SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services Division of Health Engineering, 10 SHS (207) 287-5672 Fax: (207) 287-3165

PROPERTY LOCATION

>>CAUTION: PERMIT REQUIRED - ATTACH IN SPACE BELOW<<

City, Town, or Plantation: **Augusta** PF 7/18/16

Street or Road: **541 Riverside Drive**

Subdivision, Lot #: 6-45

OWNER/APPLICANT INFORMATION

Name (last, first, MI): **Land Lease Ventures I** ☑ Owner ☐ Applicant

Mailing Address of Applicant: **Karen Iria, 541 Riverside Drive**, **Augusta, ME 04330**

Daytime Tel.#: 623-3726

AUGUSTA PERMIT #7260 TOWN COPY

Date Permit Issued: 7/19/16 $250.00 fee

Mary R. Gallant 15.00 LPI # 850

Owner or Applicant Statement

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing inspector to deny a Permit

Richard Crohan 7/15/16

Signature of Owner or Applicant — Date

CAUTION: INSPECTION REQUIRED

I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposa rules Application. _____ (1st) date approved

Local Plumbing Inspector Signature — (2nd) date approved

PERMIT INFORMATION

TYPE OF APPLICATION

- ☐ 1. First Time System
- ☑ 2. Replacement System

Type replaced: **unk**

Year installed: **unk**

- ☐ 3. Expanded System
  - ☐ a. <25% expansion
  - ☐ b. >25% expansion
- ☐ 4. Experimental System
- ☐ 5. Seasonal Conversion

SIZE OF PROPERTY

+/-36 ☐ SQ.FT. ☑ ACRES

SHORELAND ZONING

☐ Yes ☑ No

THIS APPLICATION REQUIRES

- ☑ 1. No Rule Variance
- ☐ 2. First Time System Variance
  - ☐ a. Local Plumbing Inspector Approval
  - ☐ b. State & Local Plumbing Inspector Approval
- ☐ 3. Replacement System Variance
  - ☐ a. Local Plumbing Inspector Approval
  - ☐ b. State & Local Plumbing Inspector Approval
- ☐ 4. Minimum Lot Size Variance
- ☐ 5. Seasonal Conversion Prmit

DISPOSAL SYSTEM TO SERVE

- ☐ 1. Single Family Dwelling Unit, No.of Bdrms:
- ☑ 2. Multiple Family Dwelling, No. of Units: 22
- ☐ 3. Other: Specify

Current Use ☐ Seasonal ☑ Year Round ☐ Undeveloped

DISPOSAL SYSTEM COMPONENTS

- ☑ 1. Complete Non-engineered System
- ☐ 2. Primitive System 9graywater & alt. toilet)
- ☐ 3. Alternative Toilet, specify:
- ☐ 4. Non-engineered Treatment Tank (only)
- ☐ 5. Holding Tank, _____ gallons
- ☐ 6. Non-engineered Disposal Field (only)
- ☐ 7. Separated laundry System
- ☐ 8. Complete Engineered System (2000 gpd or more)
- ☐ 9. Engineered Treatment Tank (only)
- ☐ 10. Engineered disposal field (only)
- ☐ 11. Pre-treatment, specify:
- ☐ 12. Miscellaneous components

TYPE OF WATER SUPPLY

☐ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private ☑ 4. Public ☐ 5. Other

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

- ☑ 1. Concrete **10k exist.**
  - ☑ a. Regular
  - ☐ b. Low Profile
- ☐ 2. Plastic
- ☐ 3. Other:

CAPACITY: **6,500 (new)** / **16500 total**

DISPOSAL FIELD TYPE & SIZE

- ☐ 1. Stone Bed ☐ 2. Stone Trench
- ☑ 3. Proprietary Device
  - ☐ a. cluster array ☑ c. Linear
  - ☑ b. regular load ☐ d. H-20 load
- ☐ 4. Other:

Size: **6,600** ☑ sq. ft. ☐ lin. ft.

