

SCHEDULE - 'B'

Name of Work:- A & A to Street Light On Halvad -Sara Road and Morbi-Jetpar Road , Dist-Morbi.						
Sr. No.	Quantities estimated but may be more or less		Description of Item.	Estimated Rate		Total amount according to estimate
				In Figures	In Words	
1	1188	Mtr	Replacing old and U/s By Supplying and erecting Flexible PVC insulated multi strand multi core 1.1 kv grade ISI marked copper wires of following size to be erected as directed. (e) 1.50 Sq.mm 3 core round PVC sheathed (Old-612, New-576)	46.46	Rupees Forty Six And Paise Forty Six Only	55194.48
2	16	Mtr	providing and erecting Mains with ISI marked, 1.5KV grade electrolyte multi stranded, annealed copper conductor with heat resistant PVC insulated conforms to IS 694, IEC - 227 erected in existing pipe of following size (Specifically for control panel, relays, power switchgears, motor starters & control wiring) with required size of copper lugs, nuts and bolts if required. (e) One wire 6.00 sq. mm	56.56	Rupees Fifty Six And Paise Fifty Six Only	904.96
3	4	Mtr	providing and erecting Mains with ISI marked, 1.5KV grade electrolyte multi stranded, annealed copper conductor with heat resistant PVC insulated conforms to IS 694, IEC - 227 erected in existing pipe of following size (Specifically for control panel, relays, power switchgears, motor starters & control wiring) with required size of copper lugs, nuts and bolts if required. (f) One wire 10.00 sq. mm	91.91	Rupees Ninety One And Paise Ninety One Only	367.64
4	140	Ea	Replacing Old and U/s By Supplying and erecting LED street light / Flood light fittings with High power White LEDs wattage of 3 Watt and above assembled on single MCPCB, efficiency more than 130 lm/w and corrosion free High pressure die cast aluminum housing with smooth finish powder coated and heat sink extruded aluminium with diffuser and Polycarbonate optics/ lenses, with toughened glass with company mark/name engraved or embossed 160 to 270 V,Power Factor more than 0.95, THD < 10 %, CCT 3000 K to 5700K,Uniformity ratio >0.45, Luminaire efficacy> 100 lumens/watt . LED driver efficiency > 85 %.(fittings required LM-79 & LM-80 certificates)(NOTE: Below description have shown ranges of Wattage capacity of LED fittings.The Engineer incharge may select any wattage capacity between the ranges shown.) (A) Street Light (IP-65), Surge protection -4KV integral and ,Light must have 440VAC line supply with over-voltage protection. (iii) Above 60 to 90 watts Cat-III (old-68, New-72)	5976.17	Rupees Five Thousand Nine Hundred Seventy Six And Paise Seventeen Only	836663.8
5	12	Ea	Supplying and erecting LED street light / Flood light fittings with High power White LEDs wattage of 3 Watt and above assembled on single MCPCB, efficiency more than 130 lm/w and corrosion free High pressure die cast aluminum housing with smooth finish powder coated and heat sink extruded aluminium with diffuser and Polycarbonate optics/ lenses, with toughened glass with company mark/name engraved or embossed 160 to 270 V,Power Factor more than 0.95, THD < 10 %, CCT 3000 K to 5700K,Uniformity ratio >0.45, Luminaire efficacy> 100 lumens/watt . LED driver efficiency > 85 %.(fittings required LM-79 & LM-80 certificates)(NOTE: Below description have shown ranges of Wattage capacity of LED fittings.The Engineer incharge may select any wattage capacity between the ranges shown.) (B) Flood Light (IP-65), Surge protection -4KV integral and ,Light must have 440VAC line supply with over-voltage protection. (vi) above 160 to 200 watts Cat-III	9647.52	Rupees Nine Thousand Six Hundred Forty Seven And Paise Fifty Two Only	115770.24
6	4	Ea	Providing and erecting Approved make Four pole moulded case circuit breaker having breaking capacity ICU of 25 KA. at 415 V,having normal current rating up to 25 A to 100A. with Fixed thermal & magnetic release suitable to work on A.C. supply 50 c/s. with all internal connections, spreader tinned copper & complete erected in existing 16 G.M.S. housing. ICS=100% of ICU only Cat III	6173.12	Rupees Six Thousand One Hundred Seventy Three And Paise Twelve Only	24692.48
7	2	Ea	Providing and erecting Approved make Earth fault Relay suitable to mount with inter connection suitable to following size of moulded case circuit breaker having CT ratio & MCCB rating as following along with shunt trip 220V AC. with all internal connections & complete erected in existing M.S.housing.. (1) 15 A -100 A , CT Ratio 1/100	4687.41	Rupees Four Thousand Six Hundred Eighty Seven And Paise Forty One Only	9374.82

