

# 2012 MASE Annual Meeting

Onsite Septic Systems Requiring  
Pumping

# PUMP TANKS

➤ 3'Ø or 4'Ø tank that houses pump

## ADVANTAGES:

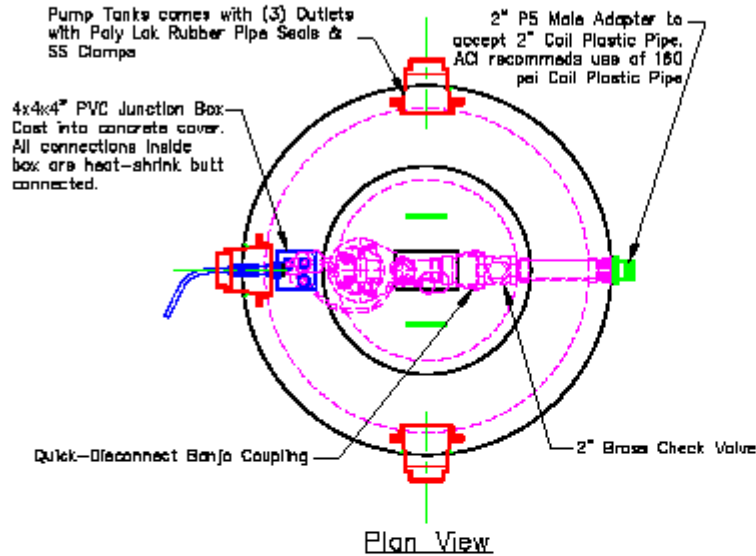
- ✓ Multiple applications
- ✓ Large reservoir
- ✓ Available in H-20 load rating

➤ Disadvantages:

- ✓ Short tank
- ✓ Additional structure buried in the ground

### 3' x 3' Pump Tank

Weight: 1,815 lbs.  
Item # 1700 W/O Pump



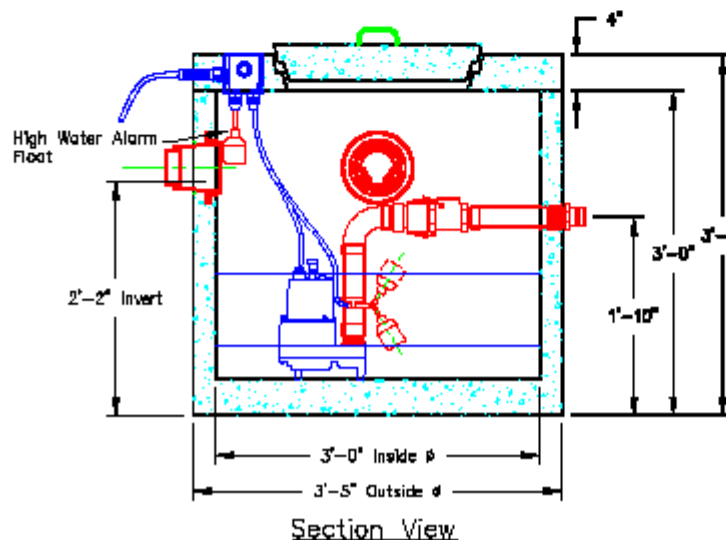
#### General Notes:

##### Concrete Specifications:

- 1) 4000 psi @ 28 Days
- 2) 4%-6% Entrained Air
- 3) Tank Penetrations are Integrally cast
- 4) CDVer is Not Designed for Vehicle Loads

##### Pump System Information:

- 1) Pumps are Warranted for One Year From Date of Installation
- 2) System Includes ACI Alarm Panel for Mounting Inside Building. Panel Needs to be Connected to a Single 20 amp. Circuit Breaker.
- 3) Available W/ Longer Cables, Please Specify Length when Ordering.



##### Pump Tank Alone (No Pump)

Item #	Description
1700	Pump Tank and Cover
1727	Cover Only

##### With Effluent (3/4" Solids) Pump

Item #	Pump Model
1701	Goulds PE51M
1702	Goulds WE0511HH
1703	Goulds WE0512HH
1704	Goulds WE1012H

##### With 2" Solids Handling Pumps

Item #	Pump Model
1706	Goulds PSS1M
1707	Goulds WSD511B
1708	Goulds PSS2MF
1709	Goulds WSD512B
1710	Goulds WS1012B

