

# Philo Ridge Farm

## Mound Distribution System Design

22-Oct-18

- 1 Maximum Allowable application Rate per Square Foot (GPD/SF)
- 47.8 Design Pumping Rate to Entire Field (GPM)
- 790 Total Design Flow to Site (GPD)
- 1 Number of Trenches/Beds

343.75 Invert Elevation

### Trench 1 (Bed)

- 9 Depth of Stone (inches)
- 1 Application Rate per Square Foot
- 280 Length of Section
- 790 Design Flow (GPD)
- 47.75 Design Flow (GPM)
- 45 Required Number of Orifices

### Orifice Design

- 0.125 Diameter of orifice (Inches)
- 14 Number of orifices
- 3 Residual pressure (FT)
- 0.32 Design Flow per head (GPM)
- 4.47 Subtotal flow (GPM)
  
- 0.1875 Diameter of orifice (Inches)
- 56 Number of orifices
- 3 Residual pressure (FT)
- 0.72 Design Flow per head (GPM)
- 40.20 Subtotal flow (GPM)
  
- 0.25 Diameter of orifice (Inches)
- 0 Number of orifices
- 3 Residual pressure (FT)
- 1.28 Design Flow per head (GPM)
- 0.00 Subtotal flow (GPM)
  
- 70 Total # of orifices
- 45 Required Number of Orifice Holes
- 44.66 Total Flow
- 47.75 Total Rec. Design Flow This Trench (GPM)
- 6.47% Percent Delta from Design
  
- 277 Length of Distribution Pipe (FT)
- 3.99 Spacing of orifice holes (FT)