PART 1 - GENERAL

1.01 Insulate direct buried water systems with minimum 3 inch thick layer of spray-on urethane foam insulation, 2-1/2 lb./cu. ft. density. Minimum depth of bury is four feet, deeper in gravel soils.

1.02 Consider continuity, straps and anti-corrosion systems to control electrolysis in existing soil conditions.

1.03 Place fire hydrants within the UAF utilidor system and avoid direct buried hydrants. If hydrant must be direct buried, place gravel drains enveloped by geomembrane separation fabric for fire hydrants on direct buried waterlines and provide means to circulate the water to prevent freeze-up. Place a control valve in utilidor. No Post Indicator Valves.

1.04 2-inch minimum size circulation line for fire hydrants on direct buried water lines. Control circulation water via the campus building management system.

1.05 UAF Facilities Services and Consultant shall obtain necessary construction permits from ADEC prior to construction.

PART 2 - PRODUCTS

2.01 Ductile iron pipe with cement-mortar lining or HDPE pipe for direct buried site water systems. Only Ductile Iron with cement mortar lining allowed inside utilidor. Refer to Division 22. Grooved joints allowed in utilidor system only.

2.02 Provide products for post installation joint flexibility where thrust-restraining glands are installed: EBAA Iron, Inc. MegaLug Alternate Brand or Substitution Request required. Install in valve box.

2.03 Use dry barrel, self-draining fire hydrants: Mueller Super Centurion 250 or Waterous Pacer WB-67-250 with two (2) ports threaded to 2.5-inch fire hose thread and one (1) 5-inch fire hose thread. No Alternate brands and No Substitutions.

2.04 Resilient seat, non-rising stem, 2 inch square operating nut, mechanical joint or flange for direct buried valves: Mueller, Waterous, Alternate Brand or Substitution Request required. Install in valve box.