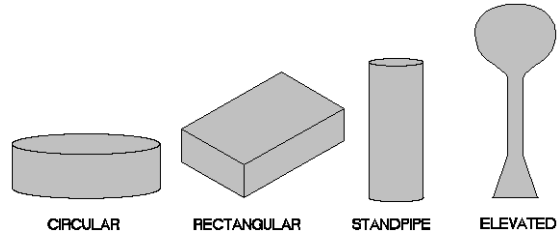


Tideflex® Mixing System

FOR FINISHED WATER STORAGE FACILITIES
DESIGN DATA SHEET



I. GENERAL INFORMATION

| | | |
|----------------------|--|---|
| Reservoir/Tank Name: | | <input type="checkbox"/> Advertises on <input type="checkbox"/> Bids on |
| Project Location: | | (mm-dd-yyyy) |

| | |
|---------------------------|----------|
| 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: <input type="checkbox"/> New Tank <input type="checkbox"/> Existing Tank | SCADA: Tank on SCADA? <input type="checkbox"/> yes <input type="checkbox"/> no | WATER SOURCE: <input type="checkbox"/> Surface Water <input type="checkbox"/> Reclaimed Water <input type="checkbox"/> Ground Water <input type="checkbox"/> _____ |
| OPERATION: <input type="checkbox"/> Distribution System Reservoir <input type="checkbox"/> Clearwell <input type="checkbox"/> Combination | MODE: <input type="checkbox"/> Fill-then-draw <input type="checkbox"/> Simultaneous fill and draw | PRIMARY DISINFECTION: <input type="checkbox"/> Chlorine <input type="checkbox"/> UV <input type="checkbox"/> Chlorine Dioxide <input type="checkbox"/> Chloramine <input type="checkbox"/> Ozone <input type="checkbox"/> None <input type="checkbox"/> _____ |
| HIGH WATER LEVEL SHUTOFF: <input type="checkbox"/> by Altitude Valve <input type="checkbox"/> None, floats on system <input type="checkbox"/> by Pressure Switch <input type="checkbox"/> _____ | | SECONDARY DISINFECTION: <input type="checkbox"/> Chlorine <input type="checkbox"/> Chloramine <input type="checkbox"/> None <input type="checkbox"/> Chlorine Dioxide <input type="checkbox"/> _____ |

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

| | | | |
|--|--|---|--|
| TYPE OF RESERVOIR / TANK: | | Tank Manufacturer or Basis of Design: _____ | |
| <input type="checkbox"/> Circular Reservoir | <input type="checkbox"/> Irregular Shape | <input type="checkbox"/> At Grade | <input type="checkbox"/> Semi-Buried |
| <input type="checkbox"/> Rectangular Reservoir | | <input type="checkbox"/> Buried | |
| <input type="checkbox"/> Standpipe | | | |
| <input type="checkbox"/> Elevated Tank | <input type="checkbox"/> Dry Riser | <input type="checkbox"/> Sphere/Spheroid | <input type="checkbox"/> Composite <input type="checkbox"/> Hydropillar <input type="checkbox"/> _____ |
| | <input type="checkbox"/> Wet Riser | Wet Riser Diameter _____ <input type="checkbox"/> ft <input type="checkbox"/> in <input type="checkbox"/> m | |

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

VOLUME: MG gallons m³ Megaliters

| Circular Reservoir / Standpipe | | Elevated Tank | | Rectangular Reservoir | |
|----------------------------------|--|--|--|----------------------------------|--|
| | <input type="checkbox"/> ft <input type="checkbox"/> m | | <input type="checkbox"/> ft <input type="checkbox"/> m | | <input type="checkbox"/> ft <input type="checkbox"/> 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 | 1 |
| 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 | <input type="checkbox"/> in <input type="checkbox"/> mm | Material: | Penetration: <input type="checkbox"/> bottom <input type="checkbox"/> sidewall <input type="checkbox"/> top |
| Outlet Diameter | <input type="checkbox"/> in <input type="checkbox"/> mm | Material: | Penetration: <input type="checkbox"/> bottom <input type="checkbox"/> sidewall |
| Outlet have Silt Stop? <input type="checkbox"/> yes <input type="checkbox"/> no → <input type="checkbox"/> fixed pipe extension <input type="checkbox"/> removable | | | |
| Does tank have a dedicated drain pipe? <input type="checkbox"/> yes <input type="checkbox"/> no | | | |

V. HYDRAULIC DATA

| | | |
|---|--|--|
| Minimum Fill Rate: | <input type="checkbox"/> gpm <input type="checkbox"/> lps <input type="checkbox"/> _____ | <input type="checkbox"/> Pumped <input type="checkbox"/> Gravity |
| Maximum Fill Rate: | | |
| Maximum Draw Rate: peak demand + fire flow (if applicable) | <input type="checkbox"/> gpm <input type="checkbox"/> lps <input type="checkbox"/> _____ | <input type="checkbox"/> Pumped <input type="checkbox"/> 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 | <input type="checkbox"/> ft | <input type="checkbox"/> ft | | <input type="checkbox"/> gallons/day |
| Winter | <input type="checkbox"/> m | <input type="checkbox"/> m | | <input type="checkbox"/> liters/day |

