

**NOTES**

1. Blower piping to FAST® may not exceed 100 FT [30.5m] total length and use a maximum of 4 elbows in the piping system (@ 100FT [30m]). For distances greater than 100 FT [30m] consult factory. Blower must be located above flood levels on a concrete base.
2. Vent to be located above finish grade or higher to avoid infiltration. Cap with a vent grate with at least 7.1 sq in.[45.8 sq. cm] open surface area. Secure with stainless steel screws (see sheet 3 of 3 MicroFAST® 0.50 Details).  
or  
Run Vent to desired location and cover opening with a vent grate with at least 7.1 sq in.[45.8 sq. cm] open surface area. Secure with stainless steel screws. Vent piping must not allow excess moisture build up or back pressure.
3. All appurtenances to FAST® (e.g. tank pump outs, etc.) must conform to all applicable country, state, province, and local plumbing and electrical codes. Blower control system by Bio-Microbics, Inc.
4. Tank volume must be increased by 20% if minimum of 10 inches [25.5cm] is used between the unit and the base of tank. Consult factory for approval.
5. Either the influent pipe tee shall be fitted with a pipe cap or the baffle separating the two zones shall be extended all the way to the top of the tank. If choosing to use the pipe cap. Then the baffle shall be at least 3" [8cm] higher than the water level as shown on the drawing.
6. All inspection, viewing and pump out ports must be secured to prevent accidental or unauthorized access.
7. Tank, piping, conduit, blower housing pad and vents are provided by others.
8. All piping and ancillary equipment installed after FAST must not impede or restrict free flow of effluent.
9. The air supply line into the FAST® unit must be secured to prevent vibration induced damage. The air supply line should be secured with a non-corrosive clamp every 2' min [60 cm]. See alternate air supply option on sheet 2 of 2 Details.
10. Min height may be reduced, consult factory and reference "Short-FAST-Module-Procedure.pdf."
11. Refer to sheet 2 of 2 Details drawing for leg extensions requirements.

DO NOT SCALE  
UNLESS NOTED  
DIMENSIONS  
ARE IN INCHES  
[CENTIMETERS]  
TOLERANCES  
± 0.02 IN/IN  
[± 0.05 CM/CM]

