(2) A <u>Duplex</u> universal convenience outlet (CO) of the grounding type must be provided on each windowless side of the classroom.

(3) The corridor must be provided with a lighting product(s) that can produce 5,000 lumens (or 50 lux illumination measured at waist level).

V. STRUCTURED CABLING FOR LAN, TELEPHONE AND CABLE TV

a) Structured Cabling – must be Category 6 UTP 4 pairs and keystone modular jack and 1 port shuttered with horizontal faceplate

b) Cable TV - cable must be RG 6 Coaxial cable and F type television terminal with face plate

VI. SANITARY AND PLUMBING DESIGN STANDARDS

a. Waste and vent line piping system

The drain, waste and vent line piping system must be according to American Society for testing and Materials (ASTM) D-2729, ISO 4435 and ISO 3633.

b. Waterline piping system

- (1) The system must be according to E DIN1988 for Polypropylene Random Copolymer (PP-R) type 3 pipe and ASTM A53/A53M. The system must provide for a waterline service entrance.
- (2) Toilet units be separate for women's and men's. For the Men's Toilet, the main fixtures shall include: urinal, water closet, counter sink, and facial mirror. For the Women's Toilet, the main fixtures shall include: water closet, lavatory, facial mirror, and grab bar, Special facilities for differently-abled persons shall be provided. The specific types and numbers of fixtures shall depend on the School Type.

VII. CONSTRUCTION MATERIALS

Construction materials for the Project must conform with the DPWH Standard Specifications for Public Works Structures, Volume III, 1995 (Blue Book).

New materials which are not covered by the Blue Book, however, must pass the requirements of the Product Accreditation Scheme prescribed under DPWH Department Order No. 189, series of 2002, and be accredited by the DPWH before they could be used in the Project.

a. Reinforced Concrete

- (1) For structural members, minimum compressive strength of 21 megapascals (mpa) (3,000 pounds per square inch or psi) 28 days test (Fc).
- (2) For non-structural members minimum compressive strength of concrete shall be 17 mpa (2,500 psi).