

SL.NO	DESCRIPTION OF WORK	QTY	UNIT	RATE	AMOUNT
<b>RATE SCHEDULE, SECTION - A</b>					
<b>NAME OF THE WORK: CIVIL WORKS FOR SITE OFFICE (10Mx40Mx3.20M-1No + BARANDAS 1x40M HEIGHT 2.5 TO 3M) AT NTPC KORBA STPS 1x500MW.</b>					
1(A)	EARTH WORK EXCAVATION UPTO 0 TO 2 M DEPTH IN ALL KINDS OF SOIL (EXCEPT HARD ROCK AND SOFT ROCK) FOR FOUNDATION COLUMNS, SEPTIC TANK, SOAK PIT, RAMPS ETC., SPREADING THE EARTH UNIFORMLY AROUND THE OFFICE /STORE COMPLEX AREA AS WELL AS OPEN STORAGE YARD FOR SITE DEVELOPMENT WITHIN THE PROJECT BOUNDARY AS DIRECTED BY BHEL ENGINEER AND INCLUDING DISPOSAL OF SURPLUS EARTH (IF ANY) INCLUDING DEWATERING WITH ALL T&P, LABOURS, MATERIALS ETC. COMPLETE.	500	M3		
1(B)	EARTH WORK EXCAVATION UPTO 0 TO 2 M DEPTH IN ALL KINDS OF SOIL INCLUDING HARD ROCK AND SOFT ROCK (MANUALLY OR MECHANICALLY WITHOUT BLASTING) FOR FOUNDATION COLUMNS, SEPTIC TANK, SOAK PIT, RAMPS ETC., SPREADING THE EARTH UNIFORMLY AROUND THE OFFICE /STORE COMPLEX AREA AS WELL AS OPEN STORAGE YARD FOR SITE DEVELOPMENT WITHIN THE PROJECT BOUNDARY AS DIRECTED BY BHEL ENGINEER AND INCLUDING DISPOSAL OF SURPLUS EARTH (IF ANY) INCLUDING DEWATERING WITH ALL T&P, LABOURS, MATERIALS ETC. COMPLETE.	25	M3		
1(C)	EXCAVATION IN ALL KINDS OF SOIL INCLUDING. SOFT & HARD ROCK (MANUALLY OR MECHANICALLY WITHOUT BLASTING) UPTO 2 TO 4M DEPTH FOR FOUNDATIONS RAFT & COLUMNS ETC. COMPLETE INCLUDING DISPOSAL OF SURPLUS EARTH (IF ANY) INCLUDING DEWATERING WITH ALL T&P, LABOURS, MATERIALS ETC. COMPLETE.	3	M3		
2(A)	BACK FILLING THE FOUNDATION AND PLINTH WITH EXCAVATED SOILS IN LAYERS NOT EXCEEDING 15 CM THICKNESS INCLUDING WATERING AND CONSOLIDATING ETC. COMPLETE AS PER STANDARD SPECIFICATION AND AS INSTRUCTED BY BHEL ENGINEER.	350	M3		
2(B)	PROVIDING & FILLING IN SOAK PIT WITH BRICK BATS 40-80MM INCLUDING PACKING ETC. COMPLETE,AS PER STANDARD SPECIFICATION AND AS INSTRUCTED BY BHEL ENGINEER.	32	M3		
2(C)	BACK FILLING THE FOUNDATION AND PLINTH WITH RIVER SAND IN LAYERS NOT EXCEEDING 15 CM THICKNESS INCLUDING WATERING AND CONSOLIDATING ETC. COMPLETE AS PER STANDARD SPECIFICATION AND AS INSTRUCTED BY BHEL ENGINEER.	100	M3		
3	PROVIDING AND LAYING OF PLAIN CEMENT CONCRETE OF MIX 1:4:8 USING 40MM & DOWN SIZE HARD BROKEN GRANITE STONE JELLY FOR FOUNDATION, FLOORING, ETC. INCLUDING SHUTTERING, CURING, CONSOLIDATION ETC. COMPLETE AS PER STANDARD SPECIFICATIONS AND AS DIRECTED BY BHEL ENGINEER.	80	M3		
4	PROVIDING AND LAYING RCC OF MIX 1:2:4 USING 20MM DOWN SIZE HARD BROKEN GRANITE STONE AGGREGATE INCLUDING MECHANICAL MIXING, VIBRATION, CURING, FORM WORK AND CENTERING AS PER DRAWING AND SPECIFICATION AND AS DIRECTED BY BHEL ENGINEER BUT EXCLUDING COST OF REINFORCEMENTS FOR FLOORING.	130	M3		

BHEL:PS-WR  
TS NO: BHE/PW/PUR/KNT-ENB/475  
PRICE BID,PART-II, VOLUME-II

SL.NO	DESCRIPTION OF WORK	QTY	UNIT	RATE	AMOUNT
5	PROVIDING DPC WITH CC 1:2:4 50MM THICK INCLUDING BITUMEN COATING AS PER STANDARD PRACTICE AND SPECIFICATIONS.	50	M2		
6	PROVIDING AND FIXING REINFORCEMENT INCLUDING CUTTING, BENDING AND FABRICATION OF REINFORCEMENT USING HIGH TENSILE TOR STEEL AS PER DRAWING AND SPECIFICATION AND AS DIRECTED BY BHEL ENGINEER INCLUDING COST OF ALL LEADS, LIFT AND MATERIALS, LABOUR AND MS BINDING WIRE 18/20 GAUGE ETC. COMPLETE.	7	MT		
7(A)	PROVIDING BURNT CLAY BRICK WORK IN CM 1:6 (1 CEMENT & 6 COARSE SAND) USING LOCALLY AVAILABLE BRICKS AS PER DRAWING FOR FOUNDATION, WALL, SEPTIC TANK ETC. INCLUDING COST OF ALL MATERIALS, LABOUR, SCAFFOLDING, CURING ETC. COMPLETE AND AS DIRECTED BY ENGINEER AT ALL ELEVATIONS AND LEVELS INCLUDING RAKING OUT JOINTS, CURING ETC. COMPLETE EXCLUDING PLASTERING & PAINTING.	100	M3		
7(B)	PROVIDING FLY ASH BRICK WORK IN CM 1:6 (1 CEMENT & 6 COARSE SAND) USING LOCALLY AVAILABLE BRICKS AS PER DRAWING FOR FOUNDATION, WALL, SEPTIC TANK ETC. INCLUDING COST OF ALL MATERIALS, LABOUR, SCAFFOLDING, CURING ETC. COMPLETE AND AS DIRECTED BY ENGINEER AT ALL ELEVATIONS AND LEVELS INCLUDING RAKING OUT JOINTS, CURING ETC. COMPLETE EXCLUDING PLASTERING & PAINTING.	100	M3		
8	PROVIDING HALF BRICK WORK PARTITION WALL IN CM 1:4 AND PLASTERING IN C.M. 1:6 12mm THK ON BOTH FACES INCLUDING COST OF ALL MATERIALS, LABOUR, SCAFFOLDING, CURING AS PER DRAWING AND AS DIRECTED BY BHEL ENGINEER	150	M2		
9 (A)	DESIGN, MANUFACTURE, SUPPLY AND ERECTION OF TUBULAR/STRUCTURAL/COMPOSITE TRUSSES, PURLINS SPACED GENERALLY @ 1.4 M CENTRE TO CENTRE TO SUPPORT ROOFING WITH AC SHEETS AND WIND TIES TO BE PROVIDED ABOVE SHEETS AND PROVIDING AND FIXING BASE PLATES WITH HOLDING DOWN BOLTS ON RCC COLUMNS, GUSSETS, RIBS, PINS, SPLICES ETC. AS REQUIRED INCLUDING TRANSPORT, LOADING, UNLOADING CHARGES FROM FABRICATION SHOP TO SITE ETC. COMPLETE. DRAWING ATTACHED WITH TENDER IS INDICATIVE ONLY & DESIGN HAS TO BE OBTAINED FOR TRUSS BEFORE FABRICATION, DULY APPROVED BY BHEL. RATE IS INCLUDING ALL STEEL SECTIONS, FIXING IN POSITION, LABOUR CHARGES AND COST OF RED OXIDE PRIMER AT FACTORY AND TWO COATS OF SYNTHETIC ENAMEL PAINTS (OVER PRIMER COAT OF RED OXIDE) OF APPROVED COLOUR AND QUALITY AT SITE.	12	MT		
9(B)	...DO.. STRUCTURAL STEEL STAGING FOR ERECTION OF PVC O.H.WATER TANK CAP. 1000 LITRES	1.2	MT		
10	PROVIDING AND FIXING 6/7MM THICK AC CORRUGATED SHEETS WITH RIDGE CAPS FOR ROOFING INCLUDING GALVANISED IRON J OR L HOOK BOLTS, GI IRON AND BITUMINOUS WASHERS, GI CRAMP BOLTS, NUTS ETC. COMPLETE, ALL AS PER LATEST IS 459, 3307 AND 730.	650	M2		

