.			
1401	Providing and laying 50 mm thick heavy duty cement concrete in flooring with metallic hardener pigmented topping 12mm thick uniform graded treated iron paricles in flooring. Under layer of 38mm thick cement concrete mix 1:2:4 (1 cement: 2 sand : 4 stone aggregates 12.5mm well graded) and top layer of 12mm thick metallic concrete of mix 1:2 (1 cement hardner mix with approved quality metallic hardening compound :2 stone aggregate 6mm nominal size) by volume including cement slurry, rounding off edges, aluminium strips etc. all complete for following (Quoted item rate shall be inclusive of providing glass joint strips):	SQM	8,355	0.016319112

PACKAGE 10V: PILE CAP (EXCEPT PILING), CIVIL FOUNDATION & SUPERSTRUCTURE, ARCHITECTURAL WORKS FOR AUX & BOP BUILDINGS, AC DUCTING, WEIGH BRIDGE AND MISC FINISHING				
Tender No: BHEL:MSTPP:AUX:20:09				
SCHEDULE:3--SERVICE				
ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
1402	Providing and laying 25 mm thick heavy duty cement concrete mix 1:2:4 (1 cement: 2 sand : 4 stone aggregates) flooring with metallic hardener pigmented topping of 10 mm thick uniform graded treated iron particles in skirting and dado. Under layer of 15mm thick cement concrete mix 1:2:4 (1 cement: 2 sand : 4 stone aggregates 12.5 mm well graded) and top layer of 10mm thick metallic concrete of mix 1:2 (1 cement hardner mix with approved quality metallic hardening compound :2 stone aggregate 6mm nominal size) by volume including cement slurry, rounding off edges, aluminium strips etc. all complete as per specification. (Quoted item rate shall be inclusive of providing glass joint strips).	SQM	800	0.000982508
1403	Providing and laying precast polished heavy duty cement concrete tiles (Carborundum topping pigment content is 3.5 kg per 50 kg of cement) of size 300X300X25 thick of approved shade as per relevant BS or equivalent international code including minimum 20 mm cement mortar bedding of 1:3 (1 cement : 3 sand) jointed with neat cement slurry @4.4 kg/sqm labour, material etc. all complete with pigment to match the shade of the tiles including rubbing, curing, grindig and polishing complete with laying as per relevant BS or equivalent international code etc. all complete for following:			
a	Laid in floors	SQM	2,221	0.012883014
b	Laid in skirting	SQM	215	0.001357607
1404	Providing and laying interlocking C25/30 Grade concrete blocks in paving with approved colour and pattern including jointing sand, bedding layer of sand (35 mm thick) as per specifications and recommendations of manufacturer inclusive of cost of cement for paver manufacturing.			
b	80 mm	SQM	3,640	0.00727737
1412	Providing and laying 18-20mm thick polished Granite stone of approved color and texture in flooring with brass/ stainless steel strips. Under bed shall average 30mm thk of 1 cement : 2 sand : 4 stone aggregate by volume and brought to proper level. The granite stone slabs/tiles laid over under bed, pressed and tapped down with wooden mallet to the proper level, lifted and pressed again with thick cement slurry @3.3 kg/sqm spread over the surface with fine joint finished including pigments, curing, grinding, granite polishing etc. all complete.	SQM	90	0.000930581
1413	Providing and laying 20mm thick Mirror polished (6 layers of polish)/Flame finish (making top surface rough by burning / shot blasting)Granite stone of approved color and texture in flooring with brass/ stainless steel strips. Under bed shall average 30mm thk of 1 cement : 1.5 sand : 3 stone aggregate by volume and brought to proper level. The granite stone slabs/tiles laid over under bed, pressed and tapped down with wooden mallet to the proper level, lifted and pressed again with thick cement slurry spread over the surface with fine joint finished including pigments, curing, grinding, granite polishing etc. all complete as per manufacturers guidelines, specifications, drawing, relevant BS or equivalent international standards and and/or as approved by BIFPCL/BHEL	SQM	250	0.002972712
1414	Providing and laying polished Granite stone 18-20mm thk in skirting and dado with 6mm thick projection from adjacent plaster minimum 12 mm thick cement mortar bedding of 1:3 (1 cement : 3 sand) with thick cement slurry @3.3kg/sqm spread over the surface with fine joint finished including cutting brickwall upto the required depth, edging, finishing etc. all complete. including mortar ,cement slurry ,pigments, curing, grinding,moulding, granite polishing etc. all complete.	SQM	15	0.000151603
1416	Providing and laying vitrified ceramic tiles of polished variety from reputed / approved manufacturer, complete including epoxy grout, underbed of cement mortar 1:3 minimum 20mm thick underbed for flooring and 12mm thick underbed for dado/skirting with neat cement slurry @3.3Kg/sqm etc. all complete for following			
a	600x600x10 mm thick tiles In flooring	SQM	2,814	0.013892717
b	600x600x10mm thick tiles In skirting and dado upto specific height	SQM	363	0.001785094
c	300x300X7 mm thick tiles In flooring	SQM	300	0.001382729
d	300x400x7mm thick tiles In skirting and dado upto specific height	SQM	70	0.000321446
1417	Providing and laying vitrified ceramic tiles of matt finish from reputed / approved manufacturer including epoxy grout, underbed of cement mortar 1:3 minimum 20mm thick underbed for flooring and 12mm thick underbed for dado/skirting with neat cement slurry @3.3Kg/sqm etc. all complete for following			

