

OFFICE OF THE NAGPUR MUNICIPAL CORPORATION, NAGPUR
(ELECTRICAL DEPARTMENT)
NON CSR ITEM LIST

Name of Work :- NON CSR Items for beautification of Sonegaon Lake with aesthetic lighting along with Electrical other allied works

Sr	Product Description	Unit	Qty.	Unit Rate
1	SITC of BIS-approved RGBW (W = 3000K / 4000K) IP67 rated Linear Wall Washer Light of 24W–25W: The luminaire shall be a high-performance, outdoor-rated Linear Wall Washer Light with a power rating of 24W–25W, constructed using highly thermal-efficient extruded aluminium housing with die-cast aluminium end caps. The fixture shall be provided with clear toughened glass having an impact resistance of IK07. The luminaire shall deliver a minimum of 1250 lumens with an efficacy of >50 lm/W at luminaire level when all LEDs are in ON condition. The optical system shall comprise Narrow / Medium / Wide / Elliptical beam angle lenses made of VDE/UL-approved, UV-resistant, non-yellowing silicon material. The product shall be integrated with an in-built 8-bit / 16-bit DMX-512 based decoder or equivalent data-processing device, housed within the luminaire maintaining the same IP rating. The fixture shall be subjected to and pass corrosion and rust-resistance testing suitable for marine / high-humidity environmental applications for a minimum duration of 500 hours. The luminaire shall operate on DC 24V and be compatible with 240V AC input through an external/remote LED driver. A BIS-approved IP65/IP67-rated constant-voltage power supply shall be provided. The electrical safety rating of the product shall be Class III. The fixture shall be equipped with industrial-grade, moulded, locked-type IP67 connectors for DC power supply. LEDs shall be sourced from reputed manufacturers such as CREE / OSRAM / NICHIA. The bidder/OEM must submit all relevant LM-80 reports, BIS certifications, and third-party NABL-accredited LM-79 test reports at the time of tender submission, which is mandatory. LEDs shall have an LM-80 declaration of >50,000 hours at 85°C. The luminaire shall operate reliably within an ambient temperature range of –10°C to +50°C and shall be supplied with a minimum 5-year warranty. The product shall comply with IS/IEC 60529; IS 10322 (Part 5/Sec 5):2013 + A1:2018 read with IS 10322 (Part 1):2014; IEC 60068-2-11:2021; IEC 62262:2002; and LM-79/LM-80 standards.	Nos.	1	
2	SITC of BIS-approved RGBW (W = 3000K / 4000K) IP67 rated Linear Wall Washer Light of 30W–36W: The luminaire shall be a high-performance, outdoor-rated Linear Wall Washer Light with a power rating of 24W–25W, constructed using highly thermal-efficient extruded aluminium housing with die-cast aluminium end caps. The fixture shall be provided with clear toughened glass having an impact resistance of IK07. The luminaire shall deliver a minimum of 1200 lumens with an efficacy of >40 lm/W at luminaire level when all LEDs are in ON condition. The optical system shall comprise Narrow / Medium / Wide / Elliptical beam angle lenses made of VDE/UL-approved, UV-resistant, non-yellowing silicon material. The product shall be integrated with an in-built 8-bit / 16-bit DMX-512 based decoder or equivalent data-processing device, housed within the luminaire maintaining the same IP rating. The fixture shall be subjected to and pass corrosion and rust-resistance testing suitable for marine / high-humidity environmental applications for a minimum duration of 500 hours. The luminaire shall operate on DC 24V and be compatible with 240V AC input through an external/remote LED driver. A BIS-approved IP65/IP67-rated constant-voltage power supply shall be provided. The electrical safety rating of the product shall be Class III. The fixture shall be equipped with industrial-grade, moulded, locked-type IP67 connectors for DC power supply. LEDs shall be sourced from reputed manufacturers such as CREE / OSRAM / NICHIA. The bidder/OEM must submit all relevant LM-80 reports, BIS certifications, and third-party NABL-accredited LM-79 test reports at the time of tender submission, which is mandatory. LEDs shall have an LM-80 declaration of >50,000 hours at 85°C. The luminaire shall operate reliably within an ambient temperature range of –10°C to +50°C and shall be supplied with a minimum 5-year warranty. The product shall comply with IS/IEC 60529; IS 10322 (Part 5/Sec 5):2013 + A1:2018 read with IS 10322 (Part 1):2014; IEC 60068-2-11:2021; IEC 62262:2002; and LM-79/LM-80 standards.	Nos.	1	
3	SITC of BIS-approved RGBW (W = 3000K / 4000K) IP67 rated Linear Wall Washer Light of 40–42W: The luminaire shall be a high-performance, outdoor-rated Linear Wall Washer Light with a power rating of 40–42W, constructed using highly thermal-efficient extruded aluminium housing with die-cast aluminium end caps. The fixture shall be provided with clear toughened glass having an impact resistance of IK07. The luminaire shall deliver a minimum of 1600 lumens with an efficacy of >40 lm/W at luminaire level when all LEDs are in ON condition. The optical system shall comprise Narrow / Medium / Wide / Elliptical beam angle lenses made of VDE/UL-approved, UV-resistant, non-yellowing silicon material. The product shall be integrated with an in-built 8-bit / 16-bit DMX-512 based decoder or equivalent data-processing device, housed within the luminaire maintaining the same IP rating. The fixture shall be subjected to and pass corrosion and rust-resistance testing suitable for marine / high-humidity environmental applications for a minimum duration of 500 hours. The luminaire shall operate on DC 24V and be compatible with 240V AC input through an external/remote LED driver. A BIS-approved IP65/IP67-rated constant-voltage power supply shall be provided. The electrical safety rating of the product shall be Class III. The fixture shall be equipped with industrial-grade, moulded, locked-type IP67 connectors for DC power supply. LEDs shall be sourced from reputed manufacturers such as CREE / OSRAM / NICHIA. The bidder/OEM must submit all relevant LM-80 reports, BIS certifications, and third-party NABL-accredited LM-79 test reports at the time of tender submission, which is mandatory. LEDs shall have an LM-80 declaration of >50,000 hours at 85°C. The luminaire shall operate reliably within an ambient temperature range of –10°C to +50°C and shall be supplied with a minimum 5-year warranty. The product shall comply with IS/IEC 60529; IS 10322 (Part 5/Sec 5):2013 + A1:2018 read with IS 10322 (Part 1):2014; IEC 60068-2-11:2021; IEC 62262:2002; and LM-79/LM-80 standards.	Nos.	1	