GARBAGE DISPOSAL UNIT

☑ 1. No ☐ 2. Yes ☐ 3. Maybe

If Yes or Maybe, specify one below:

- ☐ a. Multi-compartment tank
- ☐ b. _____ tanks in series
- ☐ c. Increase in tank capacity
- ☐ d. Filter on Tank Outlet

DESIGN FLOW

1900 gallons per day

BASED ON:

- ☐ 1. Table 501.1 (dwelling unit(s))
- ☐ 2. Table 501.2 (other facilities)

SHOW CALCULATIONS for other facilities

See attached

- ☑ 3. Section 503.0 (meter readings)

ATTACH WATER METER DATA

SOIL DATA & DESIGN CLASS

PROFILE	CONDITION	DESIGN
12(2)	**AIII**	

at Observation Hole # **2**

Depth **36"** of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

- ☐ 1. Medium---2.6 sq. st. / gpd
- ☑ 2 Medium---Large 3.3 sq. f.t/gpd
- ☐ 3 Large---4.1 sq. ft. / gpd
- ☐ 4 Extra Large---5.0 sq. ft / gpd

EFFLUENT/EJECTOR PUMP

- ☐ 1. Not Required
- ☐ 2. May Be Required
- ☑ 3. Required

Specify only for engineered systems: DOSE: _____ gallons

LATITUDE AND LONGITUDE

at center of disposal area

Lat. **44 d** **20 m** **948 s**

Lon. **69 d** **44 m** **788 s**

if g.p.s., state margin or error: _____

SITE EVALUATOR STATEMENT

I certify that on 16-Jun-16 (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the State of Maine Subsurface Wastewater Disposal rules (10-144A CMR 241).

Stephen P. Robbins — **S.E. # 301** — **6/18/2016**

Site Evaluator Signature

Stephen P. Robbins 377-6707 narrowspd@aol.com

Note: Changes to or deviations from the design should be confirmed with the Site Evaluator

HHE-200 Rev. 8/11

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

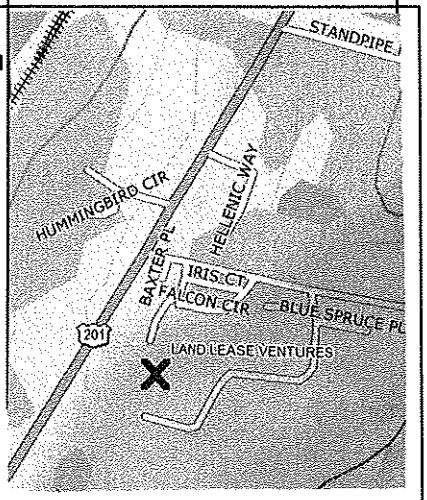
Maine Dept.Health & Human Services
Division of Health Engineering, 10 SHS
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation: **Augusta**

Street, Road Subdivision: **541 Riverside Drive,**

Owner's Name: **Land Lease Ventures LLC**

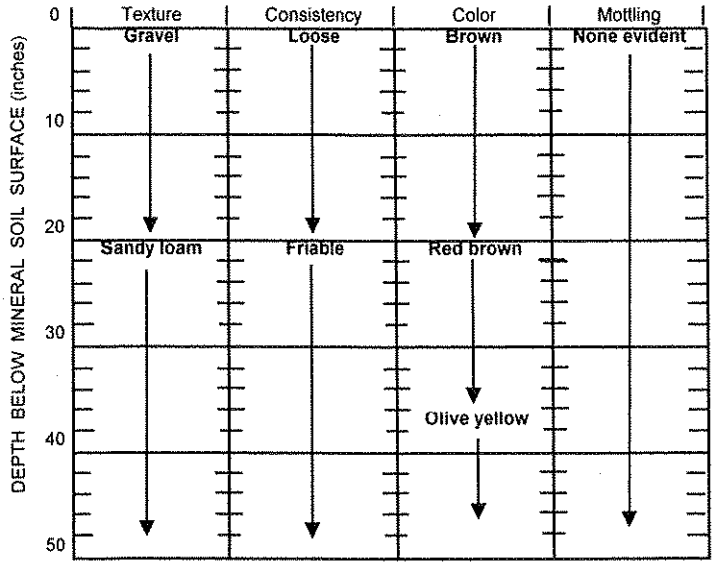
~~**SITE PLAN**~~ ~~Scale 1" = Ft.~~ ~~or as shown~~ NORTH



