



# PROSPER FIRE RESCUE

## FIRE MARSHAL'S OFFICE

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**August 30, 2017**

To All Concerned,

August 18, 2017 the Town of Prosper water department advised, they are in the process of creating a more consistent water pressure plain throughout our community. Water pressure is a dynamic number changing daily, weekly and yearly through a number of constantly evolving variables. The goal of the Prosper Water Department is to establish a pressure plain of 65 psi residual pressure. However, in some areas of our community that will not be possible.

As such, the designer for all water based suppression systems from this point forward shall utilize the targeted water pressures of 75 psi static and 65 psi residual in the hydraulic design, regardless of hydrant flow test results. The mandate for a 10 psi safety factor shall be applied to the hydraulic design.

If hydrant flow test results are below 65 psi residual flow pressure, the actual results shall be utilized and the 10 psi safety factor shall be applied to the hydraulic design.

If you have questions or require further information please do not hesitate to contact the Prosper Fire Marshal's Office @ [fire.inspections@prosperfire.com](mailto:fire.inspections@prosperfire.com)

### Example:

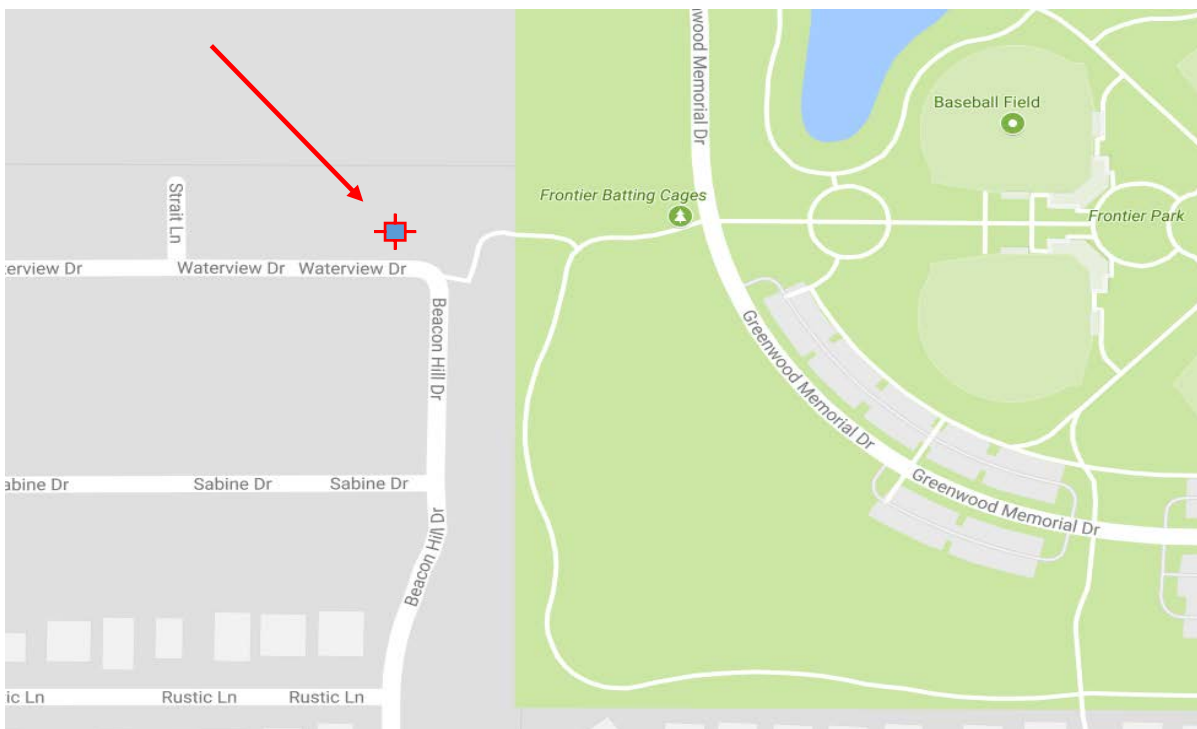
Hydrant water flow test results taken from three (3) suggested locations to establish water supply in the area.

