

ABSTRACT OF ESTIMATE SMART ROAD PHASE 2

TOTAL LENGTH 3500 METERS

SUMMARY SHEET

Sr No.	Item Description	Amount (In Rs.)
1	ROAD	₹ 7,44,26,600.38
2	UTILITY DUCT	₹ 7,44,97,986.10
3	STORM WATER DRAIN	₹ 2,73,00,982.30
4	PEDESTRIAN TRACK	₹ 3,55,31,045.10
5	ROAD SIGNAGES	₹ 22,63,026.60
6	LANDSCAPE WORK	₹ 64,58,501.16
7	UNDER GROUND ELECTRICAL WORK	₹ 16,01,52,496.20
8	STREET LIGHT WORK	₹ 1,14,65,519.00
	TOTAL	₹ 39,20,96,156.84
	SAY RS (in Crores)	39.21

ESTIMATE OF ROAD

S.No.	UADD SOR Vol II & III, ITEM NO	Descriptions of Item	Quantity	Rate	Revised Reduced Rates as per Order	Unit	Amount
1	2.3, (i) Vol III	Dismantling					
		Dismantling of existing structures like culverts, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T&P and scaffolding wherever necessary, sorting the dismantled material, disposal of unserviceable material and stacking the serviceable material with all lifts and lead 1000 meter.					
		Cement Concrete Grade M-15 & M-20	350.00	234.00	210.60	cum	₹ 73,710.00
2	2.40	Dismantling of flexible pavements and disposal of dismantled materials up to a lead of 1000 meter, stacking serviceable and unserviceable materials separately and as per relevant clauses of section-200.					
	a)	Bituminous courses	367.50	358.00	322.20	cum	₹ 1,18,408.50
5	2.12 vol III	Removal of telephone / Electric poles including excavation and dismantling of foundation concrete and lines under the supervision of concerned department, disposal with all lifts and up to a lead of 1000 meter and stacking the serviceable and unserviceable material separately.					
		Total quantity	30.00	90.00	81.00	each	₹ 2,430.00
6	3.1, Vol III	Excavation					
		Excavation for roadway in soil including loading in truck for carrying of cut earth to embankment site with all lifts and lead upto 1000 metres and as per relevant clauses of section-300					
		Total quantity	37191.00	98.00	88.20	cum	₹ 32,80,246.20
7	3.11, Vol III	Earthwork					
		Construction of Embankment/Sub grade/ earth shoulders, as per clause 305 & its sub-clauses, Where required but with approved materials/soil like morrum CBR value not less than 7% i/c all lead & lifts i/c excavation, cost of watering, mpaction and maintenance of surface during construction to ensure shedding & preventing ponding of water (clause 305.3.6) shaping & dressing (clause 305.3.7), finishing etc. complete but excluding scarifying existing granular/bituminous road surface vide clause 305.6.					
		Total quantity	17710.00	272.00	244.80	cum	₹ 43,35,408.00
8	4.8(a) I Vol III	Crusher Run Macadam					

		Crusher Run Macadam Base (Providing crushed stone aggregate, depositing on a prepared surface by hauling vehicles, spreading and mixing with a motor grader, watering and compacting with a vibratory roller to clause 410 to form a layer of sub-base/Base)					
		For 53 mm maximum size					
		Total quantity	10626.00	833.00	749.70	cum	₹ 79,66,312.20
9	4.5 Vol III	WMM					
		Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub - base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density and as per relevant clauses of section - 400.					
		Total quantity	8855.00	951.00	855.90	cum	₹ 75,78,994.50
10	5.1 Vol III	Primer Coat					
		Providing and applying primer coat with bitumen emulsion on prepared surface of granular Base including clearing of road surface and spraying primer at the rate of 0.75 kg/sqm using mechanical / Manual means and as per relevant clauses of section 502.					
		Total quantity	112420.00	26.00	23.40	Sqm	₹ 26,30,628.00
11	5.2 (ii) Vol III	Tack Coat					
		Providing and applying tack coat with bitumen emulsion using emulsion pressure distributor on the prepared bituminous / granular surface cleaned with mechanical broom and as per relevant clauses of section 503.					
	i	@0.25 kg per sqm (normal bituminous surfaces)					
		Total quantity	53900.00	9.00	8.10	sqm	₹ 4,36,590.00
	ii	@0.30 kg per sqm (dry & hungry bituminous surfaces/granular surfaces treated with primer)					
		Total quantity	55748.00	11.00	9.90	sqm	₹ 5,51,905.20
	iii	@0.35 kg per sqm (Non-bituminous surfaces) cement concrete pavement					
		<i>On OLD CC Road @ 0.35 Kg / sqm</i>					
		Total quantity	3200.00	13.00	11.70	sqm	₹ 37,440.00
12	5.6 (i) Vol III	Dense Bituminous Macadam					

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ESTIMATE FOR LENGTH UNDERGROUND CABLE DUCT IN DWC HDPE PIPE-SMART ROAD WORKS							
S.NO	UADD SOR 2012	DESCRIPTION	QTY	RATE	REVISED REDUCED RATES AS PER ORDER	UNIT	AMOUNT
EARTH WORK							
1	Vol. II 2.6.1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed. All kind of soil					
		Total quantity	29091.60	127.00	114.30	Cum	₹ 36,94,633.20
2	Vol. II 2.26.1	Extra for every additional lift of 1.5 m or part thereof in. All kinds of soil. Over and above Vol. II 2.6.1					
		Total quantity	6048.00	24.00	21.60	Cum	₹ 1,45,152.00
3	Vol. II 2.7.1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed. Ordinary Rock					
		Total quantity	3825.00	196.00	176.40	Cum	₹ 7,49,700.00
4	Vol. II 2.26.2	Extra for every additional lift of 1.5 m or part thereof in. Ordinary or hard rock. Over and above vol. II 2.7.1					
		Total quantity	990.00	44.00	39.60	Cum	₹ 43,560.00
EARTH FILLING							
2	Vol ii 2.25	Filling by available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5m.					
		Total quantity	17850.00	59.00	53.10	Cum	₹ 10,53,150.00
CARRIAGE							
3	Vol. II 1.1	Carriage of Material by Mechanical transport including loading unloading & stacking etc.					
a		For 1 km lead	250.00	73.00	65.70	Cum	₹ 18,250.00
b		For 2 km lead	1250.00	81.00	72.90	Cum	₹ 1,01,250.00
c		For 3 km lead	1750.00	88.00	79.20	Cum	₹ 1,54,000.00
d		For 4 km lead	7350.00	95.00	85.50	Cum	₹ 6,98,250.00
e		For 5 km lead	8500.00	102.00	91.80	Cum	₹ 8,67,000.00
f		Beyond 5 Kms and upto 10 Kms (add for every Km)					
		For 6 km lead	1500.00	108.00	97.20	Cum	₹ 1,62,000.00
		For 7 km lead	2600.00	114.00	102.60	Cum	₹ 2,96,400.00
		For 8 km lead	2000.00	120.00	108.00	Cum	₹ 2,40,000.00
PCC							
4	Vol ii 4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering All work up to plinth.					

	4.1.2	Cement concrete grade M-15 (Nominal Mix) with 20 mm maximum size of stone aggregate.					
		Total quantity	1616.24	4154.00	3738.60	Cum	₹ 67,13,860.96
SAND FILLING							
5	Vol ii 2.27	Supplying and filling in plinth under floors including, watering, ramming consolidating and dressing complete.					
		Total quantity	20161.43	1201.00	1080.90	Cum	₹ 2,42,13,879.23
		DWC HDPE PIPE Providing& Laying					
6	Vol iv .17.4	Supplying and installing Double wall corrugated pipes (DWC) of HDPE (IS 14930 Part-II marked) for cable laid under ground with necessary connecting sockets/ couplings,tees of same material and at required depth upto 90cm. below road/ground surface,including excavation, back filling with excavated material with ramming and making the surface good.					
a	17.4.10	200 mm dia Electrical Duct	10500.00	481.00	432.90	Meter	₹ 50,50,500.00
b	17.4.9	175.00 mm outside dia.	10500.00	432.00	388.80	Meter	₹ 45,36,000.00
c	17.4.8	160.00mm outside dia.	10500.00	407.00	366.30	Meter	₹ 42,73,500.00
d	17.4.7	145.00mm outside dia.	700.00	376.00	338.40	Meter	₹ 2,63,200.00
e	17.4.6	120.00mm outside dia.	350.00	333.00	299.70	Meter	₹ 1,16,550.00
f	17.4.5	110 mm out side dia	350.00	309.00	278.10	Meter	₹ 1,08,150.00
g	17.4.4	90.00mm outside dia.	350.00	254.00	228.60	Meter	₹ 88,900.00
h	17.4.3	77.00mm outside dia.	350.00	222.00	199.80	Meter	₹ 77,700.00
i	17.4.2	63 mm out side dia	1400.00	210.00	189.00	Meter	₹ 2,94,000.00
j	17.4.1	50 mm outside dia	1400.00	207.00	186.30	Meter	₹ 2,89,800.00
7		RCC					
	Vol. II 5.31	Providing and laying in position machine batched, machine mixed and machine vibrated design mix cement concrete of specified grade for reinforced cement concrete work including pumping of concrete to site of laying but excluding the cost of centring, shuttering, finishing and reinforcement. including Admixtures in recommended proportions as per IS 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge. M-25 grade reinforced cement concrete by using 410 kg. of cement per cum of concrete. All work up to floor 2 level.					
		Total quantity	1127.00	5245	4720.50	Cum	₹ 59,11,115.00
		Precast Reinforced Cover for manhole					
8	Vol ii 5.10	Providing, hoisting and fixing up to floor two level precast reinforced cement concrete work in string courses, bands, copings, bed plates, anchor blocks, plain window sills and the like including the cost of required centring, shuttering, finishing smooth with 6 mm thick cement plaster 1:3 (1 cement : 3 fine sand) on exposed surfaces complete but excluding cost of reinforcement with Cement concrete grade M-20 (Nominal Mix with 20 mm maximum size of stone aggregate)					
			79.74	6524	5871.60	cum	₹ 5,20,223.76
		Reinforcement					