PACKAGE 10V: PILE CAP (EXCEPT PILING), CIVIL FOUNDATION & SUPERSTRUCTURE, ARCHITECTURAL WORKS FOR AUX & BOP BUILDINGS, AC DUCTING, WEIGH BRIDGE AND MISC FINISHING				
Tender No: BHEL:MSTPP:AUX:20:09				
SCHEDULE:3--SERVICE				
ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
c	300x300X7 mm thick tiles In flooring	SQM	275	0.001043558
1419	Providing and laying granite stone slab of 20mm thickness single piece for wash basin / sink slab /facia of black or approved colour including 20mm underbed of cement mortar 1:3 with cutting,making corners,moulding and opening etc. all complete.	SQM	50	0.000582185
1422	Fixing Acid / Alkali resistant (Chemical resistant) tiles conforming to relevant BS or equivalent international code in flooring/Dado and shall be laid over bitumastic lining of min 12mm thick (to be laid in layers of 6mm each). The tiles shall be applied with 6mm thick Potassium Silicate bedding mortar as per relevant BS or equivalent international code and including preparation of surface, application of bitumen primer, curing etc. all complete for following thicknesses. The tiles should be abrasion resistant & durable.			
a	20mm thick	SQM	200	0.00034328
1423	Fixing Acid / Alkali resistant (Chemical resistant) tiles(tiles should be abrasion resistant & durable) in flooring/Dado and shall be laid over bitumastic lining of min 12mm thick (to be laid in layers of 6mm each). The tiles shall be applied with 6mm thick Potassium Silicate bedding mortar and including preparation of surface, application of bitumen primer, curing, pointing joint of bedding 20mm deepx6mm wide with epoxy/Furane morteretc. all complete as per manufacturers guidelines, specifications, drawing, relevant BS or equivalent international standards and and/or as approved by BIFPCL/BHEL for following minimum thicknesses.			
a	20mm thick	SQM	100	0.00017164
b	38mm thick	SQM	100	0.000171779
1424	Fixing chemical resistant (AR)(Acid / Alkali) bricks (75mm thick) conforming to relevant BS or equivalent international code in the floor of neutralization pit. Surface on which lining to be applied shall be prepared in accordance with relevant BS or equivalent international code. Bitumen primer as per relevant BS or equivalent international code followed by 18mm thick bituminastic followed by 6mm thick potassium silicate mortar bedding shall be provided before laying AR bricks. The joints between AR bricks shall be filled with resin type of mortar conforming to relevant BS or equivalent international code, seal coat of readymade epoxy paint shall be provided on joints to cover up any porosity that may be left in mortar. End sealing shall be done with bituminastic AR bricks shall be laid with 6mm wide & 50mm deep pointing (epoxy / furnace / CNSL) & acid curing shall be done all complete as per specification.	SQM	100	0.000268759
A1424	Fixing chemical resistant (AR)(Acid / Alkali) tiles (75mm thick) in the floor of neutralization pit. Surface on which lining to be applied shall be prepared in accordance with relevant BS or equivalent international code. Bitumen primer followed by 18mm thick Bitumenastic followed by 6mm thick potassium silicate mortar bedding shall be provided before laying AR bricks. The joints between AR tiles shall be filled with resin type of mortar, seal coat of readymade epoxy paint shall be provided on joints to cover up any porosity that may be left in mortar. End sealing shall be done with Bitumenastic AR bricks shall be laid with 6mm wide & 50mm deep pointing (epoxy / furnace / CNSL) & acid curing shall be done all complete as per manufacturers guidelines, specifications, drawing, relevant BS or equivalent international standards and and/or as approved by BIFPCL/BHEL.	SQM	100	0.000268759
B1424	Fixing chemical resistant (AR)(Acid / Alkali) bricks (115 mm thick) in the walls of neutralization pit. Surface on which lining to be applied shall be prepared in accordance with relevant BS or equivalent international standards. Bitumen primer followed by 18mm thick Bitumenastic followed by 6mm thick potassium silicate mortar bedding shall be provided before laying AR bricks. The joints between AR bricks shall be filled with resin type of mortar, seal coat of readymade epoxy paint shall be provided on joints to cover up any porosity that may be left in mortar. End sealing shall be done with Bitumenastic AR bricks shall be laid with 6mm wide & 50mm deep pointing (epoxy / furnace / CNSL) & acid curing shall be done all complete as per manufacturers guidelines, specifications, drawing, relevant BS or equivalent international standards and and/or as approved by BIFPCL/BHEL.	SQM	100	0.000322491

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SCHEDULE:3--SERVICE				
ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
1427	Providing and Fixing glazed ceramic tiles of approved color and design of size 200x300mm / 300x300mm / 300x400mm in dado of approved size, projecting 6mm uniformly from adjacent plaster or wall finish. The mix for 20 mm thick underbed plaster shall consist of 1part cement and 3 parts sand by weight. fairly moist but firm, tiles shall be pressed over under bed by applying cement slurry @3.3 kg/sqm including pigments, curing etc all complete for following thicknesses:			
b	7mm thick	SQM	590	0.001577309
1427A	Providing and fixing glazed ceramic tiles of approved color and design of size 200x300mm / 300x300mm / 300x400mm in dado of approved size, projecting 6mm uniformly from adjacent plaster or wall finish. The mix for 20 mm thick underbed plaster shall consist of 1part cement and 3 parts sand by weight. fairly moist but firm, tiles shall be pressed over under bed by applying cement slurry @3.3 kg/sqm including pigments, curing etc all complete for following thicknesses: (All tiles to be used should be with minimum 20% of recycled content. The contractor should provide the material sample/ declaration from manufacturer mentioning the recycled content used in maufacturing of vitrified tiles to be used to engineer in charge)			
b	7mm thick	SQM		
1428	Providing and laying 3 mm thick antistatic PVC flooring / skirting of approved shade,as per relevant BS or equivalent international code and laying as per relevant BS or equivalent international code all complete.	SQM	200	0.000196022
1428A	Providing and laying 2 mm thick antistatic PVC flooring / skirting of approved shade,as per relevant BS or equivalent international code and laying as per relevant BS or equivalent international code all complete.	SQM	200	0.000156887
1428B	Providing and laying 6.5 mm thick heavyduty PVC tiles in flooring / skirting of approved shade,as per relevant BS or equivalent international code and laying as per relevant BS or equivalent international code all complete.	SQM	150	0.000294265
1429	Providing and fixing removable type flooring system consisting of fire resistant particle board of size 600X600X35 mm with 0.05 mm thick aluminium foil lining at bottom and with 2 mm thick anti static PVC topping including proprietary floor supporting system complete as per specification.	SQM	50	0.000367753
1430	Providing and fixing dividing strips in joints of cast in situ floorings at various elevations, finishing, all labour, material etc. complete as per drawing, specification and instructions of engineer in charge.			
a	Glass strips 40 mm wide and minimum 6 mm thick.	RM	250	0.000070709
b	Aluminium strips 40 mm wide and minimum 3 mm thick	RM	270	0.000101502
1431	Providing and fixing 15mm thick wooden panel flooring and skirting of Pergo, Greenlam or equivalent multi-layered engineered wooden planks treated with VOC free lacquers and stains to provide extra strengthening, longevity and durability to planks. In all planks each layers are arranged at cross grain to each other for provide the balancing and stability to all three layers. Top layer of flooring is made up of about 3.0 mm thick thermosetting re-polish able natural veneer setting on a core of about 10 mm thick pine wood that produce natural characteristic of wood with 2.0mm thick bottom ply based veneer balancing layer. The planks are joint to each other through plankloc system with glue less technology system and laid on 2mm thick dual barrier underlay protecting sheet having anti-bacterial, Anti-termite, fire-resistant, noise reduction, high wear and abrasion resistance, water resistant properties. The system includes all accessories like beading, Quadrant, Veneered/solid wood skirting, end profile etc.as per as per manufacturer specification and approved by Engineer Incharge. (The contractor should provide the material cut sheet/ declaration from manufacturer mentioning the recycled content used in manufacturing of wooden flooring to be used).			
1432	Providing and laying Epoxy screed (trowel applied minimum 5 mm thick) and epoxy seal coat in flooring/skirting of approved shade,as per relevant BS or equivalent international code and laying as per relevant BS or equivalent international code all complete.	SQM	2,114	0.006861596