BHEL:PS-WR  
TS NO: BHE/PW/PUR/KNT-ENB/475  
PRICE BID,PART-II, VOLUME-II

SL.NO	DESCRIPTION OF WORK	QTY	UNIT	RATE	AMOUNT
11	A) PROVIDING AND FIXING FALSE CEILING WITH 4MM THICK AC PLAIN SHEETS OF APPROVED QUALITY AND DESIGN OF SIZE 600x600 MM PANELS WITH SQUARE EDGES SUPPORTED BY ANODISED ALUMINIUM FRAMES OF TEES 35x23.5x1.5 MM THICK AS MAIN MEMBER AND 19x23.5x1.5 MM TEES AS CROSS SUPPORTING MEMBERS AND WALL ANGLES OF 23.5x23.5x1.5MM. THE MAIN RUNNERS SHALL BE SUSPENDED FROM ROOF AT 1200 MM CENTRE TO CENTRE BY MEANS OF MS RODS WITH GI 'J' THREADED HOOK FOR ADJUSTMENTS. THE CROSS RUNNERS SHALL BE FIXED TO MAIN RUNNER TO FORM A GRID PATTERN OF 600x600MM AND PROVIDING 25 MM WIDE ALUMINIUM STRIP TEES OR MOULDED SECTIONS AT ALL JOINTS. THE RATE SHALL BE INCLUSIVE OF THREE COATS OF WHITE WASHING ON AC PLAIN SHEETS ETC. COMPLETE.	600	M2		
12(A)	MANUFACTURING, SUPPLY AND FIXING OF BEST QUALITY COUNTRY WOOD DOORS COMPRISING OF FRAME 95 X 70MM AND 38/40MM THICK FLUSH SHUTTERS OF SOLID CORE TYPE USING COMMERCIAL PLY INCLUDING HOLD FASTS, WIND APPLIANCES, HANDLES, TOWER BOLTS AND ALDROPS, MORTISE OR SUITABLE LOCKS ETC. AS PER THE STANDARD PRACTICE AND APPLYING TWO COATS OF SYNTHETIC ENAMEL PAINT OF APPROVED SHADE OVER A COAT OF PRIMER AS DIRECTED BY BHEL ENGINEER.	20	M2		
12(B)	SUPPLYING,ERECTING, ASSEMBLING BEST QUALITY PVC PANELLED DOORS OF SINTEX MAKE OR APPROVED EQUIVALENT FOR TOILETS INCLUDING ALL FITTINGS AND FIXTURES ETC. ALL COMPLETE AS PER DRAWINGS AND SPECIFICATIONS.	15	M2		
13	MANUFACTURE, SUPPLY AND FIXING IN POSITION OF STEEL WINDOWS AND VENTILATORS INCLUDING FRAMES & IRON BARRED (GUARD BAR OF SQUARE SECTION @ 100 MM C/C) AND GLAZED WITH 4MM PLAIN GLASS AS PER STANDARD SPECIFICATIONS, RELEVANT IS CODE AND INSTRUCTIONS OF BHEL ENGINEER. THE COST SHALL BE INCLUSIVE OF ALL ACCESSORIES FITTINGS, HOLD FASTS, PAINTING TWO COATS OF SYNTHETIC ENAMEL PAINT OF APPROVED COLOUR AND QUALITY OVER ONE COAT OF RED OXIDE PRIMER ETC. COMPLETE.				
13(A)	i) STEEL WINDOWS	55	M2		
13(B)	ii) STEEL LAUVERED VENTILATORS :-	6	M2		
14 (A)	PROVIDING & FIXING PARTITION OF PRELAMINATED PARTICLE BOARD 12MM THICK WITH ANODISED ALLUMINIUM FRAMES, BIDDING ETC. COMPLETE UP TO A HEIGHT OF 900MM FROM FINISHED FLOOR LEVEL (I.E. BELOW ALLUMINIUM GLAZED PARTION)	80	M2		
14(B)	PROVIDING & FIXING ANODISED ALLUMINIUM GLAZED PARTITION WITH HOLLOW EXTRUDED SECTION OF MIN. 3MM THICKNESS AS MANUFACTURED BY INDAL OR EQUIVALENT WITH MATCHING SINGLE DOOR SHUTTERS & FLOOR MOUNTED HYDRAULIC DOOR CLOSER (1 NO.) INCLUDING GLAZING OF 5.5MM THICK FLAT TRANSPERANT SHEET GLASS, BIDDING, CONCEALED SCREWS, HOLDFFAST ETC.COMPLETE	45	M2		

BHEL:PS-WR  
TS NO: BHE/PW/PUR/KNT-ENB/475  
PRICE BID,PART-II, VOLUME-II

SL.NO	DESCRIPTION OF WORK	QTY	UNIT	RATE	AMOUNT
15 (A)	PROVIDING AND FIXING IPS FLOORING 25MM THICK WITH CEMENT CONCRETE 1:2:4 AS PER STANDARD PRACTICE IN PANELS OF SIZE NOT EXCEEDING 2.0x2.0 M SQ. BY PROVIDING, FIXING GLASS STRIPS.	400	M2		
15 (B)	PROVIDING AND FIXING PVC FLOORING INCLUDING PREPARATION, FIXING TILE FINISHING ETC., ALL COMPLETE AS PER APPROVED MANUFACTURER'S SPECIFICATION.	50	M2		
15 (C)	PROVIDING 3MM THICK NEAT CEMENT FINISH OVER CONCRETE BASE FOR FLOORING PAVING ETC.	100	M2		
15 (D)	SUPPLYING AND FIXING WHITE GLAZED TILES OF SIZES 300X300X5MM FOR FLOORING AND 150X300X5 FOR DADO UP TO 2.1 M ELEVATIONS INCLUDING PEREPARATION OF BASE LAYING UNDERBED, FINISHING AND ROUNDING CORNERS AND JUNCTIONS, CURING ETC. COMPLETECAS PER DRAWINGS AND SPECIFICATIONS.	75	M2		
16.A	PROVIDING AND PLASTERING WITH CEMENT MORTAR 1:6 OVER BOTH INTERNAL AND EXTERNAL FACES OF BRICKWORK AND CONCRETE SURFACES, PARTITION WALLS ETC. OF ALL HEIGHTS INCLUDING PREPARING THE SURFACE, RAKING JOINTS, SCAFFOLDING, CURING, COST OF ALL MATERIALS, LABOUR ETC. COMPLETE.				
16.B	(i) EXTERNAL PLASTER 18MM THICK	500	M2		
16.C	(ii) INTERNAL PLASTER 12MM THICK	500	M2		
17 (A)	PROVIDING WHITE OR COLOUR WASH THREE COATS ON NEWLY PLASTERED SURFACE USING BEST SHELL LIME TO GIVE AN EVEN SHADE INCLUDING CLEANING AND BRUSHING OF WALLS AND PREPARING SURFACE IN ACCORDANCE WITH STANDARD SPECIFICATION. RATE TO INCLUDE COST OF ALL MATERIALS INCLUDING COLOURING AGENT, APPROVED ADDESSIVE, SCAFFOLDING, BRUSH ETC. COMPLETE.	500	M2		
17 (B)	PAINTING THREE COATS OF CEMENT PAINT ( SUPER SNOW CEM) OF APPROVED QUALITY AND SHADE ON NEWLY PLASTERED SURFACE TO GIVE AN EVEN SHADE INCLUDING CLEANING, PREPARING THE SURFACE AND CURING, SCAFFOLDING ETC. COMPLETE. RATE TO INCLUDE COST OF ALL MATERIALS, LABOUR, CONSUMABLES ETC. COMPLETE	500	M2		
17 (C)	PROVIDING & APPLYING TO INTERIOR SURFACES TWO OR THREE COATS OF OIL BOUND DISTEMPER OF APPROVED SHADE & MAKE CONFIRMING TO IS : 428 TO OBTAIN A EVEN FINISH AND UNIFORM COLOR OVER A COAT OF PRIMER AS PER MANUFACTURE RECOMMENDATION INCLUDING COST OF PAINT, SURFACE PREPARATION WITH POP (Plaster of Paris), SCAFFOLDING ETC, COMPLETE .	1000	M2		
18	PROVIDING AND FIXING HYDRAULIC DOOR CLOSER (HEAVY DUTY) OF APPROVED BRAND AND AS DIRECTED BY BHEL ENGINEER.	10	NO.		

