

ANNEXURE - I

REVISED BOQ and estimated Cost of Phase-I of Smart City Project, DHBVN, Gurgaon against the NIT no TSGP-02/ 2016-17 for the DLF subdivision under the jurisdiction of DHBVN.

Sr. NO.	Description	Unit	Total quantity required	Unit Supply Rates (including all taxes, ED, CST, VAT, Levies, Transportation, Contingency, insurance, handling charges, Contractor Profit & Supervision etc. (in Rs)	Total Supply cost (including all taxes, ED, CST, VAT, Levies, Transportation, Contingency, insurance, handling charges, Contractor Profit & Supervision etc. (in Rs)	Unit Erection Cost including all taxes (in Rs)	Total Erection Cost including all taxes (In Rs)	Total Cost (In Rs)
1	2	3	4	5	6	7	8	9=6+8
1	Poles							
a	PCC Pole 11.0M Long (400kg working load).	Nos	140	5491.25	768775.00	716.25	100275.00	869050.00
b	PCC Poles 9 M Long (400kg working Load)	Nos	140	2323.00	325220.00	303	42420.00	367640.00
2	ACSR Conductor							
a	100mm ²	Mtr	40350	59.25	2390737.50	5.15	207802.50	2598540.00
b	100mm ² insulated	Mtr	2000	69.07	138140.00	6.01	12020.00	150160.00
3	11 KV Insulators							
a	11 KV Porcelain insulators with GI pin, nuts and washers complete suitable for insulator assembly	Nos.	1125	103.50	116437.50	9	10125.00	126562.50
b	45 KN Disc Insulator (T&C type) along with Hardwares & Accessories all complete as per Technical Specification.	Nos.	270	307.05	82903.50	26.7	7209.00	90112.50
4	LT Insulators							
a	LT Insulator	Nos.	90	11.51	1035.90	1	90.00	1125.90
b	Egg Insulator	Nos.	90	11.50	1035.00	1	90.00	1125.00
5	M.S. Galvanized Items							
a	Fabrication and Supply of M.S. Galvanized items- Pole Top Bracket/hamper, V/straight-Cross arm, Guarding cross arm, Back Clamps for V/straight-Cross arm and Guard cross arm, D P Channel/angle, D P Channel clamp, Stay clamps angle, Stay clamps side, D P cross bracing & clamps, half clamp, full clamp, D-Strap, structure for mounting of isolator MS flat for knee bracing, MS Flat, various size of angle & channel etc. complete as required.	MT	50	56798.50	2839925.00	4939	246950.00	3086875.00
b	GI Nuts & Bolts with Washers (plain and spring)	Kgs	1000	59.80	59800.00	5.2	5200.00	65000.00
6	11 kV stay set assembly & LT stay set assembly (excluding stay clamp & fasteners)							
a	Stay wire (7/8 SWG)	Kgs	1800	59.80	107640.00	5.2	9360.00	117000.00
b	Hardware Fittings (8' long complete with X-Plat 460mm of Angle 65x65x6 Elbow & rod with Discs etc) to complete 11kV stay set	Set	180	744.05	133929.00	64.7	11646.00	145575.00
7	Earthing							
a	G.I. Pipe 40 mm dia 6 mtr. Long for earthing set. B-class	Nos	7047	1771.00	12480237.00	154	1085238.00	13565475.00
b	Earthing Rod Wt. 6.175 Kg.	Nos	7047	338.10	2382590.70	29.4	207181.80	2589772.50
c	Earthing with G.I. Strip 25x6 mm 9 mtr. as per Drawing	Nos	7047	691.15	4870534.05	60.1	423524.70	5294058.75
d	Maintanance free (Chemical) Earthing with all the allied Materialas per Nigam Specifiaction	Nos.	1328	4922.00	6536416.00	820	1088960.00	7625376.00
8	GSL 8 SWG	Kgs	2440	59.80	145912.00	5.2	12688.00	158600.00