Sr	Product Description	Unit	Qty.	Unit Rate
4	Supply, of IP67 Power Supply 24V output. Power consumption- 200W . The Driver should be of same make as the fixtures and should be BIS approved. All necessary certificates should be provided at time of Tender submission, which is mandatory. The product should have a minimum 5-year warranty.	Nos.	1	
5	Supply, of Signal Booster/Splitter with 8Way output for spreading and amplifying the DMX Data signals in multiple directions, Input-220-240V AC . All necessary certificates should be provided at time of Tender submission only, which is mandatory. The splitter should be of same make as the fixtures and should be BIS approved. The product should have a minimum 5-year warranty.	Nos.	1	
6	Supply, Installation, Testing and Commissioning of DMX Controller System with Standalone interfaces. Controller should have 3072 (6x 512) DMX nodes / channels . The controller should be features with multi-zone, extended triggers, 16-bit channels management. The controller should offer multiple possibilities to trigger lighting scenes: time / date, input ports, TCP/UDP commands. PC DMX Should have IN triggers, Standalone DMX IN triggers with 512 interfaces, x8 nos. dry (5V) External trigger contacts, Internal calendar, internal clock with power backup of 3 weeks, 4GB minimum micro SD Memory card, input power voltage: 8-15V DC with power adapter via USB (USB power supply included). Trigger lighting scenes using calendar triggers and conditional rules with New Stand-Alone engine, contact ports, RS232 or over Ethernet. Provision of Stand Alone mode with 2000 scenes across 20 zones & Buttons with rotary switch for scene selection. iPhone/iPad/Android remote and programming apps. Temperature: 0 to +50 C°, DMX Compatibility: 8- and 16-bit DMX fixtures, System Compatibility: Windows 10, 11, MAC OS X (10.6 and +), Linux. The controller should be of same make as the fixtures and the controller should be BIS approved. The product should have a minimum 5-year warranty.	Nos.	1	
7	Supply, of DMX Special Cable (single pair) having one 22AWG pair stranded (7x30) tinned copper conductors, Datalene (FHDPE) insulation, twisted pairs, overall Beldfoil shield (100% coverage) plus tinned copper braid, PVC jacket Cable. Preferred make Beldon or equivalent as approved by Consultant & Engineer in Charge.	Mtr.	1	
8	Supply, of Enclosure for Power Supply, Splitter, DMX Controller : Size 450 x 300 x 250 mm, plain sides, grey cover, Degree of protection: IP 66/ IP 67, Impact strenght: IK 08, Material, base: Fiberglass reinforced polycarbonate, Material, cover: Polycarbonate, Material, cover screws: Polyamide, Material, gasket: Polyurethane.	Nos.	1	
9	Programming, Testing, Troubleshooting and synchronization of DMX control system. The addressing of minimum 100 nos. fixtures with the multiple scenes (atleast 20 Themes) as per instruction of engineer in charge. The work to be done by the OEM representative of the luminaries supplied only. Third party not allowed. OEM must mention details as required above in self attested letter at the time of Tender submission only.	Nos.	1	
10	Supply of IP68 T Connector 3 PIN suitable 2.5sqmm flexible cable as per IS/IEC 60529: 2001 (IP68). The product must be Tested in NABL LAB with instruments used are maintained in accordance of IS/ISO/IEC 17025. NABL certificates should be provided at time of Tender submission.	Nos.	1	
11	Supply of IP68 T Connector 4 PIN suitable 2.5sqmm flexible cable as per IS/IEC 60529: 2001 (IP68). The product must be Tested in NABL LAB with instruments used are maintained in accordance of IS/ISO/IEC 17025. NABL certificates should be provided at time of Tender submission.	Nos.	1	