BHEL:PS-WR  
TS NO: BHE/PW/PUR/KNT-ENB/475  
PRICE BID,PART-II, VOLUME-II

SL.NO	DESCRIPTION OF WORK	QTY	UNIT	RATE	AMOUNT
19	SUPPLYING AND FIXING IN POSITION OF WHITE GLAZED VITREOUS CHINA WASH BASIN OF SIZE 550 X 400 MM OF APPROVED MAKE AND QUALITY WITH CI BRACKETS PAINTED WITH TWO COATS OF SYNTHETIC ENAMEL PAINT, SINGLE 15MM CP BRASS PILLAR TAP AND CP BRASS CHAIN WITH RUBBER PLUG, 32MM CP BRASS WASTE COUPLING OF STANDARD PATTERN, 32MM DIA MI OR CP BRASS TRAP AND UNIONS 32MM DIA PVC WASTE PIPE COMPLETE INCLUDING CUTTING AND MAKING GOOD THE WALLS WHEREVER REQUIRED. RATE TO INCLUDE COST OF ALL MATERIALS, LABOUR FOR CARRYING, LAYING AND FIXING AND ALL OTHER INCIDENTAL CHARGES ETC. COMPLETE.	6	NO		
20(A)	SUPPLYING AT SITE OF WORK, CARRYING, LAYING JOINTING AND FIXING IN POSITION OF INDIAN TYPE WHITE GLAZED VITREOUS CHINA WATER CLOSET PAN OF SIZE 580MM OF APPROVED MAKE AND QUALITY (PARRYWARE OR EQUIVALENT) WITH SUITABLE P OR S TRAP, WHITE GLAZED FOOT RESTS. SEPARATE FLUSHING CISTERN ARE NOT REQUIRED. SUITABLE FLUSHING DEVICE TO BE MADE THROUGH 50 DIA GI PIPING WITH CONTROL VALVES DIRECTLY CONNECTED TO OVERHEAD TANK AS PER THE INSTRUCTION OF ENGINEER-INCHARGE, CUTTING THE WALL AND FLOOR WHEREVER REQUIRED AND MAKING GOOD ALL DAMAGES AND FINISHING TO MATCH THE EXISTING WORK, COST OF JOINTING MATERIALS, ALL OTHER INCIDENTAL CHARGES ETC. COMPLETE.SUPPLYING AND FIXING OF PIPES AND VALVES SHALL BE PAID UNDER THE RESPECTIVE ITEM OF PLUMBING WORK.	3	NO		
20(B)	EUROPEAN TYPE TYPE WATER CLOSET CONFORMING TO IS:2556 WITH WHITE GLAZED STONE WARE BASIN WITH PLASTIC SEATS & COVER AND LOW LEVEL PVC CISTERN OF 15 LITRE DISCHARGE CAPACITY INCLUDING VALVELESS FITTINGS, FLUSH BENDS, SUPPLY CONNECTIONS, SYPHON , INTEGRAL 'S' OR 'P' TRAP ETC. ALL COMPLETE.	2	NO		
21	SUPPLYING AT SITE OF WORK, CARRYING, LAYING JOINTING AND FIXING IN POSITION OF WHITE GLAZED EARTHENWARE FLAT BACK/CORNER TYPE LIPPED FRONT URINALS OF 430MM X 260MM X 350MM / 340X460X265 MMOF APPROVED MAKE AND QUALITY WITH AUTOMATIC FLUSHINGCISTERN WITH CI/MS BRACKETS, STANDARD SIZE GI FLUSH PIPE AND SPREADERS WITH BRASS UNIONS, GICLAMPS (INCLUDING PAINTING OF CISTERNS), TEAKWOOD PLUGS AND SCREWS, INCLUDING SUPPLYING AND FIXING A PAIR OF WHITE GLAZED EARTHENWARE FOOT RESTS FOR EACH URINAL, CUTTING OF FLOORS AND WALLS AND MAKING GOOD OF ALL DAMAGES AND FINISHING TO MATCH THE EXISTING WORK ETC. COMPLETE. RATE QUOTED SHALL INCLUDE COST OF ALL MATERIALS AND LABOUR FOR CARRYING, LAYING AND FIXING AND ALL OTHER INCIDENTAL CHARGES ETC. COMPLETE.				
	A) URINAL BASIN WITH 5 LITRES CI AUTOMATIC FLUSHING CISTERN IN STORE CUM OFFICE SHED.	7	NO		

BHEL:PS-WR  
TS NO: BHE/PW/PUR/KNT-ENB/475  
PRICE BID,PART-II, VOLUME-II

SL.NO	DESCRIPTION OF WORK	QTY	UNIT	RATE	AMOUNT
22	SUPPLYING AT SITE OF WORK AND FIXING IN POSITION OF HIGH CLASS BELGIUM OR SUPERIOR MAKE BEVELLED EDGE MIRROR OF SIZE 600MM X 450MM X 6MM MOUNTED ON 6MM THICK PLYWOOD OR PLASTIC FOLDER SHEET. RATE TO INCLUDE COST OF ALL MATERIALS, LABOUR FOR FIXING THE WOODEN PLUGS WITH CP BRASS SCREWS AND WASHERS ETC. COMPLETE.	4	NO		
23	SUPPLYING AT SITE OF WORK AND FIXING IN POSITION ,THE FOLLOWING SIZES OF GUN METAL WHEEL VALVES AS PER STANDARD SPECIFICATION (LEADER MAKE OR EQUIVALENT).				
	A) 15 MM NOMINAL SIZE GM WHEEL VALVE	15	NO		
24 (A)	SUPPLYING AT SITE OF WORK AND FIXING IN POSITION 15MM NOMINAL SIZE SCREW DOWN TYPE CHROMIUM PLATES BRASS BIB COCKS OF APPROVED MAKE AND QUALITY (LEADER MAKE OR EQUIVALENT) AS PER STANDARD SPECIFICATION.	6	NO		
24 (B)	SUPPLYING AT SITE OF WORK AND FIXING IN POSITION 25MM DIA GATE VALVE	4	NO		
24 (C )	SUPPLYING AT SITE OF WORK AND FIXING IN POSITION 40MM DIA GATE VALVE	2	NO		
25	SUPPLYING AT SITE OF WORK AND FIXING IN POSITION OF 15MM NOMINAL SIZE CP BRASS STOP COCK OF APPROVED MAKE AND QUALITY (LEADER OR DRIPLESS MAKE) AS PER STANDARD SPECIFICATIONS. RATE TO INCLUDE COST OF JOINTING MATERIALS, COST OF STOP COCK, LABOUR FOR CARRYING AND FIXING ETC. COMPLETE.	4	NO		
26	SUPPLYING AT SITE OF WORK AND FIXING 100MM X 50MM HCI "NAHANI" TRAP WITH HCI GRATINGS AS PER STANDARD SPECIFICATIONS. RATE TO BE ALL INCLUSIVE.	4	NO		
27	SUPPLYING AT SITE OF WORK AND FIXING 150MM STONE WARE GULLY TRAP WITH HCI GRATINGS AND CI COVER OF SIZE 300X300 MM OF APPROVED MAKE (WEIGHT 300MM X 300 MM OF APPROVED MAKE (WEIGHT NOT LESS THAN 2 KG) AND QUALITY AS PER STANDARD SPECIFICATIONS. RATE TO BE ALL INCLUSIVE.	4	NO		
28	SUPPLYING AT SITE OF WORK, TRENCHING, CARRYING TO TRENCHES AND LOWERING INTO TRENCHES AND ON WALLS, FLOORS ETC., LAYING TO PROPER ALIGNMENT, GRADE, LEVEL AND JOINTING WITH ALL NECESSARY SPECIALS, TEES, ELBOWS,UNIONS AND APPURTENANCES AND INCLUDING PRESSURE TESTING OF THE FOLLOWING SIZES OF GI PIPE LINES INCLUDING REFILLING OF TRENCHES WITH EXCAVATED EARTH IN LAYERS, WATERING AND RAMMING AND RESTORATION OF GROUND, ALL COMPLETE AS PER SPECIFICATIONS. RATE TO INCLUDE EARTH WORK EXCAVATION IN ALL SOILS, EXCEPT HARD ROCK REQUIRING BLASTING , SHORING, BALLING OR PUMPING OUT OF WATER WHEREVER REQUIRED, REMOVAL OF SLUSH ETC. REMOVING AND DEPOSITING SURPLUS EARTH AS DIRECTED BY THE BHEL ENGINEER INCLUDING ALL LEADS AND LIFTS AS PER SITE CONDITIONS.				

