## **KERALA CRICKET ASSOCIATION**

## PREVENTIVE MAINTENANCE OF FLOOD LIGHTS AND CONNECTED ELECTRICAL SYSTEMS AT THE SPORTS HUB, GREEN FIELD INTERNATIONAL STADIUM THIRUVANANTHAPURAM

INTERNATIONAL STADIUM THIRUVANANTHAPURAM							
SI No	Description	Qty	Unit	Rate	Amount		
	Mandatory requirements for improving the LUX output at the site						
1.0	Flood Light Units						
1.1 (a)	Checking the Flood light units						
(b)	Cleaning of control boxes and Ignitor contacts	228.00	Nos				
(c)	Proper insulation checking of the Ignitor control boxes						
(d)	Replacing of thermal resistance graded rubber gaskets if required						
(e)	Replacing of rusted nut and bolts				-		
(f)	Checking of Bulbs						
(g)	Testing and commissioning etc. as required						
(h)	Front glass and reflector safely of the fixture, cleaning/washing the same, refixing, testing and commissioning if required. (supply of materials not included)						
1.2	Dismantling of existing 2000w Conventional light fittings and all accessories including ballast, ignitor, cables from control panel to luminaire etc	184.00	Nos		-		
1.3	Installation of LED fixtures on stadium masts at 52mtr height including fixing as per lighting design with all suitable accessories and safety equipments as required	184.00	Nos		-		
1.4	Testing of the floodlight system for suitable light Intensity to 5 x 5 meter, by properly gridding in the FOP. Correction of onfield light Intensity whereever required based on the LUX measurement and checking the Alignment of Luminaire	412.00	Nos		-		
The mandatory requirements for pre-match preventive maintenance of the Floodlight and Connected Electrical works							
2.0	PANEL BOARDS						
	Labour charges for servicing of following Cubicle type floor mounted panel boards such as						
(a)	Cleaning all the busbars , internal and external sides of the panel boards etc						
(b)	Checking and tightening of all the control wirings, busbars of the panel etc.						
(c)	Greasing of all moving parts						
(d)	Providing Contact grease for all terminal contacts						
(e)	Checking, cleaning and tightening of all earthings of the panel boards						
(f)	Continuity test and measuring earth resistance of earthing points of panel boards						

(g)	Checking and ensuring the proper grading/setting/fuse rating of			
(h)	each feeders with respect of loads/cables  Providing proper RYBN sleeves for busbars which ever is required			
(11)	Providing proper KYBN sleeves for busbars which ever is required			
(i)	Checking all the indication lamps Control fuses, Voltmeters, Ammeters, Current Transformers, Multifunction digital meters, earth fault relays etc. and replacing if required (Supply of materials not included)			
(j)	Taking the insulation resistance of Panel Busbars between phases and earth, phases, etc.			
(k)	Baking of busbar Cubicles/FRP/Bakelite/Epoxy supports etc with hot air to improve IR values			
(1)	Load testing of each feeders			
(m)	Removing of all the damaged rubber beadings whereever required or providing if required.			
(n)	Removing of all the rusted GI Bolt and Nuts with washers of busbars and Enclosures.			
(o)	Replacing of faulty Switch gear Components (Supply of materials not included)			
(P)	Testing and commisioning after the servicing			
2.1	Lighting Panel			
	Incomer:			
	250 A TP MCCB - 1 No.			
	Outgoing:			
	63 A TP MCCB - 7 Nos.	08	Nos.	-
	Timer, Control fuses, Auto manual Switch, Indication lamps, ELR,			
	MFM, Power and control contactors, etc - 1 set			
	DP MCB - 60 Nos.			
	250A TPN AL BUS BAR and interconnections -1 set			
2.2	Change over Panel (DG YARD)			
	Incomer:			
	630 A TPN ISOLATOR - 2 No.			
	Outgoing:	4.00	Nos.	-
	630 A 4P ONLOAD CHANGEOVER SW - 1 No.			
	Control fuses, Indication lamps, MFM, etc - 1 set			
	630A TPN AL BUS BAR and interconnections -1 set			
2.3	Ballast			
	Cu Ballast for 2000 W MH with	228.00	Set	-
	Complete control wiring, control contactors etc. of system			
2.4	Capacitor	456.00	Nos.	-
	Checking the Capacitor for the effective Capacitance Value			
3.0	UG, Power Cables and Termination			
	Labour charges for checking the following details of the cables.			
(a)	Physical checking and mechanical damages and Meggering where ever required.			 
(b)	Insulation resistance between core to core and core to earth.			
(c)	Cleaning and tightening of all cable terminals.			
(d)	Replacing the rusted nut and bolt of the termination.			