8	1	RMT	Supplying and erecting triple pole & neutral 440V / 500V panel mounting Copper Busbars with four equal Nos. of electrolyte bus having current density not more than 1.6 Amp. / sq.mm (Rated current / cross section area) duly wrapped with colour insulating tape for phase sequence of following current carrying capacity, erected with necessary bus bar supports /insulators, main cable socket to each bar, erected in existing cubical panel with necessary connections. (A) Suitable for 100 Amp. Capacity	1961.42	Rupees One Thousand Nine Hundred Sixty One And Paise Forty Two Only	1961.42
9	132	Ea	providing and erecting Miniature circuit breaker single pole 0.5A to 2A system and having breaking capacity 10 KA to be erected in existing box. confirming to IS 8828/1996 with ISI Mark Cat.III	270.68	Rupees Two Hundred Seventy And Paise Sixty Eight Only	35729.76
10	8	Ea	Providing & erecting 415V MCB Four Pole Switch for Lighting Load (B curve) having 10KA breaking capacity & confirms to IS :8828 in existing box having following capacity (b)40 Amp. Cat.III	638.32	Rupees Six Hundred Thirty Eight And Paise Thirty Two Only	5106.56
11	80	Kg	Providing and erecting HOT deep Galvanised iron strip wire 8 to 16 SWG.	77.77	Rupees Seventy Seven And Paise Seventy Seven Only	6221.6
12	16	Ea	Providing and erecting Pipe type earthing with 40 mm dia 2.5 mtr long 'B' grade G.I. pipe with necessary coupling buch buried in specially prepared earth pit & G.I. earth wire of 8 SWG erected & connected as directed (For panel)	823.15	Rupees Eight Hundred Twenty Three And Paise Fifteen Only	13170.4
13	16	Ea	For using salt and charcoal / coke as required for pipe type earthing.	171.70	Rupees One Hundred Seventy One And Paise Seventy Only	2747.2
14	8	Ea	Supplying & erecting earth pit of minimum bore dia.150mm size approved make Earthing Electrode consisting Pipe-in-Pipe Technology as per IS 3043-1987 made of corrosion free hot dipped G.I.Pipes having Outer pipe dia of 50mm having 80-200 Micron galvanising, Inner pipe dia of 25 mm having 200-250 Micron galvanising, connection terminal dia of 12mm with constant ohmic value surrounded by highly conductive compound with high charge dissipation suitable for following type of applications with chamber and heavy duty cover. (A)(approved make OEM has to submit test certificate including value of earth resistance of installation duly stamped and signed by agency and officer Incharge has to ensure the value of earthing resistane mentioned in test Certificate) & having back filling compound of (B) Inner chemical (CCM Compound)- Resistivity:- 0.2 ohm / meter testing as per IEC 62561-2017, Voltage drop:- < 1 volt at no load & dry form, Sulphar content:- <2%(C) Back fill Compound :- Earthing compound should be capable to retain moisture for long time Necessary test report must be submitted by Agency. (a) For Electrical Installation up to 440V in normal soil Length of pipe - 1 Mtr Back filling compound - 1 Nos Bag of 15 Kg.	4591.46	Rupees Four Thousand Five Hundred Ninety One And Paise Forty Six Only	36731.68
15	1296	Mtr	Replacing old and U/s By Providing and erecting XLPE (IS:7098)(I)-88 ISI armoured cable multistrand / Solid Aluminium conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe of following size of cables (B) 4 core 6 Sq. mm (old-320, New-976)	126.25	Rupees One Hundred Twenty Six And Paise Twenty Five Only	163620
16	60	Mtr	Providing and erecting XLPE (IS:7098)(I)-88 ISI armoured cable multistrand / Solid Aluminium conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe of following size of cables (C) 4 core 10 Sq. mm	140.39	Rupees One Hundred Forty And Paise Thirty Nine Only	8423.4
17	80	Mtr	Providing and erecting XLPE (IS:7098)(I)-88 ISI armoured cable multistrand Aluminium conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe of following size of cables (A) 4 core 16 Sq. mm	153.52	Rupees One Hundred Fifty Three And Paise Fifty Two Only	12281.6
18	1200	Mtr	Making trench in Hard Murrum / Tar Road of suitable width of 90 cm or required depth for laying any size of cable or locating the fault all over the run and back filling the same and making the surface as normal ground. (B) If additional machinery like hammer drillor or JCB use [Add]	357.54	Rupees Three Hundred Fifty Seven And Paise Fifty Four Only	429048
19	10	Mtr	Drilling the road without breaking the road surface (Asphalt) for laying of cable for feeding power supply by making up to following size of holes at both ends complete. (A) Up to 100 mm bore dia	492.88	Rupees Four Hundred Ninety Two And Paise Eighty Eight Only	4928.8