9	11 KV 400 Amps. GO Switch complete with handle, pipe & Supporting Channel. As per Nigam's Tech. Spec., relevant ISS and latest amendments	Nos	10	5980.00	59800.00	520	5200.00	65000.00
10	11kV LA	Nos	160	2875.00	460000.00	250	40000.00	500000.00
11	Barbed wire	Kg.	160	57.50	9200.00	5	800.00	10000.00
12	Danger Plate Enameled	No.	630	75.90	47817.00	6.6	4158.00	51975.00
13	Number Plate Enameled	No.	140	75.90	10626.00	6.6	924.00	11550.00
14	Phase Plate for each phase set of 3 (On H-pole & 4 pole)	Set	10	63.25	632.50	5.5	55.00	687.50
15	LT Line Spacers	Nos	625	11.50	7187.50	1	625.00	7812.50
16	Spring Loaded Constant Pressure Multi Connection Distribution System with 3 phase Supply (One incoming + Eight Outgoing Circuits) of Injection Moulded Glass Filled Fire Retardant engineering plastic with 3 mm thickness in accordance with Technical Specification	nos.	125	575.00	71875.00	50	6250.00	78125.00
17	HT Cables							
a	3/C 400 mm2 11 kV XLPE Armoured cable	Mtr	264424	1946.90	514807085.60	0.00	0.00	514807085.60
b	3/C 300 mm2 11 kV XLPE Armoured cable	Mtr	8470	1386.95	11747466.50	0.00	0.00	11747466.50
c	3/C 120 mm2 11 kV XLPE Armoured cable	Mtr	8529	854.63	7289139.27	0.00	0.00	7289139.27
18	LT Cables							
a	LT XLPE Cable S/C 630 MM. sq.	Mtr	27320	840.22	22954810.40	0.00	0.00	22954810.40
b	LT XLPE Armoured 3.5 Core, 300 sq.mm. cable	Mtr	340000	1081.48	367703200.00	0.00	0.00	367703200.00
c	LT XLPE Armoured 3.5 Core, 240 sq.mm. cable	Mtr	1500	960.64	1440960.00	0.00	0.00	1440960.00
d	LT XLPE Armoured 3.5 Core, 120 sq.mm. cable	Mtr	153000	516.35	79001550.00	22.45	3434850.00	82436400.00
e	LT XLPE Armoured 3.5 Core, 95 sq.mm. cable	Mtr	1000	396.62	396620.00	17.24	17240.00	413860.00
f	LT PVC Cable 2/C 10 MM. sq.	Mtr	92500	29.30	2710250.00	1.27	117475.00	2827725.00
g	LT PVC Cable 2/C 16 MM. sq.	Mtr	1000	44.52	44520.00	1.94	1940.00	46460.00
h	LT PVC Cable 4/C 16 MM. sq.	Mtr	85000	74.41	6324850.00	3.24	275400.00	6600250.00
i	LT PVC Cable 4/C 25 MM. sq.	Mtr	97500	104.68	10206300.00	4.55	443625.00	10649925.00
j	LT PVC Cable 4/C 50 MM. sq.	Mtr	4250	167.49	711832.50	7.28	30940.00	742772.50
k	LT PVC Cable 4/C 95 MM. sq.	Mtr	1000	297.49	297490.00	12.93	12930.00	310420.00
l	LT XLPE Armoured Cable 2/C 10 MM. sq.	Mtr	370000	70.52	26092400.00	3.07	1135900.00	27228300.00
m	LT XLPE Armoured Cable 2/C 16 MM. sq.	Mtr	1000	68.28	68280.00	2.97	2970.00	71250.00
n	LT XLPE Armoured Cable 4/C 16 MM. sq.	Mtr	340000	116.53	39620200.00	5.07	1723800.00	41344000.00
o	LT XLPE Armoured Cable 4/C 25 MM. sq.	Mtr	390000	159.77	62310300.00	6.95	2710500.00	65020800.00
p	LT XLPE Armoured Cable 4/C 50 MM. sq.	Mtr	17000	266.03	4522510.00	11.57	196690.00	4719200.00
q	LT XLPE Armoured Cable 4/C 95 MM. sq.	Mtr	1000	408.18	408180.00	17.75	17750.00	425930.00
19	Straight Jointing Kit, O/D & I/D Termination Kit							
a	Straight Jointing kit for 3/C 400 mm2 11 kV XLPE cable	No.	529	15132.19	8004928.51	1315.84	696079.36	8701007.87
b	Straight Jointing kit for 3/C 300 mm2 11 kV XLPE cable	No.	3	5148.55	15445.65	447.7	1343.10	16788.75
c	Straight Jointing kit for 3/C 120 mm2 11 kV XLPE cable	No.	53	3927.04	208133.12	341.48	18098.44	226231.56
d	ID Termination kit for 11KV 3/C 400 mm2 Cable	No.	134	3894.62	521879.08	338.66	45380.44	567259.52
e	ID Termination kit for 11KV 3/C 300 mm2 Cable	No.	6	1220.55	7323.30	106.14	636.84	7960.14
f	ID Termination kit for 11KV 3/C 120 mm2 Cable	No.	6	914.70	5488.20	79.54	477.24	5965.44
g	OD Termination kit for 11KV 3/C 400mm2 Cable	No.	1027	4712.25	4839480.75	409.76	420823.52	5260304.27
h	OD Termination kit for 11KV 3/C 300mm2 Cable	No.	148	1396.34	206658.32	121.42	17970.16	224628.48
i	OD Termination kit for 11KV 3/C 120 mm2 Cable	No.	718	971.87	697802.66	84.51	60678.18	758480.84
21	Pipes							
a	HDPE pipe 125 mm dia	Mtr	2000	194.35	388700.00	0.00	0.00	388700.00
b	HDPE pipe 160 mm dia	Mtr	81450	248.41	20232994.50	0.00	0.00	20232994.50
c	PVC pipe of Dia 160 MM, Class-1, ISI mark along with elbow and other joint.	Mtr.	1000	209.30	209300.00	9.1	9100.00	218400.00
d	PVC pipe of Dia 110 MM, Class-1, ISI mark along with elbow and other joint.	Mtr.	153000	100.05	15307650.00	4.35	665550.00	15973200.00