BHEL:PS-WR  
TS NO: BHE/PW/PUR/KNT-ENB/475  
PRICE BID,PART-II, VOLUME-II

SL.NO	DESCRIPTION OF WORK	QTY	UNIT	RATE	AMOUNT
28.A	40MM DIA GI PIPE LINE WITH ALL SPECIALS	40	RM		
28.B	25MM DIA GI PIPE LINE WITH ALL SPECIALS	100	RM		
28.C	15MM DIA GI PIPE LINE WITH ALL SPECIALS	100	RM		
29	SUPPLYING AT SITE OF WORK, CARRYING AND LOWERING INTO TRENCHES, LAYING TO PROPER ALIGNMENT, LEVEL AND GRADE, JOINTING WITH CM (1:1) AND TESTING OF JOINTS ETC. OF THE FOLLOWING SIZE OF SALT GLAZED STONEWARE PIPE INCLUSIVE OF ALL NECESSARY SPECIALS TARRED HEMP YARN AND ALL JOINTING MATERIALS COMPLETE AS PER STANDARD SPECIFICATIONS INCLUDING ALL LEAD AND LIFT AS PER SITE CONDITIONS. (RATE QUOTED SHALL INCLUDE COST OF ALL MATERIALS, LABOUR CHARGES AND INCIDENTAL CHARGES ETC. COMPLETE).				
	A) (100MM) DIA STONEWARE PIPELINE INCLUDING ALL SPECIALS COMPLETE.	100	RM		
30	SUPPLY AND FIXING IN POSITION PVC WATER OVERHEAD TANK OF SYNTEX OR ANY APPROVED MAKE OF 1000LITRE CAPACITY WITH PROVISION FOR OVERFLOW ARRANGEMENT VALVES, INLET AND OUTLET ETC. COMPLETE. SUPPORTING STRUCTURE FOR FIXING THE TANK WILL BE AS PER ITEM RATE GIVEN SEPARATELY.	3	NO		
31	CONSTRUCTION OF BRICK CHAMBER OF THE FOLLOWING DIMENSIONS (INNER DIMENSION) WITH CEMENT PLASTER INSIDE WITH NEAT CEMENT FINISH & TOP WITH CI – COVER FOR CONNECTING THE SEWER LINES. RATE SHALL BE INCLUSIVE OF ALL EXCAVATION, FILLING, PCC, B/K WORK , PLASTER, COVERS ETC. COMPLETE.				
31.A	450X450X450 WITH C.I COVER	4	NO		
31.B	B) –DO- 600X600X600 WITH C.I. COVER	3	NO		
32.A	I) PROVIDING AND FIXING ANODISED ALUMINIUM (1M LONG) TOWEL RODS OF GOOD QUALITY IN TOILET BLOCKS & PANTRY	6	NO.		
32.B	II) PROVIDING & FIXING LIQUID SOAP DISPENSER AT ALL THE WASH BASIN LOCATION	6	NO.		
33	PROVIDING & FIXING WOODEN FRAME OF BEST COUNTRY WOOD (2.5"x3.0") FOR INSTALLING PORTABLE 2-T AIR CONDITIONAR ON THE WALL OPENING (31"x22"), SO AS TO MAKE A FRAME OF INSIDE CLEAR DIMENSION 26"x17" WITH COMPLETE FINISHING PAINTING, HOLD FAST ETC.	7	NOS.		
34	PROVIDING & FIXING IN POSITION AC VENT PIPE OF DIA. 100MM (HT. 3M ) IN SEPTIC TANK	9	RM		

BHEL:PS-WR  
TS NO: BHE/PW/PUR/KNT-ENB/475  
PRICE BID,PART-II, VOLUME-II

SL.NO	DESCRIPTION OF WORK	QTY	UNIT	RATE	AMOUNT
35	PROVIDING & FIXING 75 THK. RCC PRECAST COVER ( 600X600) WITH 1:2:4 CONCRETE FOR MAN HOLE CHAMBER OF SEPTIC TANK & OVER THE SOAK PIT INCLUDING ALL MATERIALS, CURING, LIFTING HOOKS, LABOUR ETC. COMPLETE	6	Nos.		
36	PROVIDING AND FIXING METALLIC DECORATIVE TYPE HEAVY DUTY PELMET FOR DOORS AND WINDOWS AS APPROVED BY BHEL ENGINEER.	38	EACH		
37	PROVIDING AND FIXING OF 2 NOS. WATER PURIFIER AQUA-GUARD OR EQUIVALENT, ALONG WITH ALL FITTINGS	2	NOS.		
38	PROVIDING AND FIXING OF 1 NO. 18"X24" SIZE STAINLESS STEEL SINK WITH ALL FITTINGS LIKE DRAIN PIPE, STOP VALVE ETC.	1	NO.		
	<b>TOTAL VALUE OF SECTION-A IN Rs.</b>				

SL.NO	DESCRIPTION OF WORK	QTY	UNIT	RATE	AMOUNT
<b>RATE SCHEDULE, SECTION - B</b>					
<b><i>NAME OF THE WORK : INTERNAL ELECTRIFICATION WORK OF BHEL SITE OFFICE&amp; SECURITY CABIN AT NTPC KORBA STPS 1x500MW</i></b>					
SL.NO.	DESCRIPTION OF WORK	QTY.	UNIT	RATE	AMOUNT
1	<p>SUPPLYING &amp; INSTALLING 3 PHASE METER AND POWER DISTRIBUTION BOARD COMPLETE WITH :</p> <p>(1) INCOMING MCB TPN 100 AMPS -1NO.  (2) OUTGOING DP RCCBS ,63 AMPS.30 MA -3NOS.  (3) DP RCCB 25/20 AMPS ,30MA -9NOS  (4) OUTGING DP MCB , 6AMPS, - 20 NOS,  (5) OUTGOING SP MCB , 6AMPS, -12 NOS  (6) ENERGMETER CT OPERATED -1NO.  (7) VOLTMETER WITH SELECTOR SWITCH -1NO  (8) AMMETER WITH SELECTOR SWITCH - 1NO</p> <p>.ALL RCCBS, MCBS SHALL BE MDS/INDO KOPP MAKE 3 PHASE ELECTRONIC ENERGY METER - BHEL / L&amp;T / GEC MAKE AMMETER, VOLTMETER, SELECTOR SWITCHES FOR BOTH - AE / KAYCEE MAKE PHASE INDICATION LAMPS, PROVISION FOR DOUBLY EARTHING THE PANEL ENCLOSURE. PANEL ENCLOSURE SHALL BE MADE OF SHEET METAL THICHNNESS NOT LESS THAN 1.6 MM AND SUITABLE FOR OUT DOOR INSTALLATION, MODULAR CONSTRUCTION PREFERABLY IN 2 MODULES (1 FOR ENERGY METER &amp; 1 FOR DISTRIBUTION), HINGED DOOR WITH LOCKING ARRANGEMENT, BASE FRAME, SHOULD HAVE SLOPPED CANOPY, DULY PAINTED WITH FIRST COAT OF PRIMER AND TWO COATS OF SYNTHETIC ENAMEL PAINT (INTERIOR WITH WHITE PAINT AND EXTERIOR WITH LIGHT GREY AS PER SHADE 5, IS 630) INTERNAL POWER</p> <p>DISTRIBUTION SHALL BE WITH AL BUSBARS OR COPPER FLEXIBLE SINGLE CORE PVC CABLES OF 1.1 KV GRADE, CONTROL WIRING WITH 1.5 SQMM, SUITABLE STOOL MADE OUT OF MS STRUCTURE OF 1.2 METER HIGH FOR MOUNTING OF PANEL WITH ANCHORING ARRAGEMENT AT FOUNDATION, SUITABLE FOR BOTTOM ENTRY OF CABLES</p>	1	Set		
2	PROVIDING AND INSTALLING WIRING USING 2.5 MM2 COPPER CONDUCTOR THROUGH PVC CONDUIT OF REQUIRED SIZE WITH ACCESSORIES AND FIXTURES .WIRING SHALL BE CONCEALED TYPE FOR COMPUTER ROMM, OFFICE SHED & FOR REST OF SHEDS OPEN IN PVC CONDUIT OF REQUIRED SIZE.	90	PER POINT		
3	PROVIDING AND INSTALLING WIRING FOR USING 4.0MM2 COPPER CONDUCTOR THROUGH PVC CONDUIT OF REQUIRED SIZE WITH ACCESSORIES AND FIXTURES .WIRING SHALL BE CONCEALED TYPE FOR COMPUTER ROMM, OFFICE SHED & FOR REST OF SHEDS OPEN IN PVC CONDUIT OF REQUIRED SIZE.	40	PER POINT		
4	PROVIDING AND INSTALLING WIRING FOR MAINS USING 6.00SQ.MM COPPER CONDUCTOR OF ISI MAKE. USING CONCEALED TYPE WIRING/PVC CONDUIT OF REQUIRED SIZE.	10	PER POINT		