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SCHEDULE:3--SERVICE				
ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
	1500 ROOFING / SIDE CLADDING			
	Roofing / side cladding work including all labour, material (unless otherwise specified in BOQ/specification), equipment, transportation, handling, scaffolding, laps, hooks, washers, corner pieces etc. at any level as per relevant laws of Bangladesh, relavant BS Standards or Equivalent International standards approved by BIFPCL/BHEL, specification, drawings and as directed by engineer - in - charge.			
1501	Fixing permanently color coated galvanised MS troughed metal sheet decking plate of approved colour and conforming to relevant BS or equivalent international code over roof purlins for cast-in-situ roof slab as per relevant BS or equivalent international code and specification. Bare metal thickness of deck plate shall be minimum 0.7mm with minimum trough depth of 44 mm having minimum yield strength of 250 MPa and shall serve as permanent shuttering to the roof slab 100mm thick measured over crest of metal decking & shall have adequate strength to support weight of green concrete and imposed loads of min 150 kg/sqm during construction between purlins as per manufacturer's recommendations/ calculations/ test certificates for approval including fixing of plates to purlins, side lapping, end lapping, expansion joint etc. all complete for below mentioned spans. The sheet shall be permanently coated with silicon modified polyester paint of minimum 20 micron DFT on exposed surface (facing operating floor) and minimum 7 micron on other face over epoxy primer applied over hot dipped galvanising @ 275 gm/sqm including fixing of sheet to purlin with self drilling white zinc plated heat treated carbon steel screws of minimum 5.6 mm dia @ 260mm c/c in the trough and stich screws between two adjacent sheets and sealing with epoxy sealant and EPDM/Neoprene washers. Measurement of profile sheeting shall be of the plan area of roof covered by MS trough metal decking.			
a	Span Upto 1800mm	SQM	245	0.000362301
b	Span Exceeding 1800mm and upto 2500 mm	SQM	810	0.001290595
1502	Fixing shear connectors of mild steel studs having 16mm dia and minimum 75 mm projected length above purlin passing through metal decking as per relevant BS code or equivalent international code and specification.	QUINTAL	4	0.00006906
1506	Providing and fixing non combustible, water repellant grade insulation of resin bonded mineral wool of minimum 60 mm nominal thickness having maximum heat transmission coefficient of 0.75 W/(sqm K) and conforming to relevant BS or equivalent international code having a minimum density of 32 kg/cum glass wool or 48 kg/cum for rock wool, for cladding/under deck insulation including application of glue and tying with lacing wire, for glass/rock wool as per manufacturer's recommendations.	SQM	301	0.000434744
1506A	Providing and fixing non combustible, water repellant grade insulation of resin bonded mineral wool of minimum 75 mm nominal thickness having maximum heat transmission coefficient of 0.45 W/(sqm K) and conforming to relevant BS or equivalent international code having a minimum density of 32 kg/cum glass wool or 48 kg/cum for rock wool, for cladding/under deck insulation including application of glue and tying with lacing wire, for glass/rock wool as per manufacturer's recommendations.	SQM	800	0.001356326
1507A	Providing and fixing non combustible, water repellant grade insulation of resin bonded mineral wool of minimum 75 mm nominal thickness having maximum heat transmission coefficient of 0.45 W/(sqm K) and conforming to relevant BS code or equivalent international code having a minimum density of 32 kg/cum glass wool or 48 kg/cum for rock wool, for cladding/under deck insulation including wrapping in black polythene black supported over weld mesh 75X75X1.6 MM dia to hold in position and application of glue & tying with lacing wire, for glass/rock wool as per manufacturer's recommendation.	SQM	560	0.001029958
1508	Providing and installing under deck insulation using minimum 0.05 mm thick aluminium foil on exposed surface followed by 0.56 mm dia and 25 mm mesh GI wire netting, fixed at various elevations with rawl plugs including clips but excluding cost of insulation.	SQM	1,400	0.002993234
1509	Providing and fixing non metal opaque PVC sheet similar to ONDEX roofing or equivalent including all fixing accessories.	SQM	10	0.000034968

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SCHEDULE:3--SERVICE				
ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
1510	Providing and fixing 1 mm thick corrugated/semicorrugated G.I. sheet in roofs, cladding of minimum galvanisation of 275 gsm total on both sides with minimum 150mm overlapping, 8 dia G.I. hook bolts or 'J' Bolts and nuts @305 mm c/c along with G.I. and bitumen washers including cutting of sheets for opening etc. all complete.	SQM	30	0.000065741
	1600 FALSE CEILING			
	False ceiling including all labour, material (unless otherwise specified in BOQ/specification), equipment, transportation, handling, suspension system etc at any level as per relevant laws of Bangladesh, relevant BS Standards or Equivalent International standards approved by BIFPCL/BHEL, specification, drawings and as directed by engineer - in - charge.			
1601	Fixing glass fibre reinforced gypsum plaster board (GRG) ceiling (having gypsum core mixed with glass fibre) system consisting of metal supporting grid system forming panels of specified size, suspended from RCC slab/structural steel or catwalkway grid above with 4 mm (minimum) galvanised wires (rods) with special height adjustment clips, including preparation of working drawing, providing openings for AC ducts, return air grills, light fixtures etc (but excluding the cost of catwalkway grid) all complete as per drawings, specification and instructions of the engineer. The false ceiling should have minimum noise reduction factor of 0.5.			
a	12 mm thick GRG board with galvanised light gauge steel load bearing supporting GI frame and finished flat (seamless).	SQM	1,435	0.000666254
b	12 mm thick GRG board in profile (dome ,curved profiled etc.) with galvanised light gauge steel load bearing supporting GI frame and finished smooth (seamless).	SQM	220	0.000153829
1602	Fixing and laying light weight mineral fiber tile false ceiling of minimum thickness 15 mm and exposed surface semi-perforated with depth of perforation as 4 mm and humid resistance of 95% RH and fire performance of class 0/1 as per BS 476 with metal suspension grid system with galvanized Tees of section 24 X 38 mm for main runners of approved colour and make as per specification and relevant BS or equivalent international code..Additional hangers and height adjustment clips shall be provided for return air grills, light fixtures. A.C. ducts etc. suitable M.S. channel (minimum MC 75 @ 1.2m) grid shall also be provided above the false ceiling level for movement of personnel to facilitate maintenance of lighting fixtures, AC ducts etc. complete with cut-outs etc.The size of tiles shall be 600 X 600 mm or 600 X 1200 mm. Required MS channel shall be measured & paid extra under respective item unit rate.	SQM	200	0.000216656
1603	Providing and fixing permanently colour coated aluminium false ceiling of approved colour and Luxalon 84 C or approved equivalent with corrosion resistant aluminium alloy panels of minimum thickness 0.5mm including 50mm thick mineral wool insulation(density 48 kg/cum) conforming to relevant BS or equivalent international code bound in polythene bags on top of panels. Additional hangers and height adjustment clips shall be provided for return air grills, light fixtures, A.C. ducts etc all complete. Suitable M.S. channel grid shall also be provided above the false ceiling level for movement of personnel to facilitate maintenance of lighting fixtures, AC ducts etc. (Materials for structural platform grid, if required to be provided, for movement made up of MS Channels/ Beams / Angles shall be supplied by BHEL and shall be paid under ST No 703a). The false ceiling should have minimum noise reduction factor of 0.5.	SQM	400	0.002693792
A1604	Providing, fixing and laying permanently colour coated aluminium false ceiling of approved colour with stove enamel finish of approved make in LINEAR and SQUARE type with corrosion resistance aluminium alloys panels of minimum thickness 0.5mm including 60mm thick glass wool or similar of density not less than 16 kg/m3 bound in polythene bags on top of panels and noise reduction factor of 0.5. Additional hangers and height adjustment clips shall be provided for return air grills, light fixtures. A.C. ducts etc. suitable M.S. channel (minimum MC 75) grid 1200 c/c maximum shall also be provided above the false ceiling level for movement of personnel to facilitate maintenance of lighting fixtures, AC ducts etc.The work to be complete as per manufacturer's recommendation and relevant BS or equivalent international standards and/or as approved by BIFPCL/BHEL. (Materials for structural platform grid, if required to be provided, for movement made up of MS Channels/ Beams / Angles shall be supplied by BHEL and shall be paid under ST No 703a).	SQM	350	0.0025667