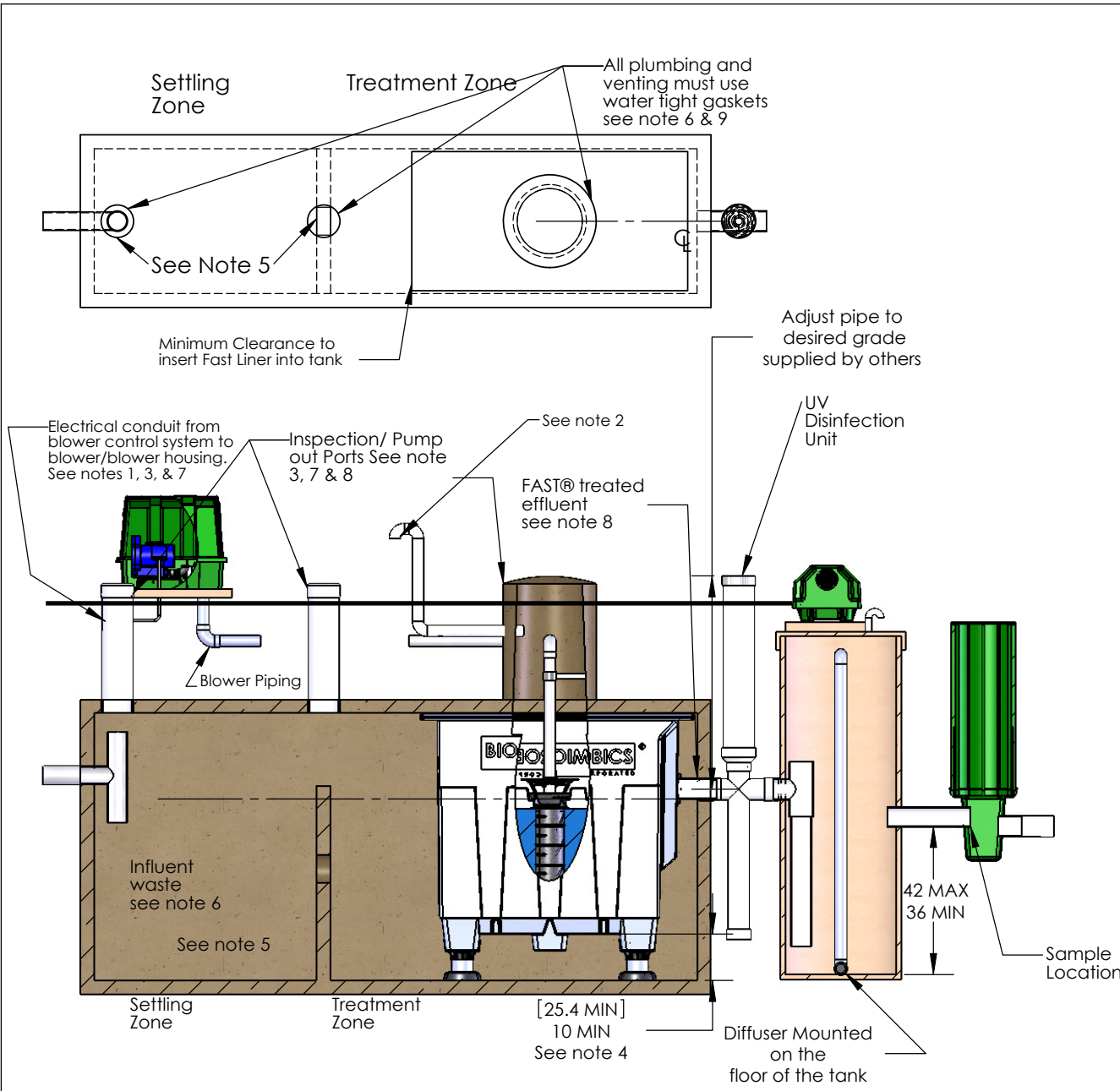


Ohio NPDES General  
Arrangement

WEIGHT	lb	SIZE	DRAWING NUMBER	SHEET 1 OF 3
NAME	DATE	A	Ohio NPDES with Fail Safe Pump	
DRAWN	CTC	11/23/2009	REVISED 6/18/2010	REV. INI-03-T
CHECKED	PF	6/18/2010		

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**NOTES**

1. Blower piping to FAST@ may not exceed 100 FT [30.5m] total length and use a maximum of 4 elbows in the piping system (@ 100FT [30m]). For distances greater than 100 FT [30m] consult factory. Blower must be located above flood levels on a concrete base.
2. Vent to be located above finish grade or higher to avoid infiltration. Cap with a vent grate with at least 7.1 sq in. [45.8 sq. cm] open surface area. Secure with stainless steel screws (see sheet 3 of 3 MicroFAST@ 0.50 Details).  
or  
Run Vent to desired location and cover opening with a vent grate with at least 7.1 sq in. [45.8 sq. cm] open surface area. Secure with stainless steel screws. Vent piping must not allow excess moisture build up or back pressure.
3. All appurtenances to FAST@ (e.g. tank pump outs, etc.) must conform to all applicable country, state, province, and local plumbing and electrical codes. Blower control system by Bio-Microbics, Inc.
4. Tank volume must be increased by 20% if minimum of 10 inches [25.5cm] is used between the unit and the base of tank. Consult factory for approval.
5. Either the influent pipe tee shall be fitted with a pipe cap or the baffle separating the two zones shall be extended all the way to the top of the tank. If choosing to use the pipe cap. Then the baffle shall be at least 3" [8cm] higher than the water level as shown on the drawing.
6. All inspection, viewing and pump out ports must be secured to prevent accidental or unauthorized access.
7. Tank, piping, conduit, blower housing pad and vents are provided by others.
8. All piping and ancillary equipment installed after FAST must not impede or restrict free flow of effluent.
9. The air supply line into the FAST@ unit must be secured to prevent vibration induced damage. The air supply line should be secured with a non-corrosive clamp every 2' min [60 cm]. See alternate air supply option on sheet 2 of 2 Details.
10. Min height may be reduced, consult factory and reference "Short-FAST-Module-Procedure.pdf."
11. Refer to sheet 2 of 2 Details drawing for leg extensions requirements.

