

DEPARTMENT OF INSPECTIONS, LICENSES & PERMITS 3430 COURT HOUSE DRIVE ELLICOTT CITY, MD 21043 PERMITS (410) 313-2455 INSPECTIONS (410) 313-1850	<b>HOWARD COUNTY          RESIDENTIAL          HEATING-VENTILATION-AIR          CONDITIONING AND          REFRIGERATION PERMIT          APPLICATION</b>	HVACR PERMIT # <u>M09001039</u> BUILDING PERMIT # <u>B 09002619</u>
---	---	---

BUILDING ADDRESS: <u>4219 Cecille Ave Ellicott City MD 21043</u> SUITE/APT: SUBDIVISION: CENSUS TRACT: <u>6620</u> SECTION: AREA: LOT: TAX MAP: <u>25</u> PARCEL: BLOCK: ZONE: <u>R-ES</u>	OWNERS NAME: <u>Roger TARR</u> ADDRESS: <u>5006 AVOCA AVE</u> CITY: <u>Ellicott City</u> STATE: <u>MD</u> ZIP CODE: <u>21043</u> HOME PHONE: <u>410 513 9916</u> WORK PHONE:
PROPERTY ID: MAP COORDINATES: TYPE OF IMPROVEMENTS: USE:	

	<u>CHECK ONE</u>	<u>HOW MANY</u>	COMPANY NAME: <u>Tri State Home Services</u>
SINGLE FAMILY DWELLING ZONES	<input checked="" type="checkbox"/>	<u>1</u>	LICENSEE NAME: <u>Steve Norwood</u> ADDRESS: <u>1560-F Tilco DR</u> CITY: <u>Frederick</u>
SINGLE FAMILY TOWNHOUSE ZONES	<input type="checkbox"/>	---	STATE: <u>MD</u> ZIP CODE: <u>21704</u>
MULTI-FAMILY / HOTEL/MOTEL UNITS	<input type="checkbox"/>	---	PHONE: <u>301 624 0970</u> HVACR LICENSE NO: <u>4551</u>

New

Heating and Air Conditioning  Heating System Only  Other Work (Describe):

Geo Thermal

Replacement

Heating Additions and Alterations

Air Conditioning  Heating

Heating and Air Conditioning  Air Conditioning

Heating and Air Conditioning

Zones <u>1</u> Permit Fee = # of Zones x \$40 = <u>40</u> Technology Fee (10% of Permit Fee) = <u>4</u> Plus Application Fee <u>\$50</u> Total Fees Due = <u>94</u>	Units Permit Fee = # of Units x \$80 = _____ Technology Fee (10% of Permit Fee) = _____ Plus Application Fee \$50 _____ Total Fees Due = <u>\$50</u>
---	--

I HAVE CAREFULLY EXAMINED AND READ THIS APPLICATION AND KNOW IT IS TRUE AND CORRECT. THE WORK DESCRIBED HEREIN WILL BE PERFORMED BY A STATE HVACR LICENSED PERSON(S), AND ALL WORK WILL BE PERFORMED IN COMPLIANCE WITH APPLICABLE CODES AND STANDARDS OF HOWARD COUNTY THE STATE OF MARYLAND.

Steve Norwood 11/30/09  
 SIGNATURE OF LICENSEE DATE  
 PRINT NAME OF LICENSEE

Validation	
Check Number:	<u>1066</u>
Cash:	_____
Receipt Number:	<u>191877</u>

Make check payable to: DIRECTOR OF FINANCE OF HOWARD COUNTY

Word doc: HVAC APPLICATION - JUNE 2004

Steve Norwood 12/22/09  
 SIGNATURE DATE  
HCAD

**Project Information**

For: Tarr

**Design Information**

	<b>Htg</b>	<b>Clg</b>		<b>Infiltration</b>	
Outside db (°F)	0	95	Method		Simplified
Inside db (°F)	70	75	Construction quality		Average
Design TD (°F)	70	20	Fireplaces		0
Daily range	-	M			
Inside humidity (%)	30	50			
Moisture difference (gr/lb)	28	28			

**HEATING EQUIPMENT**

Make Water Furnace  
Trade NDV049  
Model EER 14.8, COP 3.4

**COOLING EQUIPMENT**

Make Water Furnace  
Trade NDV049  
Cond EER 14.8, COP 3.4  
Coil

Efficiency 3.68 COP  
Heating input 28800 Btuh  
Heating output 28800 Btuh  
Temperature rise 19 °F  
Actual air flow 1400 cfm  
Air flow factor 0.035 cfm/Btuh  
Static pressure 0.00 in H2O  
Space thermostat

Efficiency 16.52 EER  
Sensible cooling 25200 Btuh  
Latent cooling 10800 Btuh  
Total cooling 36000 Btuh  
Actual air flow **1400** cfm  
Air flow factor 0.059 cfm/Btuh  
Static pressure 0.00 in H2O  
Load sensible heat ratio 0.87