9	Vol ii 5.20	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding wire upto floor two level including all wastage etc. complete.					
	5.20.6	Thermo mechanically treated Bars	150842.50	60	54.00	Kg	₹ 90,50,550.00
		Shuttering					
10	Vol ii 20.1	Centring and shuttering including strutting, propping etc.and removal of form for :					
		Shuttering For Manhole-OFC					
a	20.1.1	Foundations, footings, bases of columns, etc. For mass concrete.	105.60	138.00	124.20	Sqm	₹ 14,572.80
b	20.1.2	Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc	1188.00	216.00	194.40	Sqm	₹ 2,56,608.00
c	20.1.2	Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc	1980.00	216.00	194.40	Sqm	₹ 4,27,680.00
		Shuttering For Manhole-Electrical					
d	20.1.1	Foundations, footings, bases of columns, etc. For mass concrete.	144.72	138.00	124.20	Sqm	₹ 19,971.36
e	20.1.2	Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc	4452.84	216.00	194.40	Sqm	₹ 9,61,813.44
f	20.1.2	Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc	3515.40	216.00	194.40	Sqm	₹ 7,59,326.40
g	20.1.2	Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc	4030.99	216.00	194.40	Sqm	₹ 8,70,694.27
h	20.1.2	Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc	3093.55	216.00	194.40	Sqm	₹ 6,68,207.23
		Plaster					
11	Vol ii 13.7	12 mm cement plaster finished with a floating coat of neat cement of mix :					
	13.7.3	1:5 (1 cement: 5 fine sand)					
		Total quantity	1545.97	127.00	114.30	Sqm	₹ 1,96,338.44
		Dewatering					
12	Vol. III 2.13	Dewatering of water caused by springs, tides or river seepage, broken water mains or drains or well or the like.	7000.00	51.00	45.90	KL	₹ 3,57,000.00
		Providing & Fixing Steel Work					
13	Vol. II 10.25	Steel work welded in built up sections/ framed work including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works.	3500.00	67.00	60.30	KG	₹ 2,34,500.00
		TOTAL					₹ 7,44,97,986.10

ESTIMATE OF STORM WATER DRAIN

TOTAL LENGTH 3500 METERS

S No.	UADD SOR ITEM NO	Descriptions of Item	Quantity	Rate	Revised Reduced Rates as per Order	Unit	
1	Vol. II 2.6.1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed.					
		Total quantity	5840.00	127.00	114.30	cum	₹ 6,67,512.00
2	Vol II 2.27.1	Supplying and filling in plinth under floors including, watering, ramming consolidating and dressing complete. Crusher Stone Dust					
		Total quantity	584.00	628.00	565.20	cum	₹ 3,30,076.80
3	Vol. I 16.15.2	Carriage of Material by Mechanical transport including loading unloading & stacking etc.					
a		For 1 km lead	250.00	91.25	82.13	Cum	₹ 22,812.50
b		For 2 km lead	1250.00	101.25	91.13	Cum	₹ 1,26,562.50
c		For 3 km lead	1750.00	110.00	99.00	Cum	₹ 1,92,500.00
d		For 4 km lead	7350.00	118.75	106.88	Cum	₹ 8,72,812.50
e		For 5 km lead	8500.00	127.50	114.75	Cum	₹ 10,83,750.00
f		Beyond 5 Kms and upto 10 Kms (add for every Km)					
		For 6 km lead	1500.00	133.50	120.15	Cum	₹ 2,00,250.00
		For 7 km lead	2600.00	139.50	125.55	Cum	₹ 3,62,700.00
		For 8 km lead	2000.00	145.50	130.95	Cum	₹ 2,91,000.00
		Cement Concrete M-20 (Duct)					
3	4.1.2 Vol II	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering All work up to plinth.					
		M 15 with 20mm maxumum size of aggregate.					
		Total quantity	584.00	4154.00	3738.60	cum	₹ 21,83,342.40

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ESTIMATE OF PEDESTRIAN PATH							
TOTAL LENGTH 3500 METERS							
S No.	UADD SOR ITEM NO	Descriptions of Item	Quantity	Rate	Revised Reduced	Unit	AMOUNT
1	3.1, Vol III	Excavation					
		Excavation for roadway in soil including loading in truck for carrying of cut earth to embankment site with all lifts and lead upto 1000 metres and as per relevant clauses of section-300					
		Total	10950.00	98.00	88.20	cum	₹ 9,65,790.00
3	4.1.2 Vol II	Cement Concrete M - 15					
		Providing and laying in position cement concrete in foundation Up to plinth level. Cement concrete grade M-10 (Nominal Mix) with 40 mm maximum size of stone aggregate					
			328.50	4154.00	3738.60	Sqm	₹ 12,28,130.10
4	5.1. Vol II	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level :					
		Cement concrete grade M-20 (Nominal Mix) with 20 mm maximum size of stone aggregate.					
			210.00	4728.00	4255.20	Sqm	₹ 8,93,592.00
5		Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.					
		Thermo-Mechanically Treated bars					
		Total Weight of steel KG-	13188.00	60	54.00	Kg	₹ 7,12,152.00
7	11.20 Vol II	Chequerred precast cement concrete tiles 18-20mm thick in footpath & courtyard jointed with neat cement slurry mixed with pigment to match the shade of tiles including rubbing and cleaning etc. complete on 20 mm thick bed of cement mortar 1:4 (1 cement: 4 coarse sand).					
	11.20.1	Medium Shade Using 50% white Cement & 50% grey cement	17500.00	840.00	756.00	SqM	₹ 1,32,30,000.00
		Medium Shade Using 50% white Cement & 50% grey cement	500.00	840.00	756.00	SqM	₹ 3,78,000.00
	11.20.3	Dark shade using ordinary cement.	3500.00	616.00	554.40	SqM	₹ 19,40,400.00
		At junction					
		Dark shade using ordinary cement.	100.00	616.00	554.40	SqM	₹ 55,440.00
8	8.1, Vol III, pg 69	Kerb Stone					

		Construction of cement concrete kerb with top and bottom width 115 and 165 mm respectively, 250 mm high in M 20 grade PCC on M-10 grade foundation 150 mm thick, foundation having 50 mm projection beyond kerb stone, kerb stone laid with kerb laying machine, foundation concrete laid manually, all complete and as per clause 408 of specifications. A Using Concrete Mixer					
		Total Quantity	7270.00	187.00	168.30	meter	₹ 12,23,541.00
	NON SOR	Providing and Laying of PLASTITRAK, Roll-on Surfacing Material :A Solvent Free, High Build, Two pack, Seamless, Tough, skid resistant 1.0-1.5 mm thick red (or as required) based on Gloss and color retaining Acrylic Cross Linking Resin System for Cycle track and similar applications including surface cleaning and cost of all material etc. complete.					
		Total Quantity	12960.00	1150.00	1150.00	meter	₹ 1,49,04,000.00
						TOTAL	₹ 3,55,31,045.10

ESTIMATE OF ROAD MARKING, STREET FURNITURES & PLANTATION							
Road Streach From Golbazar to Malviya chowk(387), Golbazar to Satkar hotel(193), Golbazar to Omti nalla via Sahard jain House(904) & Golbazar to Kachiyana road(125)							
TOTAL LENGTH 1609 METERS							
S No.	UADD SOR ITEM NO	Descriptions of Item		Rate	Revised Reduced Rates as per Order	Unit	Amount
			Quantity				
1	Item 8.10 Vol III	Road Marking					
		Solid Lines in White Colour					
		Road Marking with Hot Applied Thermoplastic Compound with Reflectorising Glass Beads on Bituminous Surface (Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 .The finished surface to be level, uniform and free from streaks and holes and as per relevant clauses of section-800.					
		Total Quantity	2265.00	900.00	810.00	Sqm	₹ 18,34,650.00
2	Item 8.8 Vol III	Painting lines, dashes, arrows etc					
		Painting lines, dashes, arrows etc on roads in two coats on new work with ready mixed road marking paint conforming to IS:164 on bituminous surface, including cleaning the surface of all dirt, dust and other foreign matter, demarcation at site and traffic control as per relevant clauses of section-800 & I.R.C.-67 including cost of paint etc. complete.	2625.00	70.00	63.00	Sqm	₹ 1,65,375.00
3	Item No 8.3 Vol III	Signages					
		Providing and fixing of retro- reflectorised cautionary, mandatory and informatory sign as per IRC :67 made of encapsulated lens type reflective sheeting vide clause 801.3, fixed over aluminium sheeting, 1.5 mm thick supported on a mild steel angle iron post 75 mm x 75 mm x 6 mm (height from crown level of the road and bottom of the sign board shall not be less than 1.5 m.) firmly fixed to the ground by means of properly designed foundation with M15 grade cement concrete 45 cm x 45 cm x 60 cm, 60 cm below ground level as per approved drawing including painting of vertical post as per specification.					
		90 cm equilateral triangle	16.00	3715.00	3343.50	Nos	₹ 53,496.00
		80 cm x 60 cm rectangular	32.00	4537.00	4083.30	Nos	₹ 1,30,665.60