20	10	Mtr	Providing & laying. R.C.C. Hume pipe for cable to be laid 90 cm. below ground across the road crossing or on floor with necessary material in an approved manner and making the ground as per original. (F) 100 mm dia.	226.24	Rupees Two Hundred Twenty Six And Paise Twenty Four Only	2262.4
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21	1200	Mtr	Providing & laying approved make Double walled corrugated pipes (DWC) of polyethylene(conforming to IS 14930 II)with necessary connecting accessories of same material at required depth in existing trench for laying of cable. below ground / road surface for enclosing cable (A)50 mm outer dia	62.62	Rupees Sixty Two And Paise Sixty Two Only	75144
22	2	Ea	Providing and, fixing heavy duty flange type brass cable gland with rubber ring for PVC insulated armoured cable complete with out going tails, insulating tape etc for following size of cables. (B) 2 to 4 core 6 Sq. mm	38.38	Rupees Thirty Eight And Paise Thirty Eight Only	76.76
23	2	Ea	Providing and, fixing heavy duty flange type brass cable gland with rubber ring for PVC insulated armoured cable complete with out going tails, insulating tape etc for following size of cables. (C) 2 to 4 core 10 Sq. mm	38.38	Rupees Thirty Eight And Paise Thirty Eight Only	76.76
24	4	Ea	Providing and, fixing heavy duty flange type brass cable gland with rubber ring for PVC insulated armoured cable complete with out going tails, insulating tape etc for following size of cables. (D) 2 to 4 core 16 Sq. mm	47.47	Rupees Forty Seven And Paise Forty Seven Only	189.88
25	16	Ea	Solder less crimping type Aluminium lugs conforming to IS suitable for cable of following size evenly crimped with high pressure tool & connected to switchgear terminals with brass/cadmium plated nut bolts in an approved manner. (C) 16/25 Sq.mm.	15.15	Rupees Fifteen And Paise Fifteen Only	242.4
26	32	Ea	Supplying and erecting approved make Octagonal pole made from HR sheet steel. The pole should be made as per IS. and shall be coated with hot dip galvanizing as per IS 2629/2633/4759, suitable suspend local wind speed with integral Junction box consist of terminal plate of min 6mm Hylam sheet, standard profile 35mmX7.5mm Din-Rail for MCB Mounting, stud type terminal and arrangement for cable termination to be erected With Suitable foundation (Included) as per details given by manufacturer considering site requirement. (E) 7 Mtr. Long 70 mm Top X 135 mm bottom dia, 3 mm thickness with 225mmX225mmX16mm base plate, 4-M20 Bolts and 600mm long with necessary G.I. J Bolts .Approx Pole weight 67 kg	11411.99	Rupees Eleven Thousand Four Hundred Eleven And Paise Ninety Nine Only	365183.68
27	45	Ea	Replacing old and U/s By Supplying & erecting approved make SMC press moulded composite FRP. loop-in, loop-out approx. 2mm thick box complete with Bakelite connector strip 5way(3P+N+E),DIN rail for mounting mob & hinged doors as per requirement having locking arrangements with mounting clamp with nuts, bolts & washers suitable for erection on pole with cable clamps& earth bolt of following size of box. (C)150mm x 125mm x 100mm [deep] (Old-45, New-0)	476.72	Rupees Four Hundred Seventy Six And Paise Seventy Two Only	21452.4
28	2	Ea	Supplying & erecting approved make SMC press moulded composite FRP. loop-in, loop-out approx. 2mm thick box complete with Bakelite connector strip 5way(3P+N+E),DIN rail for mounting mob & hinged doors as per requirement having locking arrangements with mounting clamp with nuts, bolts & washers suitable for erection on pole with cable clamps& earth bolt of following size of box. (I) 400mm x 300mm x 190mm [deep]	3420.87	Rupees Three Thousand Four Hundred Twenty And Paise Eighty Seven Only	6841.74