SL.NO	DESCRIPTION OF WORK	QTY	UNIT	RATE	AMOUNT
5	PROVIDING AND INSTALLING WIRING FOR MAINS USING 16.00SQ.MMCOPPER CONDUCTOR OR ISI MAKE USING CONCEALED TYPE WIRING/PVC CONDUIT OF REQUIRED SIZE.	4	PER POINT		
6	PROVING AND INSTALLATION OF WIRING FOR FANS/COOLERS USING 2.5SQ.MM COPPER CONDUCTOR OF ISI MARK THROUGH PVC CONDUITS WITH ACCESSORIES AND FIXTURES.	70	PER POINT		
7	POVIDING AND INSTALLATION OF PLUG POINT OF 5A/15A SOCKET (ANCHOR OR EQUV.) OUTLET INCLUDING WIRING TERMINATION.	20	NO		
8	PROVIDING AND FIXING ORDINARY TUBELIGHT WITH FRAME OF STANDARD MANUFACTURER LIKE PHILIPS/BAJAJ OR EQUIVALENT AS APPROVED BY BHEL.	80	NO.		
9	PROVIDING AND FIXING EXHAUST FANS 12" DIAMETER WITH FRAME OF STANDARD MANUFACTURER LIKE CROMPTAN GREEVES OR EQUIVALENT AS APPROVED BY BHEL.	4	NO.		
10	PROVIDING AND FIXING HEAVY DUTY PLUG POINT 15 AMPS(ANCHOR MAKE OR EQUV.) WITH ONE SWITCH FOR COMPUTER ,ONE FOR AC CONNECTION WITH BORD ETC COMPLETE.	40	NO.		
11	PROVIDING AND FIXING METAL CLAD PLUG AND MCB OF 30AMPS. (CROMPTON/MDS MAKE) FOR AIR CONDITIONER WITH BOARD ETC COMPLETE.	6	NO.		
12	PROVIDING AND FIXING CEILING FAN 48" DIAMETER OF APPROVED COMPANY SUCH AS CROMTAN GREEVES OR ANY OTHER STANDARD MANUFACTURER AS DIRECTED BY BHEL.	60	NO		
13	PROVIDING AND FIXING CALLING BELLS (WITH INDICATOR LIGHT)	10	NO		
14	PROVIDING EARTHING PITS WITH 2 " DIA , 2 M LONG GI PIPES WITH FLANGE & GI WIRES WITH CHARCOAL, SALT AND AS PER THE STANDARD PRACTICE FOR ELECTRICAL CONNECTION.RATE SHALL BE INCLUSIVE OF ALL MATERIALS,LABOURS,ETC COMPLETE.	5	NO		
	<b>TOTAL VALUE OF SECTION-B IN Rs.</b>				
<b>RATE SCHEDULE, SECTION - C</b>					
<b>NAME OF THE WORK: DISMANTLING OF TWO NO'S PRE FABRICATED STEEL SHEDS( 60M X 15M EACH) &amp; TWO NO OF HOT CRANE AT NTPC RIHAND AND RE INSTALLATION AT KORBA STPS 1x500MW INCLUDING CIVIL WORKS</b>					
SL.NO	DESCRIPTION OF WORK	QTY	UNIT	RATE	AMOUNT
1	DEMOLISHING CEMENT CONCRETE ( PCC) INCLUDING DISPOSAL OF MATERIALWITHIN 50 MTS LEAD	180	M3		
2	DEMOLISHING RCC WORK INCLUDING STACKING OF STEEL ARS AND DISPOSAL CONCRETE DEBRIS/ UNSERVICEABLE WITH IN 50 METRES LEAD	200	M3		
3	DEMOLISHING OF BRICK WOR IN CEMENT MORTAR INCLUDING STACKING OF SERVICEABLE MATERIAL AND DISPOSAL OF UNSERVICEABLE MATERIAL WITH IN 50 METRES LEAD	55	M3		

BHEL:PS-WR  
TS NO: BHE/PW/PUR/KNT-ENB/475  
PRICE BID,PART-II, VOLUME-II

SL.NO	DESCRIPTION OF WORK	QTY	UNIT	RATE	AMOUNT
4	DEMOLISHING STONE RUBBLE MASONRY IN CEMENT MORTAR INCLUDING STACKING OF SERVICEABLE MATERIAL AND DISPOSAL OF UNSERVICEABLE MATERIAL WITHIN 50 METRES LEAD	60	M3		
5	DISPOSAL OF UNSERVICEABLE MATERIAL GENERATED AFTER DISMANTLING CONCRTE/BRICK WORK/RR MASONRY AND SURPLUS EARTH IF ANY BEYOND INITIAL LEAD OF 50 M AND UP TO A LEAD OF 5 KM INCLUDING LEVELLING THE DISPOSED MATERIAL ETC ALL COMPLETE AS PER SPECIFICATION AND AS DITECTED BY THE ENGINEER.	700	M3		
6	DISMANTLING STEEL WORK IN BUILTUP SECTIONS OF COLUMNS, ROOF TRUSSES WITHOUT DISMEMBERING AND STCKING ALL COMPLETE AS PER SPECIFICATION AND AS DIRECTED BY THE ENGINEER.	75	MT		
7	DISMANTLING OF GI SHEET ROOFING INCLUDING RIDGES, HIPS, VALLEYS, GUTTRES AND SIDE WALL SHEETING ETC., AND STACKING THE MATERIAL WITHIN 50 METRES LEAD, ALL COMPLETE AS PER SPECIFICATION AND AS DIRECTED BY THE ENGINEER.	3600	SQM		
8	TRANSPORTATION OF DISMANTLED STEEL TRUSSES, BUILT UP COLUMNS( APPROXIMATELY 70-75 MT) AND DISMANTLED GI SHEETING 3600 SQM AREA APPROX FROM NTPC RIHAND SITE TO 1 X 500 MW NTPC KORBA SITE, INCLUDING LOADING, UN LOADING, TOLL TAXES, TRNSIT INSURANCE OF MATERIALS.	LS	LS		
9	RE INSTALLATION / ERECTION OF DISMANTLED STEEL TRUSSES AND BUILT UP COLUMNS RECEIVED FROM RIHAND SITE INCLUDING CUTTING, WELDING AND FITTING TO SUIT AT SITE AND MAXIMUM UTILISATION OF RECEIVED MATERIAL, RATE IS INCLUDING FIXING IN POSITION, LABOUR CHARGES AND TWO COATS OF SYNTHETIC ENAMEL PAINTS OF APPROVED COLOUR AND QUALITY AT SITE.ALL COMPLETE AS PER SPECIFICATION AND AS DIRECTED BY THE ENGINEER.	70	MT		
10	SUPPLY, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR TRUSSES, STRUCTURAL COLUMNS , RATE IS INCLUDING ALL STEEL SECTIONS, FIXING IN POSITION, LABOUR CHARGES AND COST OF RED OXIDE PRIMER AT FACTORY AND TWO COATS OF SYNTHETIC ENAMEL PAINTS (OVER PRIMER COAT OF RED OXIDE) OF APPROVED COLOUR AND QUALITY AT SITE.	5	MT		
11	FIXING OF GI SHEETING RECEIVED FROM RIHAND SITE FOR ROOF AND SIDE WALL SHEETING, RIDGE ,HIPS,VALLEYS,GUTTERS INCLUDING GALVANISED IRON J OR L HOOK BOLTS, GI IRON AND BITUMINOUS WASHERS, GI CRAMP BOLTS, NUTS ETC. COMPLETE, ALL AS PER LATEST IS 459, 3307 AND 730.	3000	SQM		
12	SUPPLY, FIXING OF GI SHEETING WITH 0.8MM THICK FOR ROOF AND SIDE WALL SHEETING, RIDGE ,HIPS,VALLEYS,GUTTERS INCLUDING GALVANISED IRON J OR L HOOK BOLTS, GI IRON AND BITUMINOUS WASHERS, GI CRAMP BOLTS, NUTS ETC. COMPLETE, ALL AS PER LATEST IS 459, 3307 AND 730.( RATE INCLUDING GI SHEET MATERIAL	600	SQM		

BHEL:PS-WR  
TS NO: BHE/PW/PUR/KNT-ENB/475  
PRICE BID,PART-II, VOLUME-II

SL.NO	DESCRIPTION OF WORK	QTY	UNIT	RATE	AMOUNT
13	EARTH WORK EXCAVATION UPTO 0 TO 2 M DEPTH IN ALL KINDS OF SOIL (EXCEPT HARD ROCK AND SOFT ROCK) FOR FOUNDATION COLUMNS, SEPTIC TANK, SOAK PIT, RAMPS ETC., SPREADING THE EARTH UNIFORMLY AROUND THE OFFICE /STORE COMPLEX AREA AS WELL AS OPEN STORAGE YARD FOR SITE DEVELOPMENT WITHIN THE PROJECT BOUNDARY AS DIRECTED BY BHEL ENGINEER AND INCLUDING DISPOSAL OF SURPLUS EARTH (IF ANY) INCLUDING DEWATERING WITH ALL T&P, LABOURS, MATERIALS ETC. COMPLETE.	750	CUM		
14	BACK FILLING THE FOUNDATION AND PLINTH WITH EXCAVATED SOILS IN LAYERS NOT EXCEEDING 15 CM THICKNESS INCLUDING WATERING AND CONSOLIDATING ETC. COMPLETE AS PER STANDARD SPECIFICATION AND AS INSTRUCTED BY BHEL ENGINEER.	600	CUM		
15	PROVIDING AND LAYING OF PLAIN CEMENT CONCRETE OF MIX 1:4:8 USING 40MM & DOWN SIZE HARD BROKEN GRANITE STONE JELLY FOR FOUNDATION, FLOORING, ETC. INCLUDING SHUTTERING, CURING, CONSOLIDATION ETC. COMPLETE AS PER STANDARD SPECIFICATIONS AND AS DIRECTED BY BHEL ENGINEER.	250	CUM		
16	PROVIDING AND LAYING RCC OF MIX 1:2:4 USING 20MM DOWN SIZE HARD BROKEN GRANITE STONE AGGREGATE INCLUDING MECHANICAL MIXING, VIBRATION, CURING, FORM WORK AND CENTERING AS PER DRAWING AND SPECIFICATION AND AS DIRECTED BY BHEL ENGINEER BUT EXCLUDING COST OF REINFORCEMENTS.	350	CUM		
17	BACK FILLING THE FOUNDATION AND PLINTH WITH RIVER SAND IN LAYERS NOT EXCEEDING 15 CM THICKNESS INCLUDING WATERING AND CONSOLIDATING ETC. COMPLETE AS PER STANDARD SPECIFICATION AND AS INSTRUCTED BY BHEL ENGINEER.	250	CUM		
18	RANDOM RUBBLE MASONRY IN 1:6 CEMENT MORTAR WITH HARD STONE IN FOUNDATION AND PLINTH INCLUDING LEVELLING UP WITH CEMENT CONCRETE 1:6:12 ( 1 CEMENT: 6 COARSE SAND : 12 GRADED AGGREGATE 20 MM NOMINAL SIZE) AT PLINTH LEVEL AS PER STANDARD SPECIFICATION AND AS INSTRUCTED BY BHEL ENGINEER.	150	CUM		
19	PROVIDING HALF BRICK WORK PARTITION WALL USING FLY ASH BRICKS IN CM 1:4 AND PLASTERING IN C.M. 1:6 12mm THK ON BOTH FACES INCLUDING COST OF ALL MATERIALS, LABOUR, SCAFFOLDING, CURING AS PER DRAWING AND AS DIRECTED BY BHEL ENGINEER, RATE IS INCLUSIVE OF PLASTERING ON BOTH SIDES OF THE PARTITION WALL	360	SQM		
20	PROVIDING AND FIXING REINFORCEMENT INCLUDING CUTTING, BENDING AND FABRICATION OF REINFORCEMENT USING HIGH TENSILE TOR STEEL AS PER DRAWING AND SPECIFICATION AND AS DIRECTED BY BHEL ENGINEER INCLUDING COST OF ALL LEADS, LIFT AND MATERIALS, LABOUR AND MS BINDING WIRE 18/20 GAUGE ETC. COMPLETE.	22	MT		
21	PROVIDING DPC WITH CC 1:2:4 50MM THICK INCLUDING BITUMEN COATING AS PER STANDARD PRACTICE AND SPECIFICATIONS.	35	SQM		