4		Road Delineators (Supplying and installation of delineators (road way indicators, hazard markers, object markers), 80-100 cm high above ground level, painted black and white in 15 cm wide stripes, fitted with 80 x 100 mm rectangular or 75mm dia circular reflectorised panels at the top, buried or pressed into the ground and confirming to IRC-79 and the drawings as per relevant clauses of section-800 of specifications.					
	8.12 Vol III		100.00	292.00	262.80	each	₹ 26,280.00
		Road Markers/Road Stud with Lense Reflector (Providing and fixing of road stud 100x 100 mm, dia cast in aluminium, resistant to corrosive effect of salt and grit, fitted with lense reflectors, installed in concrete or asphaltic surface by drilling hole 30 mm upto a depth of 60 mm and bedded in a suitable bituminous grout or epoxy mortar, all as per BS 873 part 4:1973)					
	8.20 Vol III		200.00	292.00	262.80	each	₹ 52,560.00
TOTAL							₹ 22,63,026.60

Landscape Development along Proposed Smart Road, Jabalpur

S.No.	SOR Ref	Particular of item	Qty	Unit	Rate	Revised Reduced Rates as per Order	Total Amount
1	UADD SOR VOL II 19.1	Trenching in ordinary Soil upto a depth of 60 Cm including removal & Stacking of serviceable Material and then disposing of by speading and neatly leveling with in lead of 50m and making up the trenched area to proper levels by filling with earth or earth mixed with sludge or/and manure before and after flooding trench with water(excluding cost of imported earth,sludge or manure)	6720.00	CUM	129.00	116.10	780192.00
2	UADD SOR VOL II 19.2	Supplying & Stacking of good earth at site including royalty & carriage up to 1km(earth measured in stacks will be reduced by 20% for Payment)	3360.00	CUM	184.00	165.60	556416.00
3	UADD SOR VOL II 19.3	Supplying & Stacking Sludge at Site including royalty Carriage up to 1 km(sludge measured in stack will be reduced by 8% for payment)	3360.00	CUM	162.00	145.80	489888.00
4	19.4.1	Supplying & stacking at site dump manure From Approved Source including carriage up to 1 km(manure Measured in stacks will be reduced by 8% for payment) screened through sieve of I.S.designation 20mm	3360.00	CUM	105.00	94.50	317520.00
5	19.5	Rough dressing the trenched ground including breaking clods.	6720.00	100 SQM	42.00	37.80	2540.16
6	UADD SOR VOL II 19.6	Uprooting Weeds From the trenched Area after 10 to 15 Days of its Flooding with water including Disposal of Uprooted Vegetation.	6720.00	100 CUM	137.50	123.75	8316.00
7	UADD SOR VOL II 19.8	Spreading of Sludge ,Dump manure & good earth in required thickness (cost of sludge, dump manure or And good earth to be paid separately)	6720.00	CUM	15.00	13.50	90720.00
8	UADD SOR VOL II 19.9	Mixing earth & sludge or manure in proportion Specified or directed.					
		Adding the quantity of earth, sludge and manure	10080.00	CUM	102.00	91.80	925344.00
9	MP PWD 23.10	Total Cast of Selection-one Grass (Carpet Grass)including Leveling shaping compaction work soil treatment, grass fixing charges cost of irrigation deweeding ,Hoeing & maintenance up to 90 Days	1680.00	SQM	197.00	177.30	297864.00

10	19.13	Preparation of beds for hedging and shrubbery by excavating 60cm deep and trenching the excavated base to a further depth of 30cm, refilling the excavated earth after breaking clods and mixing with sludge or manure in the ratio of 8:1(8 parts of stacked volume of earth after reduction by 20% : one part of stacked volume of sludge or manure after reduction by 8%), flooding with water, filling with earth if necessary, watering and finally fine dressing, leveling etc. including stacking and disposal of materials declared unserviceable and surplus earth by spreading and leveling as directed, within a lead of 50m lift up to 1.5 m complete (cost of sludge, manure or extra earth to be paid for separately).	6720.00	CUM	62.00	55.80	374976.00
11	UADD SOR VOL II 19.14	Digging holes in ordinary Soil & refilling the same with the Excavated Earth mixed with Manure or sludge in the ratio of 2:1 by volume(2 Part of Stacked, Volume of earth after reduction by 20% 1 Part of Stacked Volume of manure after reduction by 8%) flooding with Water dressing including removal of rubbish & Surplus earth. If any with all leads & Lifts(Cost of manure / Sludge/ Soil if needed to be paid for separately)					
		Holes 60 cm dia and 60 cm deep	1400.00	EACH	24.00	21.60	30240.00
		Holes 45 cm dia and 45 cm deep	3500.00	EACH	21.00	18.90	66150.00
		Holes 30 cm dia 30 cm deep	3500.00	EACH	10.00	9.00	31500.00
		Hedge & other Cluster Ground Cover Plantation & Digging Charges					
12	UADD SOR VOL II 19.16	Providing and fixing M.S. flat iron tree guard 60cm dia. and 2m height above ground level formed of 4 nos. 25x6mm and 8 nos. 25x3mm vertical M.S. flats rivetted to 3 nos. 25x6mm M.S. flat iron rings in two halves, bolted together with 8mm dia. and 30mm long bolts including painting two coats with paint of approved brand and manufacture over a coat of priming, complete in all respects.	350.00	EACH	2037.00	1833.30	641655.00
13	UADD SOR VOL II 19.19	Edging with bricks laid dry length wise including excavation, refilling, consolidating with hand packing and spreading neatly surplus earth within a lead of 50 m :					
	19.19.2	50 class designation.					
	19.19.2.1	chimney. Bricks	1750.00	METER	34.00	30.60	53550.00

14	MP PWD SOR 23.24	Preparation of mounds of various size and shape by available excavated /supplied earth in layers not exceeding 20 cm in depth, breaking clods, watering of each layer, dressing etc lead upto 50 meter and lift upto 1.5 m complete as per direction Of Officer-in-charge .	300.00	cum	153.00	137.70	41310.00
15	MP PWD SOR 23.15	Providing and Planting different Variety of Plants of approved quality and Size as mentioned					
16	MP PWD SOR 23.15.1	Any of one from Plumeria alba, Ficua benjamina, Michelia champaca, Begonia, Plumria Pudica plants or equivalent (1.80 m to 2 m height) or equivalent	250.00	EACH	645.00	580.50	145125.00
17	MP PWD SOR 23.15.2	Any of one from Lantana Variagated/red, Lantana blue white, Hamelia Patens, dwarf, Langtana variagated, Tecoma radicans, Duranta plumieri (golden) (Height 0.3 m to 0.45 m) or equivalent	7500.00	EACH	33.00	29.70	222750.00
18	MP PWD SOR 23.15.3	Any of one from Hibiscus, Galphimia, Bamboo variagated, TMC spp., Hamelia patens, Bougainvillea, Canna red/yellow, Jaquemontia (height 0.3 m to 0.45 m) or equivalent	5000.00	EACH	54.00	48.60	243000.00
19	MP PWD SOR 23.15.4	Any of one from spathodia, Silver oak, Thuja, Bottle brush, Ixora coccinea, (height 0.45 m to 0.60 m)or equivalent	500.00	EACH	319.00	287.10	143550.00
20	MP PWD SOR 23.15.5	Any of one from Clerodendron inermi, Allamanda nerifolia, Allamanda cathartica, Bougainvillea or equivalent	7500.00	EACH	96.00	86.40	648000.00
21	MP PWD SOR 23.15.7	Foxtail palm or equivalent (1.80 m to 2.10 m height) or equivalent	75.00	EACH	1784.00	1605.60	120420.00
22	MP PWD SOR 23.15.8	Cycus (1.80 m to 2.10 m height) or equivalent	50.00	EACH	3067.00	2760.30	138015.00
23	MP PWD SOR 23.15.9	Ficus spp. (1.80 m to 2.10m height) or equivalent	100.00	EACH	994.00	894.60	89460.00
	landscape						6458501.16