PACKAGE 10V: PILE CAP (EXCEPT PILING), CIVIL FOUNDATION & SUPERSTRUCTURE, ARCHITECTURAL WORKS FOR AUX & BOP BUILDINGS, AC DUCTING, WEIGH BRIDGE AND MISC FINISHING				
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SCHEDULE:3--SERVICE				
ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
1604	Fixing and laying permanently colour coated aluminium false ceiling of approved colour with stove enamel finish of approved make in LINEAR or SQUARE type with corrosion resistance aluminium alloys panels of minimum thickness 0.5mm as per specification and relevant BS or equivalent international code. Additional hangers and height adjustment clips shall be provided for return air grills, light fixtures. A.C. ducts etc. suitable M.S. channel (minimum MC 75) grid 1200 c/c maximum shall also be provided above the false ceiling level for movement of personnel to facilitate maintenance of lighting fixtures, AC ducts etc. The work to be complete as per specifications, drawings and direction of engineer. (Materials for structural platform grid, if required to be provided, for movement made up of MS Channels/ Beams / Angles shall be supplied by BHEL and shall be paid under ST No 703a). The false ceiling should have minimum noise reduction factor of 0.5.	SQM	1,465	0.002950844
1606	Fixing 12mm thick Gypsum board plain/perforated false ceiling tiles(600x600mm) of India Gypsum or equivalent make in plan or elevation with aluminium grid, metal suspension system, anchor fastener adjustable hangers etc. including two or more coats of acrylic emulsion paint of approved colour to give an even shade with smooth finish all complete as per architectural design and detail and as per specification and relevant BS or equivalent international code. Metal suspension system as per ASTM C-635 shall be hot dipped M.S.galvanized. Nominal size of T-section shall be 24 x 38 mm or 24 x 25 mm cross runners. 24mm wide exposed flange surface shall be permanently color coated. Suspension system shall be as per manufacturer's specification supported over movement platform. The work to be complete as per specifications, drawings and direction of engineer. (Materials for structural platform grid, if required to be provided, for movement made up of MS Channels/ Beams / Angles shall be supplied by BHEL and shall be paid under ST No 703a).	SQM	30	0.000031271
	1700 RAIN WATER DOWN TAKE PIPES			
	Rain water down take pipes including all labour, material (unless otherwise specified in BOQ/specification), transportation, 2 coats of approved paint over one primary coat, fixtures, accessories etc at any level as per relevant laws of Bangladesh, relevant BS Standards or Equivalent International standards approved by BIFPCL/BHEL, specification, drawings and as directed by engineer - in - charge.			
1705	Providing and fixing UPVC down take pipes of 110mm diameter- Class C as per BS 3505:1986 or equivalent international code all complete.	RM	1,349	0.001463555
1706	Providing and fixing UPVC down take pipes of 160mm diameter- Class C as per BS 3505:1986 or equivalent international code all complete.	RM	1,505	0.002319878
1707	Providing and fixing GI down take pipes conforming to relevant BS code or equivalent international code of medium duty all complete for following diameters.			
b	150 mm Dia	RM	20	0.000038171
	1800 MISCELLANEOUS WORKS			
	Miscellaneous works including all labour, material (unless otherwise specified in BOQ/specification), equipment etc. at any level unless otherwise specified as per relevant laws of Bangladesh, relevant BS Standards or Equivalent International standards approved by BIFPCL/BHEL, specification, drawings and as directed by engineer - in - charge.			

PACKAGE 10V: PILE CAP (EXCEPT PILING), CIVIL FOUNDATION & SUPERSTRUCTURE, ARCHITECTURAL WORKS FOR AUX & BOP BUILDINGS, AC DUCTING, WEIGH BRIDGE AND MISC FINISHING				
Tender No: BHEL:MSTPP:AUX:20:09				
SCHEDULE:3--SERVICE				
ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
1801	Providing and Filling in trenches, plinths, area paving and other underground structures with graded stone aggregate of size range 63 mm to 45 mm in layers not exceeding 230 mm in thickness including breaking of stone boulders to required sizes, filling the interstices with selected sand and compacting to 85 % of original volume of stone stack for all lifts etc. all complete. Payment shall be made for the measurement of the volume of the compacted fill.	CUM	2,440	0.020955578
1801A	Providing and Filling in trenches, plinths, area paving and other underground structures with 50 mm downgraded jhama brick aggregate mixed with selected sand (F.M. 1.2) in (2:1) (Brick aggregate: sand) proportion to achieve minimum dry density of 90% with optimum moisture content (Modified proctor test) in layers not exceeding 150 mm in thickness including breaking and screening chips, laying and spreading etc. all complete. Payment shall be made for the measurement of the volume of the compacted fill.	CUM	1,360	0.011713802
1803	Anti termite chemical treatment of soil with Chlorpyrifos/Lindane E.C. 20% with 1% concentration conforming to relevant BS code or equivalent international code all complete. (Plinth area of building at ground floor only shall be measured for payment)	SQM	600	0.000187832
1804	Supply and installation of approved 25mm thick vibration damping resilient pads on/around foundation of vibrating equipment and at other locations all complete.	SQM	20	0.000105475
1805	Providing 50mm thick premix carpet surfacing laid to slope in two layers 30mm and 20mm respectively with 12mm downgraded stone chips mixed with 80/100 grade bitumen @ 52 Kg/Cu.M including compaction etc. all complete.	SQM	400	0.000706513
1806	Providing 50mm thick anti corrosive layer laid to required slope consisting of fine graded asphalt concrete with maximum grain size of 5 mm as per relevant BS code or equivalent international code and rolled or compacted all complete.	SQM	400	0.000728569
1807	Providing and fixing G.I strips minimum 1.5mm thk and 150mm wide including fixing accessories etc. all complete.	Kg	30	0.000015741
1808	Providing and fixing aluminium strips minimum 18 SWG thk and 300mm wide over expansion joints with minimum lap of 50mm length including brass / aluminium screws, rawl plugs etc. all complete.	Kg	30	0.000031355
1808A	Providing and fixing PVC strips over expansion joints with minimum lap of 50mm length including fixing system etc. conforming to relevant BS code or equivalent international code all complete.	SQM	70	0.000029588
1809	Providing Chemical (epoxy) injection grouting with pressure pump for water retaining concrete structures conforming to relevant BS code or equivalent international code, including fixing nozzles, cost of approved chemical, admixture, curing etc. all complete. Payment shall be made as per the consumption of chemical grout.	Kg	130	0.000506384
1810	Laying and fixing rails and guide rails in concrete for transformer, rail track including cutting of rails, joining of rails, anchoring lugs etc all complete.	MT	5	0.000355599
1811	Providing and fixing weep holes in Drains consisting of 100 mm dia HDPE pipe sleeves with single side covering for the pipe mouth with galvanised welded wire fabric of 20 mm sq. opening covered with 40 mm downgraded aggregates in 300 X 300 mm sq. and 300 mm deep size all complete.	EACH	10	0.000005926
A1812	Laying of earthing mats/rods of "tinned copper" or "steel rod clad/bonded with copper" including risers, transportation from yard stores, loading, unloading, cutting to length, thermo welding/brazing, protective painting of joints etc. all complete. (Excavation & Back filling shall be paid separately under respective item of earth work. Earthing mats/rods and thermowelding material shall be supplied by BHEL free of cost)	MT	5	0.000094647
AA1812	Laying of earthing mats/rods/plates/flats of "Galvanized steel" or "Stainless steel" inside concrete members (pile, pile cap, pedestals, columns, slabs, beams etc.) including risers, transportation from yard stores, loading, unloading, cutting to length, welding, connection to reinforcement using connectors, protective painting of joints etc. all complete. (Excavation & Back filling shall be paid separately under respective item of earth work. Earthing mats/rods/plates/flats, connectors shall be supplied by BHEL free of cost)	MT	6	0.000134431
1813	Providing Earthing pit as per drawing with charcoal & salt, GI pipes, GI earth electrodes, GI wire, GI strips, brick chamber with covers including associated earthwork etc. all complete.	EACH	9	0.000766836

