

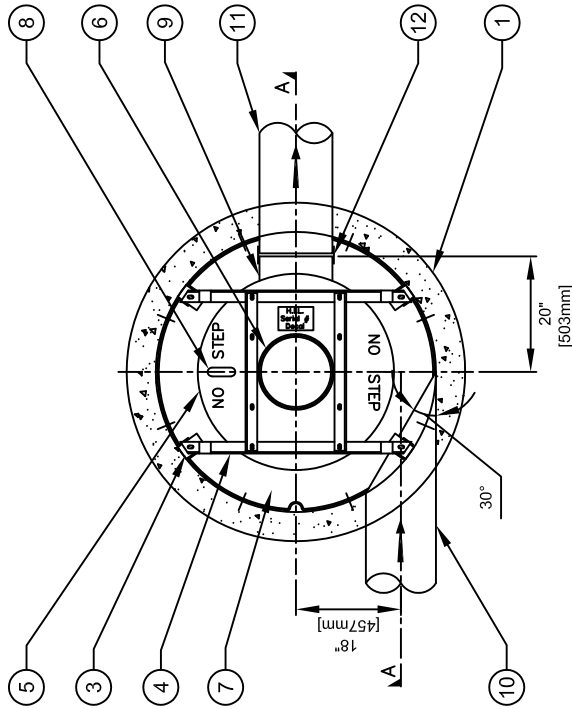
SECTION A-A

**EQUIPMENT PERFORMANCE**

The stormwater treatment unit shall adhere to the hydraulic parameters given below and provide the storage capacities as follows:

1. Performance objectives: The unit shall be capable of treating the peak flow rate below.
2. Peak treatment flow: 3.0 cfs [85 L/s]
3. Depth of flow in overflow pipe at 3.0 cfs: 8 in. [204 mm]
4. Estimated headloss\* at 3.0 cfs: 5 in. [127 mm]
5. Sediment storage capacity: 0.70 Cu. yd. [0.54 cu.m.]
6. Oil storage capacity: 70 Gal. [265 liters]
7. Sediment shall be stored in a zone that is isolated from the main flow path and protected from reentrainment by a benching skirt.

\*Headloss is defined as the difference between static water level at the inlet of the Downstream Defender to the free water surface in the overflow pipe, assuming free discharge. Dimensions are general and intended for guidance only. The orientation of the inlet pipe and overflow pipe can be adjusted to site requirements. See site plan for orientation.



PLAN VIEW

PARTS LIST	
ITEM	DESCRIPTION
1	I.D. CONCRETE MANHOLE
2	MANHOLE LID, FRAME & COVER
3	LEDGER ANGLE (TYP.)
4	SUPPORT FRAME
5	DIP PLATE
6	CENTER SHAFT & CONE
7	BENCHING SKIRT
8	FLOATABLES LID W/ VENT
9	OVERFLOW PIPE STUB
10	TANGENTIAL INLET PIPE (BY OTHERS)
11	OVERFLOW PIPE (BY OTHERS)
12	PIPE COUPLING (BY OTHERS)

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RC 02/02/09	PROPOSAL
Rev By	Date
02/02/09	3/8" = 1' - 0"
Drawn By	Checked Eng.
RC	Approved By
Checked Prod.	
Title	

4-FT DIAMETER  
DOWNSTREAM DEFENDER®  
[1219 mm]

STANDARD UNIT

GENERAL ARRANGEMENT



94 HUTCHINS DRIVE  
PORTLAND, ME 04102  
TEL: 207.756.6200  
FAX: 207.756.6212  
EMAIL:  
STORMWATERINQUIRY  
@HIL-TECH.COM

CAD Ref:	DD4GA2
Project No.	
Drawings No.	DD4GA2 Rev.

RC 02/02/09	PROPOSAL
Rev By	Date
02/02/09	1/4" = 1' - 0"
Drawn By	Checked Eng.
RC	Approved By
Checked Prod.	