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
great room	400	6870	6013	241	<b>352</b>
kitchen	156	1911	2286	67	<b>134</b>
dinning	224	2566	2135	90	<b>125</b>
den	196	2864	1940	101	<b>114</b>
1st fl hall	180	1192	463	42	<b>27</b>
pr	36	0	0	0	<b>0</b>
laundry	36	753	257	26	<b>15</b>
basement	1128	7281	585	256	<b>34</b>
mbr	224	4527	3645	159	<b>214</b>
br 1	196	4182	2494	147	<b>146</b>
br 2	99	2815	1531	99	<b>90</b>
hall bath	54	794	369	28	<b>22</b>
master bath	156	3304	1907	116	<b>112</b>
closet	12	0	0	0	<b>0</b>
2nd Fl Hall	39	0	0	0	<b>0</b>
basement bath	30	832	259	29	<b>15</b>

*Bold/italic values have been manually overridden*

Printout certified by ACCA to meet all requirements of Manual J 8th Ed.

basement closet	30	0	0	0	0
storage	70	0	0	0	0
Entire House	3266	39893	23884	1400	<b>1400</b>
Other equip loads		5947	1699		
Equip. @ 1.00 RSM			25583		
Latent cooling			3936		
<b>TOTALS</b>	3266	45840	29520	1400	<b>1400</b>

*Bold/italic values have been manually overridden*

Printout certified by ACCA to meet all requirements of Manual J 8th Ed.



**wrightsoft**

Right-Suite Residential 6.0.119 RSR27852

2009-Dec-01 11:08:04

C:\Documents and Settings\Dan\My Documents\larr ellicot city.rpt Calc = MJ8 Orientation = SW

