

**Notes:**

1. Precast concrete structure shall be manufactured in accordance with ASTM Designation C478.
2. Filter system shall be supplied with traffic rated (H20) bolted & gasketed Ø36" circular access covers with risers as required. Field poured concrete collar required, by others.
3. Inlet & outlet pipe(s) are to be Ø18.00" maximum. Inlet pipes must enter the structure in the inlet bay.
4. Inlet chamber shall be supplied with drain-down device designed to remove standing water between storm events.
5. Minimum separation between invert in & invert out is outlet pipe diameter plus 4.00".
6. For depths less than specified minimums contact Oldcastle® Stormwater Solutions for engineering assistance.

**\* Treatment Flow Rates shown conform to Washington State GULD Specifications**



Media  
Filtration

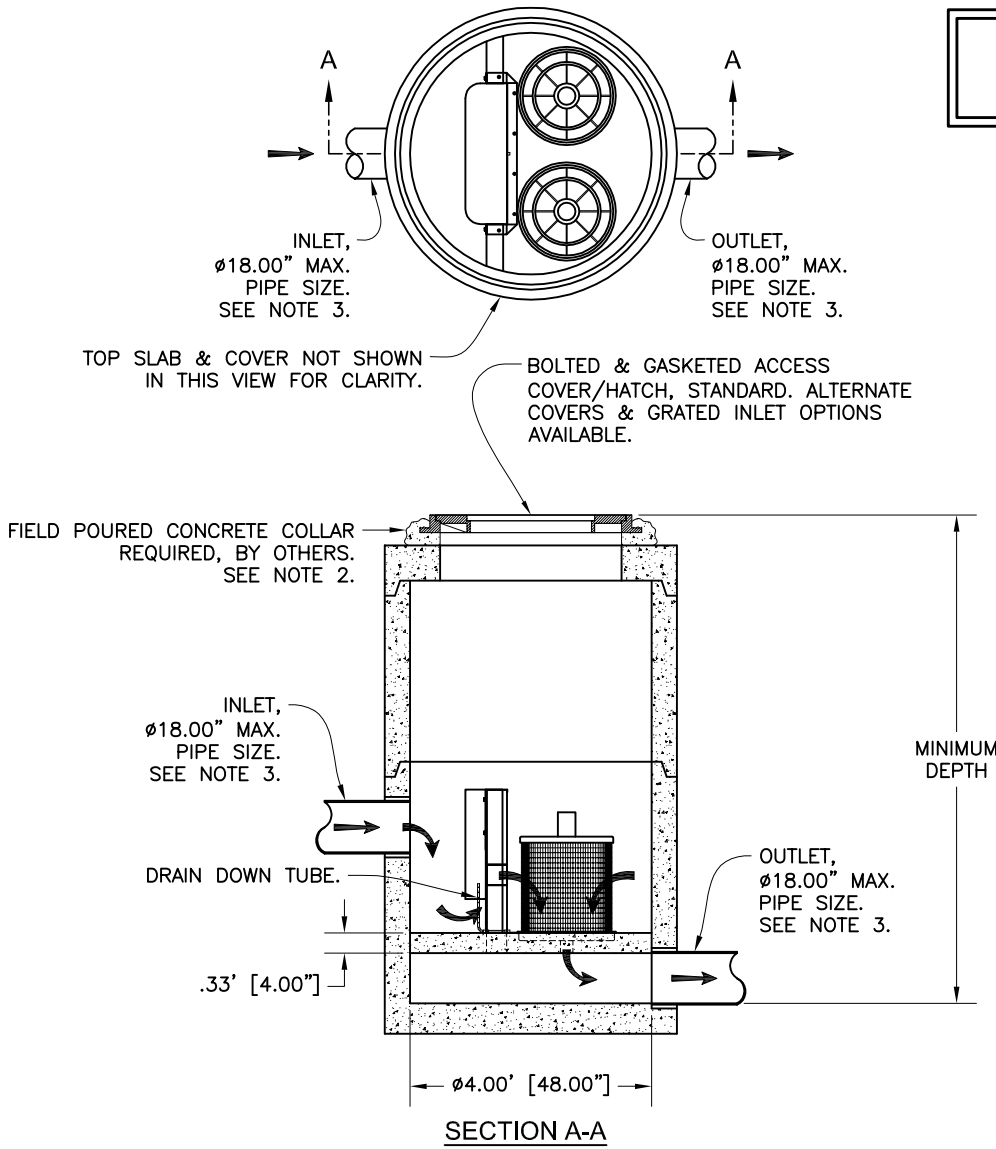
**Perk Filter™**  
 Ø48.00" Manhole  
 Washington State GULD  
 One to Two Cartridges / Stacks



**Oldcastle®**  
 Stormwater Solutions

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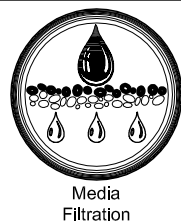
DRAWING NO. PF-MH-48-WA	REV NR	ECO ECO-0132	DATE ISM 4/27/15	SHEET 1 OF 2
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**Minimum Depth**

PIPE SIZE	Ø6.00"	Ø8.00"	Ø10.00"	Ø12.00"	Ø15.00"	Ø18.00"
CARTRIDGE TYPE	MINIMUM DEPTH RIM TO OUTLET	MINIMUM DEPTH RIM TO OUTLET	MINIMUM DEPTH RIM TO OUTLET	MINIMUM DEPTH RIM TO OUTLET	MINIMUM DEPTH RIM TO OUTLET	MINIMUM DEPTH RIM TO OUTLET
12"	3.67' [44.00"]	3.92' [47.00"]	4.17' [50.00"]	4.42' [53.00"]	4.67' [56.00"]	4.92' [59.00"]
18"	4.42' [53.00"]	4.67' [56.00"]	4.92' [59.00"]	5.17' [62.00"]	5.42' [65.00"]	5.67' [68.00"]
12" + 12"	5.17' [62.00"]	5.42' [65.00"]	5.67' [68.00"]	5.92' [71.00"]	6.17' [74.00"]	6.42' [77.00"]
12" + 18"	5.67' [68.00"]	5.92' [71.00"]	6.17' [74.00"]	6.42' [77.00"]	6.67' [80.00"]	6.92' [83.00"]

Ø48.00" PERK FILTER MANHOLE TREATMENT FLOW RATES, TOTAL FLOW CAPACITIES & MAXIMUM HEAD LOSS								
CARTRIDGE STACK QUANTITY	CARTRIDGE STACK CONFIGURATION							
	12"		18"		12" & 12"		12" & 18"	
	TREATMENT FLOW RATE (GPM / CFS)	TOTAL FLOW CAPACITY (CFS)	TREATMENT FLOW RATE (GPM / CFS)	TOTAL FLOW CAPACITY (CFS)	TREATMENT FLOW RATE (GPM / CFS)	TOTAL FLOW CAPACITY (CFS)	TREATMENT FLOW RATE (GPM / CFS)	TOTAL FLOW CAPACITY (CFS)
1	6.8 / 0.015	2.47	10.2 / 0.022	3.05	13.6 / 0.03	3.45	17 / 0.037	3.62
2	13.6 / 0.03	2.47	20.4 / 0.045	3.05	27.2 / 0.06	3.45	34 / 0.075	3.62
MAXIMUM HEAD LOSS	1.7 FEET		2.3 FEET		2.9 FEET		3.5 FEET	



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