e	PVC pipe of Dia 50 MM, Class-1, ISI mark along with elbow and other joint.	Mtr.	747000	46.00	34362000.00	2	1494000.00	35856000.00
f	PVC pipe of Dia 25 MM, Class-1, ISI mark along with elbow and other joint.	Mtr.	370000	18.40	6808000.00	0.8	296000.00	7104000.00
g	CI pipe 250mm dia, 14mm thick for crossing	Mtr	500	1543.30	771650.00	0.00	0.00	771650.00
22	HT cable & LT Cable protection cover RCC slabs	nos.	900499	235.75	212292639.25	0.0	0.00	212292639.25
23	HT & LT Cable RCC Route Marker and Straight Joint maker	nos.	4931	862.49	4252938.19	0.0	0.00	4252938.19
24	LT Feeder Pillar							
a	6- way Distribution feeder pillar with 1 no ACB , 4 pole, 3phase, 415 v , 1600 Amps for incoming and 5 nos outgoing MCCB 4 pole, 3phase, 415 v , 400 Amps rating type, metering arrangement on incomer suitable for outdoor installation, in accordance with Technical Specification	Nos	239	551595.59	131831346.01	9592.97	2292719.83	134124065.84
b	5- way Distribution feeder pillar with 1 no ACB , 4 pole, 3phase, 415 v , 1250 Amps for incoming and 4 nos outgoing MCCB 4 pole, 3phase, 415 v , 400 Amps rating type, metering arrangement on incomer suitable for outdoor installation , in accordance with Technical Specification	Nos	138	495392.98	68364231.24	8615.53	1188943.14	69553174.38
c	4- way Distribution feeder pillar with 1 no ACB , 4 pole, 3phase, 415 v , 800 Amps for incoming and 3 nos outgoing MCCB 4 pole, 3phase, 415 v , 400 Amps rating type, metering arrangement on incomer suitable for outdoor installation , in accordance with Technical Specification	Nos	27	421490.99	11380256.73	7330.28	197917.56	11578174.29
d	7- way Distribution feeder pillar with 2 no MCCB , 4 pole, 3phase, 415 v , 400 Amps for incoming and 5 nos outgoing MCCB 4 pole, 3phase, 415 v , 100 Amps rating type suitable for outdoor installation , in accordance with Technical Specification	Nos	4615	211554.27	976322956.05	3679.2	16979508.00	993302464.05
e	3 phase, 415 V, Distribution service Pillar for LT, 100 Amps rating bus bar only with 12 holes for 2 nos. incoming and 10 nos. outgoing , feeder type distribution service pillar suitable for outdoor installation , in accordance with Technical Specification	Nos	2432	54659.92	132932925.44	950.61	2311883.52	135244808.96
25	Distribution T/Fs							
a	1000 KVA 11/.433 KV T/F Oil Type	Nos.	77	1131694.30	87140461.10	19681.64	1515486.28	88655947.38
b	630 KVA 11/.433 KV T/F Oil Type	Nos.	129	862106.70	111211764.30	14993.16	1934117.64	113145881.94
c	400 KVA 11/.433 KV T/F Oil Type	Nos.	4	682398.50	2729594.00	11867.8	47471.20	2777065.20
d	1000 KVA 11/.433 KV T/F Dry Type	Nos.	10	1853315.85	18533158.50	32231.58	322315.80	18855474.30
e	630 KVA 11/.433 KV T/F Dry Type	Nos.	10	1621753.00	16217530.00	28204.4	282044.00	16499574.00
f	400 KVA 11/.433 KV T/F Dry Type	Nos.	10	1281248.35	12812483.50	22282.58	222825.80	13035309.30
26	Fencing for DT,RMU and LT ACB feeder Panel. (Per Running meter) as per Nigam Specification including gate.	R/Mtr.	9711	3822.60	37121268.60	332.4	3227936.40	40349205.00
27	PSS (Package Sub-Station)							
a	1000 KVA 11/.433 KV T/F compact type containerized T/F unit with RMU with one VCB and two LBS with FRTU and FPI, 415 V 1600 Amps Air circuit Breaker as incomer, 5nos. 400 Amps MCCB's as outgoing .	Nos.	5	3494980.63	17474903.15	60782.27	303911.35	17778814.50

