21 40 00 Fire Suppression Water Storage
Revision 01/04/2019

Purpose:
The Architect and/or Engineer shall incorporate the Rice specific requirements indicated in this standard’s section into their design. The Architect and/or Engineer shall further produce project specifications in line with industry standards that are updated to reflect these Rice specific requirements.

1. Design Standards
   a. Break Tanks shall be a minimum of 2,500 Gallons
   b. Break tanks shall be rectangular steel with internal coating
   c. Where a project also requires a domestic water storage tank, a single tank with internal separation is acceptable.
   d. Break tank drains shall be hard piped to the exterior of the building, not to interior floor drains.
   e. Break tanks shall be fitted with a manway that is:
      i. minimum 24” x 24”
      ii. bolted closed with tight fitting gasket.
   f. Alarms
      i. Break tanks shall have local audio/ visual alarms and interface with the building fire alarm panel and BAS system front end graphics.
      ii. Minimum alarms
         1. Low level
         2. High Level
         3. Overflow
   g. Break tanks shall be installed on concrete housekeeping pads.
   h. Break tanks shall be painted red. If a combined firewater/domestic water tank is used, then the fire water side shall be painted red and the domestic water side blue.
   i. A hydraulic analysis shall be performed to make sure an adequate fill water supply is provided to the fire pump. This analysis shall be provided to the Rice Project Manager.
   j. Installation shall comply with current adopted NFPA and City of Houston standards.