Estimate of Under Ground Electrification Work at Smart Road Phase 2

Sr. No.	SOR	Code	Description of Items	Qty	Rate	Revised Reduced Rates	Unit	Amount
			HT Cable specification, Laying and Termination					
1	MP PWD SOR 2014	41.3	Supply of approved High-Tension XLPE cable (conforming IS-7098/II/85) as per ISI standard 3 core Armoured with Alu. Solid/stranded conductor ISI MARKED as required					
		41.3.1	3 CORE XLPE CABLE 11 KV GRADE					
		41.3.1.4	120 Sq.mm.	500	1,377.00	1,377.00	Mtrs	₹ 6,88,500.00
		41.3.1.5	150 Sq.mm.	2,000	1,537.00	1,537.00	Mtrs	₹ 30,74,000.00
		41.3.2	3 CORE XLPE CABLE 33 KV GRADE					
		41.3.2.2	120 Sq.mm.	500	2,362.00	2,362.00	Mtrs	₹ 11,81,000.00
		41.3.2.3	150 Sq.mm.	1,200	2,562.00	2,562.00	Mtrs	₹ 30,74,400.00
2	MP PWD SOR 2014	41.10	Providing & Making cable end termination with HEAT SHRINKABLE jointing kit complete with all accessories including lugs suitable for 33 kV/11 kV 3 core XLPE alum. conductor cable as required as per specification and as per accepted standard including connection testing complete.					
		41.10.1	Heat shrinkable joint,kit 11 kV XLPE, 3 Core					
		41.10.1.1	Heat shr.jointg. kit 11 kV XLPE cable O.D. termination c. 3 x 120-185 sq.mm.	15	13,078.00	13,078.00	Each	₹ 1,96,170.00
		41.10.1.2	Heat shr.jointg. kit 11 kV XLPE cable I.D. termination c. 3 x 120-185 sq.mm.	15	15,691.00	15,691.00	Each	₹ 2,35,365.00
		41.10.1.3	Heat shr.jointg. kit 11 kV XLPE cable Straight Joint c. 3 x 120-185 sq.mm.	12	26,902.00	26,902.00	Each	₹ 3,22,824.00
	MP PWD	41.10.2	Heat shrinkable joint,kit 33 kV XLPE, 3 Core					
		41.10.2.1	Heat shr.jointg. kit 33 kV XLPE cable O.D. termination86 b. 3 x 95-150 sq.mm.	15	25,166.00	25,166.00	Each	₹ 3,77,490.00
		41.10.2.2	Heat shr.jointg. kit 33 kV XLPE cable I.D. termination b. 3 x 95-150 sq.mm.	12	17,405.00	17,405.00	Each	₹ 2,08,860.00
		41.10.2.3	Heat shr.jointg. kit 33 kV XLPE cable Straight Joint b. 3 x 95-150 sq.mm.	12	59,503.00	59,503.00	Each	₹ 7,14,036.00
2	MP PWD SOR 2014	41.37	Laying of one number 3 core H.T armoured / unarmoured power cable of grade exceeding 1.1kV but not exceeding 11kV of size not exceeding 150 Sq.mm in the existing RCC / Hume / Stoneware / G.I. Pipe / surface in existing trench as required.	1,500	52.00	52.00	Mtrs	₹ 78,000.00
3	MP PWD SOR 2014	41.40	Laying of one number 3 core H.T armoured / unarmoured power cable 33kV grade of size not exceeding 150 Sq.mm in the existing RCC / Hume / Stoneware / G.I. Pipe / surface in existing trench as required.	1,000	52.00	52.00	Mtrs	₹ 52,000.00
4	MP PWD SOR 2014	41.5	Supplying and fixing heavy duty cable gland for P.V.C. insulated armoured cable with brass washer, Rubber ring complete erected with cable and lead connection etc. as per specification complete.					
		41.5.6	Gland Size 45mm 3/3½ x 120 Sq.mm, 3½ x 95 Sq.mm 3 x 150 Sq.mm.	40	137.00	137.00	Each	₹ 5,480.00
		41.5.7	Gland Size 50 mm 3½ x 150 Sq.mm, 3 x 185 Sq.mm	45	177.00	177.00	Each	₹ 7,965.00
			Pipes Specification and Laying					
6	UADD SOR	17	Supplying & installing G.I. Pipe for protection of underground cable fixed on wall/support/in trench/fixed between two rigid existing support of wall/beam for erection of ceiling Fan/down rod for stiff pendent for light luminaries /fan/protective for earthing, lightening conductor down strip/everhead service line/for submer cable or centrifugal pump for water supply with necessary iron clamp coupler, bend, te, elbow, nuts and bolts etc. complete in an approved manner as required to complete the job excluding cost of excavation/dismateling & other finished masonry Item complete.					
		17.1	For 'B' Class G.I.pipe ISI Marked (IS-1161-68)					
		17.1.11	150.00mm	500	1,201.00	1,080.90	Mtrs	₹ 5,40,450.00

7	UADD SOR	17.4	Supplying and installing Double wall corrugated pipes (DWC) of HDPE (IS 14930 Part II -marked) for cable laid under ground with necessary connecting sockets / couplings, tees of same material and at required depth upto 90cm. below road / ground surface, including excavation, back filling with excavated material with ramming and making the surface good.					
		17.4.2	63.00mm outside dia.	2,500	210.00	189.00	Mtrs	₹ 4,72,500.00
		17.4.6	120.00mm outside dia.	300	333.00	299.70	Mtrs	₹ 89,910.00
		17.4.10	200.00mm outside dia.	1,000	481.00	432.90	Mtrs	₹ 4,32,900.00
8	Non SOR		Supply Installation of HDPE DWC Spacer for 200 mm DWC Pipe (IS 14930 Part II -marked), 18 Pieces of set to connect 9 No. DWC Pipes	10	1,500.00	1,500.00	each	₹ 15,000.00
			LT Cable Specification, Laying and Termination					
9	UADD SOR	14.1	Supply of XLPE Insulated power cable (conforming IS- 7098) 1100 Volt grade/Heavy duty power cable conforming to IS 1554- 1100 Volts grade, 2 core /3½ core/4 core ISI MARKED with Alu. Stranded / Solid conductor					
		14.1.2	ARMOURED 2 Core					
		14.1.2.3	6 Sq.mm.(XLPE)	2,000	138.00	124.20	Mtrs	₹ 2,48,400.00
		14.1.2.4	10 Sq.mm.(XLPE)	1,000	154.00	138.60	Mtrs	₹ 1,38,600.00
		14.1.2.5	16 Sq.mm.(XLPE)	800	180.00	162.00	Mtrs	₹ 1,29,600.00
		14.1.4	ARMOURED 3 Core					
		14.1.4.2	10 Sq.mm.(XLPE)	800	180.00	162.00	Mtrs	₹ 1,29,600.00
		14.1.4.3	16 Sq.mm.(XLPE)	1,000	198.00	178.20	Mtrs	₹ 1,78,200.00
		14.1.4.4	25 Sq.mm(XLPE)	500	246.00	221.40	Mtrs	₹ 1,10,700.00
		14.1.4.5	35 Sq.mm(XLPE)	200	313.00	281.70	Mtrs	₹ 56,340.00
		14.1.4.6	50 Sq.mm(XLPE)	100	392.00	352.80	Mtrs	₹ 35,280.00
		14.1.4.7	70 Sq.mm(XLPE)	100	519.00	467.10	Mtrs	₹ 46,710.00
		14.1.4.8	95 Sq.mm.(XLPE)	100	643.00	578.70	Mtrs	₹ 57,870.00
		14.1.6	ARMOURED 3½ CORE					
		14.1.6.6	120 Sq.mm.(XLPE)	100	931.00	837.90	Mtrs	₹ 83,790.00
		14.1.6.7	150 Sq.mm.(XLPE)	3,000	1,084.00	975.60	Mtrs	₹ 29,26,800.00
		14.1.6.8	185 Sq.mm.(XLPE)	100	1,350.00	1,215.00	Mtrs	₹ 1,21,500.00
		14.1.6.9	240 Sq.mm.(XLPE)	100	1,716.00	1,544.40	Mtrs	₹ 1,54,440.00
		14.1.6.10	300 Sq.mm.(XLPE)	2,000	2,097.00	1,887.30	Mtrs	₹ 37,74,600.00
		14.1.8	ARMOURED 4 CORE					
		14.1.8.1	6 Sq.mm.(XLPE)	200	168.00	151.20	Mtrs	₹ 30,240.00
		14.1.8.2	10 Sq.mm.(XLPE)	100	183.00	164.70	Mtrs	₹ 16,470.00
		14.1.8.3	16 Sq.mm.(XLPE)	200	229.00	206.10	Mtrs	₹ 41,220.00
		14.1.8.4	25 Sq.mm(XLPE)	200	281.00	252.90	Mtrs	₹ 50,580.00
		14.1.8.5	35 Sq.mm(XLPE)	200	358.00	322.20	Mtrs	₹ 64,440.00
		14.1.8.6	50 Sq.mm(XLPE)	400	463.00	416.70	Mtrs	₹ 1,66,680.00
		14.1.8.7	70 Sq.mm(XLPE)	400	604.00	543.60	Mtrs	₹ 2,17,440.00
		14.1.8.8	95 Sq.mm.(XLPE)	600	774.00	696.60	Mtrs	₹ 4,17,960.00
		14.1.8.9	120 Sq.mm.(XLPE)	200	953.00	857.70	Mtrs	₹ 1,71,540.00
		14.1.8.10	150 Sq.mm.(XLPE)	4,000	1,155.00	1,039.50	Mtrs	₹ 41,58,000.00
10	UADD SOR	14.5.2	Supply and making cable end termination with all necessary materials including lugs etc.Heat shr.jointg. kit 1.1 kV XLPE/HD cable O.D. termination					
		a	10-50 sqmm 2 / 3 / 3½ / 4core	12	7,439.00	6,695.10	Each	₹ 80,341.20
		b	70-150 sqmm 2 / 3 / 3½ / 4core	20	8,665.00	7,798.50	Each	₹ 1,55,970.00
		c	150-300 sqmm 2 / 3 / 3½ / 4core	25	10,466.00	9,419.40	Each	₹ 2,35,485.00
	UADD SOR	14.5(B)	Cable Jointing					
11		14.5.1	Straight through cable jointing kit including compound, hardener, plastic mould with other accessories for the following aluminium conductor PVC insulated and PVC sheathed cable//XLPE of 1.1 kV grade:(I.D./O.D.)					
		a	6-16 sqmm 2 / 3 / 3½ / 4core	50	1,062.00	955.80	Each	₹ 47,790.00
		b	25-35 sqmm 2 / 3 / 3½ / 4core	50	1,421.00	1,278.90	Each	₹ 63,945.00
		c	50-95 sqmm 2 / 3 / 3½ / 4core	10	1,802.00	1,621.80	Each	₹ 16,218.00
		d	120-240 sqmm 2 / 3 / 3½ / 4core	25	2,991.00	2,691.90	Each	₹ 67,297.50
		e	300-350 sqmm 2 / 3 / 3½ / 4core	25	3,806.00	3,425.40	Each	₹ 85,635.00
12	UADD SOR	14.5.2	Supply and makingHeat shr.jointg. kit 1.1 kV XLPE/HD cable straight through jointing,kit complete with all accessories including lugs etc. (I.D../O.D.)					
		a	6-16 sqmm 2 / 3 / 3½ / 4core	10	2,789.00	2,510.10	Each	₹ 25,101.00
		b	25-35 sqmm 2 / 3 / 3½ / 4core	10	3,768.00	3,391.20	Each	₹ 33,912.00
		c	50-95 sqmm 2 / 3 / 3½ / 4core	10	4,725.00	4,252.50	Each	₹ 42,525.00