SOIL DESCRIPTION AND CLASSIFICATION (LOC

Observation Hole **#3** ☑ Test Pit ☐ Boring

1 " Depth of Organic Horizon Above Mineral Soil

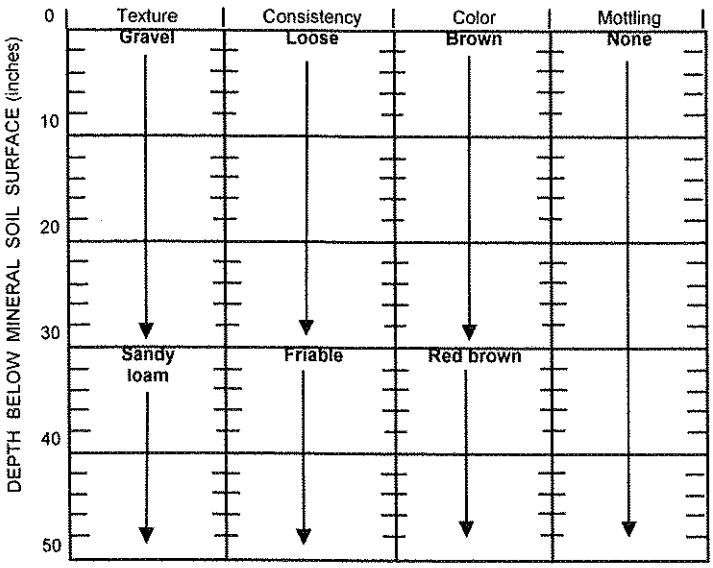


Soil Classification		Slope	Limiting Factor	
12(2)	**B**			☐ Ground Water
Profile	Condition	**0%**	**+48"**	☐ Restrictive Layer
				☐ Bedrock
				☐ Pit Depth

SOIL DESCRIPTION AND CLASSIFICATION (LOCATION OF OBSERVATION HOLES SHOWN ABOVE)

Observation Hole **#1** ☑ Test Pit ☐ Boring

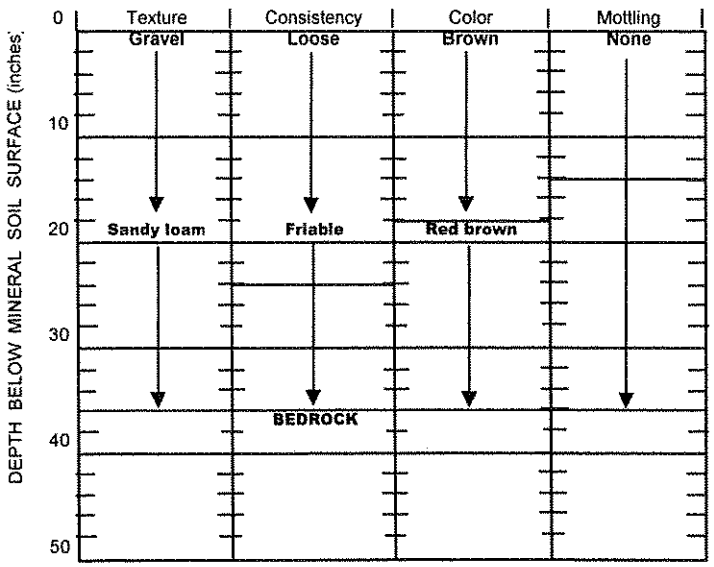
0 " Depth of Organic Horizon Above Mineral Soil



Soil Classification		Slope	Limiting Factor	
12(2)	**C**			☐ Ground Water
Profile	Condition	**0%**	**+48"**	☐ Restrictive Layer
				☐ Bedrock
				☐ Pit Depth

Observation Hole **#2** ☑ Test Pit ☐ Boring

0 " Depth of Organic Horizon Above Mineral Soil



Soil Cllassification		Slope	Limiting	
12(2)	**AIII**			☐ Ground Water
Profile	Condition	**0%**	**36"**	☑ Restrictive Layer
				☐ Bedrock
				☐ Pit Depth

