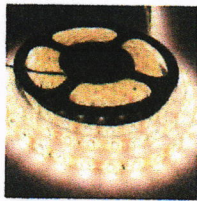








LED Strip 5630 14.4w/m 230V, 3500K warm white	Cove light	10 meters	
LED Recessed Panel Light (300mm x 600mm) 24W, 230V, 2400 lumens, 6500K daylight	Function hall	24 sets	
Troffer Recessed Aluminum Louver w/ mirrored reflector, 2 x 18W T8, 6500K Daylight	Offices	38 sets	
Cage Globe Lamp Post, base type white, 15W LED 230V, 6500K Daylight	Roof deck	18 sets	
LED Flood Light	As specified	1 set	
Omni Twin Head Automatic Emergency Light, 2 x 1W LED, 230V, 6500K Daylight	As specified in plan	49 sets	
Omni LED Exit Sign w/ battery backup, single face wall mounted, 3W, 230V	Exits	7 sets	

XXVII.E Distribution Transformer and Metering

- Provision, hauling, testing and installation of three-units brand new 50KVA, 13.2kV / 7.6kV / 240V single phase, 60Hz, pole-mounted, double bushing, oil-immersed self-cooled distribution transformer c/w accessories (such as but not limited to, wire termination kits, mounting support).
- Provision and installation of three (3) 15kV Class 100 fuse cut-out and arrester combination
- Provision and installation of primary metering equipment (including wirings and accessories):
 - Three (3) Current transformer, primary, 15kV 100/50:5 outdoor type
 - Three (3) Potential transformer, primary, 15kV 70:1 outdoor type

Spd

- One (1) three phase 240V Electronic Kilowatt-hour meter c/w seal and NEMA 3R enclosure.
- d. All instrument transformers, distribution transformers and metering equipment shall be tested at FICELCO prior to installation.
- e. The contractor shall furnish a copy of certificates and specification / data sheet obtained from the manufacturer / distributor.

XXVII.F Grounding System

- a. Provision and installation of grounding system.
- b. The grounding electrode shall be Copper bonded steel rod 20mmØ x 3m. The ground rod shall be flushed underground with a vertical orientation. Use clamp suitable for direct burial.
- c. Ground resistance shall not exceed 25ohms. A single ground rod that does not have a resistance to ground of 25 ohms or less shall be augmented by one additional rod. Where multiple rods are installed to meet the requirements of the code (PEC), they shall not be less than 1.8m apart.
- d. Non-current-carrying conductive materials enclosing electrical conductors or equipment, or forming part of such equipment shall be grounded.
- e. Grounding conductors and bonding jumpers shall be connected by listed pressure connectors or listed clamps. Connection devices or fittings that depend solely on solder shall not be used. Sheet metal screws shall not be used to connect grounding conductors or connection devices to enclosures.
- f. Ground clamps or other fittings shall be protected from physical damage.

XXVII.G Fire Detection and Alarm System (FDAS)

- a. Fire Detection & Alarm System installation shall be in compliance with the Fire Code of the Philippines 2019 Edition. All installations shall be supervised by persons who are qualified and experienced in the installation, inspection and testing of fire alarm systems.
- b. The contractor shall verify site conditions and dimensions prior to ordering of equipment or performing work to avoid conflicts and ensure the compatibility of all equipment before installation. All materials & equipment shall be installed as per manufacturer's specifications and instructions.
- c. All components, parts and assemblies supplied by the manufacturer and installed by the contractor shall be warranted against defects in material and workmanship for a period of at least 12 months (parts and labor), commencing upon date of acceptance by the university. A qualified factory-trained service representative shall provide warranty service.
- d. This scope includes provision and installation of Fire Detection and Alarm devices, including conduits and wirings.
 - One (1) set Conventional Fire Alarm Control Panel 4 zones w/ battery backup
 - Forty-six (46) sets Conventional Smoke detector
 - Two (2) sets Conventional Heat detector
 - Six (6) sets Conventional Manual call point
 - Six (6) sets 8" Fire alarm bell
- e. Smoke detectors shall not be installed until after construction is completed and the subject area has been cleaned.
- f. All devices shall be hard wired. Use Fire Alarm cable #16AWG (2conductor) @20mmØ uPVC.
- g. All wires shall be continuous all throughout the circuit.
- h. Operational testing in coordination with PMC: Upon completion of installation, the contractor shall perform thorough operational testing and verify that all system components are fully operational.

