1.1 **GENERAL**

1.2 **Related SFU Technical Requirements**

.1 *Section 22 05 00 Plumbing - General Requirements*

1.3 **Coordination Requirements**

.1 Coordinate with SFU Facilities.

1.4 **Description**

.1 Additional SFU design and approval requirements for plumbing piping.

2.1 **MATERIAL AND DESIGN REQUIREMENTS**

2.2 **General**

.1 Specify Backflow/Cross Connection Control as per BC Plumbing Code. (Refer to SFU Owners’ Technical Requirements, *Section 22 11 18 Backflow/Cross Connection Control* for details).

.2 Size water hammer arrestors to AWWA and manufacturers standards.

.3 All equipment requiring periodic maintenance shall be mounted in locations where access using ladders, “confined space entry” are not required.

.4 Specify floor drains for public washrooms only, or as required by code.

.5 Bypass piping isolation and check valves are required on water booster systems.

.6 Dryers are required on compressed air systems. Specify auto-drain valves.

.7 Use only lead-free solder and water flushable non-acidic flux on potable water systems. Specify dual PRV's for services larger than 2" diameter.

.8 Specify strainers for all domestic water systems.

.9 All major sections of domestic cold water piping being replaced must be tested in accordance with governing code, and coordinated with SFU Facilities.

.10 Specify two strainers in parallel for services larger than 2" diameter.

.11 Only cast iron or copper pipe is to be used for above ground storm and sewer piping in all buildings.

.12 Do not specify plastic piping as follows:

.1 For use inside buildings or under buildings except for acid waste systems.

.2 For underground sanitary, storm drainage if steam or condensate is drained to these systems, or can be drained into them in the future.

.13 Do not specify cellular ABS or PVC pipe under traffic areas with less than 30" cover.
.14 Do not specify trap primers that contain fine screens.

.15 Where solar collectors are planned or contemplated, consult with Technical Services for approval of concept.

.16 Specify curbs and housekeeping pads under equipment and around pipe penetrations in Mechanical rooms.

.17 All sanitary sumps within buildings must have gas tight covers and be vented to outdoors.

.18 Do not specify glass acid waste piping under laboratory sinks that have storage shelf below or are intended for storage.

.19 Review proposed acid waste treatment with SFU Facilities.

2.3 Plumbing Piping Type

.1 Specify type "K" copper piping for hot water and recirculated hot water. Alternatives may be considered as long as they are submitted and approved by SFU Facilities.

.2 Do not specify flexible (similar to Big O type) drainage piping.

.3 Where practical polypropylene acid waste piping is acceptable, pending approval by SFU facilities.

***END OF SECTION***