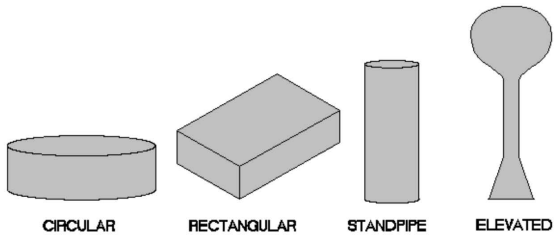
Tideflex® Mixing System

For Finished Water Storage Facilities
Design Data Sheet



I. GENERAL INFORMATION

Reservoir/Tank Name:		☐ Advertises On: ☐ Bids On:
Project Location:		

Water Utility/Owner Name:			
Owner Contact:			
Email:			
Address:			
City:		State:	
Zip:		Country:	
Phone:		Fax:	

Consulting Engineering Firm:			
Engineer Contact:			
Email:			
Address:			
City:		State:	
Zip:		Country:	
Phone:		Fax:	

II. SYSTEM INFORMATION

INSTALLATION:
☐ New Tank
☐ Existing Tank

SCADA:
Tank on SCADA?
☐ Yes ☐ No

WATER SOURCE:
☐ Surface Water ☐ Reclaimed Water
☐ Ground Water ☐ _____

OPERATION:
☐ Distribution System Reservoir
☐ Clearwell
☐ Combination

MODE:
☐ Fill-then-draw
☐ Simultaneous Fill and Draw

PRIMARY DISINFECTION:
☐ Chlorine ☐ UV ☐ Chlorine Dioxide
☐ Chloramine ☐ Ozone ☐ None
☐ _____

HIGH WATER LEVEL SHUTOFF:
☐ By Altitude Valve By ☐ None, Floats on System
☐ Pressure Switch ☐ _____

SECONDARY DISINFECTION:
☐ Chlorine ☐ Chloramine ☐ None
☐ Chlorine Dioxide ☐ _____

III. RESERVOIR / TANK DATA *(Provide tank drawings if available. See nomenclature on page 4.)*

TYPE OF RESERVOIR / TANK:		Tank Manufacturer or Basis of Design: _____
☐ Circular Reservoir ☐ Irregular Shape ☐ Rectangular Reservoir		☐ At Grade ☐ Semi-buried ☐ Buried
☐ Standpipe		
☐ Elevated Tank	☐ Dry Riser	☐ Sphere/Spheroid ☐ Composite ☐ Hydropillar ☐ _____
	☐ Wet Riser	Wet Riser Diameter _____ ☐ ft ☐ in ☐ m

TANK DETAILS: *(Provide tank drawings if available.* ***See nomenclature on page 4.)***

VOLUME: ☐ MG ☐ Gallons ☐ m^3 ☐ Megaliters

Circular Reservoir / Standpipe		**Elevated Tank**		**Rectangular Reservoir**	
	☐ ft ☐ m		☐ ft ☐ m		☐ ft ☐ m
Tank Diameter:		Bowl Diameter:		Length x Width	x
Depth to Maximum Operating Level		Head Range:		Depth to Maximum Operating Level	
Depth to Overflow		Height from Foundation to Overflow		Depth to Overflow	
		Height from Foundation to Max. Operating Level		Number of Cells	
Bottom Elevation:		Foundation Elevation:		Bottom Elevation:	

TANK MATERIAL: *(Select multiple if alternates for new tank.)*

☐ Welded Steel ☐ Bolted Steel (Conc. Floor) ☐ Bolted Steel (Steel Floor) ☐ Riveted Steel
☐ Prestressed Concrete ☐ Post-tensioned Concrete ☐ Cast-in-place Concrete
☐ Composite (Elevated) ☐ Earthen Lined ☐ _____

TYPE OF ROOF / COVER:

☐ Fixed Roof → Internal Roof Supports? ☐ Yes ☐ No ☐ Floating Cover ☐ None, Open Reservoir

IV. INLET / OUTLET PIPING

(For new tanks that operate in fill-then-draw and for existing tanks that have a common inlet/outlet pipe, complete the "Inlet" pipe data. The TMS separates inlet/outlet inside the tank.)