XXVIII. Auxiliary Works

- a. Provision and installation of conduits, boxes, fittings, wires and cables for network and CCTV surveillance system.
- b. Provision and installation of one (1) set Main Distribution Frame (MDF) with components:
 - 1 x 9U Server rack cabinet wall mountable w/ lockable tempered glass door, cable entries from top and bottom c/w exhaust w/ Power Distribution Unit (PDU)
- c. Provision and installation of one (1) set Intermediate Distribution Frame (IDF) with components:
 - 1 x 6U Server rack cabinet wall mountable w/ lockable tempered glass door, cable entries from top and bottom c/w exhaust w/ Power Distribution Unit (PDU)
- d. For cabling, use Belden Cat6 UTP 4-pairs cable, 24AWG.
- e. All LAN outlets shall be covered with blank plate.
- f. All CCTV and Wireless Access Point boxes shall be covered.
- g. All cables shall be concealed from view where applicable.
- h. Provide cable tray and/or cable trunking if necessary, to facilitate wire management. Cable trunking shall be concealed from view where applicable.
- i. Provide NEMA 3R pull box for fiber optic service entrance.

- j. Provision and installation of conduits, cables and boxes for CATV.
- k. Use RG6 coaxial cable @20mmØ uPVC.
- l. CATV outlets shall be covered with blank plate.

PART IV – OTHER SPECIALTY WORKS

XXIX. Supply and Delivery of Roll-up Blinds

1. All Roller Blinds to be provided shall be **brand new**.
2. Provide items as per specification provided as follows:
 - 4 sets – Located in **FW1** (Ground Floor) – **2600mmW x 2100mmH**

XXX. Supply, Delivery, & Installation: Reflective Mirrors

- Ground Floor Level
 - Director's Powder Room (0.75mW x 0.90mH), Function Hall's Powder Room (0.75mW x 0.90mH), Common Men's CR (0.75mW x 0.90mH), PWD CR (0.75mW x 0.90mH), Common Women's CR (2.225mW x 0.90mH)
- Second Floor Level
 - Common Women's CR (1.65mW x 0.90mH), Common Men's CR (0.75mW x 0.90mH), CRs: Room203 (0.75mW x 0.90mH), Room 204 (0.75mW x 0.90mH), Room 206 (1.50mW x 0.90mH), Room 201 (0.75mW x 0.90mH), Room 202 (0.75mW x 0.90mH), Room 205 (1.50mW x 0.90mH)

NOTE: Verify size and location in actual site condition prior installation

XXXI. Supply, Delivery, & Installation: Phenolic Toilet Partition System

This Item shall consist of furnishing all phenolic toilet doors and partition materials, labor, tools and equipment required in undertaking the toilet doors & partitions system as shown on the plans and in accordance with this specification.

1. For all assembly and fabrication works the cut ends shall be true and accurately jointed, free of burrs and rough edges. Cut-out recesses, mortising, grinding operation for hardware shall be accurately made and properly reinforced when necessary.
2. Upon delivery, phenolic boards and accessories shall be stored on a flat and stable surface to avoid cambers upon installation.
3. Provide and install 12mm thk. 5ft x 6ft – Neuform Compact Laminate Phenolic Panel Board with the specified color Peruvian Mahogany NWD 1229 for toilet partition.
4. Provide stainless steel partition profile and accessories such as Top rail, h-profile, U profile and corner profile.
5. Provide partition accessories for such as adjustable foot and other accessories for every cubicle. See phenolic comfort room cubicles isometric details. All accessories shall be made of Stainless Steel.
6. Use proper profile fittings on all corners and edges of the partition system.
7. Use appropriate cutting equipment. Clearances in fitting phenolic boards shall be avoided.
8. Any improper work shall be reconstructed by the Contractor.
9. Use phenolic door with specify color of Peruvian Mahogany NWD 1229. Phenolic Frame with complete accessories; Stainless Hinge, Stainless Coat Hook, Stainless Indicator Handle and locking accessories.
10. The Contractor shall assign well-versed personnel in the installation procedure of the phenolic toilet doors & partition system.