12	Supply of IP68 T Connector 5 PIN suitable 2.5sqmm flexible cable as per IS/IEC 60529: 2001 (IP68). The product must be Tested in NABL LAB with instruments used are maintained in accordance of IS/ISO/IEC 17025. NABL certificates should be provided at time of Tender submission.	Nos.	1	
13	SITC of LED IK10 30W Luminaire & decorative ornamental 3 meter height Pole (Above ground level till Luminaire Bottom), made up of two sections. bottom section shall be made up of 114 mm diameter & 3mm thickness, GI pipe of 1000 mm height, top section of 76 OD diameter & 3mm thickness GI Plain / Ribbed pipe, 2000 mm height and base plate shall be made up of MS plate. The pole is designed to mount post top or post top side mounting fixture with 76 ID pipe, the pipe shall be made by ERW pipes confirming to IS 1161 /IS 1239 All plates confirming to A36/A572-50 IS: 2062 or equivalent, the pole shall be PU paint of graphite grey color, shall have 3 layer coating of Minimum DFT level is 60 Microns. 1st layer with etch primer, 2nd layer with epoxy primer & 3rd final layer with PU paint, a suitable service window shall be provided in the base of pole to allow access to electrical Connections and terminations, Pole unit can be grouted using 4 nos. anchor J-bolts of size M16 x 250 mm long confirming to EN 8 Gr. Pole should be from same company of decorative luminaire for proper installation at site. Decorative pole to be Supplied with LED Decorative IK10 Luminaire, Supply of BIS Certified (as per IS10322 Part 5/ Sec 3) 30W LED Post top Luminaire. The Heat Sink of Post top should be made of Pressure Die Cast Aluminum (Grade – ADC 12) in single pc (Not in extruded fins aluminum housing or module form or spun Housing). Heat sink should fin design for better thermal management. The Optical cover should be made of Clear polycarbonate (Virgin PC), product should be IK10 rating & IP66 with complete optical part of product. To ensure any chance of Ingress breach, the fully sealed LED compartment remains intact at the time of maintenance or service of LED driver or SPD. Product should be painted with UV protected pure polyester powder coated Grey colour after phosphochromate treatment. The lower base of the Light Fixture is also made up of Pressure Die Cast Aluminum (Grade – ADC 12) in single pc. Product should be equipped with LED with make Osram, Cree, Nichia, Color Rendering Index (CRI) >70 and L70 rated lifetime of 50,000 hours. System Lumen Efficacy of 110 Lumens/watt in 4000K with symmetrical light distribution. Mounting on pole with outer Dia 60 mm. Electrical Class I, System Power 30W, rated voltage 240VAC, Power Factor ≥ 0.95, offered with BIS certified potted driver having Internal surge protection of 4/4kV (in both Common & Differential Modes), Led Driver efficiency should be > 85% and an additional/external Surge Protection Device (SPD) of 10/10kV (in both Common & Differential Modes). Product and Led driver should be connected with detachable male -female connector. The product should have a minimum 5-year warranty. Product must be comply with IEC 62262: 2002, IS/IEC 60529, IS 10322 (Part 5/ Sec 5):2013+A1:2018 in conjunction with IS 10322(Part-1):2014 & LM 79/80.	Nos.	1	
14	Supplying, erecting, testing and commissioning of 60 kVA pure sine wave UPS without backup. UPS will be 3PH I/P & 3PH O/P with Isolation Transformer. UPS will have THD <3% at 100% Load, o/p PF of 0.9 or above, overload capacity of 110% for 60 Mins, 125% for 10 Mins, 150% for 1 Min.	Each	1	

