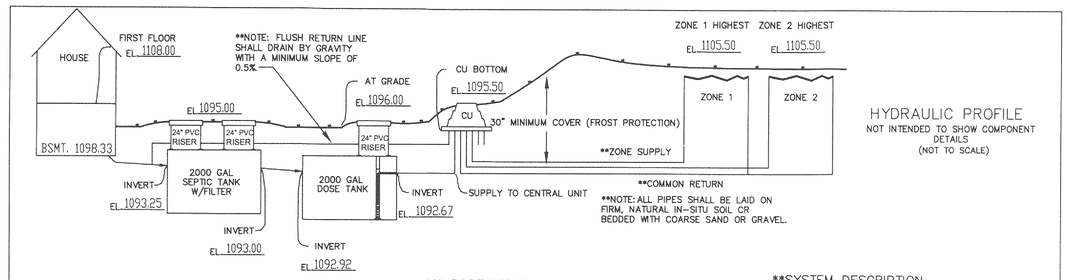
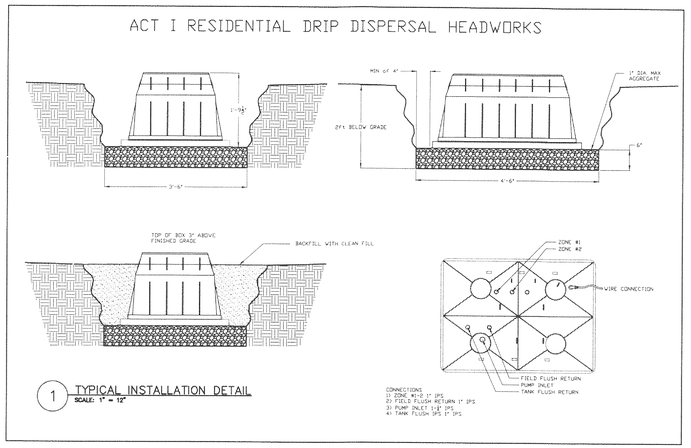


HYDRAULIC PROFILE
NOT INTENDED TO SHOW COMPONENT DETAILS
(NOT TO SCALE)

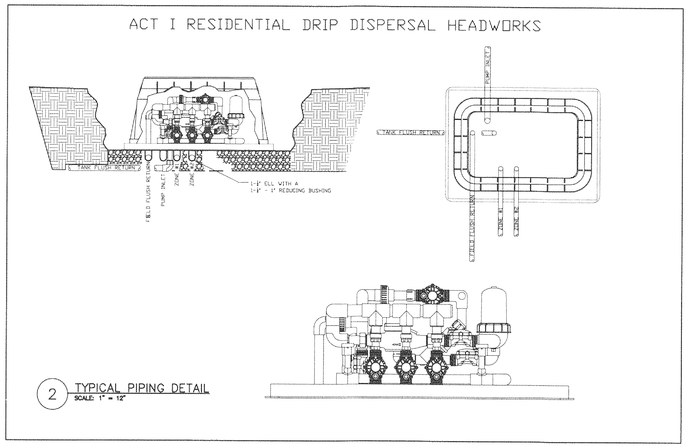
**IMPORTANT TANK NOTES

THE INSTALLING CONTRACTOR IS RESPONSIBLE FOR PROVIDING WATERPROOF TANKS. BOTH THE SEPTIC TANK AND THE DOSING TANK SHALL BE FITTED WITH FLEXIBLE BOOTS ON THE INLETS AND OUTLETS. TANK OPENINGS ARE TO HAVE ADAPTER RINGS CAST IN THE TOP TO ACCEPT PVC RISERS. TANKS SHALL BE WATER TIGHT PER OHIO ADMINISTRATIVE CODE CHAPTER 3701-29 "SEWAGE TREATMENT SYSTEM RULES".

**SYSTEM DESCRIPTION



1 TYPICAL INSTALLATION DETAIL
SCALE: 1" = 12"



2 TYPICAL PIPING DETAIL
SCALE: 1" = 12"

Client: Probuilt Homes Inc.
Location: 10154 Courtney Ln.

