

Cromwell Fire District

1 West Street Cromwell, CT 06416

COMMISSIONERS' OFFICE TELEPHONE 860-635-4420

FIRE DEPARTMENT WATER DIVISION

Cromwell Fire District Water Division Residential Pump Station Requirements and Specifications

Interior and exterior components guidelines

- 1. Above ground and subterranean pump stations accepted. Both stations must meet state, federal and local building and safety codes, at the time of commissioning / in-service date.
- 2. Sufficient heat must be installed to maintain a minimum 50 degree F winter temperature.
- 3. Proper ventilation so as to allow up to 4 hours of continuous occupancy.
- 4. Alarm system containing:
 - A. Communications including 2 phone lines and Comcast internet connections
 - B. Keypad
 - C. Burglar alarm
 - D. Fire/smoke alarm
 - E. Power fail alarm
 - F. Low pressure alarm.

- G. High pressure alarm.
- H. Pump failure alarm for each booster pump.
- I. Building high temp alarm.
- J. Building low temp alarm.
- K. Man down alarm.
- L. Any other required alarm connection relevant to the station.
- 5. Low pressure cut off switch
- 6. Station water meter (Neptune- model to be selected by the CFD) connected to control to allow for totalized and instantaneous readings.
- 7. Paperless chart recorder to record all functions of the station. (Make / model/manufacturer to be approved by Cromwell Fire District).
- 8. Depending on static pressures, per CT DPH standby generator will be installed. Per Cromwell Fire District Water Division it will be installed with rainproof enclosure and ATS. Natural gas powered if gas is available at the street, Diesel powered with sufficient amount of fuel storage if natural gas is not available at the street.
- 9. Sufficient indoor LED lighting with auto motion switches.
- 10. Sufficient outdoor LED lighting with auto motion switches.
- 11. Proper fire extinguisher mounted along with proper labeling.
- 12. Wall mounted first aid kit along with proper labeling.
- 13. Minimum of two high definition, low light security cameras one indoors and one outdoors.
- 14. High definition 30 day storage, DVR system connected to cameras having the ability for remote access.
- 15. Commercial grade UPS. APC1500 minimum, for surge suppression on control, security and communications equipment.
- 16. Concrete floor with sump and sump pump or floor drain with proper pitch and installed at the proper elevations to work most effectively.
- 17. Dehumidifier plumbed with drain hose draining into a condensate pump with integral reservoir and then ejected from the station.
- 18. Waterproof cement board taped and painted covered with Embossed white Fiberglass Reinforced Plastic (FRP) wall paneling with waterproof baseboard trim. With this wall detail an integral poured concrete sill must be provided below the wall for the first 8".
- 19. Premium efficiency inverter duty ready pump motors are to be used. This is a list of acceptable pump and pump motor manufacturers:
 - 1. Grundfous
 - 2. Peerless/Sulzer
 - 3. Flowserve
 - 4. EFI

- 5. Xylem
- 6. Goulds
- 7. Baldor
- 8. WEG
- 9. Us. Motors
- 20. Allen Bradley Comactlogix control system. This is Cromwell Fire District Water Divisions installed base.
- 21. Chrome sample tap with PVC drain draining to buildings sump/drain installed with proper air gap.
- 22. Indoor sill cock hose connection.
- 23. Commercial grade standing seam metal roof.
- 24. Commercial grade gutters.
- 25. Commercial grade metal entrance door without windows.
- 26. Permanent door locks are high security and to be supplied and installed by Manchester safe and lock in Manchester Ct, and must be keyed to CFD Water Division access plant.

The above guidelines are intended to offer direction to external entities that may work with CFD. All pump station drawings that are submitted to CFD for consideration are subject to review and approval, requests for modification, or rejection by the Cromwell Fire District water division and CT DPH.