Esimate for Installation of Energy Efficient LED Street Lighting with Smart Controls in Various wards in Pan City Indore under Indore Smart City Project (Package-1)

Smart City Project (Package-1)								
S. No	UADD SOR Item No	Description	Unit	Qty.	Rate (Rs)	Amount (Rs.)		
1	14.1	Supply, laying, testing and commissioning following ISI marked XLPE insulated, Al conductor, armoured, 1.1kV grade cable. By clamping from pole to pole in air as per mpseb norms inclusive of supply and installation of suspension clamps, tension clamps and other hardware as required.						
1	14.1.2	2 CORE ARMOURED						
b	14.1.2.3	2Cx10 Sq mm	Mtr	5000	139	693000		
2	14.1.8	4 CORE ARMOURED						
a	14.1.8.4	4Cx25 Sq mm	Mtr	500	253	126500		
3	SOR.NO. 14.1.8/ pg.no.81	Supply, laying, testing and commissioning following ISI marked XLPE insulated, Al conductor, armoured, 1.1kV grade cable underground at 600 mm depth or at safe depth as per site condition. The cable shall be laid in existing 50mm dia PVC pipe. The item includes termination of cable with suitable brass cable gland (at panel end) and aluminium lugs.						
a		(A) 4Cx25 Sq mm	Meters	300	253	75870		
4	(MPPWD SOR 42.86)	Supplying & fixing of Aerial bunch cable accessories suspension clamps i/c required attachment for single core cable of approved make on pole with clamp, necessary material as per specification for required size.	Each	100	308	30800		
		NON SOR ITEM						
5		Supply and Installation of 32/40 mm 4-5 feet length A class G.I. pipe bracket inclusive of required clamps as per site condition required.	Each	412	450	185400		
6		Supply and installation of 25/32 mm 2.5-3 feet length A class G.I. pipe bracket inclusive of required clamps as per site condition required.	Each	2750	375	1031250		
7		Supply, installation testing & commissioning of LED street light Luminaires of specified Wattage with IP 66 rating. The fixture should be made of pressure die cast Aluminium / Aluminium Extrusion and clear flat glass, integral control gear, IK 05 or above. The fixture should have lumen maintenance of at least 70% at 50000 burning hours at ambient temp of 35 degree C. The driving current for LED should be Max 1A ±10 %. The efficacy of fixture should be at least 110 lumens/watt. The power factor of driver should be > 0.9 and the THD < 15% & surge. Protection 4KV internal and 10KV external. CRI > 70%. The Fixture should be complete with LED, Driver, and all other accessories, vendor should provide LM 79 and LM 80 Test report. Luminaire. The fixture should be installed on existing poles. Job includes supply and installation, connection of suitable length 3Cx2.5 sqmm cu conductor cable from street lighting fixture to connection box on pole. The job includes supply of all necessary hardware, clamps and mounting accessories, connectors including piercing connectors. Item is inclusive of proper body earthing of lighting fixture.approved Make(phillips/keslec/bajaj/wipro/havells/surya)	Each					
(i)		40 to 45 W	Each	1700	3100	5270000		

(iv)	90 to 100 W (Road light or Flood Light optics and mounting as per application)	Each	400	7000	2800000		
9	Supply, installation, testing and commissioning of outdoor weather proof type street lighting control feeder pillar made from 14/16 SWG MS galvanised powder coated sheet complete with mounting stand. The feeder pillar should provide following functionalities related to remote switching and monitoring of LED street lights:  i) Should be capable of controlling of upto 15 KVA street lighting load distributed in three / two phases. The wattage of each street light will be 100 to 150 watts.  ii) It should be complete with all required switching and protecting devices, contactors, timers, relays, sensors, controller, remote wireless communication devices, wiring, pipe earthing, surge protection device, required software, web server, hosting, etc.  iii) The feeder pillar should perform at least following tasks through remote PC/mobile based web application user friendly interface: Phasewise remote ON/OFF switching of street lights. Monitoring of quantity and electrical parameters of circuitwise full or partially /ON/OFF of street lights in each phase. Specifications enclose as per tender document.	Each	10	93298	932980		
10	Earthing with G.I. Earth plate 600mm X 600mm X 6mm thick including accessories and providing masonaryencloser in cement mortar, cover plate having locking arrangement on the top and G.I. watering pipe 20mm dia 2.7 Metre long etc., with charcoal or coke and salt complete as required.	Nos.	10	3300	33000		
14	Supplying and installation of two nos SP MCBs, 4-way connectors, and 2 nos, 3Cx2.5 sqmm copper flexible cable from connection compartment of existing lighting pole to fixtures with Bakelite sheet.	Nos	50	1500	75000		
Total							