☐ Common Inlet/Outlet Pipe ☐ Separate Inlet and Outlet Pipes

Inlet Diameter	☐ in ☐ mm	Material:	Penetration: ☐ Bottom ☐ Sidewall ☐ Top
Outlet Diameter	☐ in ☐ mm	Material:	Penetration: ☐ Bottom ☐ Sidewall
Outlet have Silt Stop? ☐ Yes ☐ No →			☐ Fixed Pipe Extension ☐ Removable
Does tank have a dedicated drain pipe? ☐ Yes ☐ No			

V. HYDRAULIC DATA

Minimum **Fill** Rate:		☐ gpm ☐ lps ☐ ____	☐ Pumped ☐ Gravity
Maximum **Fill** Rate:			
Maximum **Draw** Rate: Peak Demand + Fire Flow (If Applicable)		☐ gpm ☐ lps ☐ ____	☐ Pumped ☐ Gravity

VI. TANK FLUCTUATION / TURNOVER DATA

(With one of the methods below, provide data on the typical, or expected, daily fluctuation of tank levels in summer and winter, if different. ****See nomenclature, page 4)***

	Method 1				***Method 2***	***Method 3***	
	Max. Operating Level*		Min. Operating Level*		**%** (Percent)	Volume Exchange	
Summer		☐ ft		☐ ft			☐ Gallons/Day
Winter		☐ m		☐ m			☐ Liters/Day

VII. REFROFIT INFORMATION

Year Tank Constructed:	
Date of Last Inspection:	
Date of Last Rehab/Repaint:	
Next Scheduled Rehab:	
Internal Baffles?	☐Yes ☐No
Ice Formation?	☐Yes ☐No
Water Temperature Range	Min
☐ °F ☐ °C	Max
Size of Largest Roof Hatch	☐Dia. ☐ Sq.
Size of Largest Shell Hatch	☐Dia. ☐ Sq.
Rechlorination/recirculation sytems installed?	☐Yes ☐No
Are sampling taps installed?	☐Yes ☐No
Samples been taken at different locations/depths inside the tank?	☐Yes ☐No
Has a tracer study, CFD, or scale model been done?	☐Yes ☐No

VIII. WATER QUALITY ISSUES

Identify Water Quality Issues
☐ Loss of Residual
☐ DBPs > ☐ TTHM ☐ HAA5
☐ Coliform Bacteria
☐ Nitrification
☐ Elevated HPC
☐ Biofilms
☐Taste and Odor
☐ Increased pH
☐ Color
☐ Turbidity
☐

Identify Known/Suspected Causes:
☐ Poor Mixing
☐Short-circuiting
☐ Poor Turnover / Tank Fluctuation
☐ Long Detention Time
☐ Thermal Stratification
☐ High Levels of Organics
☐

IX. OVERFLOW PIPE PROTECTION

Check method used to prevent birds, rodents, cold drafts, etc., from entering tank through overflow pipes.

Overflow Pipe Size:		☐ in ☐ mm

☐ **Dechlorinating Overflow Security Assembly (DOSA)** ☐ **Tideflex Valve** ☐ **Overflow Security Valve (OSV)** ☐ **Screen** ☐ **Flap Valve**