b	630 KVA 11/.433 KV T/F compact type containerized T/F unit with RMU with one VCB and two LBS with FRTU and FPI, 415 V 1250 Amps Air circuit Breaker as incomer, 5nos. 400 Amps MCCB's as outgoing	Nos.	5	3163226.89	15816134.45	55012.64	275063.20	16091197.65
c	400 KVA 11/.433 KV T/F compact type containerized T/F unit with RMU with one VCB and two LBS with FRTU and FPI, 415 V 800 Amps Air circuit Breaker as incomer, 5nos. 400 Amps MCCB's as outgoing	Nos.	5	2771390.43	13856952.15	48198.09	240990.45	14097942.60
29	RMU (Ring Main Units)							
a	Indoor type 11 KV SF6 type extensible and motorized 5 way smart Ring Main Unit (RMU) complete with three VCB and two LBS with FRTU and FPI as per IS	Nos.	5	1052400.65	5262003.25	18302.62	91513.10	5353516.35
b	Indoor type 11 KV SF6 type extensible and motorized 4 way smart Ring Main Unit (RMU) complete with two VCB and two LBS with FRTU and FPI as per IS	Nos.	5	923737.50	4618687.50	16065	80325.00	4699012.50
c	Indoor type 11 KV SF6 type extensible and motorized 3 way smart Ring Main Unit (RMU) complete with one VCB and two LBS with FRTU and FPI as per IS	Nos.	5	739650.10	3698250.50	12863.48	64317.40	3762567.90
d	Indoor type 11 KV SF6 type extensible and motorized 3 way smart Ring Main Unit (RMU) complete with all three VCB and with FRTU as per IS	Nos.	5	896684.90	4483424.50	15594.52	77972.60	4561397.10
e	Indoor type 11 KV SF6 type extensible and motorized one way smart Ring Main Unit (RMU) complete with LB and with FPI as per IS	Nos.	5	177489.85	887449.25	3086.78	15433.90	902883.15
f	Indoor type 11 KV SF6 type extensible and motorized one way smart Ring Main Unit (RMU) complete with VCB and FPI as per IS	Nos.	5	253368.00	1266840.00	4406.4	22032.00	1288872.00
g	Outdoor type 11 KV SF6 type non extensible and motorized 5 way smart Ring Main Unit (RMU) complete with three VCB and two LBS with FRTU and FPI as per IS	Nos.	17	1055700.00	17946900.00	18360	312120.00	18259020.00
h	Outdoor type 11 KV SF6 type extensible and motorized 4 way smart Ring Main Unit (RMU) complete with two VCB and two LBS with FRTU and FPI as per IS	Nos.	83	926376.75	76889270.25	16110.9	1337204.70	78226474.95
i	Outdoor type 11 KV SF6 type extensible and motorized 3 way smart Ring Main Unit (RMU) complete with one VCB and two LBS with FRTU and FPI as per IS	Nos.	418	741629.25	310001026.50	12897.9	5391322.20	315392348.70
j	Outdoor type 11 KV SF6 type extensible and motorized 3 way smart Ring Main Unit (RMU) complete with all three VCB and with FRTU as per IS	Nos.	5	898665.20	4493326.00	15628.96	78144.80	4571470.80
k	Outdoor type 11 KV SF6 type extensible and motorized one way smart Ring Main Unit (RMU) complete with LB and with FPI as per IS	Nos.	5	178149.95	890749.75	3098.26	15491.30	906241.05
l	Outdoor type 11 KV SF6 type extensible and motorized one way smart Ring Main Unit (RMU) complete with VCB and FPI as per IS	Nos.	5	254028.10	1270140.50	4417.88	22089.40	1292229.90
30	Optical Fiber							
a	Un- Armoured Optical Fiber (48 Fibers) along with the all accessories connectors, switches etc.	KM	222	55309.25	12278653.50	0.00	0.00	12278653.50