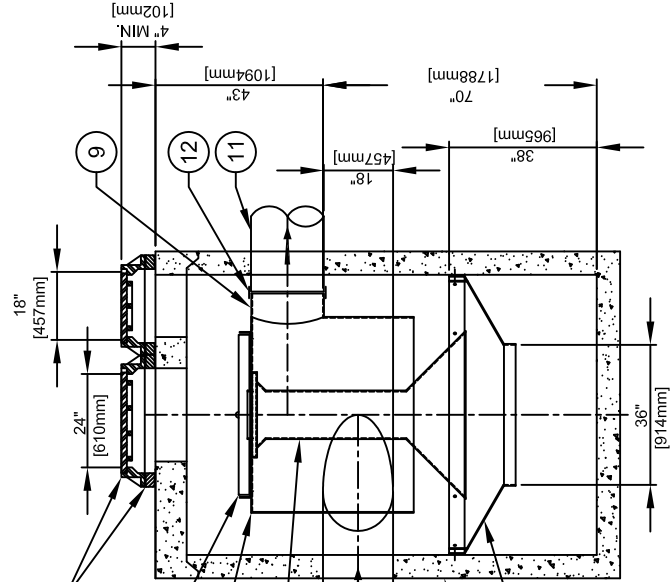
Title  
 6-FT DIAMETER  
 DOWNSTREAM DEFENDER®  
 [1829 mm]  
 STANDARD UNIT

GENERAL ARRANGEMENT

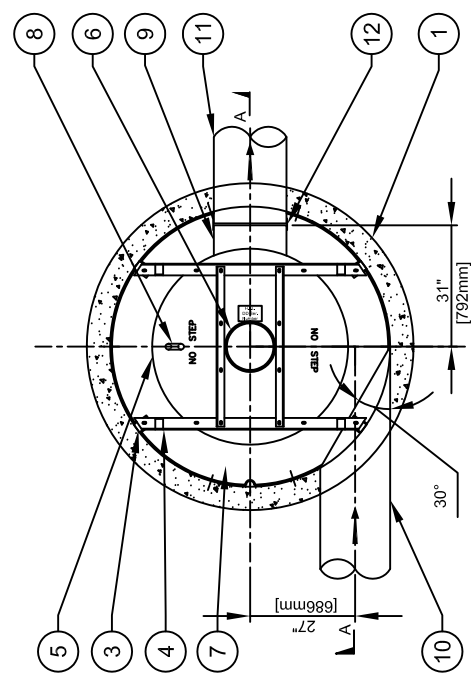


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CAD Ref: DD6GA2  
 Project No.  
 Drawings No. DD6GA2 Rev.



SECTION A-A



PLAN VIEW

**EQUIPMENT PERFORMANCE**

The stormwater treatment unit shall adhere to the hydraulic parameters given below and provide storage capacities as follows:

1. Performance objectives: The unit shall be capable of treating the peak flow rate below.
2. Peak treatment flow: 8.0 cfs [227 L/s]
3. Depth of flow in overflow pipe at 8.0 cfs: 11 in. [280 mm]
4. Estimated headloss\* at 8.0 cfs: 8 in. [204 mm]
5. Sediment storage capacity: 2.10 cu. yd. [1.61 cu.m.]
6. Oil storage capacity: 230 Gal. [871 liters]
7. Sediment shall be stored in a zone that is isolated from the main flow path and protected from reentrainment by a benching skirt.

\*Headloss is defined as the difference between static water level at the inlet of the Downstream Defender to the free water surface in the overflow pipe, assuming free discharge. Dimensions are general and intended for guidance only. The orientation of the inlet pipe and overflow pipe can be adjusted to site requirements. See site plan for orientation.

ITEM	SIZE	DESCRIPTION
1	72 in.	I.D. CONCRETE MANHOLE
2	24 in.	MANHOLE LID, FRAME & COVER
	18 in.	MANHOLE LID, FRAME & COVER
3		LEDGER ANGLE (TYP.)
4		SUPPORT FRAME
5		DIP PLATE
6		CENTER SHAFT & CONE
7		BENCHING SKIRT
8		FLOATABLES LID W/ VENT
9	18 in.	OVERFLOW PIPE STUB
10	18 in.	TANGENTIAL INLET PIPE (BY OTHERS)
11	18 in.	OVERFLOW PIPE (BY OTHERS)
12		PIPE COUPLING (BY OTHERS)

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