PACKAGE 10V: PILE CAP (EXCEPT PILING), CIVIL FOUNDATION & SUPERSTRUCTURE, ARCHITECTURAL WORKS FOR AUX & BOP BUILDINGS, AC DUCTING, WEIGH BRIDGE AND MISC FINISHING				
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SCHEDULE:3--SERVICE				
ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
1814	Construction of below ground earthing system test pits as per drawing/ sketches including brickwork, plaster, concreting, reinforcement, formwork, providing & fixing GI strips/pipes, GI wires, covers etc as per drawing & specification (excavation and backfilling only will be paid under applicable BOQ items).	EACH	9	0.000370319
1815	Providing and fixing GI rungs in concrete/brick walls having zinc coating of minimum 900 g/sqm etc. all complete.	Kg	950	0.000196015
1816	Fixing PVC pressure release valve of minimum dia 90mm in water retaining structure including 160 mm dia housing pipe of minimum length 2 m with perforation as per relevant BS code or equivalent international code, nylon jali, perforated end plug, collar, graded filter, excavation, fixing in concrete slab/wall etc. all complete. (only PRV shall be issued by BHEL free of cost)	EACH	200	0.003498668
1817	Providing and fixing HDPE pipes in concrete/ brick work of following sizes including cutting, fixing and levelling in position etc. all complete.			
a	Upto 75 mm dia	RM	20	0.00001719
b	100 mm dia	RM	20	0.000021341
c	150 mm dia	RM	60	0.000103121
d	200 mm dia	RM	60	0.00016714
1822	Cutting of groove of 10mm X 40mm size with groove cutting machine in concrete paving all complete.	RM	190	0.000018931
1823	Fire proofing of steel structures with VERMICULITE cementitious coating including supply of all materials for vermiculite materials, reinforcement mesh (3mm thick wire, 50x50 size mesh) , nuts, tie wires, weldings, surface preparation, curing, staging, compatible paintings etc. all complete.	CUM	7	0.001374376
1824	Supply & fixing expanded metal steel sheet conforming to relevant BS code or equivalent international code . Size of mesh shall be 10mmX40mm with strands of 2.5mm width and 1mm thickness to the structural steel for facilitating fireproofing works.	SQM	8	0.00001165
1825	Supply and laying approved quality Stone aggregate 40mm size in transformer yards.	CUM	7	0.000082695
1826	Supply and laying approved quality rounded pebbles / gravels of 40mm size in transformer yards.	CUM	120	0.001417512
1828	Dismantling old existing reinforced/non-reinforced brickwork/blockwork/stone masonry work in mud/lime/ cement mortar at any level including clearing/cleaning, stacking the serviceable materials at plant site and disposal of unserviceable materials within a lead upto 1km all complete.	CUM	7	0.000018453
1829	Dismantling old existing plain/re-inforced concrete work at any level including clearing/cleaning, stacking the serviceable materials at plant site and disposal of unserviceable materials within a lead upto 1km all complete.	CUM	7	0.000023059
1830	Dismantling old existing structural steel work at any level including plates, bolts, cutting rivets, welding, dismembering and stacking the dismantled materials within a lead upto 1km etc all complete.	MT	3	0.000214504
1831	Sprinkling of water by water tanker fitted with perforated GI pipe (portable tanker minimum 3000 litre capacity) for roads and miscellaneous area within plant boundary, for dust suppression and reduction of suspended material at site for day to day work, as directed by BHEL site engineer (water for this purpose shall be provided by BHEL free of cost and utilisation of machine will be in terms of Tank-hour put in actual use for water sprinkling).	TANK-HR	568	0.00100426
1832	Providing & filling Bentonite Powder (Sodium base) mixed with water in electronic earthing pit as per drawing & direction below ground level including all materials, transportation, labour, incidental etc all complete as per specification.	CUM	2	0.000051591
1834	Anti weed chemical treatment of soil with suitable chemical pertaining to the types of weeds found in the vicinity, anti-weed/soil sterilization providing test certificate, performance guarantee of three years etc all complete as per specification, manufacturer's recommendations, relevant BS or equivalent international standards and/or as approved by BIFPCL/BHEL..	SQM	10	0.000000088
A1840	Providing and applying self adhesive pressure sensitive membrane as per relevant international codes approved by BHEL/BIFPCL over concrete surface etc all complete as per specifications and directions of engineer in charge.	SQM	120	0.000080897

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SCHEDULE:3--SERVICE				
ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
1857	Providing and laying stone aggregate in switch yard areas (150mm compacted thickness) using 30 mm uniform gauge aggregates in top & bottom layers. Before laying the stone aggregates, the yard surface shall be treated with antiweed treatment as per manufacturer's specification, micro leveling and compaction all complete including laying of a single layer of drainage geotextile membrane below the layer of stone aggregates . (The rate shall be inclusive of all materials, labour, loading, unloading and surface dressing etc. required for aggregate laying and antiweed treatment).	SQM	32,000	0.045763061
	2000 FENCING AND GATES			
	Fencing and gates including all labour, material (unless otherwise specified in BOQ/specification), equipment etc at any level as per relevant laws of Bangladesh, relavant BS Standards or Equivalent International standards approved by BIFPCL/BHEL, specification, drawings and as directed by engineer - in - charge.			
2001	Supplying and erecting in position 1.8 m high PVC coated gavanised chain linked fencing of minimum 8 gauge (including PVC coating) of mesh size 75mm x 75mm. The diameter of the hot dip galvanised steel wire for chain link fencing excluding PVC coating shall not be less than 12 gauge. GI barbed wire fencing of height of 600 mm confirming to relevant BS code or equivalent international code at top of chain link fencing shall be provided with 3 strands of barbed wire hot dip galvanised wire of 12G comprising of 2 ply of wires with barbs of 16G spaced at 100mm. Cost to include for GI hook bolts, rings & washers, hot dip galvanised tension wires, line wires, 25X6 mm GI flat stretcher bar at end posts, accessories, connection to posts etc. all complete. (Post shall be paid separately)	RM	1,300	0.00419229
2006	Supplying and fixing 600mm high concertina on top of boundary wall including GI tension wires, clips, anchors, accessories etc. all complete. Concertinal shall be from tensile serrated galvanised wire (HTSW) made with wire diameter of 2.5 mm which will be stretched to 6m and attached on two strands of galvanised HTSSW (high tensile spring steel wire) of 2.5mm dia by means of clips at 1m interval. These two HTSSW strands will be attached to the fence posts/ angles with 12 mm security fasteners. (Structural post shall be separately)	RM	800	0.000692938
2008	Supply, fabrication and fixing of mild steel posts for fencing including painting etc all complete.	MT	20	0.004211867
2009	Fabrication and installing in position and testing galvanised MS Gates out of channels, joists, angles, flats, plates, pipes, welded steel wire mesh & sheets including stiffeners, bracings, fabricated hinges, MS Aldrops with locking arrangement, tempered steel pivot, guide track of MS Tee, bronze aluminium ball bearing arrangements, castor wheels, paintings etc. all complete.	MT	5	0.000308277
2009A	Installing in position and testing PVC coated galvanised MS Gates out of rectangular hollow sections, channels, joists, angles, flats, plates, pipes including stiffeners, bracings, fabricated hinges, MS Aldrops with locking arrangement, tempered steel pivot, guide track of MS Tee, bronze aluminium ball bearing arrangements, castor wheels etc. all complete (mesh & barbed wire to be paid seperately uner item no 2001).	MT	6	0.000388423
	2100 WATER SUPPLY			
	Water supply work including men, material (unless otherwise specified in BOQ/specification), equipment etc. at any level as per relevant laws of Bangladesh, relavant BS Standards or Equivalent International standards approved by BIFPCL/BHEL, specification, drawings and as directed by engineer - in - charge.			
2101	Providing and fixing in position tested heavy duty type chromium plated (CP) brass long neck bib cocks including sockets, union, nuts etc all complete - Nominal size 1/2	EACH	65	0.000181303
2101A	Providing and fixing in position tested heavy duty type chromium plated (CP) brass long neck bib cocks with flow rate less than 2.5 LPM (litres per minute) at 60 psi, including sockets, union, nuts etc all complete -Nominal size 1/2	EACH	15	0.000045729
2102	Providing and fixing in position heavy duty brass stop cock of approved quality including all specials etc all complete - Nominal size 1/2	EACH	74	0.000135777