		d	120-240 sqmm 2 / 3 / 3½ / 4core	10	7,177.00	6,459.30	Each	₹ 64,593.00
		e	300-350 sqmm 2 / 3 / 3½ / 4core	10	13,580.00	12,222.00	Each	₹ 1,22,220.00
		14.6	BRASS COMPRESSION GLAND					
13	UADD SOR	14.6.1	Supplying and fixing heavy duty cable gland for P.V.C. insulated armoured cable with brass washer, Rubber ring complete erected with cable and lead connection etc. as per specification complete.					
		14.6.1.1	Gland Size 22mm suitable for cable 2,3,3½ & 4 x upto 6 Sq.mm	25	38.00	34.20	Each	₹ 855.00
		14.6.1.2	Gland Size 22mm suitable for cable 2,3, 3½, 4 x 10 Sq.mm or 2x 16 Sq.mm	15	44.00	39.60	Each	₹ 594.00
		14.6.1.3	Gland size 28mm for 3,4 x 16 Sq.mm	10	66.00	59.40	Each	₹ 594.00
		14.6.1.4	Gland size 32mm for 2,3, 3½, 4 x 25 Sq.mm OR 2,3, 3½ x 35 Sq.mm OR 2,3 x 50 Sq.mm.	15	76.00	68.40	Each	₹ 1,026.00
		14.6.1.5	Gland size 38mm 3½ x 70 Sq.mm, 3x95 Sq.mm	10	119.00	107.10	Each	₹ 1,071.00
		14.6.1.6	Gland Size 45mm 3/3½ x 120 Sq.mm, 3½ x 95 Sq.mm, 3 x 150 Sq.mm.	12	149.00	134.10	Each	₹ 1,609.20
		14.6.1.7	Gland Size 50 mm 3½ x 150 Sq.mm, 3 x 185 Sq.mm	10	191.00	171.90	Each	₹ 1,719.00
		14.6.1.8	Gland Size 57mm 3 x 225 Sq.mm, 3 ½ x 185 Sq.mm	12	248.00	223.20	Each	₹ 2,678.40
		14.6.1.9	Gland Size 70mm 3 x 240 Sq.mm, 3½ x 300 Sq.mm	10	353.00	317.70	Each	₹ 3,177.00
14	UADD SOR	14.7	Supplying and fixing ferrules. (Aluminium in Line connector) As per IS - specification suitable for following size of cable with Aluminium stranded/ solid conductor evently cramped with high pressure tool including connection as required complete					
		14.7.1	For Conductor Size-					₹ 0.00
		14.7.1.1	2.5 to 6.00 Sq.mm	50	2.00	1.80	Each	₹ 90.00
		14.7.1.2	10.00 Sq.mm	30	2.00	1.80	Each	₹ 54.00
		14.7.1.3	16.00 Sq.mm	30	4.00	3.60	Each	₹ 108.00
		14.7.1.4	25.00 Sq.mm	60	5.00	4.50	Each	₹ 270.00
		14.7.1.5	35.00 Sq.mm	30	5.00	4.50	Each	₹ 135.00
		14.7.1.6	50.00 Sq.mm	50	8.00	7.20	Each	₹ 360.00
		14.7.1.7	70.00 Sq.mm	12	14.00	12.60	Each	₹ 151.20
		14.7.1.8	95.00 Sq.mm	25	15.00	13.50	Each	₹ 337.50
		14.7.1.9	120.00 Sq.mm	15	22.00	19.80	Each	₹ 297.00
		14.7.1.10	150.00 Sq.mm	25	31.00	27.90	Each	₹ 697.50
		14.7.1.11	185.00 Sq.mm	15	38.00	34.20	Each	₹ 513.00
		14.7.1.12	240.00 Sq.mm	25	62.00	55.80	Each	₹ 1,395.00
		14.7.1.13	300.00 Sq.mm	50	89.00	80.10	Each	₹ 4,005.00
			LT Cable Laying					
15	UADD SOR	14.1.7	Laying of one number PVC insulated and PVC sheathed power cable of 1:1 kV grade of size not exceeding 25 Sq.mm in the existing RCC Hume/ Stone/Ware/G.I. pipe as required	8,000	20.00	18.00	Mtrs	₹ 1,44,000.00
		14.1.8	Laying of one number PVC insulated and PVC sheathed power cable of 1.1 kV grade of size exceeding 25 Sq.mm but not exceeding 400 Sq mm in the existing RCC / Hume Stoneware / G.I. Pipe as required.	4,000	28.00	25.20	Mtrs	₹ 1,00,800.00
		14.1.15	Laying of one number PILC/PVC insulated and PVC sheathed power cable of grade exceeding 1.1kV but not exceeding 11kV of size not exceeding 400 Sq.mm in the existing RCC / Hume / Stoneware / G.I. Pipe as required.	800	40.00	36.00	Mtrs	₹ 28,800.00
16	UADD SOR	14.13	Laying of cement concrete or approved type of cable cover / flag stone over L.T. cover trench as per specification.	40	25.00	22.50	Mtrs	₹ 900.00
17	UADD SOR	14.14	Supplying of approved type precast R.C.C. cable cover class EHV / HVP at site inclusive of transport required.					
		14.14.1	Cable cover class EHV-type-I with peak size 450 x 230 x 50mm.	150	59.00	53.10	Each	₹ 7,965.00
		14.14.2	Cable cover class EHV-type-I with peak size 600 x 230 x 50mm.	100	80.00	72.00	Each	₹ 7,200.00
		14.14.3	Cable cover class HVP-type-I with peak size 300 x 180 x 40mm.	200	31.00	27.90	Each	₹ 5,580.00
		14.14.4	Cable cover class HVP-type-II with peak size 450 x 180 x 40mm.	250	45.00	40.50	Each	₹ 10,125.00
18	UADD SOR	14.15	Fixing Route Marker with cement concrete 1:2:4 (1cement and 2 coarse sand :4graded stone aggregate 20mm nominal size) of size 60cm x 60cm at the bottom and 50cm x 50cm at the top with a thickness of 10cm including inspection duly engraved as required.	120	193.00	173.70	Each	₹ 20,844.00

19	UADD SOR	14.16	Supplying Route Marker with 10cm x 10cm G.I. Plate 5mm. Thick with Inspection thereon bolted/welded to 35mm x 35mm x 6mm angle iron 60cm long and fixing the same in ground as required.	100	211.00	189.90	Each	₹ 18,990.00
			Earthing					
20	UADD SOR	11.40	Supplying and erecting earth pit of minnum bore dia 150 mm size, approved make safe earthing electrode consiting pipe in pipe tecnologie as per IS 3043-1987 made of corrosion free GI pipes having outer pipe dia of 50 mm having 80-200 micron galvanising, inner pipe dia of 25 mm having 20-250 micron galavinsing, connection teriminal dia of 12 mm with constant OHMIC value sourrounded by highly conductiv compund with high charge disipation sutible for effective and maintence free earthing					
		11.40.1	with 2 mtr. Pipe in normal soil with 25 kg (one bag) back filling compound	12	7200	6,480.00	Each	₹ 77,760.00
		11.40.2	with 3 mtr. Pipe in normal soil with 50 kg (two bag) back filling compound	45	10800	9,720.00	Each	₹ 4,37,400.00
		11.40.3	with 2 mtr. Pipe of 80 mm outer dia, 40 mm inner dia and 14 mm terminal dia, in soft rock/marshy soil with 25 kg (one bag) back filling compound	6	8800	7,920.00	Each	₹ 47,520.00
		11.40.4	with 3 mtr. Pipe of 80 mm outer dia, 40 mm inner dia and 14 mm terminal dia, in soft rock/marshy soil with 25 kg (two bag) back filling compound	45	13300	11,970.00	Each	₹ 5,38,650.00
21	UADD SOR	11.15	Providing and fixing 25mm X 4mm G.I. strip on surface or in recessed /concealed for connection etc. as required.	500	107	96.30	Mtrs	₹ 48,150.00
22	UADD SOR	11.16	Providing and fixing 4.00mm G.I. wire on surface or in recessed /concealed for loop earthing as required.	800	35	31.50	Mtrs	₹ 25,200.00
23	UADD SOR	11.33	Laying of copper / G.I. tape 32mm X 6mm thick for earth electrode directly in ground as required.	1,000	18	16.20	Mtrs	₹ 16,200.00
24	UADD SOR	11.37	Providing and laying earth continuity conductor including fixing					
		(B)	G.I. Or Steel Earth Continuity Conductor :-					
		1	6 Sq mm.	1,000	7.00	6.30	Mtrs	₹ 6,300.00
			Cable Tray					
25	MP PWD SOR 2014	41.54	Supply and erection of hot dip G.I. cable tray perforation not more than 17.5% for specific dimensions along with tees, bends.. The cable tray shall be hang from ceiling / fixed to wall with necessary angle/flat iron / hanging rod, for ceiling suspensions, clamps, anchor fastner, nuts, bolts, washers, not mor than 1.5 mtr. apart complete as per specification to complete the job. The tray shall be as follows :-					
		41.54.3	300 x 50 mm x 1.6mm thick	200	844.00	844.00	Mtrs	₹ 1,68,800.00
		41.54.4	450 x 50 mm x 2 mm thick	200	1296.00	1,296.00	Mtrs	₹ 2,59,200.00
		41.54.5	600 x 50 mm 2 mm thick	200	1603.00	1,603.00	Mtrs	₹ 3,20,600.00
			MISCELLANEOUS Items					
26	UADD SOR	19.15	Supplying, fixing, testing & commissioning wall / floor mounted LT Panel primer coated with two coat of enamel paint & provided with required gasket for dust/ vermin proof with degree of protection IP42 suitable for 415V 3 phase ,50 Hz ,4 wire system fabricated out of CRCA sheet upto 2 mm thick (1.6 mm for doors) with frame work of angle iron / channel/ bolted type construction duly compartmentalised for incomer,bus section, outgoing, cable alleys & CT, PT Ampere Meter, Volt Meter, selector switches, Frequency Meter, phase indicating lamps, energy Meter complete including cost of busbar supports, detachable cable gland plates, 2 earthing terminals, internal wiring & fixing of separately supplied MCBs, MCCBs, panel mounted Changeover switch/SFUs, etc. as required but excluding cost of busbar strips, Ampere Meter, Volt Meter, Selector switch as per approved design & specification	5	116.00	104.40	Kg	₹ 522.00
27	UADD SOR	19.16	Supplying and fixing of LT Panel accessories of approved make in existing LT Panel including connections etc.as required as per speccecification					
		19.16.4	Copper Bus bar strips with PVC sleeves	10	666.00	599.40	Kg	₹ 5,994.00
		19.16.5	Aluminium bus bar strips with PVC sleeves	10	209.00	188.10	Kg	₹ 1,881.00

