

1.0 **GENERAL**

1.1 **Related UBC Guideline**

- .1 Division 26 through 33

1.2 **Coordination Requirements**

- .1 UBC Energy and Water Services
- .2 UBC Building Operations

1.3 **Power**

- .1 The University owns and operates the power system consisting of 60 KV underground and overhead distributions, and 12 KV underground distributions.
- .2 The University purchases power in bulk form from BC Hydro. The two 60 KV lines feed two substations, one located on the South Campus and one on the Main Campus.
- .3 The Main Substation supplies in turn a 12 KV indoor switching station.
- .4 The 12 KV systems is distributed underground in a combined duct and manhole system which services throughout the major portion of the North Campus and a portion of the South Campus.
- .5 The 12 KV system is nominally rated at 12,480 volts, 3 phase, 3 wires, Wye System low resistance grounded.
- .6 The design limits shall be basic impulse level 95 KV and design fault 300 MVA symmetrical.
- .7 The power distribution is a Dual Radial System with 500 MCM low resistive grounded single conductor crosslink polyethylene for 12 KV system.
- .8 For a General Distribution Diagram of the 12 KV feeders, refer to Division 26, Standard Drawing E1-1 (https://technicalguidelines.ubc.ca/technical/divisional_specs.html). Also, refer to 5.4.3.1 Design Development Brief.

1.4 **Communication**

- .1 The Campus communication systems in most areas of the campus is owned and operated by the University. Project requirements shall be coordinated between the User, the Consultant and the Cable Facilities Services by the Project Manager.

1.5 **Central Building Alarm – A Division, Building Operations, UBC**

- .1 The University operates a Building Management System (BMS) to provide control and alarm monitoring for all primary mechanical and electrical systems.
- .2 The panels are usually located in the building mechanical rooms to capture the necessary alarm event. This event is transmitted across the BMS network to the appropriate display terminals.

1.6 **UBC Standard Forms**

- .1 The following standard forms apply to all utilities for this project, as applicable:

- .1 UBC Application for Service Shutdown.
- .2 UBC Application for Service Connection.
- .3 I-B-07 - Clearance Permits.
- .4 I-B-33 - Test and Work Permits.
- .5 UBC Utilities Manhole Entry Permit 1.

*****END OF SECTION*****