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SCHEDULE:3--SERVICE

ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
2103	Providing and fixing in position heavy duty brass full way valve with wheel of approved quality including all specials etc all complete for following sizes:			
a	Nominal size 1	EACH	41	0.000045304
b	Nominal size 2	EACH	27	0.000078083
2104	Providing and fixing GI pipes class B medium class conforming to relevant BS code or equivalent international code pipes shall be concealed and painted with anticorrosive paint, complete for internal works with GI sockets, unions, elbows, tees, nipples etc and clamps including cutting and making good the walls etc all complete for following sizes:			
a	15 mm nominal bore.	RM	14	0.000009846
b	20 mm nominal bore.	RM	19	0.0000152
c	25 mm nominal bore.	RM	19	0.000018514
2104A	Providing and fixing uPVC pipes conforming to BS:3505 pipes shall be concealed, complete for internal works with sockets, unions, elbows, tees, nipples etc conforming to BS 4346 or equivalent and clamps including cutting and making good the walls etc all complete for following sizes:			
a	Nominal size 1/2	RM	464	0.00011637
b	Nominal size 3/4	RM	248	0.000083367
c	Nominal size 1	RM	176	0.000073871
d	Nominal size 1 1/4	RM	415	0.000209635
e	Nominal size 1 1/2	RM	190	0.000111856
2105	Providing and fixing GI pipes class B complete for external work with GI sockets, unions, elbows, tees, nipples etc including trenching & refilling, anti-corrosive paint etc all complete for following sizes:			
b	20 mm nominal bore.	RM	11	0.000009614
c	25 mm nominal bore.	RM	15	0.000016433
d	50 mm nominal bore.	RM	35	0.000060882
2105A	Providing and fixing uPVC pipes conforming to BS:3505 for external work with sockets, unions, elbows, tees, nipples etc conforming to BS 4346 or equivalent including trenching & refilling etc all complete for following sizes:			
a	Nominal size 1/2	RM	60	0.000015052
b	Nominal size 3/4	RM	358	0.000120366
c	Nominal size 1	RM	366	0.000153649
d	Nominal size 1 1/4	RM	530	0.000267735
e	Nominal size 2	RM	243	0.000163374
f	Nominal size 3	RM	175	0.000147228
2106	Providing and fixing 700mmx500mmx6mm thk mirror from reputed mirror manufacturer. Mirror shall be mounted with glass adjustable revolving CP brackets with CP screws etc all complete.	EACH	48	0.000109731
2107	Providing and fixing 700mmx127mmx6mm thk clear glass with C.P Guard rails and mounted on C.P. brackets etc all complete.	EACH	36	0.000097074
2108	Providing and fixing 25 mm diameter stainless steel towel rails (600mm X 25mm) with CP mounting brackets all complete.	EACH	49	0.000086393
2109	Providing and fixing 20mm dia chromium plated M.S. pipes wall mounted towel rod with C.P. Brackets etc all complete.	EACH	7	0.000010733
2110	Providing and fixing C.P. soap holder mounted with C.P. screws etc all complete.	EACH	33	0.000037513
2111	Providing and fixing stainless steel / C.P. liquid soap dispenser. Dispenser shall be round and easily revolving with removable threaded nozzle and mounted on C.P. brackets etc all complete.	EACH	48	0.000112976

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SCHEDULE:3--SERVICE				
ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
2112	Providing and fixing glazed vitreous wall mounted paper holder with suitable cover cum cutter fitted with CP screws etc. sll complete.	EACH	48	0.000057768
2113	Providing and fixing chromium plated brass shower rose 100 mm dia with 15 or 20 mm inlet dia all complete.	EACH	15	0.000022528
2114	Providing & fixing in position UV resitant glass-fibre reinforced polyethylene water tank conforming to relevant BS or equivalent international code including making all necessary inlet & outlet pipes, fixture, ball cocks, valves, visible outside water level gauge etc all complete as per specification for following capacities . Pipes shall be paid separately under ST No. 2105A.			
a1	500 liters capacity	EACH	19	0.000305543
a	1000 litres capacity	EACH	30	0.00096506
b	2000 litres capacity	EACH	6	0.000347366
c	5000 litres capacity	EACH	2	0.000289463
2115	Providing and fixing approved stainless steel sink with integrated drainboard as per relevant BS code or equivalent international code of size 915x460x178mm with CI brackets, stainless steel chain with rubber plug 40mm, cp brass waste trap with necessary union complete including painting the fittings, cutting and making good the wall where required etc. all complete.	EACH	21	0.000377355
2116	Providing and fixing approved one push button operated hot air hand dryer (with overheating protection) all complete	EACH	38	0.000340508
A2118	Providing and fixing electric operated hand dryer with photo voltaic control.etc all complete as per specification, relevant BS or equivalent international standards and/or as approved by BIFPCL/BHEL.	EACH	6	0.000104128
A2119	Providing and fixing Recessed porcelain soap tray in shower area etc all complete as per specification, relevant BS or equivalent international standards and/or as approved by BIFPCL/BHEL..	EACH	11	0.000028509
	2200 SANITARY WORKS			
	Sanitary work including all labour, material (unless otherwise specified in BOQ/specification), equipment etc. at any level as per relevant laws of Bangladesh, relavant BS Standards or Equivalent International standards approved by BIFPCL/BHEL, specification, drawings and as directed by engineer - in - charge.			
2201	Supply and fixing glazed vitreous china Wash Basin (minimum size 580x450 mm) conforming to relevant BS code or equivalent international code of approved shape with R.S. or C.I. brackets painted white, nominal size 1/2 chromium plated brass hot & cold mixing faucets with nylon washers, chromium plated brass chain with rubber plug, nominal size 1 1/4 chromium plated brass bottle trap and waste of standard pattern, nominal size 1 1/4 dia chromium plated brass trap unions, plastic connection pipe with chromium plated nuts, fittings, cutting and making good the walls where required etc all complete.			
a	White	EACH	54	0.000738709
b	Colored	EACH	69	0.001020594
2201A	Supply and fixing glazed vitreous china Wash Basin (minimum size 580x450 mm) conforming to relevant BS code or equivalent international code of approved shape with R.S. or C.I. brackets painted white, nominal size 1/2 chromium plated brass hot & cold mixing faucets with nylon washers and photo-voltic control system for water control with flow rate less than 2.5 LPM (litres per minute) at 60 psi, chromium plated brass chain with rubber plug, nominal size 1 1/4 chromium plated brass bottle trap and waste of standard pattern, nominal size 1 1/4 dia chromium plated brass trap unions, plastic connection pipe with chromium plated nuts, fittings, cutting and making good the walls where required etc all complete.			
a	White	EACH	11	0.000171779
b	Colored	EACH	9	0.000152029