28	UADD SOR	13.2	Supply of support for overhead line RS joist / H-beam of I.S. Standard including welding, drilling of required hole etc. complete as required.			0.00		₹ 0.00
	UADD SOR	13.2.6	H-Beam 152x152mm , Std weight 37.1 kg per meter	500	1977.00	1,779.30	Mtrs	₹ 8,89,650.00
29	UADD SOR	13.14	Erection of steel tubular or steel rail pole or H-Beam of length exceeding 10 meters but not exceeding 13 meters in cement concrete 1:3:6 (1 cement :3 coarse sand: 6 graded stone aggregate 40mm nominal size) foundation , base padding & muffing including excavation and refilling etc. as required.(4.55 bags of cement/cmt.)	52	2563.00	2,306.70	Each	₹ 1,19,948.40
30	UADD SOR	13.79	Supplying and erection of 11kV pin insulator complete with large steel head G.I. pin, nut, washer etc. as required.	60	375.00	337.50	Set	₹ 20,250.00
31	UADD SOR	13.80	Supplying and erection of 11kV disc insulator for 11kV overhead lines with galvanised insulator fittings, ball and socket type, and complete with galvanised strain clamp, bolts, nuts washer etc. as required.	60	1,089.00	980.10	Set	₹ 58,806.00
32	UADD SOR	13.86	Painting of Pole Bracket cable Protecting Pipe and its clamps in two coatings of All enamel based Primer as directed by Engineer-Charge.					
	UADD SOR	13.86.2	Primer Cost over new Steel and other metallic surface with red oxide/zinc chromide paint complete with supply of material labour etc. Including preparation of Surface.	40	21.00	18.90	Sq.Mtrs	₹ 756.00
	UADD SOR	13.86.3	Primer cost with aluminium paint, brushing complete with material and labour including preparation of surface.	50	28.00	25.20	Sq.Mtrs	₹ 1,260.00
33	UADD SOR	15.3	Supplying installing and testing of AB isolating switch assembly set gang operated suitable for 11/0.4 KV, DP structure with brass part contacts, operating rod with required GI pipe, handle locking arrangement on On-Off position conforming to IS complete with required material and installing on existing structure to complete the job as required as per specification.					
		15.3.1	11 kV	20	7,099.00	6,389.10	Set	₹ 1,27,782.00
		15.3.2	33 KV	10	15,416.00	13,874.40	Set	₹ 1,38,744.00
34	UADD SOR	13.84	Supplying and erection of three piece nonlinear resistor type lighting arrestor suitable for 3 wire, 11kV overhead lines with rated voltage of 9kV (rms) with a nominal discharge current rating of 5 KA and complete with galvanised clamping arrangement, G.I. bolts, nuts, washer etc. as required.	25	4,284.00	3,855.60	Set	₹ 96,390.00
35	UADD SOR	13.5	Supplying and drawing All Aluminium Alloy conductor (AAAC) of approved make confirming to IS 398-1979 Pt. IV, including binding at existing insulator, jointing, jumpering, tearing off, connecting etc. as required including clearing of obstacles (if any)					
		13.5.4	0.075 sq.inch / 48 sq.mm Alloy Aluminium Conductor	100	59,138.00	53,224.20	KM	₹ 53,22,420.00
36	UADD SOR	13.24	Supplying and erection of stay set complete (Galvanized) with 19mm.dia 1.8 meter long stay rod, anchor plate of size 300mm x 300 mm x 6.4mm thimble stay clamps,bow tightener, 7/3.15 dia G.I. stay wire and strain insulator etc. in cement concrete 1:3:6 (1 Cement : 3 Coarse and : 6 graded stone aggregate 40mm nominal size) foundationincluding excavation and refilling etc. as required.	40	2,634.00	2,370.60	Each	₹ 94,824.00
37	UADD SOR	13.7	Supplying and fixing guard insulator or split insulator complete:					
		13.7.2	37x37mm	50	30.00	27.00	Pair	₹ 1,350.00
		13.7.3	50x50mm	60	41.00	36.90	Pair	₹ 2,214.00
38	UADD SOR	13.40	Supplying and erection of 100mmx80mm pin insulator complete with G.I. spindle and nuts etc. as required.	45	59.00	53.10	Each	₹ 2,389.50
39	UADD SOR	13.55	Dismantling of over head lines comprising of copper / aluminium overhead conductor, G.I. wire, cross arm, insulators etc. as required.	2,500	1,203.00	1,082.70	Kg	₹ 27,06,750.00
40	UADD SOR	13.57	Dismantling poles/street light standards / struts embedded in cement concrete foundation etc. as required.	300	609.00	548.10	Each	₹ 1,64,430.00
41	UADD SOR	13.58	Supplying of angle/channel flat iron fitting for overhead lines such as cross arms, clamps, brackets, welding and other necessary materials as per specifications.	2,000	54.00	48.60	Kg	₹ 97,200.00
42	MPPKVVCL	M-0201154	Supply of 11KV OUTDOOR SF6, 3 WAY RMU	12	9,66,466.00	9,66,466.00	Nos.	₹ 1,15,97,592.00

43	MPPKVVCL	M-0201150	Supply of 11 KV Ring main unit (RMU) SF-6 type (1 circuit breaker 3 isolator)	12	10,38,482.00	10,38,482.00	Nos.	₹ 1,24,61,784.00
44	MPPKVVCL	M-0201153	Supply of 11 KV Ring main unit (RMU) SF-6 type (2 circuit breaker 3 isolator)	15	13,04,625.00	13,04,625.00	Nos.	₹ 1,95,69,375.00
45	UADD SOR	9.11	Supplying and fixing as per specification Caution / Danger Board as required of approved make & design with necessary material complete.					
		9.11.1	Small Size	100	106.00	95.40	Each	₹ 9,540.00
		9.11.2	Large Size	100	211.00	189.90	Each	₹ 18,990.00
46	UADD SOR	287	Sand	80	525.00	472.50	CUM	₹ 37,800.00
47	UADD SOR	289	Excavation including refilling as required	100	165.00	148.50	CUM	₹ 14,850.00
48	UADD SOR	290	Cement concrete 1:2:4 (1 cement:2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	200	2129	1,916.10	CUM	₹ 3,83,220.00
49	UADD SOR	291	Cement concrete 1:3:6 (1 cement:3 coarse sand : 6 graded stone aggregate 40 mm nominal size)	150	1789	1,610.10	CUM	₹ 2,41,515.00
50	MPPKVVCL	P-0001041	YARD FENCING WITH CHAIN LINK MESH OVER RCC BEAM	200	4,070.00	4,070.00	RM	₹ 8,14,000.00
			Package Sub-station					
51	MPPKVVCL	M-0106019	Installation, Testing and commissioning of Package Transformer : 630KVA, 11KV/433V, DYn11, Dry type, Copper Wound transformer for HT & LT with Off load Tap Links , rating +5 to - 5% @2.5% with complete HT RMU, LT Pannel Outdoor type enclosure internal interconnections & earthing. include Concreting for foundation 1:3:6	24	19,78,384.00	19,78,384.00	Each	₹ 4,74,81,216.00
52	MPPKVVCL	M-0909115	REMOTE TERMINAL UNIT (RTU) FOR 2 NO. POWER TRANSFORMER (including 2 MCU, 2 Power Card, 10 DI, 6 DO, 1 AI, 1 COM 6 cards with installation) with communication protocol IEC, DNP 3.0, 61850 etc., 48V operated	24	6,10,500.00	6,10,500.00	Each	₹ 1,46,52,000.00
53	MPPKVVCL	M-0909112	MULTI FUNCTION TRANSDUCER (5 Amp, 110 V with RS485 Modbus communication protocol	24	10,008.00	10,008.00	Each	₹ 2,40,192.00
54	MPPKVVCL	M-0204112	HEAVY DUTY RELAY (HDR) FOR CB TRIP/CLOSE (48V DC, 2 NO,1 NC)	288	460.00	460.00	Each	₹ 1,32,480.00
55	MPPKVVCL	M-0304033	GPRS / CDMA / EDGE / 3G MODEM	24	4,323.00	4,323.00	Each	₹ 1,03,752.00
56	MPPKVVCL	M-0902008	Routers 230 V AC, 2 GE ports, 48xFE, WAN speed 200 mbps	24	73,552.00	73,552.00	Each	₹ 17,65,248.00
57	MPPKVVCL		NETWORK CONNECTIVITY CHARGES FOR FRTU & FPIs ON 3G/ CDMA / GPRS FOR 1 YEAR	120	681.00	681.00	Each	₹ 81,720.00
58	MPPKVVCL	M-1001008	Fire extinguisher cartridge CO2 10 kgs	24	5,198.00	5,198.00	Each	₹ 1,24,752.00
59	UADD SOR	8	Supplying of ISI Marked and approved make of Moulded Case Circuit Breaker (MCCB) suitable for 3 phase,3 pole, 50 Hz, 415 Volts, AC supply with respective interrupting capacity (KA) at 415 Volts cited against their range standard conforming to IS - 8828					
		8.2	MCCB with Breaking Capacity 35 KA at 415 V					
		8.2.2	Current Rating -200 Amps & Adjustable: 70% -100% thermal & 5 - 10 times magnetic setting	144	14,401.00	12,960.90	Each	₹ 18,66,369.60
		8.2.5	Current Rating -400 Amps & Adjustable: 70% -100% thermal & 4 - 10 times magnetic setting	48	20,907.00	18,816.30	Each	₹ 9,03,182.40
60		8.4	Supplying of ISI Marked and approved make of Air Circuit Breaker (ACB) with Microprocessor release with LCD screen showing kW, kVA, PF, maximum demand with breaking capacity of 50 kA, 4 pole, 415 Volts conforming to IEC : 60947-2 / IS :13947-II					
		8.4.3	1000 Amp,manual,fixed	24	80,259.00	72,233.10	Each	₹ 17,33,594.40
61	UADD SOR	9.16	Supplying and fixing of LT Panel accessories of approved make in existing LT Panel including connections etc.as required as per specefication					
		9.16.1	Digital Ampere Meter with CTs with selector switch	24	2,354.00	2,118.60	Set	₹ 50,846.40
		9.16.2	Digital Volt Meter with selector switch & HRC fuse	24	2,530.00	2,277.00	Set	₹ 54,648.00
		9.16.3	Frequency Meter	24	1,458.00	1,312.20	Each	₹ 31,492.80
		9.16.6	LED lamps	144	242.00	217.80	Each	₹ 31,363.20
			Feeder Pillar Panel					