BHEL:PS-WR  
 TS NO: BHE/PW/PUR/KNT-ENB/475  
 PRICE BID,PART-II, VOLUME-II

SL.NO	DESCRIPTION OF WORK	QTY	UNIT	RATE	AMOUNT
22	SUPPLY, FABRICATING, AND FIXING OF MS FOUNDATION BOLTS ASSEMBLY IN CONCRETE ALONG WITH LOCK NUTS, WASHERS, ANCHOR PLATES COMPLETE AS PER SPECIFICATION AND AS DIRECTED BY ENGINEER.	500	KG		
23	PAINTING THREE COATS OF CEMENT PAINT ( SUPER SNOW CEM) OF APPROVED QUALITY AND SHADE ON NEWLY PLASTERED SURFACE TO GIVE AN EVEN SHADE INCLUDING CLEANING, PREPARING THE SURFACE AND CURING, SCAFFOLDING ETC. COMPLETE. RATE TO INCLUDE COST OF ALL MATERIALS, LABOUR, CONSUMABLES ETC. COMPLETE (EXTERNAL WALL)	360	SQM		
24	PROVIDING WHITE OR COLOUR WASH THREE COATS ON NEWLY PLASTERED SURFACE USING BEST SHELL LIME TO GIVE AN EVEN SHADE INCLUDING CLEANING AND BRUSHING OF WALLS AND PREPARING SURFACE IN ACCORDANCE WITH STANDARD SPECIFICATION. RATE TO INCLUDE COST OF ALL MATERIALS INCLUDING COLOURING AGENT, APPROVED ADDESSIVE, SCAFFOLDING, BRUSH ETC. COMPLETE. (INTERNAL WALL)	360	SQM		
	<b>TOTAL VALUE OFSECTION-C IN Rs.</b>				

SL.NO	DESCRIPTION OF WORK	QTY	UNIT	RATE	AMOUNT
-------	---------------------	-----	------	------	--------

**BHEL:PSWR:NAGPUR  
RATE SCHEDULE, SECTION - D**

**INTERNAL ELECTRIFICATION OF CLOSED SHEDS 2NO AT KORBA NTPC STPS 1x500MW**

SR. NO.	DESCRIPTION OF WORK	QTY	UNIT	RATE	AMOUNT
1	Supplying & Installing Power Distribution Board complete with : 1) Incoming MCB TPH 100 Amps. - 1 No., 2) Outgoing MCB TPH 32 Amps. - 4 Nos,3) RCCB DP 25/20 Amps. - 3Nos. ) 4)Outgoing MCB SP 6 Amps - 6Nos. All RCCBs, MCBs shall be MDS/INDO KOPP make Distribution Boards shall be SIEMENS / MDS / INDO KOPP make with internal busbars, internal wiring, 2 nos. earthing terminals, earth connections, including Glands, Lugs	1	Set		
2	Providing & Fixing Aluminium Dispersive Luminaire enameled green and white with cast Aluminium flange and nipple suitable for use with GLS lamp, dome 12" diameter, with hanging bracket and 200W GLS lamp of Crompton or equivalent BAJAJ/PHILIPS make, complete.	50	Nos.		
3	Wiring with 2.5 sq mm ISI mark copper wire for above in PVC conduit along with GI earth wire inclusive of all material, labour etc. Complete	50	Per Point		
4	Supplying & Fixing Wall Mounting type LIGHTING PANELS, each with : <b>(1)</b> Incoming MCB TPN -32 Amps - 1No. <b>(2)</b> RCCB DP 32 Amps - 3Nos ; <b>(3)</b> MCB SP 6Amps - 30 Nos. All MCBs and RCCBs shall be of MDS / INDO KOPP make Lighting Panel shall be SIEMENS/MDS/INDO KOPP make with internal busbars, 2 nos. earthing terminals, earth connections, including Glands, Lugs & wiring from main DB.	2	Sets.		
5	Providing Earth Pits with 2" dia., 2.5 Mtr. Long GI Pipes with flange and 8 SWG GI wire with Charcoal, Salt and as per IS 3043. Rate shall be inclusive of all material, labour etc. complete. A brick wall chamber with CI cover for all earth pits shall be provided.	2	NOS.		
	<b>TOTAL VALUE OF SECTION-D IN Rs.</b>				

BHEL:PS-WR  
TS NO: BHE/PW/PUR/KNT-ENB/475  
PRICE BID,PART-II, VOLUME-II

SL.NO	DESCRIPTION OF WORK	QTY	UNIT	RATE	AMOUNT
-------	---------------------	-----	------	------	--------

**BHEL:PSWR:NAGPUR**

**RATE SCHEDULE, SECTION - E**

**NAME OF WORK-ROADS, FENCING, DRAINAGE OF OPEN STORAGE AREA AT KORBA NTPC STPS 1x500MW**

SL. NO	DESCRIPTION	QTY	UNIT	RATE	AMOUNT IN RS
1	EXCAVATION FOR ROADWAY IN ALL TYPES OF SOILS, SAND, GRAVEL OR SOFT MURAM INCLUDING DRESSING SECTION TO THE REQUIRED GRADE, CAMBER AND SIDE SLOPES(MAX DEPTH OF EXCAVATION BEING 300MM AVG) AND SPREADING THE EXCAVATED EARTH UNIFORMLY IN THE SPECIFIED AREA FOR SITE LEVELING & DEVELOPMENT AS DIRECTED BY THE BHEL& CONSOLIDATION OF THE SURFACE BY ROLLING THE SURFACE WITH 10/12 CAPACITY POWER ROLLER .	15000	M2		
2	EXCAVATION FOR SIDE DRAINS/DRAINS IN ALL KINDS OF SOILS, TO THE SPECIFIED SECTION INCLUDING SPREADING THE EXCAVATED EARTH UNIFORMLY IN THE SPECIFIED AREA FOR SITE LEVELING & DEVELOPMENT, DISPOSING THE SURPLUS EARTH (IF ANY) AT THE AREA EARMARKED OUTSIDE THE PLANT WITHIN 1 KM DISTANCE AS DIRECTED BY THE BHEL ENGINEER.	2000	M3		
3	SUB GRADE PREPARATION: LEVELLING, WATERING AND ROLLING WITH 10-12 MT CAPACITY ROLLER FOR SUB BASE PREPARATION BY AVERAGE CUTTING & FILLING OF 200MM THICK AVAILABLE EARTH WITH ALL T&P, LABOURS, MATERIALS ETC. COMPLETE.	50000	M2		
4	PROVIDING AND LAYING SOLING 230 MM THK WITH 150 -200 MM THICK BOULDER SIZE AND FILLING THE VOIDS WITH HAND BROKEN METAL OF SIZE 40-60 MM SPREADING MURRUM AND ROLLING AND COMPACTION INCLUDING WATERING, WITH 10-12 MT CAPACITY ROAD ROLLER IN TWO LAYERS.	3000	M3		
5	PROVIDING 150MM THICK WATER BOUND MACADAM (WBM) IN TWO LAYERS OF EACH 75MM, WITH 40MM TO 60MM METAL (STONE AGGREGATE) INCLUDING SUPPLYING AND SPREADING GRAVEL/MURRUM OVER THE SOLING/CONSOLIDATED BASE, COMPACTING THE SAME WITH POWER ROLLER INCLUDING NECESSARY LABOUR, WATERING, MATERINGS ETC. COMPLETE, ALL AS PER RELEVANT SPECIFICATIONS AND DIRECTIONS OF BHEL ENGINEER (RATE SHALL BE INCLUSIVE OF ALL LABOUR, MATERIALS ETC., COMPLETE).	2500	M3		
6	PROVIDING AND LAYING OF PLAIN CEMENT CONCRETE OF MIX 1:4:8 USING 40MM & DOWN SIZE HARD BROKEN GRANITE STONE JELLY FOR FOUNDATION, FLOORING, ETC. INCLUDING SHUTTERING, CURING, CONSOLIDATION ETC. COMPLETE AS PER STANDARD SPECIFICATIONS AND AS DIRECTED BY BHEL ENGINEER.	100	M3		