29	28	Ea	Providing and erecting street light pole bracket comprising main B Class GI pipe of 4.2 cm/require outside dia. complete with suitable B Class G.I sleeve tubing of approx. 45cms.length and suitable for 76.5 mm / 80mm. / require size pole top having sufficient fasteners for fixing the brackets and having spread of 1 mtr. length with suitable rise as per site condition & suitable welded stiffener reducer and nipple with check nut complete painted with one coat of Red oxide / PU base primer and two coats of Aluminium / PU paint. paint with following nos of arms. [B] Double Arm Bracket 1 Mtr	829.21	Rupees Eight Hundred Twenty Nine And Paise Twenty One Only	23217.88
30	4	Ea	Providing and erecting street light pole bracket comprising main B Class GI pipe of 4.2 cm/require outside dia. complete with suitable B Class G.I sleeve tubing of approx. 45cms.length and suitable for 76.5 mm / 80mm. / require size pole top having sufficient fasteners for fixing the brackets and having spread of 1 mtr. length with suitable rise as per site condition & suitable welded stiffener reducer and nipple with check nut complete painted with one coat of Red oxide / PU base primer and two coats of Aluminium / PU paint. paint with following nos of arms. [D] Four Arm Bracket 1 Mtr	1252.40	Rupees One Thousand Two Hundred Fifty Two And Paise Forty Only	5009.6
31	2	Ea	Supplying & erecting IP 55 grade following size section pillar fabricated from joint less M.S. Sheet with angle iron legs made from jointless M.S. Angle with cable clamps to be buried in ground to have appropriate erection to work uniform until erected with cement concrete foundation and 45 cm high bricks work finishing with plaster etc. hinged double door internally supported on both side, with internal and outside looking arrangement with lock and keys in duplicate 35 x 35 x 5 mm M.S. Angle of Two Nos. one is welded and other with nut and bolt for erecting Bakelite sheet. Painting the Section Pillar inside and out side with three tank powder coated paint. section pillar roof should be without joint with water leakage proof & tested as per IP 55 test & followed by IS 2147 of 1962 (A) 150 X 90 X 75 cm section pillar fabricated from 14 Gauge MS Sheet with angle iron legs 95 cm long made from 40 X 40 X 6 mm thick MS angle.	16691.26	Rupees Sixteen Thousand Six Hundred Ninety One And Paise Twenty Six Only	33382.52
32	2.5	sq.mtr	Supplying and erecting HYLAM sheet on existing angle iron frame.for following thickness (E) 10mm	1927.08	Rupees One Thousand Nine Hundred Twenty Seven And Paise Eight Only	4817.7
33	4	Ea	Supplying & erecting approved make Digital time switch having lithium cell 6 years operative and operate battery backup 1 channel day clock with 14 memory programme, suitable to operate on 240V + 5%, 16A with, floating contacts Minimum switching setup time 1 minimum & LCD display. Also comprised permanent ON/OFF switching. Programming switches & housed in fire proof thermoplastic enclosure & transparent cover erected as required with necessary connection erected as directed.	3168.37	Rupees Three Thousand One Hundred Sixty Eight And Paise Thirty Seven Only	12673.48
34	4	Ea	Supplying & erecting power contactor ,AC3 duty for time switch complete erected as per direction Cat III (D) 4 pole 440V 40 Amp.	2782.55	Rupees Two Thousand Seven Hundred Eighty Two And Paise Fifty Five Only	11130.2
35	2	Ea	Supplying, erecting, testing, commissioning approved make M.S. Polygonal High Mast Pole having following general Specification. (a) Polygonal Section fabricated from M.S. Plate confirms BSEN 10025 & Hot deep galvanized minimum 65/86 micron (as per IS 2629 /1985) Lantern carriage with ring and rubber lines for erection of luminaries of suitable site. (b) Maximum telescopic section not more than four (c) Double drum gear pipe motorized winch with 6mm dia S.S. Rod (For 16 mtr and above size) (d) Approved make L.E.D. aviation light = 1 No. Lightening arrestor = 1 No. with necessary wiring of 2.5 sq.mm 5 core ISI copper cable Unarmoured. (e) Bottom most section suitable for mounting reversible motor and switchgears having door not more than 1400mm x 300mm with waterproof gasket & hinges & locking arrangement. (f) Pole structure comprises suitable size of reversible motor, cable and necessary switchgears with control panel. (g) bottom section shall have suitable size of thickness supports ribs foundation bolts nuts etc. (h) Item not comprises the cost of lanterns. (i) Necessary Cement Concrete foundation as per IS including testing & commissioning of the entire structure for following size of High Mast poles [1] High Mast 12 Mtr. TOP A/F 105 mm, BOTTOM A/F 360mm, No. of Sec. No. - 1, Bottom Thickness - 3 mm, Size of Base Plate - Dia 520 mm x 20 mm thick, Foundation Bolt Size M24 x 850 mm, Qty - 6 Nos., Suitable for mounting Fitting of Light - 6 Nos.	141616.14	Rupees One Lakh(s) Forty One Thousand Six Hundred Sixteen And Paise Fourteen Only	283232.28
Total Rs.						2607872.52