b	Armoured Optical Fiber (48 Fibers) along with the all accessories connectors, switches etc.	KM	37	48848.78	1807404.86	0.00	0.00	1807404.86
c	PLB-HDPE (Permanently Lubricated High Density Poly Ethylene) pipe 40 mm. dia pipe for laying optical Fiber Cable.	KM	259	70150.00	18168850.00	0.00	0.00	18168850.00
31	Street light							
a	Supply and erection of 3 corePVC copper insulated and Sheathed Circular flexible wire of size 2.50sqmm(80/0.20mm)as per HSR No.31.9(II)e	Mtr	110000	0.00	0.00	35.88	3946800.00	3946800.00
b	Supply and erection of Galvanized Iron pipe 65 mm dia on flushed for wiring purposes including bends inspection boxes etc. where necessary and painting as required as per HSR No. 31.21(XIV)	Mtr	4000	0.00	0.00	405.45	1621800.00	1621800.00
c	Earthing with GI earth pipe 4.5 m long and 40 mm dia with masonry enclosure on the top etc. as required as per HSR item No.31.22(1)	Each	11000	0.00	0.00	1701	18711000.00	18711000.00
d	Extra item for using salt and charcoal / coke for pipe earth electrode as required as per HSR item No.31.12(II)	Each	11000	0.00	0.00	562.5	6187500.00	6187500.00
e	Supplying and laying of 25 mm x 5 mm G.I. Strip at 0.50 metre below ground level as strip earth electrode including soldering etc. as required as per HSR no. 31.22(VIII)	Mtr	55000	0.00	0.00	72.9	4009500.00	4009500.00
f	Supply and erection of 25 Sq. mm 4 Core Armoured under ground cable ,loose in existing pipe or trenches complete with necessary connections as per HSR 31.26(XII)	Mtr	341000	0.00	0.00	135.12	46075920.00	46075920.00
g	Supply and erection of copper lugs of 25sqmm size including crimping etc. up to entire satisfaction of Engineer-in-charge as per HSR No. 31.45(d)	Each	88000	0.00	0.00	15.95	1403600.00	1403600.00
h	Supply and erection of HDPE pipe 90/75 mm Outer dia/Inner dia laid 1 Mtr below ground level including digging or trenchless boring and refilling of earth including cost of suitable size socket/coupler for HDPE Pipe including cost of labour and material required to complete the job in all respects upto the entire satisfaction of the engineer-in-charge of the work.	Mtr	350000	0.00	0.00	135	47250000.00	47250000.00