BHEL:PS-WR  
TS NO: BHE/PW/PUR/KNT-ENB/475  
PRICE BID,PART-II, VOLUME-II

SL.NO	DESCRIPTION OF WORK	QTY	UNIT	RATE	AMOUNT
7	PROVIDING BURNT CLAY BRICK WORK IN CM 1:6 (1 CEMENT & 6 COARSE SAND) USING LOCALLY AVAILABLE BRICKS AS PER DRAWING FOR FOUNDATION, WALL, SEPTIC TANK ETC. INCLUDING COST OF ALL MATERIALS, LABOUR, SCAFFOLDING, CURING ETC. COMPLETE AND AS DIRECTED BY ENGINEER AT ALL ELEVATIONS AND LEVELS INCLUDING RAKING OUT JOINTS, CURING ETC. COMPLETE EXCLUDING PLASTERING & PAINTING.	230	M3		
8	PROVIDING FLY ASH BRICK WORK IN CM 1:6 (1 CEMENT & 6 COARSE SAND) USING LOCALLY AVAILABLE BRICKS AS PER DRAWING FOR FOUNDATION, WALL, SEPTIC TANK ETC. INCLUDING COST OF ALL MATERIALS, LABOUR, SCAFFOLDING, CURING ETC. COMPLETE AND AS DIRECTED BY ENGINEER AT ALL ELEVATIONS AND LEVELS INCLUDING RAKING OUT JOINTS, CURING ETC. COMPLETE EXCLUDING PLASTERING & PAINTING.	230	M3		
9	PROVIDING AND PLASTERING WITH CEMENT MORTAR 1:6 (12MM THICK) OVER BOTH INTERNAL AND EXTERNAL FACES OF BRICKWORK AND CONCRETE SURFACES, PARTITION WALLS ETC. OF ALL HEIGHTS INCLUDING PREPARING THE SURFACE, RAKING JOINTS, SCAFFOLDING, CURING, COST OF ALL MATERIALS, LABOUR ETC. COMPLETE.	3000	M2		
10	PROVIDING AND FIXING BARBED WIRE FENCING AROUND OPEN STORAGE YARD AS PER DRAWING/AS INSTRUCTED BY BHEL ENGINEER , INCLUDING POSTS OF MS ANGLES 50x50x6MM 2.00 M HIGH ABOVE GROUND AND 450MM EMBEDDED IN THE CONCRETE BELOW G.L AS PER STANDARD PRACTICE/AS INSTRUCTED BY BHEL ENGINEER, FIXING THE POSTS WITH FOUNDATION OF SIZE 0.30x0.30x0.45 M DEEP IN PCC OF MIX 1:3:6,THE POSTS SHALL BE SPACED AT 3M CENTRES AND STRUTS AT 30M CENTRES AND AT ALL TURNINGS WITH FOUNDATIONS,SUPPLYING AND FIXING GI BARBED WIRES, 10 HORIZONTAL LINES, TWO DIAGONALS BETWEEN POSTS BY MEANS OF GI STAPLES AS PER STANDARD PRACTICE. THE BARBED WIRE SHALL CONFORM TO IS 278 AND BE MADE OF TWO STRANDS OF GALVANISED TWISTED 2.5MM DIA (12.5 GAUGE) STEEL WIRE WITH FOUR POINT BARS. RATE QUOTED SHALL BE INCLUSIVE OF EXCAVATION, DISPOSAL OF SURPLUS EARTH, CONCRETE (1:3:6), FORM WORK AND ALL MATERIALS, COST OF POSTS, BARBED WIRES, TRANSPORTING, FIXING IN POSITION ETC. INCLUDING COST OF ALL LABOUR AND TWO COATS OF ENAMEL PAINT OF APPROVED SHADE WITH A SHOP COAT OF PRIMER IN ALL STRUCTURAL MEMBERS ETC COMPLETE.	1500	RM		
11	SUPPLYING & FIXING IN POSITION RCC HUME PIPE OF 450 DIA NP2 WHEREVER DRAIN CROSSES THE ROADS INCLUDING ALIGNING,LEVELLING ETC. COMPLETE AS PER THE DIRECTION OF ENGINEER. INCLUDING P.C. & INCLUDING COLLAR JOINTS, ENCASEMENT WITH CONCRETE 1:3:6 OF 300 MM DIA , ENCASING SHALL BE PAID EXTRA UNDER RESPECTIVE ITEMS OF CONCRETE..	110	RM		
12	SUPPLY FABRICATION, AND FIXING IN POSITION OF MS GATES WITH STRUCTURAL/TUBULAR STEEL FRAMES WITH GALVANIZED CHAIN LINK MESH OF APPROVED DESIGN INCLUDING COST OF FOUNDATION & POSTS, PAINTING TWO COATS BY SYNTHETIC ENAMEL PAINT OF APPROVED COLOUR AND QUALITY OVER ONE COAT OF RED OXIDE PRIMER, COST OF ALL MATERIALS, LABOUR, TRANSPORT ETC. COMPLETE.POST SHALL BE UNDER ITEM NO (12)	3	MT		
	<b>TOTAL VALUE OF SECTION-E IN Rs.</b>				

SL.NO	DESCRIPTION OF WORK	QTY	UNIT	RATE	AMOUNT
-------	---------------------	-----	------	------	--------

**BHEL:PSWR:NAGPUR  
RATE SCHEDULE, SECTION - F**

**NAME OF WORK- EXTERNAL ILLUMINATION OF OPEN STORAGE YARD AT KORBA NTPC STPS 1x500MW .**

SL.NO.	DESCRIPTION	UNIT	QTY	RATE	
				IN FIGURES	IN WORDS
1	SUPPLYING, INSTALLATION & COMMISSIONING OF SODIUM VAPOUR LAMP STREET LIGHT FITTING 150 WATT SSG-2315 IH OF CROMPTON OR SIMILAR PHILIPS MAKE, COMPLETE WITH ONE PIECE CANOPY, INTEGRAL CONTROLGEAR COMPRISING OF COPPER WOUND CHOKE , IGNITOR , HPF CAPACITOR, HPSV LAMP AND SUITABLE FOR DIRECTLY SLIPPING OVER LIGHT MOUNTING BRACKET MADE OUT OF 40 MM OD PIPE AND SUITABLE FOR LAMPS, CONTROL GEAR BOX CABLING & TERMINATION OF ITEMS SUPPLIED (TO BE MOUNTED ON 9 MTR POLE - ITEM NO. 2).	Nos.	30		
2	SUPPLY AND ERECTING STEEL TUBULAR SWAGED POLES 9 MTR LONG MADE OF SHEET STEEL HAVING ULTIMATE TENSILE STRENGTH 42 KG F/SQ.MM CONFIRMING TO BIS :2713 (RPART-II) COMPLETE WITH 300X300X6 MM THICK M. S. BASE PLATE FOR WELDING AT SITE AND SIZE AS PER CONFIGURATION GIVEN IN BIS FOR 410 SP-28 (113 KG- POLE WEIGHT ) WITH 1.5 MTR. DEEP EXACAVATION, CONCRETING IN 1:4:8 RATIO SIZE 45 CMS X 45 CMS X 150 CMS AND POLE PLINTH IN 1:3:6 CEMENT CONCRETING HAVING 300 MM HEIGHT AND 300 MM DIA . including double earthing of pole with suitable arrangement, duly painted with two coats of Red Oxide paint and one coat of Aluminium paint to be applied after erection; the length of pole below ground to be painted with two coats of black bituminus paint. The pole shall be complete with JB, Fuse and minor fabrication as below :	Nos.	30		
	I) DRILING 20 MM DIA HOLE AT ABOUT 2.5 MTR FROM GROUND LEVEL FOR WIRE LEADS FROM JUNCTION BOX TO LIGHT FIXTURE				
	II) DRILING 15 M DIA HOLES AT ABOUT 0.7 AND AT 2.5 MTR FROOM GROUND LEVEL AND WELDING 12 MM NUTS FOR USING A 12 MM G.I BOLT FOR FASTENING EARTH CONDUCTERS				
	III) WELDING REQUIORED HOLES FOR FIXING POLE CAP OF STREET LIGHT BRACKET				
	IV) WELDING DIAMETRALLY 10 MM M.S. ROUND 30 MM BELOW POLE TOP EDGE FOR CLIPPING WIRE LEADS				
3	Supply of Steel Tubular Swaged Pole 9 Meters long type 410 SP -28 as per BIS 2713 (Part -II) complete with base M.S. plate size 300x 300 x 8 mm , suitable mounting arrangement for mounting two number flood light luminaries of Crompton make ( FBD 1425/40- HPSV) or equivalent on each pole , including earthing of pole with suitable arrangement , duly painted with two coats of Red Oxide paint and one coat of Aluminium paint to be applied after erection, the lenght of pole below ground to be painted with two coats of black bituminus paint.	Nos.	20		
4	Erection of Steel Tubular Swaged Pole 9 Meters long type 410 SP -28 as per BIS 2713 (Part -II) complete with base M.S. plate size 300x 300 x 8 mm , Providing cement contrete foundation including excavation of pit size 450 x 450 mmx depth 1.5 Metres in all type of soil, concreting in 1:3:6, concrete foundation all around the pole foundation and up to 200 mm above the ground level and tapered suitably into collar, height plinth duly plastered and necessary curing , finishing and back filling etc.	Nos.	20		