(e)	Replacing the burnt Cu/Al sockets with new ones.			
(f)	Continuity and load test of all cables			
(g)	Testing and commissioning			
3.1	1R x 3.5C x 240 sq.mm AYFY cable from Sub station to Lighting panels with terminations.	6.00	Set	-
3.2	3C x 2.5sq.mm stranded Cu. Cable from lighting panel to ballast rack with terminations	309.00	Set	-
3.3	3C x 2.5sq.mm stranded Cu. Cable from ballast rack to Ignitor mounting box/lamp with Terminations	309.00	Set	-
3.4	1R x 3.5C x 240 sq.mm AYFY cable from Sub station to Lighting panels - Water Trap removel, Moisture removing with necessary heat treatment, Insulation Testing (Tower 4 electrical room)	2.00	Set	-
3.5	3C x 2.5sq.mm stranded Cu. Cable from ballast rack to Ignitor mounting box/lamp with Terminations - Water Trap removel, Moisture removing with necessary heat treatment, Insulation Testing (Tower 4 electrical room)	103.00	Set	-
3.6	3C x 2.5sq.mm stranded Cu. Cable from lighting panel to ballast rack with terminations - Water Trap removel, Moisture removing with necessary heat treatment, Insulation Testing (Tower 4 electrical room)	103.00	Set	-
3.7	2R x 3.5C x 300/400 sq.mm AYFY cable from Changeover Panel (DG YARD) to Sub station with terminations.	4.00	Set	-
4.0	Earthing			
<b>4.0</b> 4 (a)	Servicing of Earth pit such as removing rusted nut/bolts, cleaning contacts area, applying petroleum jelly as required and improving the earth resistance values.			
	Servicing of Earth pit such as removing rusted nut/bolts, cleaning contacts area, applying petroleum jelly as required and improving	16.00	Nos	-
4 (a)	Servicing of Earth pit such as removing rusted nut/bolts, cleaning contacts area, applying petroleum jelly as required and improving the earth resistance values.	16.00 8.00	Nos Nos	-
4 (a) 4.1	Servicing of Earth pit such as removing rusted nut/bolts, cleaning contacts area, applying petroleum jelly as required and improving the earth resistance values.  Floodlight highmast tower - Body Earth Pit			-
4 (a) 4.1 4.2	Servicing of Earth pit such as removing rusted nut/bolts, cleaning contacts area, applying petroleum jelly as required and improving the earth resistance values.  Floodlight highmast tower - Body Earth Pit  Floodlight highmast tower - Lightning Arrester Earth Pit	8.00	Nos	-
4 (a) 4.1 4.2 4.3	Servicing of Earth pit such as removing rusted nut/bolts, cleaning contacts area, applying petroleum jelly as required and improving the earth resistance values.  Floodlight highmast tower - Body Earth Pit Floodlight highmast tower - Lightning Arrester Earth Pit DG YARD Earth Pit	8.00	Nos	- - -
4 (a) 4.1 4.2 4.3 4 (b)	Servicing of Earth pit such as removing rusted nut/bolts, cleaning contacts area, applying petroleum jelly as required and improving the earth resistance values.  Floodlight highmast tower - Body Earth Pit Floodlight highmast tower - Lightning Arrester Earth Pit DG YARD Earth Pit Earth Continuity test	8.00 16.00	Nos Nos	- - -
4 (a) 4.1 4.2 4.3 4 (b) 4.4	Servicing of Earth pit such as removing rusted nut/bolts, cleaning contacts area, applying petroleum jelly as required and improving the earth resistance values.  Floodlight highmast tower - Body Earth Pit  Floodlight highmast tower - Lightning Arrester Earth Pit  DG YARD Earth Pit  Earth Continuity test  Continuity test from Lightning Arrester to the Earth Pit	8.00 16.00 8.00	Nos Nos	-
4 (a) 4.1 4.2 4.3 4 (b) 4.4 5	Servicing of Earth pit such as removing rusted nut/bolts, cleaning contacts area, applying petroleum jelly as required and improving the earth resistance values.  Floodlight highmast tower - Body Earth Pit Floodlight highmast tower - Lightning Arrester Earth Pit DG YARD Earth Pit Earth Continuity test Continuity test from Lightning Arrester to the Earth Pit  Supply - Panel Components  Supply and Providing 250A 4P 25KA MCCB with terminal spreders, Shunt trip coil- Compatible with existing Panel - L&T/ GE Make	8.00 16.00 8.00	Nos Nos	-
4 (a)  4.1  4.2  4.3  4 (b)  4.4  5	Servicing of Earth pit such as removing rusted nut/bolts, cleaning contacts area, applying petroleum jelly as required and improving the earth resistance values.  Floodlight highmast tower - Body Earth Pit  Floodlight highmast tower - Lightning Arrester Earth Pit  DG YARD Earth Pit  Earth Continuity test  Continuity test from Lightning Arrester to the Earth Pit  Supply - Panel Components  Supply and Providing 250A 4P 25KA MCCB with terminal spreders, Shunt trip coil- Compatible with existing Panel - L&T/ GE Make prefered (subject suitable to rotary handle avaliability)  Supply and Providing 63A TP MCCB 25KA with spreader terminal and ROH- L&T/ GE Make prefered (subject suitable to rotary	8.00 16.00 8.00	Nos Nos Nos	-

Supply fixing and glanding of APFCR (Automatic Power Factor Correction Relay) Panel for regularising Volatage, Power factor, capacitive load protection and light fixtures protection. With Components like 35KVR - 100KVR HMI (Human Memmory Inteligent), 35KVR Capacitor, 125A Incomming switch, Power Contactor 7nos, Power factor meter, Automatic timer switch etc as required.	8.00	Nos		-
		Total without GST :		-

## **Terms and Conditions**

- 1. Rates for the item estimated is as lumsum irrespective of quantity noted for indicative purpose.
- 2. If any cable, wires required to be replaced, to be done subject to Approval. Labour charges required will be included in the work rates quoted.
- 3. The Bidder shall have previous experience in executing similar nature of stadium preventive maintenance work. Proof for the same shall be attached along with tender.