i	Supply and erection of Hot Dip Galvanized octagonal pole of 3 mm thickness 7 Mtr. Long pole with top dia 70 mm and bottom dia 130 mm with base plate of size 220 x 220 x 12 mm, including cost of nut and bolts and all accessories(including provisions of camera, Wi-Fi unit, speaker etc.at later stage) as supplied by the manufacture including cost of foundation accessories etc. the foundation bolts as per manufacturer design should be hot dipped galvanized pole complete with door locking arrangement, Terminal plate consisting of 2 nos. 100 A, 4 pole natural links inclding connection etc. with suitable connecting arrangement for 2 nos. MCBs/ kit- kat including cost of RCC 1:1.5:3 for foundation of size 0.7 m x 0.7 m x 1.8 m with minimum 8 nos. 12 mm dia longitudinal MS reinforcement rods with rings of 8 mm dia not more than 200 mm C.C. for fixing the pole with all labour & material required to complete the job in all respect upto the entire satisfaction of Engineer - In - Charge of the work.as per HSR item no. 31.68(i)	nos.	2000	0.00	0.00	13940	27880000.00	27880000.00
j	Supply and erection of Hot Dip Galvanized octagonal pole of 3 mm thickness 8 Mtr. Long pole with top dia 70 mm and bottom dia 135 mm with base plate of size 225 x 225 x 16 mm, including cost of nut and bolts and all accessories (including provisions of camera, Wi-Fi unit, speaker etc.at later stage)as supplied by the manufacture including cost of foundation accessories etc. the foundation bolts as per manufacturer design should be hot dipped galvanized pole complete with door locking arrangement, Terminal plate consisting of 2 nos. 100 A, 4 pole natural links inclding connection etc. with suitable connecting arrangement for 2 nos. MCBs/ kit- kat including cost of RCC 1:1.5:3 for foundation of size 0.7 m x 0.7 m x 1.8 m with minimum 8 nos. 12 mm dia longitudinal MS reinforcement rods with rings of 8 mm dia not more than 200 mm C.C. for fixing the pole with all labour & material required to complete the job in all respect upto the entire satisfaction of Engineer - In - Charge of the work as per HSR item No.31.68(ii)	Nos	9000	0.00	0.00	15320	137880000.00	137880000.00
k	Supply, installation, Testing & commissioning of LED type IP-66 and above ,72W Street Light Fitting as per technical specification enclosed. With Free Replacement Guarantee --- 5 years as per the specification.	Nos	2000	0.00	0.00	13930	27860000.00	27860000.00
l	Supply, installation, Testing & commissioning of LED type IP-66 and above 35W Street Light Fitting as per technical specification enclosed . With Free Replacement Guarantee --- 5 years as per the specification.	Nos	9000	0.00	0.00	8168	73512000.00	73512000.00
m	Supply and erection of terminations for octogonal poles consisting of 1no 4 pole 40 A connector with brass/copper links,2 no 10A , SP MCB 10 KA mounted on 5 mm thick bakelite sheet duly fixed inside of the pole.	Nos	11000	0.00	0.00	440	4840000.00	4840000.00

n	Supply, Erection, Testing and Commissioning of Intelligent feeder pillar (Outdoor type) for smart lighting system having compatibility with optical fibre,GSM,Wi-Fi,Wi-max,Ethernet as per specifications attached including concentrator,converter and other items required for successful operation as per entire satisfaction of Engineer-Incharge	Nos	75	0.00	0.00	295570	22167750.00	22167750.00
o	Supply , fabrication and erection of single arm bracket 1500 mm overhang made of 48.3mm OD Dia.MS pipe (3.5mm thick) as per IS 1161 welded to canopy 400 mm long with angle of inclination of 105 degree to the vertical.The canopy should be suitable for 70 mm top dia pole.The bracket should be hot dip galvanized alongwith 3 no. 10mm dia.SS bolts	Nos	11000	0.00	0.00	2350	25850000.00	25850000.00
32	Civil Work including material required for civil work			0.00				
a	Foundation for Package Substation (400,630 & 1000kVA)	No.	15	0.00	0.00	60000	900000.00	900000.00
b	Foundation for RMU	No.	538	0.00	0.00	18000	9684000.00	9684000.00
c	Foundation for Distribution Transformer(400,630 & 1000kVA)	No.	380	0.00	0.00	20000	7600000.00	7600000.00
d	Foundation for LT feeder Pillar			0.00				
i	Type A	No.	239	0.00	0.00	14000	3346000.00	3346000.00
ii	Type B	No.	138	0.00	0.00	14000	1932000.00	1932000.00
iii	Type C	No.	27	0.00	0.00	11000	297000.00	297000.00
iv	Type D	No.	4615	0.00	0.00	14000	64610000.00	64610000.00
v	Type E	No.	2432	0.00	0.00	11000	26752000.00	26752000.00
e	Excavation for trenches upto 2m depth for size 1000mmX1200mmX700mm with supplying & laying 100mm jamuna sand below the 2 no. cables i/c refilling the excavated earth, watering, rolling compaction etc. complete in all respects alongwith laying of cables and all necessary installation of material including HDPE pipes & PLB-HDPE for road/rail crossing or as per site requirement , GI pipes (Heavy Gauge) for bridge crossings, cable protection cover RCC slabs, Yamuna Sand, end termination, supporting structure for crossing small bridges, culverts etc, cast riser for cable joint marker, route markers, earthing material and earthing cable etc, including testing and commissioning for Laying and restoration of excavated portion to original look as far as practical possible of HT/ LT(3-core, 1 core) and optic fiber cable of various sizes below the ground complete as per Drg./TS.	Mtr	611000	0.00	0.00	150	91650000.00	91650000.00