Stephen P. Robbins — Site Evaluator Signature

S.E. # **301**

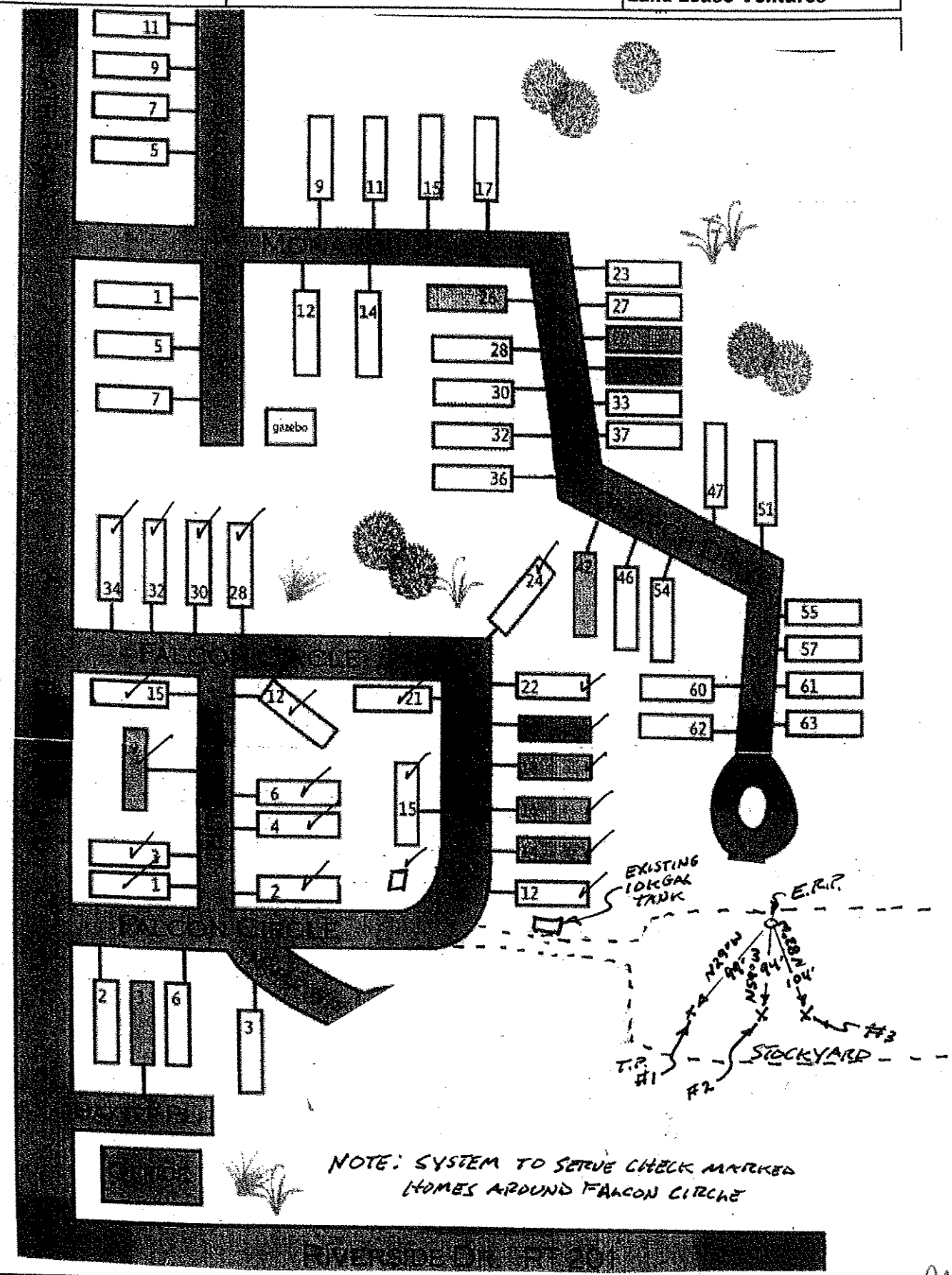
Date **6/18/2016**

HHE-200 Rev 7/97

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept.Health & Human Services
Division of Health Engineering, 10 SHS
(207) 287-5672 Fax: (207) 287-3165

Town, City, Plantation	Street, Road, Subdivision	Owner or Applicant Name
Augusta	**541 Riverside Drive**	**Land Lease Ventures**