VII. REFROFIT INFORMATION



| | |
|---|---|
| Year Tank Constructed: | |
| Date of Last Inspection: | |
| Date of Last Rehab/Repaint: | |
| Next Scheduled Rehab: | |
| Internal Baffles? | <input type="checkbox"/> yes <input type="checkbox"/> no |
| Ice Formation? | <input type="checkbox"/> yes <input type="checkbox"/> no |
| Water Temperature Range | min |
| <input type="checkbox"/> °F <input type="checkbox"/> °C | max |
| Size of Largest Roof Hatch | <input type="checkbox"/> dia <input type="checkbox"/> sq. |
| Size of Largest Shell Hatch | <input type="checkbox"/> dia <input type="checkbox"/> sq. |
| Rechlorination/Recirculation Systems Installed? | <input type="checkbox"/> yes <input type="checkbox"/> no |
| Are Sampling taps installed? | <input type="checkbox"/> yes <input type="checkbox"/> no |
| Samples been taken at different locations/depths inside the tank? | <input type="checkbox"/> yes <input type="checkbox"/> no |
| Has a tracer study, CFD, or scale model been done? | <input type="checkbox"/> yes <input type="checkbox"/> no |

VIII. WATER QUALITY ISSUES

| Identify Water Quality Issues |
|---|
| <input type="checkbox"/> Loss of Residual |
| <input type="checkbox"/> DBPs > <input type="checkbox"/> TTHM <input type="checkbox"/> HAA5 |
| <input type="checkbox"/> Coliform Bacteria |
| <input type="checkbox"/> Nitrification |
| <input type="checkbox"/> Elevated HPC |
| <input type="checkbox"/> Biofilms |
| <input type="checkbox"/> Taste & Odor |
| <input type="checkbox"/> Increased pH |
| <input type="checkbox"/> Color |
| <input type="checkbox"/> Turbidity |
| <input type="checkbox"/> |
| Identify known/suspected causes: |
| <input type="checkbox"/> Poor Mixing |
| <input type="checkbox"/> Short-Circuiting |
| <input type="checkbox"/> Poor Turnover / Tank Fluctuation |
| <input type="checkbox"/> Long Detention Time |
| <input type="checkbox"/> Thermal Stratification |
| <input type="checkbox"/> High Levels of Organics |
| <input type="checkbox"/> |

IX. OVERFLOW PIPE PROTECTION

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

| | | | |
|---|---|---------------------------------|-------------------------------------|
| Overflow Pipe Size: | <input type="checkbox"/> in <input type="checkbox"/> mm | | |
| <input type="checkbox"/> Tideflex Valve | <input type="checkbox"/> Overflow Security Valve (OSV) | <input type="checkbox"/> Screen | <input type="checkbox"/> Flap Valve |
|  |  | | |