f	Excavation for trenches upto 2m depth for size 1000mmX1200mmX1000 m with supplying & laying 100mm jamuna sand below the 3 no. cables i/c refilling the excavated earth, watering, rolling compaction etc. complete in all respects. alongwith laying of cables and all necessary installation of material including HDPE & PLB-HDPE pipes for road/rail crossing for road/rail crossing or as per site requirement , GI pipes (Heavy Gauge) for bridge crossings, cable protection cover RCC slabs, Yamuna Sand, end termination, supporting structure for crossing small bridges, culverts etc, cast riser for cable joint marker, route markers, earthing material and earthing cable etc, including testing and commissioning for Laying and restoration of excavated portion to original look as far as practical possible of HT/ LT(3-core, 1 core) and optic fiber cable of various sizes below the ground complete as per Drg./TS.	Mtr	35000	0.00	0.00	190	6650000.00	6650000.00	
g	Construction of room for providing Underground Distribution Transformer alongwith RMU and Ltfeeder panel	No.	5	0.00	0.00	400000	2000000.00	2000000.00	
h	Construction of double-decker room for providing Distribution Transformer alongwith RMU and LT feeder panel	No.	5	0.00	0.00	375000	1875000.00	1875000.00	
i	Trenchless laying of HDPE pipe or PLB-HDPE pipe by using HDD method	km	397	0.00	0.00	650000	258050000.00	258050000.00	
Total =							3619548303.53	980769909.85	4600318213.38
Grand Total of Supply & Erection							4600318213.38		

Estimate for dismantlement of material of existing HT and LT network along with Distribution T/F and allied material and transportation to Nigam store.

Sr. No.	Description	Unit	Dismantling Unit Rates	Qty	Total Cost
1	HT Pole along with complete steel structure	Nos.	300.00	44687	13406100.00
2	LT Pole along with complete steel structure	Nos.	287.50	7446	2140725.00
3	ACSR Conductor (50 mm. sq.)	KM	925.00	13.200	12210.00
4	ACSR Conductor (80 mm. sq.)	KM	1125.00	213.470	240153.75
5	ACSR Conductor (100 mm. sq.)	KM	1500.00	98.960	148440.00
6	Distribution T/F 25 & 63 KVA	nos.	1200.00	10	12000.00
7	Distribution T/F 100 to 200 KVA	nos.	1360.00	154	209440.00
8	Distribution T/F 200 to 500 KVA	nos.	562.50	70	39375.00
9	HT AB Cable 3CX50 mm.sq. with messenger wire	KM	10500.00	5.560	58380.00
10	HT AB Cable 3CX70 mm.sq. with messenger wire	KM	11000.00	1.000	11000.00
11	HT AB Cable 3CX95 mm.sq. with messenger wire	KM	14000.00	6.040	84560.00
12	HT AB Cable 3CX120 mm.sq. with messenger wire	KM	14000.00	3.510	49140.00
13	HT AB Cable 3CX185 mm.sq. with messenger wire	KM	18000.00	22.780	410040.00
14	HT XLPE Cable 3CX95 mm.sq.	KM	12000.00	1.4700	17640.00
15	HT XLPE Cable 3CX185 mm.sq.	KM	15000.00	1.8800	28200.00
16	HT XLPE Cable 3CX300 mm.sq.	KM	20000.00	7.6300	152600.00
Total dismantlement Cost					17020003.75

Note: - The contractor will dismantle the entire existing electrical distribution network after energization of new system laid under this project. In addition, any other item which is not mentioned above but is required to be dismantled for the completion of dismantlement activity of entire existing electrical distribution network shall also be in the scope of contractor for which no payment shall be given.

Abstract of Estimated cost of Smart Grids Project, Gurgaon

Sr. No.	Description	Cost (in Cr.)
A	Total Supply Cost	3619548303.53
B	Total Erection Cost	980769909.85
C	Total Cost	4600318213.38
D	O&M cost for five years for street light after completion of project, (@10% of total supply & Erection cost of street light items excluding 15% overhead charges)	44919587.00
E	O&M cost for five years after completion of project for the entire project area, excluding street light, (@10% of total cost supply & Erection of supply and erection of items excluding street light items and excluding 15% overhead charges)	367900734.69
F	Dismantling estimated Cost	17020003.75
G	Total PROJECT COST (C+D+E+F)	5030158538.82