62	MPPKVVCL	M-0204157	LT FEEDER PILLER, 1 no.-160 amp,16 kA b.c at 415 volts TP MCCB with copper neutral link 1 set-250 amp, rating TPN aluminium busbar, 30 no 40 amp, 10 kA b.c. SP MCB complete	144	25,258.00	25,258.00	Each	₹ 36,37,152.00
63	MPPKVVCL	M-0204112	HEAVY DUTY RELAY (HDR) FOR CB TRIP/CLOSE (48V DC, 2 NO, 1 NC)	288	460.00	460.00	Each	₹ 1,32,480.00
64	MPPKVVCL	M-0204155	LT FEEDER PILLER, 1 no.-125 amp,16 kA b.c at 415 volts TP MCCB with copper neutral link 1 set-200 amp, rating TPN aluminium busbar, 30 no 32 amp, 500 V Porcelain / DMC / bakelite rewirable type fuse carrier and base complete	10	17,211.00	17,211.00	Each	₹ 1,72,110.00
65	MPPKVVCL	M-0204112	HEAVY DUTY RELAY (HDR) FOR CB TRIP/CLOSE (48V DC, 2 NO, 1 NC)	20	460.00	460.00	Each	₹ 9,200.00
66	MPPKVVCL	P-0001225	Chem rod earthing including electrode, chemical, various locations in a 33/11 kv substation (consisting galvanised mild steel pipe of size 2000mm x 50mm outer diameter or higher size as per site conditions, filled with a highly conductive material and a GI strip minimum 16 mm x 3mm covering total of pipe, forming the electrode) for obtaining earth resistance less than 1 ohm	144	9,393.00	9,393.00	Each	₹ 13,52,592.00
67	UADD SOR	4.3	Supplying and drawing single core PVC insulated cable FR with copper multi strand conductor ISI marked in existing rigid conduit in surface or concealed as per specification.					
	UADD SOR	4.3.2	2.5 Sq mm cable					
	UADD SOR	4.3.2.8	8 X 2.5 sq mm	1,500	255.00	229.50	Mtrs	₹ 3,44,250.00
	UADD SOR	4.3.2.10	10 X 2.5 sq mm	1,000	319.00	287.10	Mtrs	₹ 2,87,100.00
68	MPPKVVCL	a	REPLACEMENT OF METER					
		F-1.1	Installation / Replacement of Single Phase Meters	200	1,343.00	1,343.00	Each	₹ 2,68,600.00
		F-1.2	Installation / Replacement of Three Phase Meters	150	2,886.00	2,886.00	Each	₹ 4,32,900.00
		F-1.3	Replacement of Single Phase Meter	50	1,099.00	1,099.00	Each	₹ 54,950.00
		F-1.4	Replacement of Three Phase Meter	20	2,574.00	2,574.00	Each	₹ 51,480.00
69	MPPKVVCL	b	Shifting of meters to outside premises with service line					
		F-2.1	Shifting of meters to outside premises with service line (4.0 sq.mm Service line) for single phase	15	1,988.00	1,988.00	Each	₹ 29,820.00
		F-2.2	Shifting of meters to outside premises with service line (6.0 sq.mm Service line) for Three phase meter	15	2,724.00	2,724.00	Each	₹ 40,860.00
70	MPPKVVCL	c	REPLACEMENT OF SERVICE LINE					
		F-3.1	Replacement of Service line (2.5 sq.mm Service line)	50	1,742.00	1,567.80	Each	₹ 78,390.00
		F-3.2	Replacement of Service line (4.0 sq.mm Service line)	50	1,886.00	1,697.40	Each	₹ 84,870.00
		F-3.3	Replacement of Service line (6.0 sq.mm Service line)	50	2,687.00	2,418.30	Each	₹ 1,20,915.00
		F-3.4	Replacement of Service line (10.0 sq.mm Service line)	50	2,992.00	2,692.80	Each	₹ 1,34,640.00
185	Non SOR		Supply, fill and seal expanding spray foam sealant, foam shall designed to fill large areas / Holes quickly and permanently. Uses include filling holes, cracks or gaps that require a complete airtight and waterproof seal but are too large to be filled with ordinary caulk. product shall be free from CFC and environment friendly. Technical Data: Type: Polyurethane, Tack Free: After ± 10 min (at +23°C, 50% RH), Can be cut: After ± 20 min (at +23°C, 50% RH), Tensile Strength: 9-10 N/cm², Stability load bearing: After ± 12 hours (at +23°C, 50% RH), Fire rating: B3, Temperature resistance: -40 °C till +90 °C (cured), Box Yield: 750 ml yields can	50	350.00	350.00	Each	₹ 17,500.00
			Total					₹ 16,01,52,496.20

Street Lighting work at Smart Road Phase - 2

Sr. No.	SOR	Code	Description	Quantity	Rate	Revised Reduced Rates	Unit	Amount
1	UADD SOR	4.3	CIRCUIT WIRING IN EXISTING CONDUIT / PVC CASING CAPPING: Supplying and drawing single core PVC insulated cable FR with copper multi strand conductor ISI marked in existing rigid conduit in surface or concealed as per specification					
		4.3.1	1.5 Sq mm cable					
		4.3.1.1	1 X 1.5 sq mm	2,000	24.00	21.60	Mtrs	43,200.00
		4.3.2	2.5 Sq mm cable					
		4.3.2.1	1 X 2.5 sq mm	1,000	32.00	28.80	Mtrs	28,800.00
2	UADD SOR	8.5	Supplying of ISI Marked and accepted standard of Miniature Circuit Breaker (MCB) of 'C' series suitable for 240/415 Volts, 50 Cycle, 10 kA Value AC supply confirming to IS : 8828 : 1996, IEC : 60898 :2002 but without enclosures :					
		8.5.1	SINGLE POLE (SP)					
		8.5.1.2	6 Amp to 32 Amp Rating	120	166.00	149.40	Each	17,928.00
		8.5.4	FOR TRIPLE POLE (TP)					
		8.5.4.3	For 40 Amps. Rating only.	50	1,145.00	1,030.50	Each	51,525.00
2	UADD SOR	8.14	Fixing of metal clad enclosure on 25X 25 X 5 mm angle iron clamps including supplying and fixing of clamps as required duly embedded in masonry including cable connection and other required material as per specification :-					
		8.14.1	Fixing of 63 Amps TP or TPN main switches/ DB 63 Amps. 240/415 Volt 4 to 8 way or 63 Amps change over switch /63 Amps 415 Volt Isolator /30 Amps 415V TPN DB upto 6 way per pole and busbar 4 way	50	170.00	153.00	Each	7,650.00
3	UADD SOR	8.16	Fixing of MCB /MCCB/ Isolator					
		8.16.1	Fixing of MCB / Isolator SP/DP in sheet steel enclosure as required as per accepted practice, including mounting on busbar and cable connection etc. complete (Labour only)	50	10.00	9.00	Each	450.00
		8.16.2	Fixing of MCB /MCCB Isolator TP /TPN/FP in sheet steel enclosure as required as per accepted practice, including mounting on busbar and cable connection etc. complete.	50	20.00	18.00	Each	900.00
4	UADD SOR	10.23	Labour rate for point wiring a Light / Fan / Twin control light / Socket out let on separte board / Call bell Point in (open) surface rigid PVC conduit system.	500	93.00	83.70	Each	41,850.00
6	UADD SOR	10.33.15	Cement concrete grade M-20 (Nominal Mix) with 20mm maximum size of stone aggregate (rate from Building ISSR)	45	4,594.00	4,134.60	Cum	1,86,057.00
		10.33.16	Cement concrete grade M-15 (Nominal Mix) with 20mm maximum size of stone aggregate (rate from Building ISSR)	45	4,154.00	3,738.60	Cum	1,68,237.00
7	UADD SOR	11.7	Supplying and laying 6 SWG G.I. wire at 0.5Meter below ground level as conductor earth electrode including soldering etc. as required.	500	15.00	13.50	Mtrs	6,750.00
8	UADD SOR	11.34	Providing and fixing earthing arrangement with 16mm dia 2.5 meter long galvanized iron or steel rod electrode including packing of charcoal powder and salt as per specification watering pipe 19mm dia G.I. Connection etc. complete with refilling the pit as required, but excluding the excavation of earth pit.	150	667.00	600.30	Each	90,045.00