X. COMMENT

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

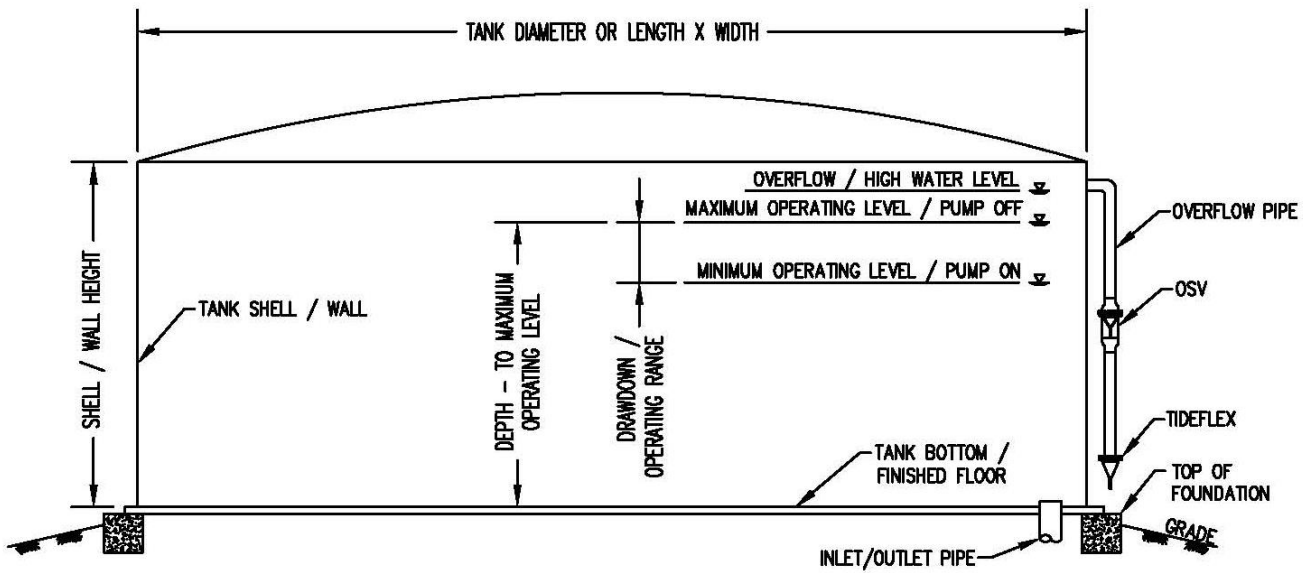
Tideflex Technologies

600 North Bell Ave. Carnegie, PA 15106 USA

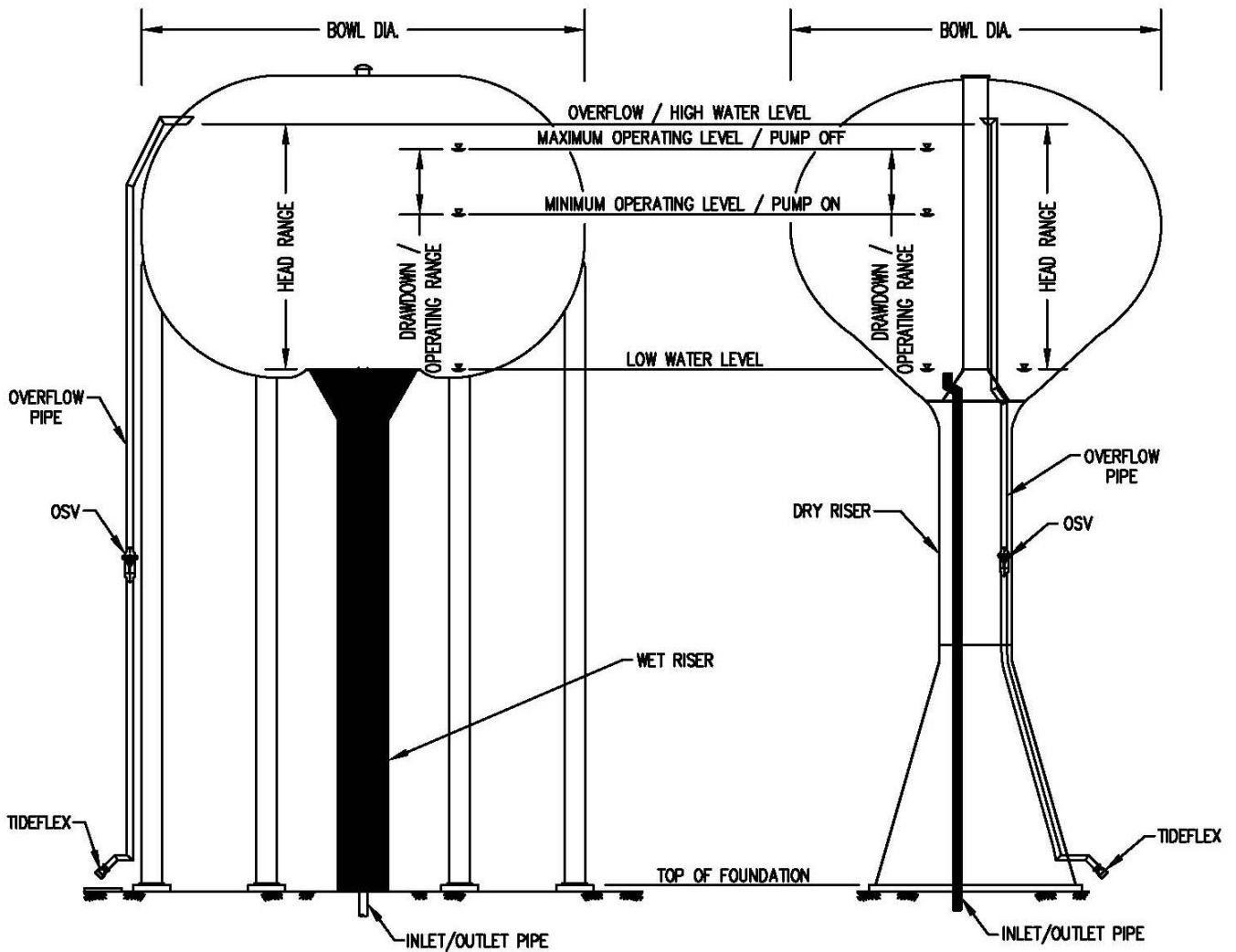
PHONE: 412-279-0044 FAX: 412-279-5410

E-MAIL: mduer@tideflex.com (Mike Duer) or info@tideflex.com

XI. TANK NOMENCLATURE



CIRCULAR AND RECTANGULAR RESERVOIRS AND STANDPIPES



WET RISER ELEVATED TANK

DRY RISER ELEVATED TANK