BHEL:PS-WR  
TS NO: BHE/PW/PUR/KNT-ENB/475  
PRICE BID,PART-II, VOLUME-II

SL.NO	DESCRIPTION OF WORK	QTY	UNIT	RATE	AMOUNT
5	Supply of weather proof flood light luminaries of Crompton make (FBD 1425/40-with high pressure sodium vapour lamp 1x 400 watt along with non- integral type control gear box having adequate number of terminal connectors for terminating two cable of 3x 10 sqmm AL and suitable for out door application ) or equivalent in BAJAJ, Phillips only , including supply & fixing cables between the control gear box and light luminaries and mounting fixture with hardware for mounting of light luminaries and control gear box on pole type 410 SP-28.	Nos.	40		
6	Installation & commissioning of flood light luminaries, control gear box , cabling & termination for sr.no.01 (Items supplied above)	Nos.	40		
7	Engineering , Supply and installation of lattice type structural Tower of height 15M .Tower shall be fabricated in three section of equal length of 5 Meter each.Preparation of fabrication drawing & its approval from BHEL. Brief details are as given below	Nos.	2		
	Tower shall be adequately strong to withstand heavy wind . No stay/guy ropes shall be tied with it. At top of the tower adequate size of platform shall be provided with railing around the platform for mounting of lighting luminaries( tentatively Twelve fitting on each tower) and maintenance purpose , floor of platform shall be covered with chequered plate. A ladder along with protective cage shall be provided along the height of tower. It should be painted with one coat red oxide primer and two coats of aluminium paint after installation. Each Tower shall be provided with power distribution box out door type and should have provision of terminating one number incoming and eight out going cable .Erecting at site including all civil works like excavation, casting of foundation of required size and depth with concrete of grade 1:2:4 with base plates, grouting of lattice structure, One earth pit as per BIS standard is to be made near the tower and earthing of the tower including supply of material etc. complete.				
8	Supply, of flood light luminaries of BAJAJ make Type BGENF 22 OR equivalent in Crompton , Phillips only, Each luminaries shall be with two number 400 watt HPSV lamps and control gear box integral/ non itegral type including cables for interconnection . (These fitting shall be mounted on lighting mast /tower , on each tower 8 such fitting shall be mounted)	Nos.	16		
9	Supply of Cables 3 -1/2 Core x 95 sqmm Aluminium armoured PVC Insulated Cable (Three and half core) Confirming to IS 1554 ( Part -I)	Mtrs	750		
10	Installation of Cables 3 -1/2 Core x 95 sqmm Aluminium armoured PVC Insulated Cable Confirming to IS 1554 ( Part -I) including laying of cable below ground, excavation of trench of 600 mm depth in all kind of soil, termination of cables cores with crimp type luggs, providing sand layer below/ above the cable, brick laying both side /above the above the cable and back filling etc complete. Cables are to be laid from 415 Volt AC Distribution Board to Feeder Pillar board , Feeder Pillar Board to Lighting Mast / Tower.	Mtrs	750		
11	Supply of Cables 2 Core x 10 sqmm Aluminium armoured PVC Insulated Cable Confirming to IS 1554 ( Part -I)	Mtrs	1200		
12	Installation of Cables 2 Core x 10 sqmm Aluminium armoured PVC Insulated Cable Confirming to IS 1554 ( Part -I) including laying of cable below ground , excavation of trench of 600 mm depth in all kind of soil, termination of cables cores with crimp type luggs, providing sand layer below/ above the cable, brick laying both side /above the above the cable and back filling etc complete. Cables are to be laid from 415 Volt AC Power Feeder Pillar Board Board to Lighting poles & Pole to Pole	Mtrs	1200		
13	Supply of Cables 3 -1/2 Corex 185 sqmm Aluminium armoured PVC Insulated Cable (Three and half core) Confirming to IS 1554 ( Part -I)	Mtrs	600		

BHEL:PS-WR  
TS NO: BHE/PW/PUR/KNT-ENB/475  
PRICE BID,PART-II, VOLUME-II

SL.NO	DESCRIPTION OF WORK	QTY	UNIT	RATE	AMOUNT
14	Installation of Cables 3 -1/2 Corex 185 sqmm Aluminium armoured PVC Insulated Cable Confirming to IS 1554 ( Part -I) including laying of cable below ground , excavation of trench of 600 mm depth in all kind of soil, termination of cables cores with crimp type luggs, providing sand layer below/ above the cable, brick laying both side /above the above the cable and back filling etc. Cables are to be laid from Transformer Sub station to 415 Volt AC Distribution Board	Mtrs	600		
15	Supply of Cables 3 -1/2 Corex 35 sqmm Aluminium armoured PVC Insulated Cable (Three and half core) Confirming to IS 1554 ( Part -I)	Mtrs	500		
16	Installation of Cables 3 -1/2 Corex 35 sqmm Aluminium armoured PVC Insulated Cable Confirming to IS 1554 ( Part -I) including laying of cable below ground , excavation of trench of 600 mm depth in all kind of soil, termination of cables cores with crimp type luggs, providing sand layer below/ above the cable, brick laying both side /above the above the cable and back filling etc. Cables are to be laid from Transformer Sub station to 415 Volt AC Distribution Board	Mtrs	500		
17	Supply & Installing 3 Phase Metering and Power Distribution Board complete with : (1) Incoming SFU TPN 400 AMPS- 1No, (2) Outgoing SFU TPN 200 Amps -2Nos. (3) Outgoing SFU TPN 100 Amps -2Nos. (4) Outgoing SFU TPN 32 Amps -2Nos. 3 Phase Electronic Energy Meter - BHEL / L&T / GEC make Ammeter, Voltmeter and Selector switches for both - AE and Kaycee make Phase Indication Lamps, HRC fuses for IC and OG feeders, Cable glands, Power Terminals for cables termination, cable lugs and provision for doubly earthing the panel enclosure. Panel enclosure shall be made of sheet metal thichnness not less than 1.6 mm and suitable for out door installation, modular construction, hinged door with locking arrangement, base frame, should have slopped canopy, duly painted with first coat of primer and two coats of synthetic enamel paint (interior with white paint and exterior with light grey as per shade 5, IS 630) internal power distribution to devices shall be with AL busbars OR copper flexible single core PVC cables of 1.1 KV grade, control wiring with 1.5 sqmm, suitable stool made out of MS structure of 1.2 meter high for mounting of panel with anchoring arrangement at foundation, suitable for bottom entry of cables	No.	1		
18	Providing suitable foundation for mounting AC Distribution Board as specified in sl. No.15 , Installation & commissioning of panel	No.	1		
19	Supply of 415 volt AC , 3 phase /four wire Power feeder Pillar Board , Board shall be comprises of Three number and one number Aluminium Bus Bar for phase & neutral respectively. bus bar rating shall be 200 Amps and shall be mounted on epoxy insulator of 1.1 KV grade, Each bus bar shall have drilled hole for connecting incoming / out going cables, provision for earthing the panel enclosure. Panel enclosure shall be made of sheet metal thichnness not less than 1.6 mm and suitable for out door installation, hinged door with locking arragement , base frame , should have slopped canopy, Duly painted with first coat with primer and two coats of synthetic enamel paint ( interior with white paint and exterior with smoke grey as per IS), Suitable stool made out of MS structure of 1.2 meter high for mounting of panel with anchoring arrangement at foundation .	Nos.	2		
20	Providing suitable foundation for mounting 415 volt AC Power Feeder Pillar Board as specified in sl. No.12 , Installation & commissioning of of panel	Nos.	2		
	<b>TOTAL VALUE OF SECTION-F IN Rs.</b>				

SL.NO	DESCRIPTION OF WORK	QTY	UNIT	RATE	AMOUNT
<b>ANNEXTURE OF RATE SCHEDULE</b>					
SR.NO.	PARTICULARS	AMOUNT IN Rs			
SECTION A	CIVIL WORK FOR SITE OFFICE				
SECTION B	INTERNAL ELECTRIFICATION OF BHEL SITE OFFICE				
SECTION C	DISMANTLING AND RE ERECTION TWO NO'S CLOSED STORAGE SHEDS & TWO NO OF HOT CRANE				
SECTION D	INTERNAL ELECTRIFICATION OF CLOSED SHED 2NOs				
SECTION E	ROAD, FENCING, DRAINAGE OF OPEN STORAGE AREA				
SECTION F	EXTERNAL ILLUMINATION OF OPEN STORAGE YARD				
<b>TOTAL OF ALL ABOVE</b>					
<b>% REBATE IF ANY ON ABOVE TOTAL VALUE</b>					
<b>NET QUOTED PRICE IN RS</b>					
<b>TOTAL IN WORDS ( RS.....)</b>					