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SCHEDULE:3--SERVICE				
ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
2202	Providing and fixing approved vitreous china laboratory sink of size 600x400x200mm conforming to relevant BS code or equivalent international code with R.S. or C.I. brackets, chromium plated brass chain with rubber plug nominal size 1 1/2, CP brass waste and nominal size 1 1/2 CP brass trap with necessary union complete including painting the fittings, cutting and making good the wall where required etc. all complete.	EACH	35	0.000292911
2203	Providing and fixing stainless steel kitchen sink of size 610x510x200mm conforming to relevant BS code or equivalent international code including all fittings etc. all complete.	EACH	14	0.000179693
2204	Providing and fixing colour glazed vitreous china European type water closet conforming to relevant BS code or equivalent international code with siphon, open front solid plastic seat and plastic cover, low level 12.5 litre PVC flushing cistern (same colour as WC) with valveless fittings, hand spray with angle valve and hand trigger, 100 cm long hose, toilet roll holders, necessary C.P connections etc all complete.			
a	Floor mounted	EACH	71	0.001865333
b	Wall mounted	EACH	72	0.002053106
2204A	Providing and fixing colour glazed vitreous china European type water closet conforming to relevant BS code or equivalent international code with siphon, open front solid plastic seat and plastic cover, low level PVC flushing cistern (same colour as WC) with valveless fittings, hand spray with angle valve and hand trigger, 100 cm long hose, toilet roll holders, necessary C.P connections etc all complete having Dual Flush Cistern with flow rate of 4/2 LPF (liters per flush).			
a	Floor mounted	EACH	5	0.000149999
b	Wall mounted	EACH	5	0.000162813
2205	Providing and fixing colour glazed vitreous asian squatting (minimum 500x400mm) water closet conforming to relevant BS code or equivalent international code with all fittings including foot rests, low level 12.5 litre PVC flushing cistern with valveless fittings, hand spray with angle valve and hand trigger, 100 cm long hose, toilet roll holders, necessary C.P connections etc all complete.	EACH	79	0.001116123
2205A	Providing and fixing colour glazed vitreous asian squatting (minimum 500x400mm) water closet conforming to relevant BS code or equivalent international code with all fittings including foot rests, low level PVC flushing cistern with valveless fittings, hand spray with angle valve and hand trigger, 100 cm long hose, toilet roll holders, necessary C.P connections etc all complete having Dual Flush Cistern with flow rate of 4/2 LPF (liters per flush).	EACH	8	0.000129053
2206	Providing and fixing colour flat back glazed vitreous china urinals of size 440x265x355 mm with photo voltaic control flushing system as per relevant BS code or equivalent international code with flush pipes, lead pipes, gratings, traps and necessary C.P. fittings etc. all complete.	EACH	43	0.000831695
2206A	Providing and fixing colour flat back glazed vitreous china urinals of size 440x265x355 mm with photo voltaic control flushing system as per relevant BS code or equivalent international code with flush pipes, lead pipes, gratings, traps and necessary C.P. fittings etc. all complete having flow rate of 0.35 LPF (liters per flush) or less	EACH	24	0.000507036
2207	Supply, laying and jointing UPVC pipes conforming to BS EN 13476 or equivalent international code including bends, branches and all other necessary fittings, M.S holder bats/clamps, cutting and making good the walls and floors, jointing, testing etc all complete for following.			
a	75mm dia pipes	RM	208	0.000174997
b	110mm dia pipes	RM	1,735	0.001928822
c	160mm dia pipes	RM	902	0.001261087
d	200mm dia pipes	RM	903	0.001909761
2208A	Providing, laying circular RCC pipes for use in trench construction conforming to BS 5911 or equivalent international code with collars jointed with stiff mixture of cement mortar including testing of joints etc. all complete for following.			
a	225mm dia	RM	2,150	0.006157022

PACKAGE 10V: PILE CAP (EXCEPT PILING), CIVIL FOUNDATION & SUPERSTRUCTURE, ARCHITECTURAL WORKS FOR AUX & BOP BUILDINGS, AC DUCTING, WEIGH BRIDGE AND MISC FINISHING

Tender No: BHEL:MSTPP:AUX:20:09

SCHEDULE:3--SERVICE

ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
b	300mm dia	RM	300	0.001105466
c	450mm dia	RM	100	0.000513945
b	600mm dia	RM	100	0.000750553
e	900mm dia	RM	100	0.001283697
2209	Providing, laying light duty non pressure RCC pipes conforming to BS 5911 (equivalent to NP2 class) with collars jointed with stiff mixture of cement mortar including testing of joints etc all complete for following.			
b	250mm dia	RM	110	0.000311882
2211	Providing and fixing C.I Manhole heavy duty cover of size 600mmx450mm including frame from reputed manufacture etc. all complete.	EACH	92	0.000736883
2212	Providing and fixing circular heavy duty C.I. manhole cover of 600 mm dia with frame etc. all complete.	EACH	71	0.000521962
2213	Providing and fixing square mouth S.W Gully trap grade 'A' complete with CI grating, brick masonry chamber and water tight CI cover with 300x300mm (inside). The weight of cover to be not less than 4.53 Kg and frame to be not less than 2.72 Kg etc all complete for following sizes:			
a	100x100mm P or S Type.	EACH	52	0.000277234
b	150x100mm P or S Type.	EACH	26	0.000147652
c	150x150mm P or S Type.	EACH	72	0.000450241
2215	Providing and fixing C.I. floor traps size 100 mm Inlet and 100 mm Outlet Sand Cast Iron S&S as per relevant BS code or equivalent international code with C.P jalli all complete.	EACH	197	0.000472951
2217	Providing and installing approved brand single tap water cooler of 80 L cooling capacity all complete.	EACH	14	0.001090026
2218	Providing and installing approved brand single tap water cooler of 150 L cooling capacity all complete.	EACH	5	0.000487526
2219	Providing and fixing white/colored vitreous urinal partitions of size 675x325x85mm all complete.	EACH	75	0.000273007
2220	Providing and fixing eye and face drinking water fountain (combined unit with receptacle conforming to relevant BS code or equivalent international code) all complete as per specification.	EACH	7	0.000356486
2221	Supply, laying and jointing HDPE pipes including bends, branches and all other necessary fittings, M.S holder bats/clamps, cutting and making good the walls and floors, jointing, testing etc all complete for following.			
b	110mm dia pipes	RM	8	0.000012783
c	160mm dia pipes	RM	8	0.000026031
2221A	Providing and fixing suitable water meter (Maximum Working Pressure 16 bar; Maximum Liquid Temperature 60°C; Connection Flanges according to ISO, BS 10, American Water works Association (AWWA) or others; Register water consumption in cum) on 50 mm domestic water inlet pipe	EACH	8	0.00014558
2222A	Providing and fixing suitable water meter (Maximum Working Pressure 16 bar; Maximum Liquid Temperature 60°C; Connection Flanges according to ISO, BS 10, American Water works Association (AWWA) or others; Register water consumption in cum) on 150 mm sewer water outlet pipe	EACH	9	0.000321371
A2222	Supply, laying and jointing vitrified clay pipe with leak proof lead joints including bends, branches and all other necessary fittings, approved holder bats/clamps, cutting and making good the walls and floors, jointing, testing etc all complete as per specification, manufacturer's recommendations, relevant BS or equivalent international standards and/or as approved by BIFPCL/BHEL for following.			
a	110mm dia pipes	RM	270	0.00051772
b	160mm dia pipes	RM	350	0.001367125
A2223	Supply, laying and jointing stoneware pipes conforming to IS: 651 including bends, branches and all other necessary fittings, M.S holder bats/clamps, cutting and making good the walls and floors, jointing, testing etc all complete for following.			
a	110mm dia pipes	RM	8	0.000018721
b	160mm dia pipes	RM	8	0.000025001