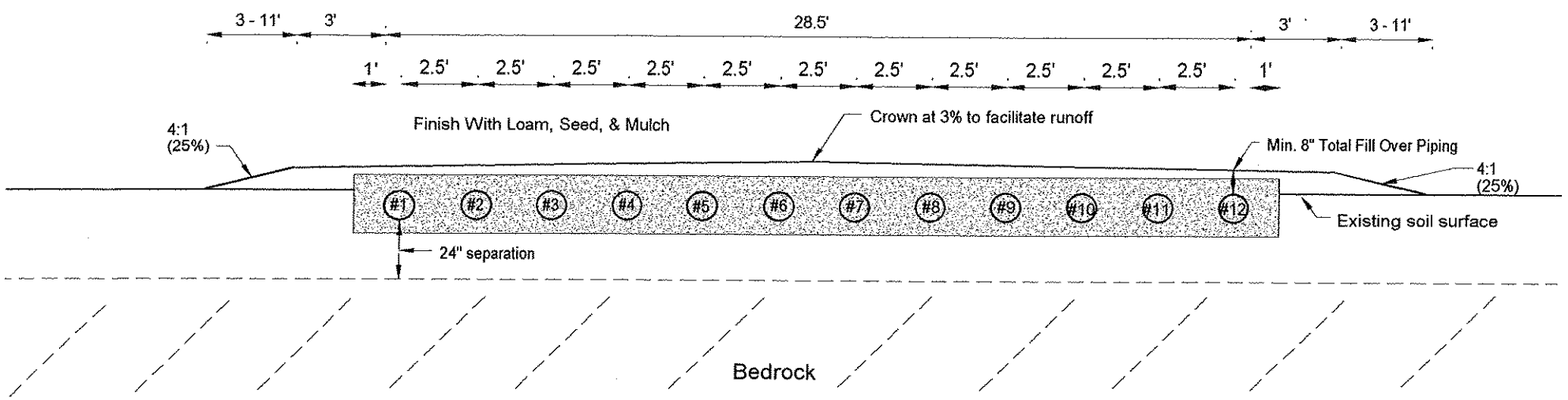


Augusta	541 Riverside Drive	Land Lease Ventures

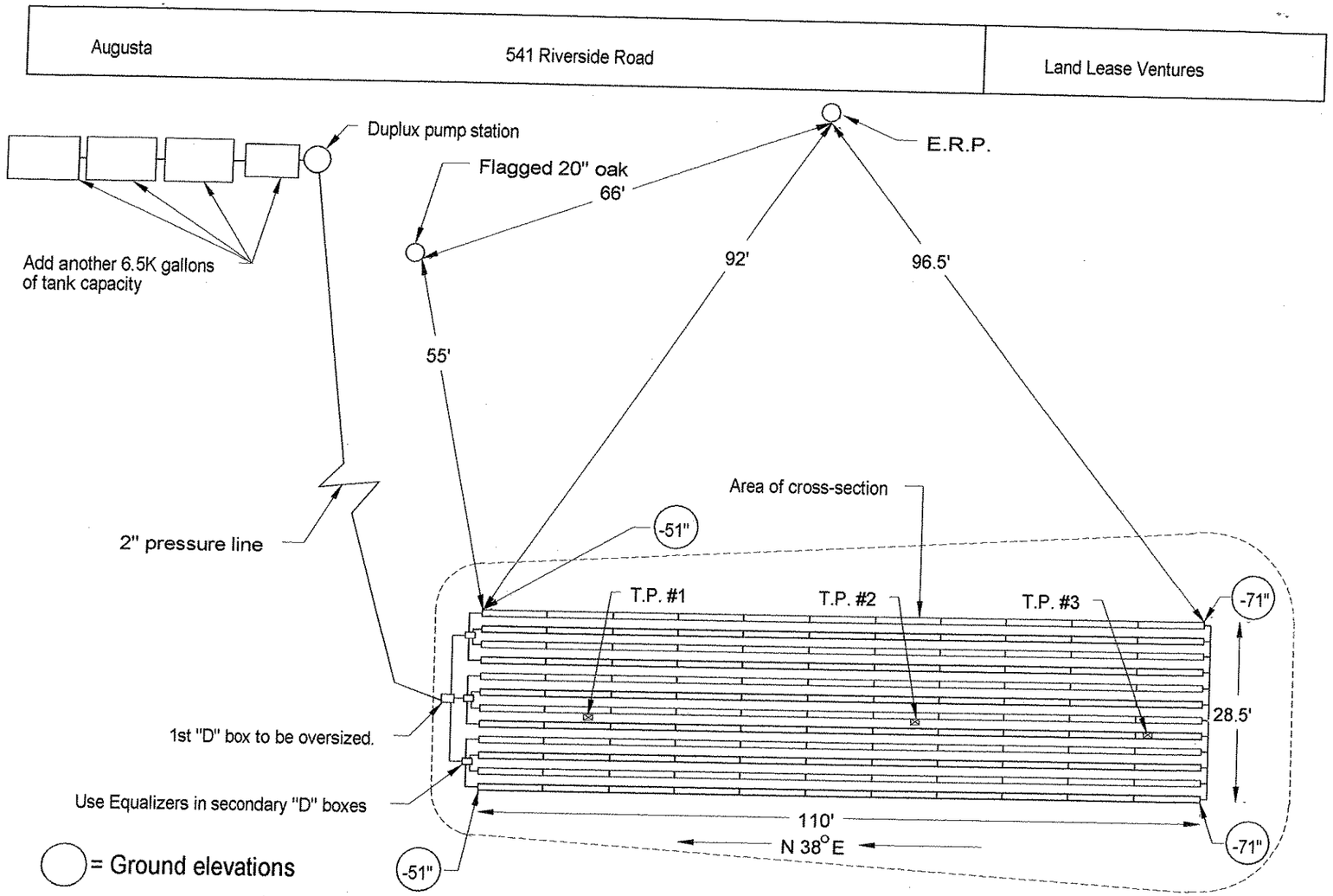
Notes: System will require 1320' of Infiltrator ATL type drainage pipe.
Pipe to be set in bed of coarse sand 6" above and below, and 1' around outside of pipe. Use manufacturer installation manual.
Provide vents at four corners.