##### With 2 h.p. Grinder Pump

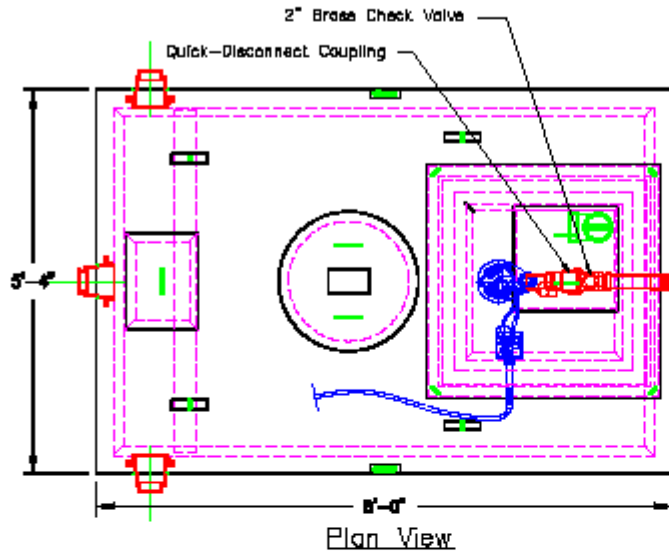
Item #	Pump Model
1724	Goulds RCS2012

# COMBINATION LIFT STATION

- 1000, 1500 or 2000 gallon septic tank with a small sump incorporated in outlet end of tank.
- Advantages:
  - ✓ Compact Design
  - ✓ Fewer components
- Disadvantages:
  - ✓ Small reservoir
  - ✓ Increased cycling
  - ✓ Not available in H-20 load rated

## 1000 Gallon Lift Station

Weight: 8,000 lbs.  
Item # 1811



### General Notes

#### Concrete Specifications:

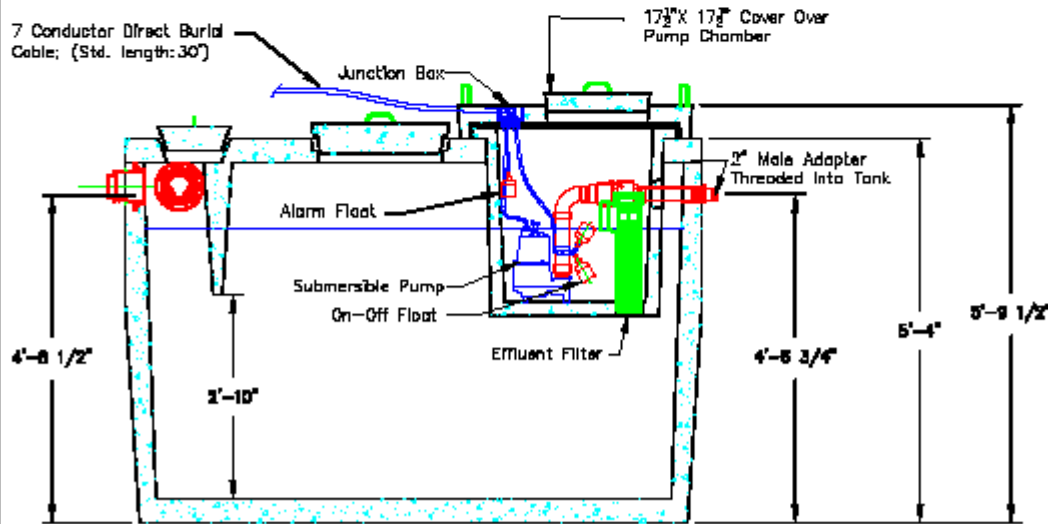
- 1) 4000 psi after 28 days with 4%-6% air
- 2) Reinforcing is grade 60
- 3) Cover over pump chamber is not designed for vehicle loads.
- 4) All joints sealed with butyl rubber joint sealant

#### Septic Tank Information:

- 1) Tanks should be pumped every 3-5 years
- 2) Center access cover and pump chamber cover should have risers to bring cover access close to grade.

#### Pump System Information:

- 1) Pumps are warranted for one year from date of installation.
- 2) System Includes ACI Alarm Panel for mounting inside building.
- 3) Available with longer cable. Please specify length when ordering.



Model # w/Specified Pump	Item #
Pump	1811
Goulds PES1M	1811
Goulds WECS11HH	1813
Goulds WE1012HH	1815

# Pumps

- Effluent pump
  - ✓ For pumping liquid ONLY
  - ✓ Highly efficient
  - ✓ Economical
  - ✓ 115V or 230V
- Solids Handling pump
  - ✓ For pumping raw sewage
  - ✓ Potential for clogging in some applications
  - ✓ 115V or 230V
- Grinder (macerator) pump
  - ✓ High head, low flow
  - ✓ Actually shreds solids
  - ✓ High volume of suspended solids
  - ✓ 230V Minimum

# Sizing Pump for Site Conditions

- $LIFT = \text{Difference in elevation from pump location to discharge location (Static Head)}$
- $PUSH = \text{Horizontal offset from pump location to discharge location (Friction Loss)}$  Each 100' of 2" force main = 3' of Static Head
- $LIFT + PUSH = \text{TOTAL DYNAMIC HEAD}$

# EXAMPLE

- LIFT = 19'
- PUSH 200' (2x3) = 6'
- TDH = 25'



Goulds Pumps is ISO 9001 Registered.