9	UADD SOR	11.38	Providing and laying earth Continuity Conductor of 4 Sq mm Aluminium along the run of final sub circuit in PVC conduit in an approved manner.	3,500	8.00	7.20	Mtrs	25,200.00
10	UADD SOR	13.10	Supplying and erection of water tight terminal box of 14 SWG M.S. Sheet 4mm thick box of required size to erect the suitable kit kat / MCB / Switch with Top & bottom folded fitted with rubber ring to make it water tight with pole clamp made from 40x3mm M.S. flat iron with 2 Nos. Nut and Bolts duly painted with 2 coat of Red Oxide paint and 2 coat of Aluminium silver paint erected with cable gland but excluding the cost of the Kit Kat / MCB / Switch complete as per specification:					
		13.10.1	20x15x15Cms.	50	286.00	257.40	Each	12,870.00
		13.10.2	30x20x15 Cms.	25	390.00	351.00	Each	8,775.00
11	UADD SOR	14.1	Supply of XLPE Insulated power cable (conforming IS-7098) 1100 Volt grade / Heavy duty power cable conforming to IS 1554-1100 Volts grade, 2 core /3½ core/4 core ISI MARKED with Alu. Stranded /solid conductor					
		14.1.8	ARMOURED 4 CORE					
		14.1.8.1	6 Sq.mm.(XLPE)	500	168.00	151.20	Mtrs	75,600.00
		14.1.8.2	10 Sq.mm.(XLPE)	2,000	183.00	164.70	Mtrs	3,29,400.00
		14.1.8.3	16 Sq.mm.(XLPE)	3,000	229.00	206.10	Mtrs	6,18,300.00
12	UADD SOR	14.6	BRASS COMPRESSION GLAND					
		14.6.1	Supplying and fixing heavy duty cable gland for P.V.C. insulated armoured cable with brass washer, Rubber ring complete erected with cable and lead connection etc. as per specification complete.					
		14.6.1.1	Gland Size 22mm suitable for cable 2, 3, 3½ & 4 x upto 6 Sq.mm	10	38.00	34.20	Each	342.00
		14.6.1.2	Gland Size 22mm suitable for cable 2, 3, 3½, 4 x 10 Sq.mm or 2x 16 Sq.mm	50	44.00	39.60	Each	1,980.00
13	UADD SOR	14.8	Supplying and fixing cramping type Alum. lugs as per I.S.S. Specification suitable for following size of cable with Alu. / Copper solid / stranded conductor evently cramped with high/pressure tool and connected to switch gear / Bus / M.C.C.B./ M.C.B. etc. as required complete. For Conductor Size					
		14.8.1	6mm to 16 Sq.mm	500	5.00	4.50	Each	2,250.00
	UADD SOR	14.10	CABLE LAYING					
14		14.10.7	Laying of one number PVC insulated and PVC sheathed power cable of 1:1 kV grade of size not exceeding 25 Sq.mm in the existing RCC Hume / Stone / Ware / G.I. pipe as required.	3,000	20.00	18.00	Mtrs	54,000.00
15	UADD SOR	16.7	Designing & casting with M-20 cement concrete foundation suitable for 9 mtrs. Octagonal poles considering the safe soil bearing capacity at site as 10 T/sqm at 2 mtrs. Depth including excavation, foundation nut bolts in an approved manner.	120	13,500.00	12,150.00	Each	14,58,000.00

16	UADD SOR	16.11	Providing and erecting 25 mt high mast lighting system with 12 nos metal halide flood light fittings of 2x400 watt each complete with control gear and lamps with integral power tool, weight 1000 kg having 3 section hot dip galvanized material as per BSEN ISO 1461 thick of 3 mm & 4 mm dia / 5 mm 150 top and 460 bottom respectively. The mast shall be stress fitted at site as per IS overlap dynamic loading to with standard maximum wind pressure as per IS 875 part III and parameters of structures and foundation design should be taken from wind tunnel test. The mast shall have lighting protection of GI single spike of 1200 mm length at top. The base inside compartment with double internal lock with adequate size of MCB mounted on PVC board complete with base plate of 30 mm thick 670 mm diameter and foundation bolts having 8 nos bolts of 30 mm / 850 mm diameter (TS 600) anchor plate 590 PCD including accessories Viz	4	4,75,000.00	4,27,500.00	Each	17,10,000.00
	UADD SOR	16.11	(1) Lantern carriage of 50 NB ERW class B pipe covered with PVC sleeves suitable to carry 750 KG load and upto 16 fitting symmetrically (2) Trailing copper cable of 8x2.5 sqmm EPR insulated PVC sheathed (3) Double drum winch having gear ratio 531 oil bath (SAE/90/140) arrangement to be Type tested from NIT or IIT for (4) 2 nos stainless wire ropes 6 mm diameter (7/19) breaking load capacity 2400 kg x2 (5) integral power tool 3 phase 1.5 HP 2 m/min single speed Torque limited 750 Kg (6) Feeder pillar out of 14 SWG CRCA sheet and comparison of incoming 63 A TPN MCB single dial timer, suitable size of contractors for lighting and power tool, 2 nos. outgoing and reversing switch of motor. Twin dome aviation light 2 nos 100 watt lamp.					
17	UADD SOR	17.4	Supplying and installing Double wall corrugated pipes (DWC) of HDPE (IS 14930 Part II -marked) for cable laid under ground with necessary connecting sockets / couplings, tees of same material and at required depth upto 90cm. below road / ground surface, including excavation, back filling with excavated material with ramming and making the surface good.					
		17.4.1	50.00mm outside dia.	500	207.00	186.30	Mtrs	93,150.00
		17.4.2	63.00mm outside dia.	3,000	210.00	189.00	Mtrs	5,67,000.00
18	UADD SOR	289	Excavation including refilling as required	100	165.00	148.50	Cum	14,850.00
19	PWD SOR 2014	42.93	Providing and erecting hot dipped galvanized octagonal poles in single section made from 3mm thick sheet having lockable weather proof flush door junction box complete erected in an approved manner on provided foundation. Suitable size & type of foundation bolts 4 nos. 'J' type (EN8 grade)					
20	PWD SOR 2014	42.93.7	9 mtrs. Height, 155 X 70mm A/F, 260x260x16mm base plate, 4 nos. X 24 x 750mm bolt	120	24,908.00	24,908.00	Each	29,88,960.00
21	PWD SOR 2014	42.94	Providing and fixing of sword canopy type single arm GI bracket upto 2 Mtr. Long for 70mm A/F top octagonal pole	80	3,478.00	3,478.00	Each	2,78,240.00
22	PWD SOR 2014	42.95	Providing and fixing of sword canopy type double arm GI bracket upto 2 Mtr. Long for 70mm A/F top octagonal pole	40	5,645.00	5,645.00	Each	2,25,800.00

23	PWD SOR 2014	31.29	Supplying and fixing street light with high power LED of 1 to 3 W each assembled on single MCPCB, system lumens output with efficacy > 90 lm/W. luminaire having color temp 6500K & 50000 burning hrs life with minimum @ L 70, The colour rendering index of LED light should be more than 70. Luminaire comprises of driver, PF 0.95 & surge protection 3KV. Housing made of pressure die cast aluminium with heat resistant flat glass / Lens type, IP65 protection. Submission LM 80-08 Form LED Source Manufacturer & LM 79-08 / IS16106 from NABL approved lab. Manufacturer mandatory i/c 50mm.dia G.I. Pipe bracket upto 2 mtr. long in required angle / shape, connection lead, testing etc to complete the job. 2 Yrs Guarantee certificate from manufacturer.					
		31.29.5	120 Watt	120	17,888.00	17,888.00	Each	21,46,560.00
		16.15.4	Change of timer renowned make	50	3,680.00	3,680.00	Each	1,84,000.00
24	PWD SOR 2014	27.16	Supply & fixing of approved make accepted standard sheet steel enclosure (dust protected) duly powder coated paint Neutral bar suitable for MCB / RCBOs / MCCB of capacity as required etc. complete as per specification (exclusive of M.C.B./ MCCB / RCBOs)					
		27.16.1	For MCB					
		27.16.1.1	DP/TP/FP Enclosure	50	537.00	537.00	Each	26,850.00
			Total					1,14,65,519.00