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TOLERANCES  
± 0.02 IN/IN  
[± 0.05 CM/CM]



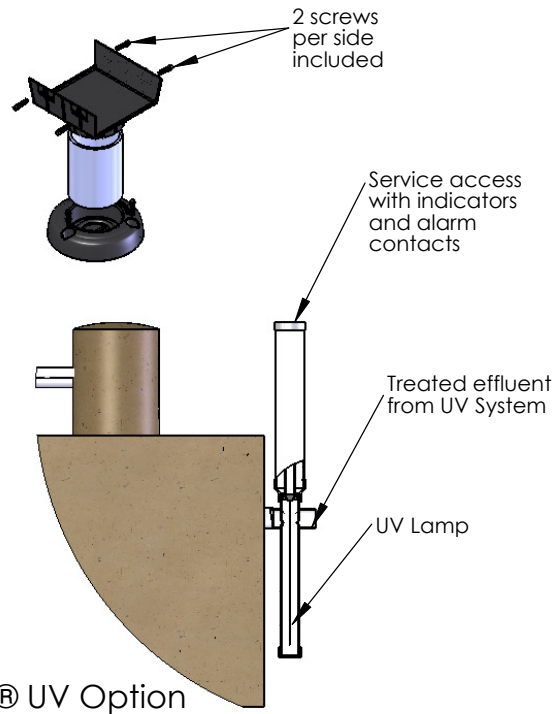
Ohio NPDES General Arrangement

WEIGHT		lb	SIZE A	DRAWING NUMBER		SHEET 2 OF 3
NAME	DATE	Ohio NPDES with Gravity				
DRAWN	CTC	11/23/2009	REVISED 6/18/2010		REV. INI-03-T	
CHECKED	PF	6/18/2010				

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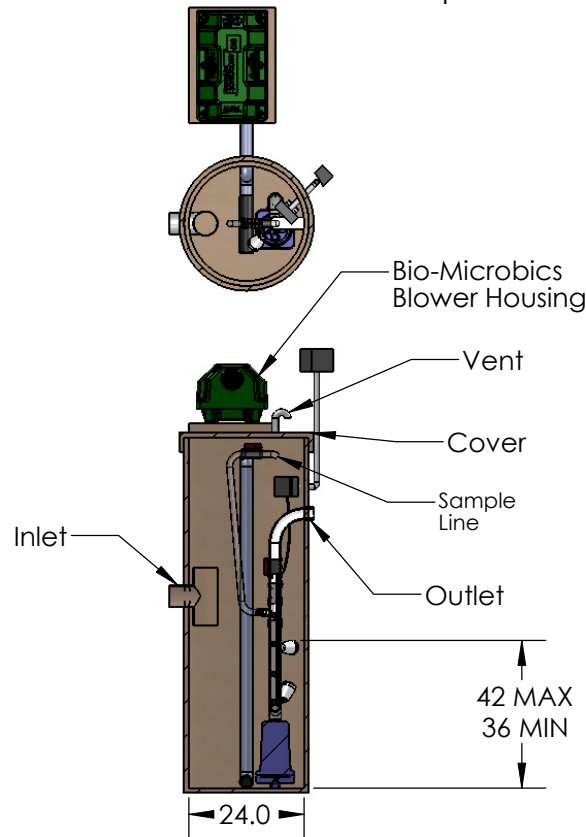
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Minimum leg extension assembly  
see note 4



FAST® UV Option

FAST® Post Aeration Option



NDS Grate

Fasten with non-corrosive screws

FAST® Vent Option

Non-corrosive clamp every 2 feet

2" Air Supply Line

Riser

FAST® Air Lift

Non-corrosive clamp every 2 feet

FAST® Air Lift

2" Coupler

Riser

Gasket

2" Air Supply Line

Alternate Air Supply Option

- Notes
1. Secure leg extension to the FAST® unit by placing two screws on each side of the leg extension (4 screws per foot are included).
  2. Cut 4" [10] schd. 40 PVC pipe (not included) to obtain the desired height. Minimum pipe length of 6 1/8" [15.56]; Original leg extension height requires a pipe length of 11 1/8" [28.26]. For heights greater than 18" [45.7] use schd. 80 PVC pipe (not included). Consult factory for extending leg beyond 36" [91].
  3. Anchor the leg extensions to the tank with non-corrosive hardware not included at the provided mounting points.
  4. Increase minimum tank volume by 20% if minimum leg extension is used.
  5. The air supply line into the FAST® unit must be secured so as to prevent damage from pipe vibration.
  6. The air supply line into the FAST® unit must be secured to prevent vibration induced damage. The air supply line should be secured with a non-corrosive clamp every 2' MIN.
  7. Tank, anchors, piping conduit, blower, housing pad and vents are provided by others.

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[CENTIMETERS]  
TOLERANCES  
± 0.02 IN/IN  
[± 0.05 CM/CM]



Ohio NPDES General Arrangement

WEIGHT	lb	SIZE	DRAWING NUMBER	SHEET 3 OF 3
NAME	DATE	A	Details	
DRAWN	CTC	11/23/2009	REVISED 6/18/2010	
CHECKED	PF	6/18/2010	REV. INI-05-M	