Infiltrator ATL

12"



Stephen P. Robbins S.R. S.E. #301 18 June 16



Stephen P. Robbins S.R

S.E. #301

18 June 16

Town **Augusta** Address **541 Riverside Drive** Owner **Land Lease Ventu**

ATTACHMENT TO HHE-200

Caution: Before starting, contractor must insure fill depth amounts match with elevations given. Contact designer immediately with any discrepancies.

Notes:

1. Construction to conform to "State of Maine Subsurface Wastewater Disposal Rules".
2. Property lines shown are as provided by owner, agent, or municipality. No guarantee of accuracy is implied. Actual property lines must be confirmed by survey.
3. Remove organic material and **roto-till** area under drain-field and fill extensions.
4. Unless otherwise specified, all fill will be coarse sand to a gravelly coarse sand. See Sec. 804.0 in the State of Maine Subsurface Waste-water Disposal Rules for further clarification of fill requirements. In 8" lifts, compacted as placed. First lift to be thoroughly mixed with original soil, to form a transition horizon.
5. Septic tanks and pump stations shall be installed water-tight to prevent infiltration of ground and surface water.
6. Force mains, pump stations, and or gravity piping subject to freezing shall be adequately insulated.
7. Unless otherwise specified, septic tank to be located by contractor; at minimum; 8' to proposed or existing home and or buildings, 10' to property line & water supply line, 50' to all wells, 100' and shoreline.
8. A septic tank outlet filter is recommended.
9. If replacement system with new tank, existing tank or cesspool to be filled with soil or removed. If existing tank is to be utilized, thoroughly inspect & replace outlet baffle with plastic filter.
10. Unless otherwise specified, this plan does not allow the placement of pumps between the waste-water source and the septic tank.
11. Unless otherwise specified, disposal area to existing or proposed buildings setback is 20'.
12. Water from gutters, driveways, walks, and other surface water to be diverted away from system.
13. Loam, seed and mulch all disturbed areas to prevent erosion and facilitate runnoff.
14. Unless otherwise specified, keep traffic heavier than lawn tractor away from all components of system.
15. Keep sanitary napkins, cigarette butts, coffee grounds, paper towels, grease, and nonbiodegradables out of system.
16. Many times it is impossible to locate water supplies. Property owner assumes responsibility of proper setback to any unknown water supplies.
17. Discharge from water treatment equipment and residential foundation/floor drains is not considered waste-water and must not be plumbed into septic system. This flow should be diverted into a separate drywell (disposal area that does not require design or permit). A floor drain used for anything other than fresh-water disposal does require design and permit.
18. Plumbing fixtures must be strictly maintained to insure excess water does not enter septic system. Excess water can lead to premature clogging and total failure of disposal area.
19. Venting of disposal area is not required, but can facilitate biological action in disposal area.
20. Pumped systems will be equipped with audible high water alarm, wired to separate circuit as pump.
21. If a BK2000 Waste-Water Management system or any other Norweco products are included in this design, or SoilAir or other GeoMatrix products are included in this design; the designer may have a financial interest in the sale of these products. Owner is encouraged to research comparable products and make final choice. If owner chooses a competitors product, design will be revised to note said change at no charge.
22. Take 3 copies of the plan to your local plumbing inspector for required permit.
23. Install tank with top of outlet pipe no lower than **-16"** to avoid pumping.