Sr	Product Description	Unit	Qty.	Unit Rate
	1.1 Cat6 Copper Cabling			
15	Supplying and installing Horz. Cable Manager-1U PVC Slotted Duct - Channel On Front for managing Cat6 Patch Cords patched between 24 port Cat6 Patch Panel & Switch	Each	1.00	
16	Supplying and installing 86 x 86 mm, Single Faceplate Accepts one Keystone Jack to install Cat6 Information Outlet at the user/furniture end of the cable	Each	1.00	
17	Supplying and installing 86 x 86 x 36.7mm Back Box for Single and Dual Faceplate to house the Faceplate & Keystone Jack installation & termination within flush or surface mount style	Each	1.00	
18	Supplying and installing Customised Printed Ferule - Material PVC, Size 2.5mm-6mm-10mm, Color Yellow, White as per cable numbering scheme requirement - to be installed on both ends of Cat6 cables for identification	Each	1.00	
19	Supplying and installing Customised Printed Lable - Material PVC, Size 2.5mm-6mm-10mm, Color Yellow, White as per cable numbering scheme requirement - to be installed on Faceplate for the identificaion of Cat6 cable port number	Each	1.00	
20	Supplying and installing Customised Printed Ferule - Material PVC, Size 2.5mm-6mm-10mm, Color Yellow, White as per cable numbering scheme requirement - to be installed on both ends of Cat6 cables for identification	Each	1.00	
21	Supplying and installing Customised Printed Lable - Material PVC, Size 2.5mm-6mm-10mm, Color Yellow, White as per cable numbering scheme requirement - to be installed on Faceplate for the identificaion of Cat6 cable port number	Each	1.00	
	1.2 Single Mode Optical Fiber Cabling	Each		
22	Supplying and fixing 6 Port Adaptor Blank Plate to cover the unterminated slots of the fiber LIU panel	Each	1.00	
	2. Cable & Wireless Data Network - Solution			
	Core - Switching			
23	Supplying, installing, configuring and testing - Core Switch for connecting all the hub racks in the campus and provide 2 x 1GBPS fiber connectivity per hub location 20 x SFP ports 4 x Combo 10/100/1000BASE-T/SFP ports 4 x 10G SFP+ ports 6 kV surge protection on all RJ-45 access ports Switch Resource Management (SRM) for flexible management of system resources Redundant Power Supply (RPS) support MPLS L2VPM/L3 VPN support Full L3 routing protocol support including OSPF, BGP, and ISIS for IPv4/IPv6 SDN-enabled switch, compatible with Openflow 1.3	Each	1.00	
24	Supplying, installing, configuring and testing - Stacking Cable with 1M (40") 10G Direct Attach Cable for Data/Stacking to stack 2 x core switches with each other	Each	1.00	
25	Supplying, installing, configuring and testing - Stacking Cable with 3M (120") 10G Direct Attach Cable for Data/Stacking - to connect local access switches to both the core switch	Each	1.00	
	Access - Switching			
26	Supplying, installing, configuring and testing - Access Switches with 8 Port PoE + Gigabit Rugged Switch 8 10/100/1000Base-T PoE/ PoE+ ports & 2 Combo 10/100/1000 base-T/SFP ports Layer 2+ switch. Operating Temperature -40 to 75 deg C to connect horizontal Cat6 cabling terminated within each wall mount network rack	Each	1.00	
27	Supplying, installing, configuring and testing - Meanwell 240W Single Output Industrial DIN RAIL Power Supply to provide power to the access switches	Each	1.00	
28	Supplying, installing, configuring and testing - AC Power Cord and DC to DC Cables and DIN Rail Panel to connect access switches power supply to the power sockets	Each	1.00	
28	Supplying, installing, configuring and testing - Stacking Cable with 1M (40") 10G Direct Attach Cable for Data/Stacking to connect multiple switches with each other on every network hub location	Each	1.00	
	3. IP Surveillance - Solution			
29	Supply, installation, testing & commissioning Supply, installation, testing & commissioning of - 5MP IR Bullet Camera (2.8mm Lens with Aperture of F1.6 (By Default) / F2.0 (On demand)) 1/2.8" SONY - CMOS (STARVIS Series) 5MP, 0Lux with IR LED on, 2.8mm M12 lens/F 1.6 Horizontal Field of View: 107 degrees and IR Range of up to 50 meters, Video Analytics: Trip Wire, Intrusion Detection and Motion Detection, H.265/H.264/M-JPEG Video Compression PoE Support, NAS Storage, SD Card(512GB), Quad Stream Support True WDR, 3D Noise Reduction, Adaptive Streaming, Smart Streaming and ROI, SNR > 70 dB BIS, CE, FCC, RoHS, IK10, IP67, UL, NEMA 4X.	Each	1.00	
30	Supply, installation, testing & commissioning Supply, installation, testing & commissioning of - MATRIX MAKE SATATYA NVR3204X 32 Channel NVR with 4K Support and 4 HDD Slots • 32 IP Channel Inputs; HDMI, 1/1 Audio I/O and 2/1 Alarm I/O • 12MP, 8MP, 5MP, 4MP, 3MP, 2MP, 720p, D1 and CIF Recording Resolution • 4x 4K/ 10x 3MP/16x 1080p Local Decoding • 4 SATA HDD Support (Maximum 10TB Capacity per Slot, Hard Disk Not Included) • Save Storage Space with Adaptive Recording and Camera-wise Recording Retention • SMS & Email Notification, Video Pop-up, Alarms and Calling from Mobile Application • 512Mbps Throughput - 256 Uplink, 256 Downlink • Cascading: Create Multiple NVR Clusters to Monitor and Control Multiple Matrix NVRs Centrally ONVIF and Major Camera Brands Support	Each	1.00	
31	Supply, installation, testing & commissioning 4TB Surveillance Hard Drive Form Factor 3.5 inches, Item Height 1.03 Inches, Item Width 4 Inches, Product Dimensions 14.7 x 10.16 x 2.61 cm; 648.64 Grams, RAM Size 128 MB, Hard Drive Size 4 TB, Hard Drive Interface Serial ATA-600, Hard Disk Rotational Speed 5400 RPM, Number of USB 2.0 Ports 1, Hardware Platform Unix, PC, Mac,	Each	1.00	