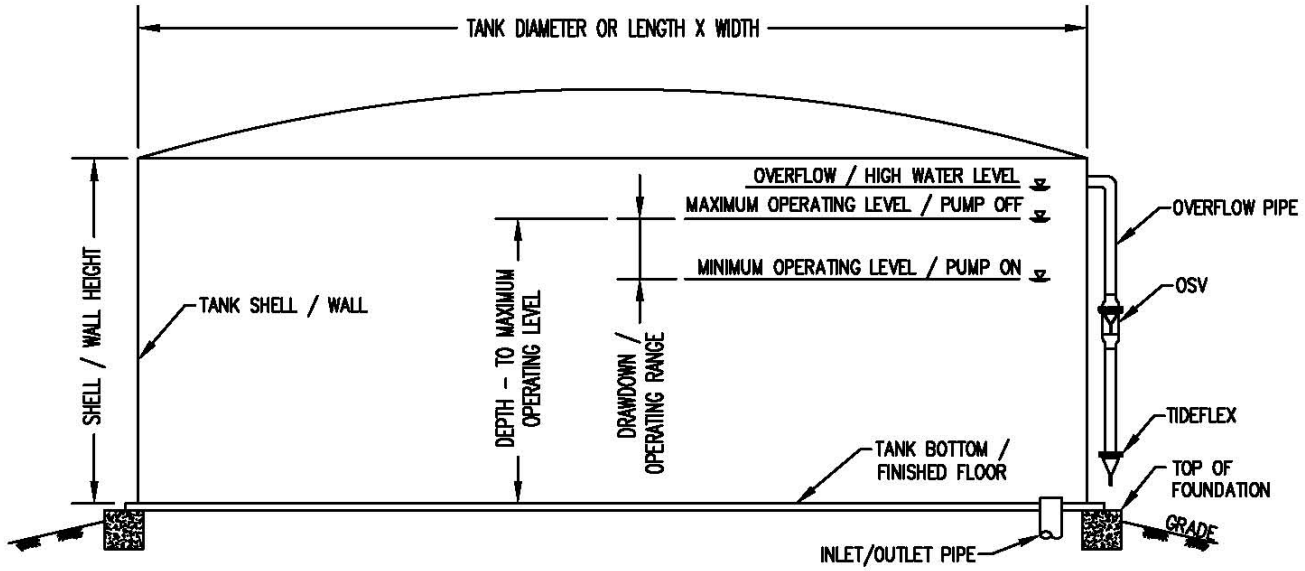


X. COMMENT

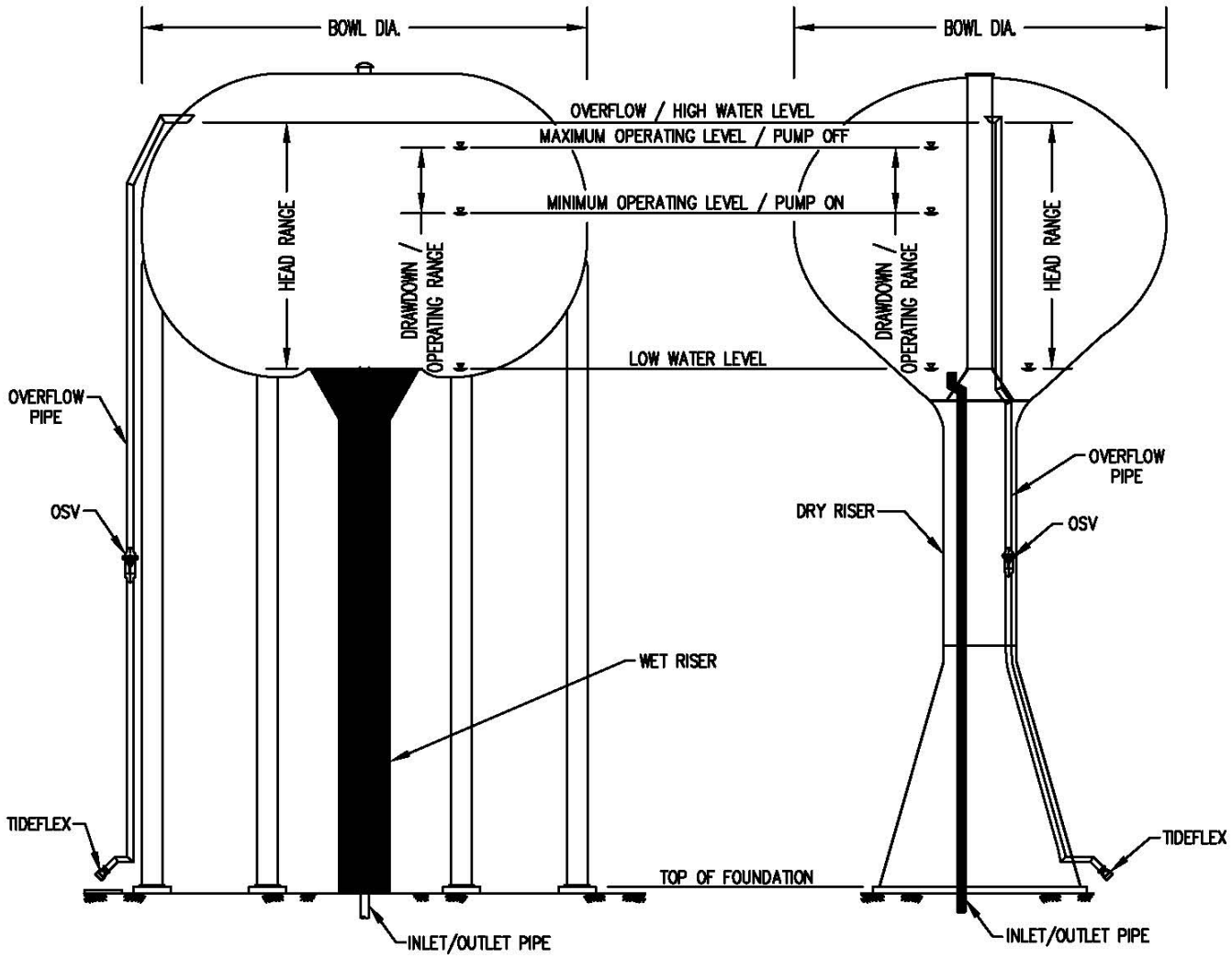
PLEASE MAIL, FAX OR E-MAIL COPIES OF TANK DRAWINGS, INSPECTION REPORTS/PHOTOS TO:

Red Valve Company / Tideflex®
750 Holiday Drive, Suite #400, Pittsburgh, PA 15220, USA
PHONE: 412-279-0044 **FAX:** 412-279-5410
E-MAIL: support@redvalve.com

XI. TANK NOMENCLATURE



CIRCULAR AND RECTANGULAR RESERVOIRS AND STANDPIPES



WET RISER ELEVATED TANK

DRY RISER ELEVATED TANK