Stephen P. Robbins **SE # 301** Date: **6/18/2016**

S.R.

Attachment to HHE-200

Land Lease Ventures, 541 Riverside Drive, Augusta

Section 4G – Meter readings

The proposed system will serve 22 Mobile home sites located around Falcon Circle. The attached readings were gathered and organized during a previous site evaluation (Coffin). Readings are taken every 30 days. The four years from May 2008 thru July 2012 were measured. The readings are in units of 750 gallons, and were considered by using the beginning and ending units and showing the days covered. Two homes were given a 48 gallon per day rating because the readings were nonexistent or were abnormally low. The 90th percentile GPD was calculated at 1826. (1900 was used)

Stephen P Robbins, SE #301

	7/12	6/12	5/12	4/12	3/12	2/12	1/12	12/11	11/11	10/11	9/11	8/11	7/11	6/11	5/11	4/11	3/11	2/11	1/11	12/10	11/10	10/10	9/10	8/10
7 Falcon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12 Falcon	100	99	98	98	97	97	97	85	84	84	83	82	81	80	79	79	78	77	77	76	76	75	74	73
14 Falcon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	57	56	56	55	55	54	54	53	52
15 Falcon	137	133	129	124	120	116	113	110	108	105	102	97	93	89	85	81	77	74	69	67	65	61	58	55
16 Falcon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18 Falcon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	236	236	236	236	236	236	236	235	234	232
20 Falcon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21 Falcon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	305	305	305	305	305	305	305	305	305	304
22 Falcon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	37	37	37	37	37	37	37	37
24 Falcon	416	414	411	408	405	400	400	398	396	392	390	384	380	376	273	371	267	365	363	361	360	355	352	349
28 Falcon	239	237	235	233	231	229	227	225	223	220	218	216	214	211	209	207	204	202	200	199	198	196	194	192
30 Falcon	288	286	284	281	278	276	46	44	41	39	36	34	32	32	32	32	32	32	32	31	31	31	31	31
32 Falcon	169	167	165	163	161	159	156	154	152	149	147	145	143	143	143	143	143	143	143	143	143	143	143	143
34 Falcon	258	255	253	250	248	245	243	240	238	236	233	231	229	227	225	222	219	217	215	214	212	210	207	205
1 Iris	83	825	82	81	81	80	80	79	78	78	77	76	75	75	74	73	72	72	71	71	70	70	69	68
2 Iris	354	352	351	349	347	346	344	342	341	339	338	336	334	332	330	329	327	325	323	322	322	320	319	318
3 Iris	134	131	127	123	119	116	112	109	104	100	96	92	88	84	80	77	75	73	68	66	65	62	59	56
4 Iris	111	109	106	103	100	97	94	91	88	85	78	72	67	64	61	58	55	53	50	48	47	46	42	39
6 Iris	62	61	60	58	57	56	54	53	52	51	50	49	48	46	45	44	43	42	40	39	39	38	37	36
9 Iris	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	156	153	152	151	150	149	148	147	146
12 Iris	138	135	131	128	125	123	120	117	115	113	111	108	106	103	101	99	97	94	91	90	90	88	86	84
16 Iris	189	187	186	185	184	182	181	180	179	178	177	175	173	172	171	170	169	168	167	166	166	165	164	163