Location "A" – Between 830 & 840 Waterview Drive – 8" supply

### Converted Mandate Results

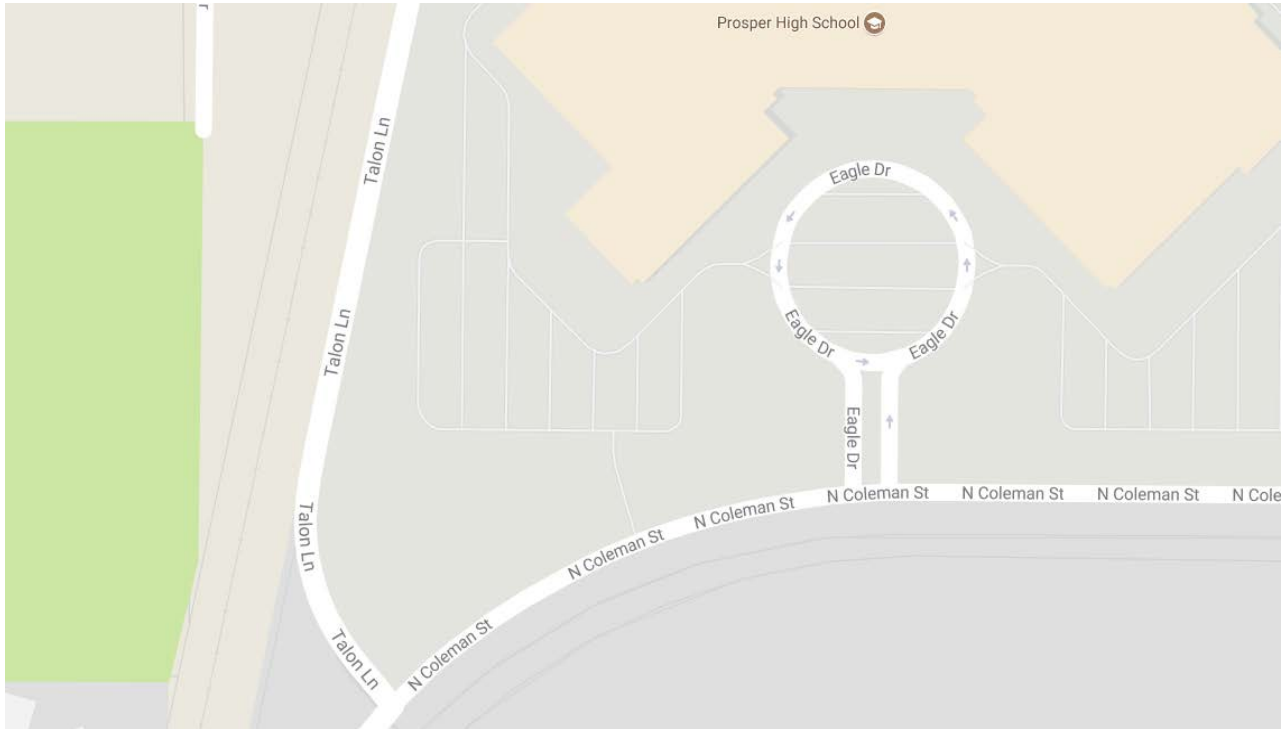
Static Water Pressure - 119 psi  
Residual Water Pressure - 100 psi  
Pitot Reading - 98 psi = 1635 gpm

Static Water Pressure - 75 psi  
Residual Water Pressure - 65 psi  
Pitot Reading - 65 psi = 1359 gpm



Location "B" – 301 Eagle Drive – 12" supply

[Converted Mandate Results](#)



Static Water Pressure - 117 psi  
Residual Water Pressure - 105 psi  
Pitot Reading - 98 psi = 1635 gpm

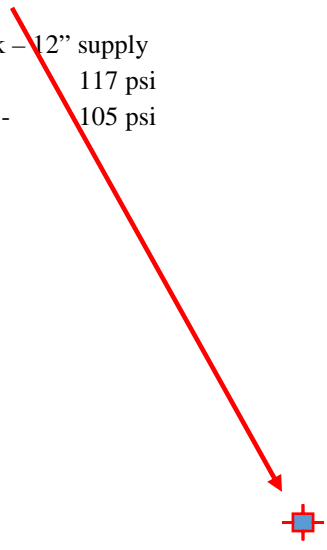
Static Water Pressure - 75 psi  
Residual Water Pressure - 65 psi  
Pitot Reading - 65 psi = 1359 gpm

Location "C" – Frontier Park – 12" supply

[Converted Mandate Results](#)

Static Water Pressure - 117 psi  
Residual Water Pressure - 105 psi

Static Water Pressure - 75 psi  
Residual Water Pressure - 65 psi



Pitot Reading -

98 psi = 1635 gpm

Pitot Reading -

65 psi = 1359 gpm