Date: 11/25/2013

1. Soil Texture or Perc Time: _____
2. Soil Structure Shape: _____
Soil Structure Grade: _____
3. Infiltration Loading Rate(ILR): 0.21 gal/day/ft^2
4. Slope: 10.0 %
5. Infiltration Depth: 9 in.
6. Hydraulic Linear Loading Rate: 3.3 gal/day/ft
7. Maximum Contour Length (MCL): 80 ft

8. Daily Flow
4.00 (No. of Bedrooms) X 120.00 (Flow / Bedroom) = 480.00 (GPD)

9. Dosing Area
480.00 (Daily Flow) / 0.21 (ILR) = 2285.71 (sqft)

10. Dosing A. Length
480.00 (Daily Flow) / 3.30 (HLLR) = 145.45 (ft)

11. Dosing A. Width
2285.71 (Dosing Area) / 145.45 (Dosing A. Length) = 15.71 (ft)

11a. Dosing Design Width & Length Adjustment
Design Width 14.00 ft Adjusted Dosing Length 163.27 ft

12. Required Dripper Line
2285.71 (Dosing Area) / 12 (Drip line Spacing) = 2285.71 (ft)

13. Required Zones
163.27 (Dosing A. Length) / 80.00 (MCL+) = 2.04 (Theoretical) = 2 (Design Zones)

14. Zone Breakout Table

Maximum Recommended Bioline Lateral Length 300

	a.	b.	c.	d.	e.	f.	g.	h.	i.	j.	k.	l.	m.	n.	o.	p.
Zone No.	Zone Dosing Area (sqft)	Linear Ft. of Tubing (ft)	Longest Lateral (ft)	Dosing Flow Rate (gpm)	Number of Distal Ends	Field Flush Rate (gpm)	Required Total Flow (RTF) (gpm)	Field Flushing Head (ft)	Force Main Supply Line			Return Flush Line			Static Lift (ft)	Total Field Head Loss (TFHL)
									Pipe Dia. (in)	Len. of Run (ft.)	Head Loss (ft)	Pipe Dia. (in)	Len. of Run (ft.)	Head Loss (ft)		
Zone 1	1120.0	800.0	160.0	4.1	5.0	8.0	12.1	20.0	1.049	220	17.3	1.049	220	8.0	10	55.34
Zone 2	1120.0	800.0	160.0	4.1	5.0	8.0	12.1	20.0	1.049	220	17.3	1.049	220	8.0	10	55.34
Zone 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0			0.0		0.00
Zone 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0			0.0		0.00
Zone 5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0			0.0		0.00
Zone 6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0			0.0		0.00

Note: (14c) Longest lateral may be looped one or more times and is a function of: (7) contour length, Bioline lateral length, #of distal ends, #of zones and (10) dosing area length.

15. Max Required Total Flow: 12.1 (Largest RTF Based on 14g.)

16. Max Total Field Head Loss: 55.3 (Largest TFHL Based on 14p.)

17. Headworks Head Loss: 13 ft

18. Miscellaneous Head Loss: 14 ft

19. Design Total Dynamic Head: 83.0 ft

20. Pump Data: MINIMUM Pump Specifications

STA-RITE S.T.E.P. Plus D Series 20DOM05121 Pump Model Selected
0.5 HP 1 Phase 115 Volts 12.1 GPM @ 115.0 FT.
Note: Selected pump must produce 115 ft @ 12gpm or 35 gpm for filter flush depending on filter model. (auto-flush units only)