7/10	6/10	5/10	4/10	3/10	2/10	4/30/09	3/31/09	2/27/09	1/30/09	12/31/08	12/1/08	10/31/08	10/1/08	9/2/08	7/30/08	7/1/08	6/1/08	5/1/08
0	0	0	0	0	0	145	142	140	137	134	132	130	128	127	126	124	123	117
72	72	71	71	70	69	59	59	58	57	56	55	54	53	52	51	50	50	49
51	51	51	51	50	49	44	43	42	42	40	39	39	38	38	38	38	37	35
50	46	44	42	37	32	39	34	30	26	22	18	15	12	8	4	198	194	189
0	0	0	0	0	0	0	0	0	0	0	19	18	18	17	15	14	14	13
230	228	228	227	226	224	210	210	209	208	207	206	205	204	202	201	199	197	194
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
302	298	297	285	292	290	250	246	242	239	236	233	229	226	223	218	215	212	207
37	37	37	37	36	36	0	57	57	57	67	56	56	56	66	54	54	54	54
345	342	340	338	335	332	286	282	277	274	270	267	263	260	264	248	243	240	236
190	188	187	186	184	182	162	160	0	0	0	0	0	0	0	0	0	0	0
31	29	29	28	26	26	10	9	8	7	5	5	3	2	147	147	147	147	147
143	143	143	143	142	142	128	125	124	123	121	119	113	108	102	99	98	97	95
203	200	199	198	196	193	168	166	163	161	159	157	155	153	151	149	147	145	143
68	67	67	66	65	65	60	59	59	58	58	56	56	55	54	53	52	51	51
316	315	314	313	312	311	293	290	288	287	285	284	283	282	281	279	275	275	271
52	48	46	46	45	41	36	0	0	0	0	0	0	0	0	0	0	0	0
36	34	32	31	28	26	0	0	0	0	4	3	2	1	0	158	158	158	146
35	34	34	33	31	30	9	8	6	5	4	3	2	1	0	101	99	97	95
144	142	141	141	140	138	123	121	120	118	117	115	113	111	109	30	28	26	25
82	79	78	77	75	73	48	46	43	41	39	37	36	34	32	135	134	133	132
161	160	159	159	158	157	145	144	143	142	141	140	138	137	136				

Water Use Records and Percentile Calculations

rev. 02/2004

Mainely Investments, LLC
541 Riverside Drive, Augusta, ME

Location	units	gallons	# days	avg. gpd	# readings
7 Falcon	28	21000.00	360	58.33	12.00
12 Falcon	51	38250.00	1290	29.65	43.00
14 Falcon	23	17250.00	870	19.83	29.00
15 Falcon	133	99750.00	1200	83.13	40.00
16 Falcon	6	4500.00	240	18.75	8.00
18 Falcon	42	31500.00	870	36.21	29.00
20 Falcon	0	0.00	0	46.00	0.00
21 Falcon	98	73500.00	870	84.48	29.00
22 Falcon	1	750.00	420	48.00	14.00
24 Falcon	180	135000.00	1290	104.65	43.00
28 Falcon	57	42750.00	900	47.50	30.00
30 Falcon	21	15750.00	720	21.88	24.00
32 Falcon	74	55500.00	1290	43.02	43.00
34 Falcon	115	86250.00	1290	66.86	43.00
1 Iris	32	24000.00	1290	18.60	43.00
2 Iris	83	62250.00	1290	48.26	43.00
3 Iris	98	73500.00	900	81.67	30.00
4 Iris	85	63750.00	900	70.83	30.00
6 Iris	32	24000.00	900	26.67	30.00
9 Iris	61	45750.00	840	54.46	28.00
12 Iris	113	84750.00	1290	65.70	43.00
15 Iris	57	42750.00	1290	33.14	43.00

Daily	Weekly	Monthly	Quarterly
60th percentile	85th percentile	90th percentile	95th percentile
1541	1761	1826	1857

	units	gallons	avg. gpd
total	1390.00	1042500.00	34750
average	63.18	47386.36	50.44

To use: Enter the date, number of days, and cubic feet. The gallons and percentiles will be calculated automatically by the spreadsheet. To add more readings, simply insert additional rows into the spreadsheet. Choose the percentile which corresponds to the reading frequency: daily, weekly, monthly, or quarterly.

1 unit = 750 gpd

90th percentile avg. gpd

avg gpd 90 perc	number of trailers	
83	22	1826