

# Fire Sprinkler Pump Mounted Inside an Underground Concrete Vault or Basement

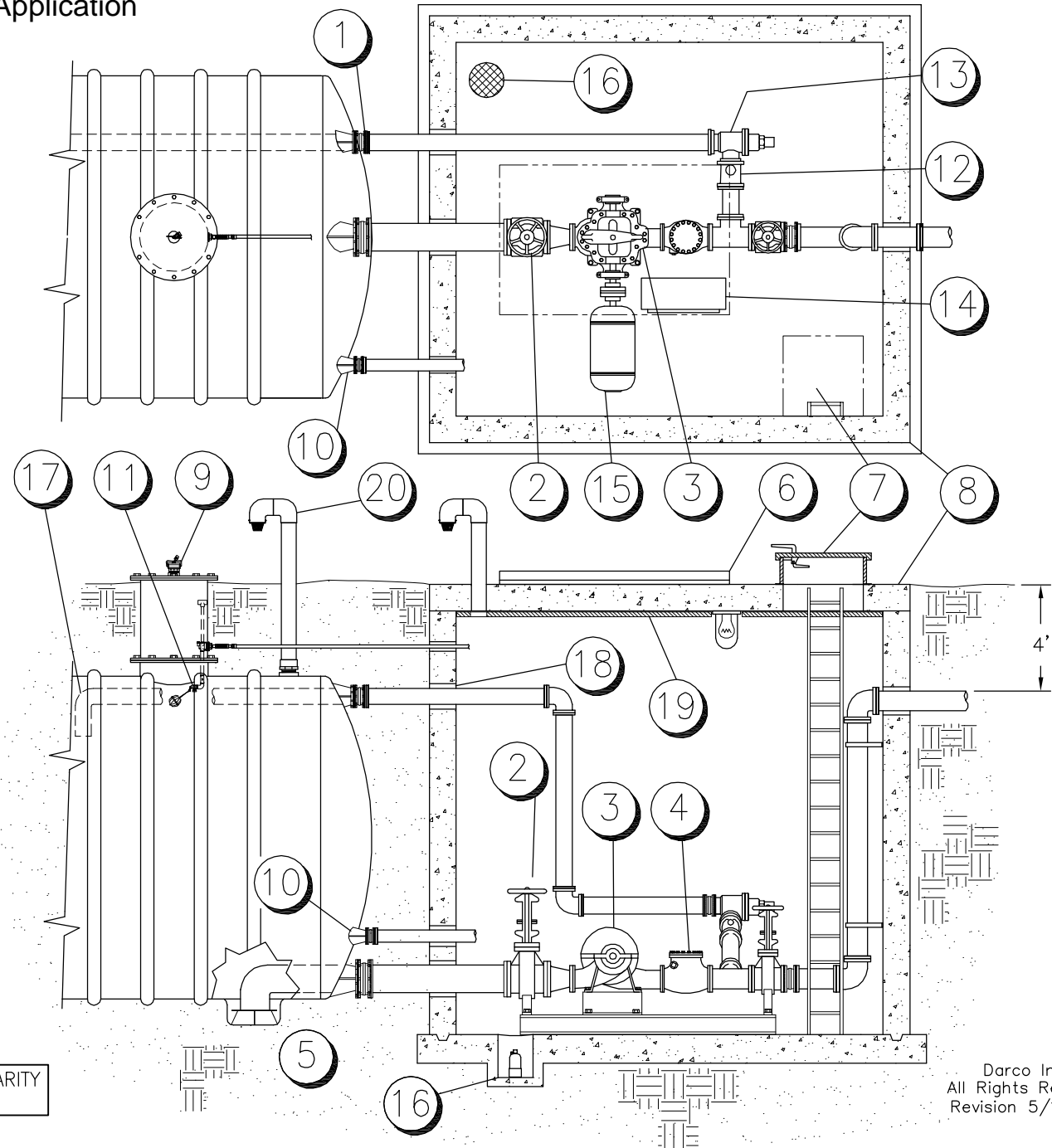
## Typical Commercial / Industrial Application

### COMPONENTS

1. Flexible pipe coupler / typical in multiple locations
2. Gate valve / typical
3. Fire pump
4. Check valve / typical
5. Sump with anti-vortex plate
6. Equipment access cover
7. Entry hatch
8. Vault or basement pump room
9. Manway with 4" inspection hatch
10. Jockey pump suction fitting (pump not shown)
11. Tank refill inlet float valve
12. Site glass
13. Pressure relief valve
14. Pump control cabinet
15. Pump motor
16. Floor sump with automatic pump
17. Internal down pipe at far end of tank for relief valve recirculation
18. Pliable water stop material or Link-Seal to isolate pipes from vault wall
19. Insulate ceiling with foam board
20. Tank vent sized for pump volume

### IMPORTANT

This layout is conceptual but typical of such systems. All fire protection sprinkler designs must be engineered for each specific building application and approved by the Local Authority Having Jurisdiction. Jockey pump and hose line header omitted for clarity. Vaults may require an air exchange blower, heater, or dehumidifier.



ABBREVIATED N.F.P.A. PLUMBING FOR FITTING CLARITY  
NOT TO SCALE, FOR ILLUSTRATION ONLY