In Words : **Rupees Twenty Six Lakh(s) Seven Thousand Eight Hundred Seventy Two And Paise Fifty Two Only**

I/We am/are willing to carry out the work at _____ % above/below (in Figures) _____ percent Above /
below (in words) the estimated rates mentioned above amount of my/our tender works out as under :-

Estimated amount put to Tender

Rs. _____

Deduct _____ % below

Rs. _____

(-)Less For Dismantle Material

Rs. _____

Net Amount

Rs. _____

(Rupees in Words) _____

O R

Estimated amount put to Tender

Rs. _____

Add. _____ % Above

Rs. _____

(-)Less For Dismantle Material

Rs. _____

Net Amount

Rs. _____

(Rupees in Words) _____.

- A I/We hereby declare that I/we have visited the site and fully acquainted my self / our selves with the local situation regarding material,labour and other factors pertaining to the work before submitting this tender.
- B I/We hereby declare that I/we carefully studied the conditions of contract, detailed technical specifications and other tender documents of this work and agree to execute the same accordingly.
- C **ERDA Testing will be taken for any illuminary and wires/ Cable items mentioned above in tender on random basis and charges of the same will be deducted from the bill. Contractors are advised to quote the rate by considering the same.**
- D Any Excess in tender Item/ Extra item if needs to be Execute, Contractors has to carry out on the instruction of Competant Authority on Tender Submitted rate, No Excuse will be Accepted. Hence Contractor are Requested to Quote the rate Considering this Condition.
- E Contractor are requested to quote the Tender by considering that payment will be made after availability of grant. Contractor has to start the work immediately after issue of work order and as per instruction of Engineer in-charge irrespective of availability of grant.
- F **This Estimate has been prepared on the new SOR which is exclusive of GST hence GST Additional Will be paid to the agency as per existing guidelines.**

(Signature of the Contractor)

Deputy Executive Engineer
Morbi Electrical R&B Sub Division
Morbi

Executive Engineer,
Electrical (R.&B.) Division
Bhuj-Kutch

- Note**
- 1 Please strike out whichever is not applicable.
 - 2 In the case of tendered amount being quoted incorrectly the quoted pered percentage Below/Above will be considered as final.