



ANNEX F - SANITARY & PLUMBING DESIGN PARAMETERS & SPECIFICATIONS

I. Codes and Standards

The Sanitary/Plumbing Design shall be in accordance with the following Codes and Standards.

- **Codes:**
 1. National Building Code of the Philippines and Its New IRR
 2. Fire Code of the Philippines
 3. National Plumbing Code of the Philippines (NPCP)
 4. Sanitation Code of the Philippines
 5. Existing Local Codes and Ordinances.

- **Standards:**
 1. Bureau of Product Standards (BPS)
 2. Philippine National Standards for Drinking-Water
 3. National Water Resources Board (NWRB)
 4. National Plumbers Association of the Philippines (NAMPAP)
 5. Philippine Society of Sanitary Engineers, Inc. (PSSE)

II. Site Works

Based on the Master Site Development of the Proposed Academic Building, the Site Works shall provide complete layout of the following:

1. Storm Drainage Network, indicating Drainage Manholes and Pipe Culvert;
2. Water Supply Network, indicating the location of Water Service entrance, Cisterns, Elevated Water Tank and proposed Pump House, if any.
3. Septic Tank

III. Building Facilities Sanitary/Plumbing System

1. Sewerline and Vent System
 - Provide complete Sewerline and Vent System from all (Domestic) plumbing fixtures and floor drains, laid by gravity flow leading to the septic of the building;
 - For Demand Weight of Fixtures in Fixture Units; refer to Appendix A, Table A-2, NPCP
2. Wastewater line and Vent System
 - For Estimated Demand Weight of Fixtures in Fixture Units; refer to Appendix A, Table A-2, NPCP



3. Waterline System

- Provide complete cold water supply pipes to all plumbing fixtures. From the main water source, the water shall be pumped to the Elevated Water Tank (EWT) and conveyed to the fixtures by gravity system and or distributed to fixtures by transfer pumped with constant pressure through a Pneumatic Storage Tank, whichever is feasible.
- Provide complete Hot water system with portable water heaters for selected Areas as required and or specified by the Owner.

4. Storm Drainage System

- Complete Storm Drainage System shall be provided for all roofs, canopies, concrete ledges and balconies including condensate drains laid for gravity flow connected to a leader/pipe line leading to the natural ground level storm drainage network.

5. Septic Tank

- Provide complete detailed design of a septic in compliance to the parameters set under the provision of Environmental Statutory Laws specifically DENR Administrative Order No. 35

IV. Summary of Materials

- Sewer and Vent pipes; Unplasticized Polyvinyl Chloride (uPVC) extra series 1000 (Conforming to ISO 3633 ASTM D2729 including Trims and Fittings)
- Storm Drainage pipes; Downspouts, Unplasticized Polyvinyl Chloride (uPVC) extra series 1000(Conforming to ISO 3633 ASTM D2729 including Trims and Fittings , BPS Certified)
- Drainage Pipes; 250mm dia. and below, Non-Reinforced Concrete Pipe (NRCDP) 300mm dia. and above, Reinforced Concrete Pipe (RCDP)
- Drainage Manholes; Street Inlet, Curb Inlet, Traffic Type Reinforced Concrete Area drain/Catch Basin, Reinforced Load Bearing CHB
- Cold Waterline pipes; for buildings, Polypropylene Pn10 Fusion Weld Pipes including Trims and Fittings (BPS Certified)
- Trench Grating; Galvanized/Stainless Steel Iron grates (optional)
- Plumbing Fixtures including Trims, Fittings and accessories; (BPS Certified)
 - a) Water Closet-Tank Type push button flush
 - b) Lavatory-(Pedestal/Counter Type)
 - c) Kitchen Sink-Ga#16 Stainless Steel seamless bowl with gooseneck faucet
 - d) Urinal-Wall hung Flush valve type

V. Drawing Requirements: See attached KSU checklist based on Revised IRR of the National Building Code of the Philippines (PD 1096)

--End of Scheme--