Size and Number of Telecommunication Rooms (TR's): See "*Communication Systems*" within these design guidelines for programmatic requirements related to the number and sizes of TR's provided.

Environmental Requirements:
- HVAC: The ambient temperature in TRs shall be maintained in the range of 68 to 75 F., 24 hours per day through an <u>independent</u> HVAC unit (typically, a ductless split system). TRs shall be ventilated at the rate of one air change per hour. Separate, wired, thermostatic control shall be provided for each TR.
- Lighting: Lighting in the TRs shall provide a minimum light level of 50 fc at desktop level on all sides of the rack equipment.

Power: The TR shall be designed to include a dedicated power panel located in the TR. All TRs shall have 2 sources for electrical power:
- Emergency Power: Provide 100 amp 120/208 volt 3 phase panel in each TR, connected to the emergency system if available. Receptacles in each TR shall include a minimum of one each L6-30R, one each L6-20R, and one each L14-30R, and one each L5-20R mounted above the communications racks (per Switch).
- Building Power: Provide a dedicated L6-20R and L5-20R mounted above the communication rack (per switch). Also, provide a dedicated 20 amp 120 volt quad receptacle with building power in the following locations: one on each wall

Enclosing Walls: Walls surrounding the TR shall extend to the structural floor above on all sides, both for reasons of physical security and environmental control.

Conduits and Raceways: Provide adequate conduit or other raceways through walls to adjoining accessible ceilings and/or accessible locations on other floors, where appropriate.

Ceiling: A suspended ceiling shall not be installed. Minimum clear height shall be 10'.

Floor: Floor finish shall be smooth, dust-free, and not susceptible to static electricity build-up. Acceptable finishes would be composition tile or sealed concrete.

Door: Provide 3' 0" wide by 7' 0" high door, opening outward, with card reader lock. Door shall be labeled "Telecommunication Room and Room #."

Windows: TR's shall not have any windows.

Water Infiltration: Measures must be taken to prevent water intrusion. Water or drain piping