Sr	Product Description	Unit	Qty.	Unit Rate
32	Supply, installation, testing & commissioning of 43" LED TV 108 cm (43 inches) Full HD Smart LED TV Resolution: Full HD (1920x1080) Refresh Rate: 50 hertz Connectivity: 3 HDMI ports to connect set top box, Blu Ray players, gaming console 2 USB ports to connect hard drives and other USB devices Sound : 20 Watts Output Wireless sound (2 way Bluetooth) Smart TV Features : AI ThinQ Magic remote One touch access to Netflix and amazon prime Miracast (screen sharing) AI launcher Display : Active HDR HDR dynamic tone mapping DTS virtual: X	Each	1.00	
33	Supply, installation, testing & commissioning of HDMI Cable 10 meter 8K HDMI 2.1 Cable 48Gbps 9.80FT/ Ultra High Speed HDMI Braided Cord-4K@120Hz 8K@60Hz, DTS:X, HDCP 2.2 & 2.3, HDR 10 Compatible with Roku TV/PS5/HDTV/Blu-ray	Each	1.00	
9. Raceways & Trunking - Solution				
34	Supplying and laying 200 mm Hume Pipe	Mtr.	1.00	
35	Providing & erecting hot dipped galvanised perforated type Cable tray manufactured from 18 SWG (1.2 mm thick) GI sheet of 150 mm width & 50 mm height complete with necessary hardware.	Mtr.	1.00	
36	Providing & erecting hot dipped galvanised perforated type Cable tray manufactured from 18 SWG (1.2 mm thick) GI sheet of 500 mm width & 75 mm height complete with necessary hardware.	Mtr.	1.00	
Fire Fighting				
37	Supplying & erecting ABC fire extinguisher of 6 kg. capacity conform to IS 2878 /15683 complete erected with necessary clamp made from 50 x 6 mm. M. S. flat with nut & bolts routed in wall complete	Each	1.00	
38	Supplying & erecting fire bucket 9 ltr capacity 04 Nos with M.S Stand	Nos	1.00	

J.E. (Ele)

A.E.(Ele)

E.E. (Ele)