PACKAGE 10V: PILE CAP (EXCEPT PILING), CIVIL FOUNDATION & SUPERSTRUCTURE, ARCHITECTURAL WORKS FOR AUX & BOP BUILDINGS, AC DUCTING, WEIGH BRIDGE AND MISC FINISHING				
Tender No: BHEL:MSTPP:AUX:20:09				
SCHEDULE:3--SERVICE				
ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
A2225	Providing and fixing energy efficient geyser of 25 liters capacity including fittings etc all complete as per specifications, manufacturer's recommendations, relevant BS or equivalent international standards and and/or as approved by BIFPCL/BHEL..	EACH	1	0.000064795
	2300 STRUCTURAL STEEL			
	Structural steel works including all labour, material (unless otherwise specified in BOQ/specification), equipments, transportation, handling etc. at any level as per relevant laws of Bangladesh, relevant BS Standards or Equivalent International standards approved by BIFPCL/BHEL, specification, drawings and as directed by engineer - in - charge.			
2319	Supply, fabrication and fixing of stainless steel pipe hand railing conforming to SS409 of 32 mm/40 mm dia including transportation, loading/unloading etc. all complete..	MT	1	0.00114708
2319A	Fixing of stainless steel pipe hand railing conforming to SS409 of 32 mm/40 mm dia including transportation, loading/unloading etc. all complete..	MT	1	0.000229413
2320	Supply, fabrication and fixing of GI pipe hand railing of 32 mm/40 mm dia (Medium Grade) including transportation, loading/unloading, painting etc. all complete..	MT	15	0.006592927
2320A	Fixing of GI pipe hand railing of 32 mm/40 mm dia (Medium Grade) including transportation, loading/unloading, painting etc. all complete..	MT	7	0.000717296
	MISCELLANEOUS			
2500	PILING WORK: Piling works including all labour, material (unless otherwise specified in BOQ/contract specification), equipment etc. as per specification, drawings and as directed by engineer - in - charge.			
2516	Design, supplying, installing of sheet pile for earth protection around foundation as per accepted scheme including material, labour, equipment, consumable etc. all complete complying all safety norms and removal of sheet pile after completion of foundation work. this item to be executed after approval of execution scheme by BHEL Engineer. [mode of measurement : Area shall be calculated on the basis of exposed sheet pile area above founding level inside excavated pit]. Payment shall be made 70% after installation and 30% after removal of sheet pile.	SQM	600	0.014252826
	FOR AIR CONDITIONING & VENTILATION SYSTEM			
3011	GSS zinc coating 275 GSM ducting complete with hangers/ supports etc. (Supply,febrication,erection and completion in all respect)			
a	18 G	SQM	230	0.000976949
b	20 G	SQM	230	0.000866496
c	22 G	SQM	81	0.000261075
d	24 G	SQM	144	0.00042801
e	26 G	SQM	450	0.001203036
3013	Thermal insulation & Cladding (Supply,febrication,erection and completion in all respect)			
a	Thermal insulation as per specification	SQM	840	0.001042902
b	Cladding for insulation as per specification	SQM	64	0.00007012
	ADDITIONAL ITEMS (OTHER MISCELLANEOUS ITEMS)			
B101	Earth work in excavation in all types of soil including ash which can be excavated by any means including setting out, levelling, dewatering (but excluding special type of dewatering viz. well point method), shoring & strutting (wherever required), dressing the sides & bottom, all lifts, ramming/compacting the excavated bottom, stacking, disposal of surplus excavated materials within a lead upto 1 km, spreading/levelling of disposed materials etc all complete for following depths below ground level. [This item is applicable for all type of excavtion by using of steel sheet pile. payment for sheet pile shall be paid as per item number 2516]			

PACKAGE 10V: PILE CAP (EXCEPT PILING), CIVIL FOUNDATION & SUPERSTRUCTURE, ARCHITECTURAL WORKS FOR AUX & BOP BUILDINGS, AC DUCTING, WEIGH BRIDGE AND MISC FINISHING				
Tender No: BHEL:MSTPP:AUX:20:09				
SCHEDULE:3--SERVICE				
ST. NO	DESCRIPTION OF ITEM	UNIT	QUANTITY	WEIGHTAGE (Nearest to the 9 decimal points) W.R.T THE TOTAL value
a	Depth from ground level but not exceeding 2 m	CUM	3990	0.000807088
b	Depth exceeding 2 m but not exceeding 4 m	CUM	3990	0.001008663
c	Depth exceeding 4 m but not exceeding 6 m	CUM	3116	0.000982472
d	Depth exceeding 6 m but not exceeding 8 m	CUM	1000	0.000394147
e	Depth exceeding 8 m but not exceeding 10 m	CUM	1000	0.000472977
f	Depth exceeding 10 m but not exceeding 15m	CUM	1,000	0.00054501
M-01	Removal of mud, silt , debris, sand, etc. deposits from existing CW Pump sump, CW duct channel, pockets, etc. including all labours, pumps, tools and tackles, scaffolding, etc all complete as per direction of engineer in charge.	CUM	150	0.000133534
M-04	Providing and Fixing Hot Dip Galvanised MS Cage Ladder in concrete wall / brick wall including fasteners, all materials, labour complete	MT	3	0.00116897
M-05	Providing and Fixing MS Cage Ladder in concrete wall / brick wall including fasteners, all materials, labour complete	MT	3	0.000607832
M-06	Fixing of GRP pipe in concrete / brickwork including scaffolding, setting out, alignment, labour, etc. all complete including receiving and transporting material from BHEL / vendor's store	Quintal	15	0.000251195
M-07	Fixing of Mild steel foundation bolt assembly conforming to relevant BS or equivalent international code in concrete at elevation above 5 m from finish floor level along with nuts, lock nuts (as per relevant BS or equivalent international code), washers, anchor plates, stiffner plates, protective tape, pipe sleeves, templates, including staging / scaffolding (including rigid platform for bolt fixing), alignment, labour.. etc all complete including receiving and shifting materials from BHEL Store, etc. [Foundation bolt matetials shall be supplied by BHEL free of cost]	MT	5	0.000218155
	TOTAL WEIGHTAGE			0.948981627