21. Dosing Schedule

Peak Flow Adjustment 4.00 Minutes

Peak					Average			
Total Run Time:	117.1	Minutes			Total Run Time	78.0	Minutes	
Total Rest Time:	1322.9	Minutes			Total Rest Time	1362.0	Minutes	
Peak								
Zone 1	4.1	GPM	12.0	Min/Dose	49.2	Gal/Dose	4.9	Cycles/Day
Zone 2	4.1	GPM	12.0	Min/Dose	49.2	Gal/Dose	4.9	Cycles/Day
Zone 3	0.0	GPM		Min/Dose	0.0	Gal/Dose	0.0	Cycles/Day
Zone 4	0.0	GPM		Min/Dose	0.0	Gal/Dose	0.0	Cycles/Day
Zone 5	0.0	GPM		Min/Dose	0.0	Gal/Dose	0.0	Cycles/Day
Zone 6	0.0	GPM		Min/Dose	0.0	Gal/Dose	0.0	Cycles/Day
Avg								
Zone 1	4.1	GPM	8.0	Min/Dose	32.8	Gal/Dose	4.9	Cycles/Day
Zone 2	4.1	GPM	8.0	Min/Dose	32.8	Gal/Dose	4.9	Cycles/Day
Zone 3	0.0	GPM	0.0	Min/Dose	0.0	Gal/Dose	0.0	Cycles/Day
Zone 4	0.0	GPM	0.0	Min/Dose	0.0	Gal/Dose	0.0	Cycles/Day
Zone 5	0.0	GPM	0.0	Min/Dose	0.0	Gal/Dose	0.0	Cycles/Day
Zone 6	0.0	GPM	0.0	Min/Dose	0.0	Gal/Dose	0.0	Cycles/Day

Portion of Peak Daily Flow 67%

Notes:
Bioline 0.62 gph and 2 fps flush velocity
Peak Flow Cycle Adjustment should be between 2 and 4 minutes. Higher values could result in damage to the drain field.

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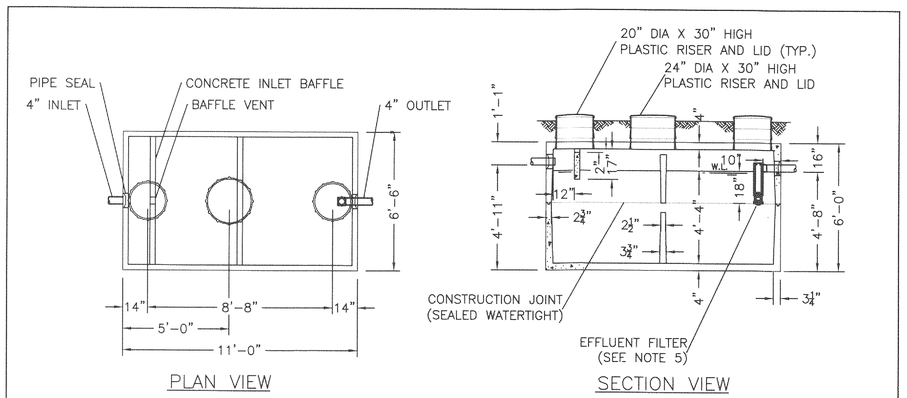

NOTES:

1. REINFORCED PRECAST CONCRETE TO HAVE A COMPRESSIVE STRENGTH OF 5000 PSI @ 28 DAYS.
2. PRECAST CONCRETE TANK SHALL MEET OR EXCEED SPECIFICATIONS AS SET BY O.A.C. RULE 3701-293-11.
3. CONCRETE JOINT SEALANT CONFORMS TO ASTM C-990.
4. TANK SEALS CONFORM TO ASTM C-923.
5. EFFLUENT FILTER RETAINS SOLIDS GREATER THAN 1/16" AND CONFORMS TO ASTM C-1227.
6. STAMP OR LABEL TOP OF TANK AS FOLLOWS:
MACK INDUSTRIES LOGO
2000 GAL. TANK CAPACITY
DATE OF MANUFACTURE

STATE APPROVAL PENDING

DUAL COMPARTMENT 2000 GALLON SEPTIC TANK

O.D.H. 2007 COMPLIANCE, OAC RULE 3701-29-11

DRAWN BY: CJ	SCALE: 1/4"=1'-0"	DRAWING NO.:
DATE: 4/5/07	REV:	D 1000 GAL

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13087

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SITE PLAN
10154 COURTNEY LN., KIRTLAND, OHIO 44060
S/L 3 COURTNEY LANE SUBDIVISION VOL. 51 PG. 91
YAEGER RESIDENCE

DRAWN WSO
CHECKED DWN
DATE NOV. 25, 2013
SCALE NONE
JOB NO. 13087
SHEET 3/3 OF SHEETS