

# Philo Ridge Farm

## Mound Distribution System Design

### 2-Oct-16

1 Maximum Allowable application Rate per Square Foot (GPD/SF)  
81.0 Design Pumping Rate to Entire Field (GPM)  
2,146 Total Design Flow to Site (GPD)  
1 Number of Trenches/Beds

343.4 Invert Elevation

#### **Trench 1 (Bed)**

9 Depth of Stone (inches)  
1 Application Rate per Square Foot  
275 Length of Section  
2,146 Design Flow (GPD)  
81.00 Design Flow (GPM)  
88 Required Number of Orifices

#### **Orifice Design**

0.125 Diameter of orifice (Inches)  
0 Number of orifices  
3 Residual pressure (FT)  
0.32 Design Flow per head (GPM)  
0.00 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)  
32 Number of orifices  
3 Residual pressure (FT)  
1.28 Design Flow per head (GPM)  
40.83 Subtotal flow (GPM)

88 Total # of orifices  
88 Required Number of Orifice Holes  
81.03 Total Flow  
81.00 Total Rec. Design Flow This Trench (GPM)  
0.04% Percent Delta from Design

272 Length of Distribution Pipe (FT)  
6.28 Spacing of orifice holes (FT)