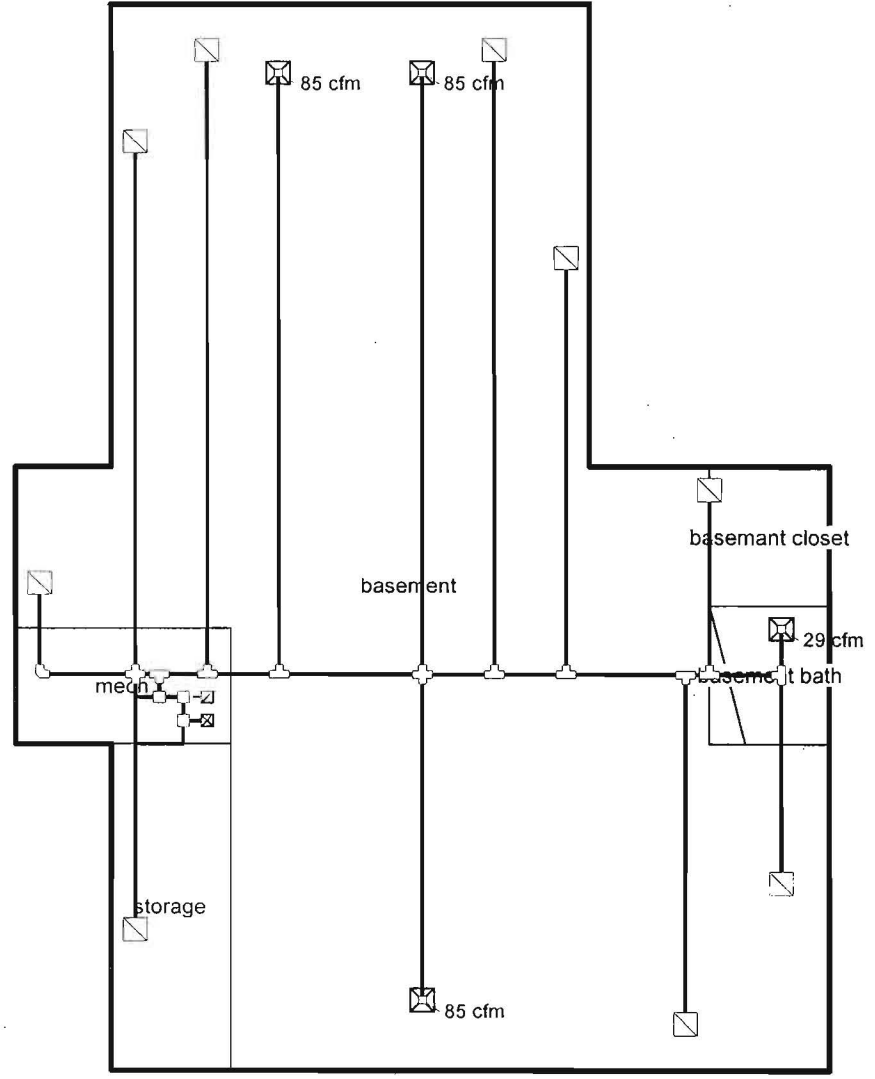
Page 2

M09001039

4219 College Ave  
Ellicott City MD 21043  
TriState Home Services  
Steve Norwood  
4551 - State License



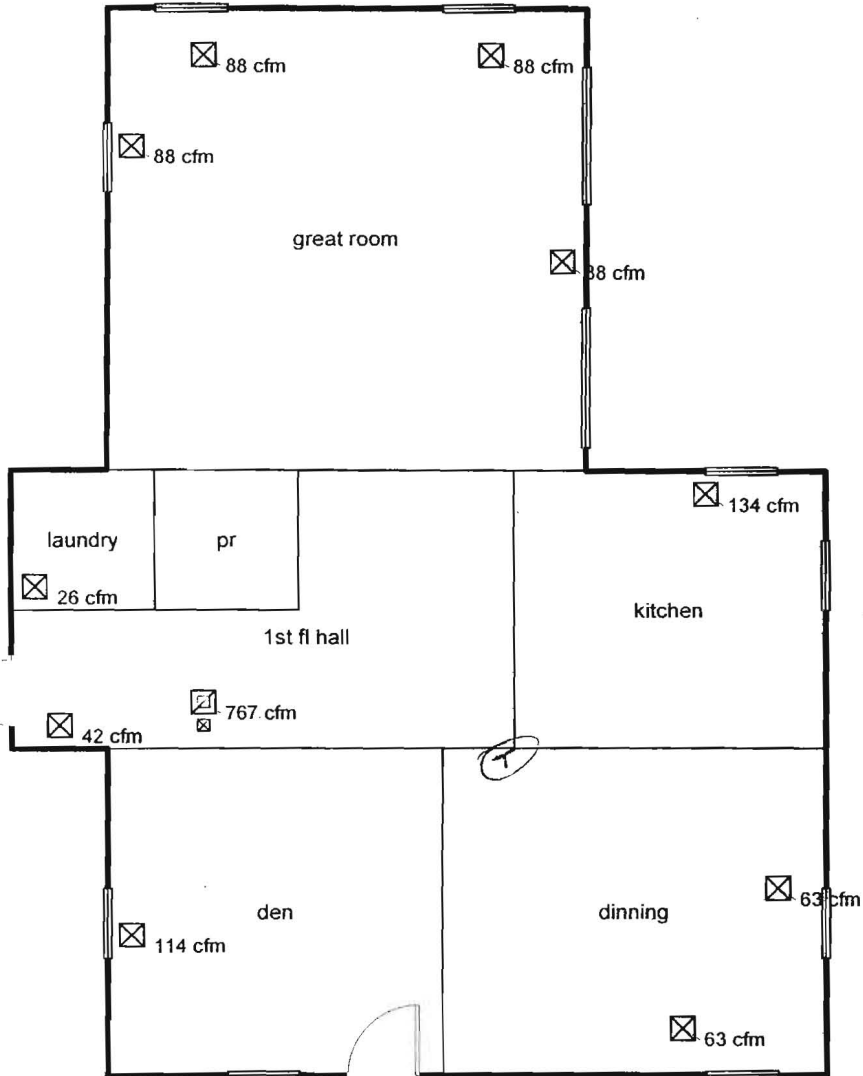
Sheet 1



Job #:  
Performed for:  
Tarr

Scale: 1/8" = 1'0"  
Page 1  
Right-Suite Residential  
6.0.119 RSR27852  
2009-Dec-01 11:20:05  
C:\Documents and Settings\Dan\My...

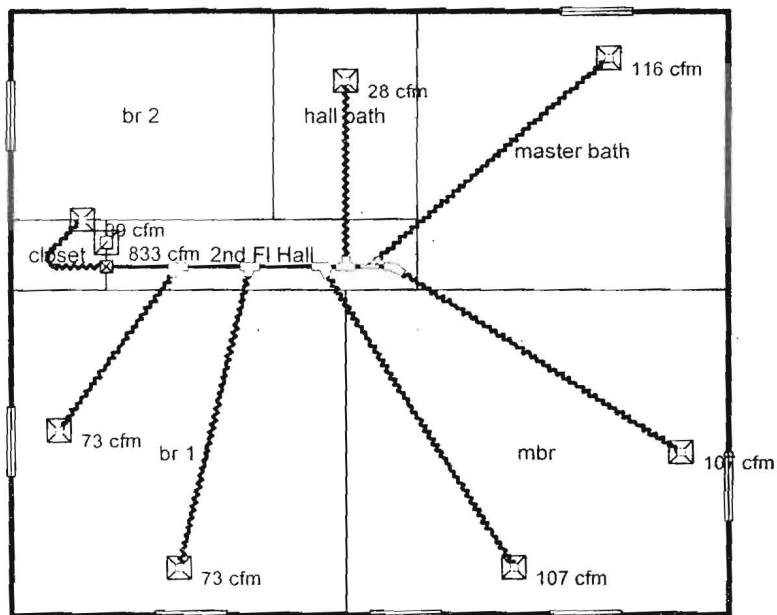
1st fl



Job #:  
Performed for:  
Tarr

Scale: 1/8" = 1'0"  
Page 2  
Right-Suite Residential  
6.0.119 RSR27852  
2009-Dec-01 11:20:05  
C:\Documents and Settings\DanWy...

2nd fl

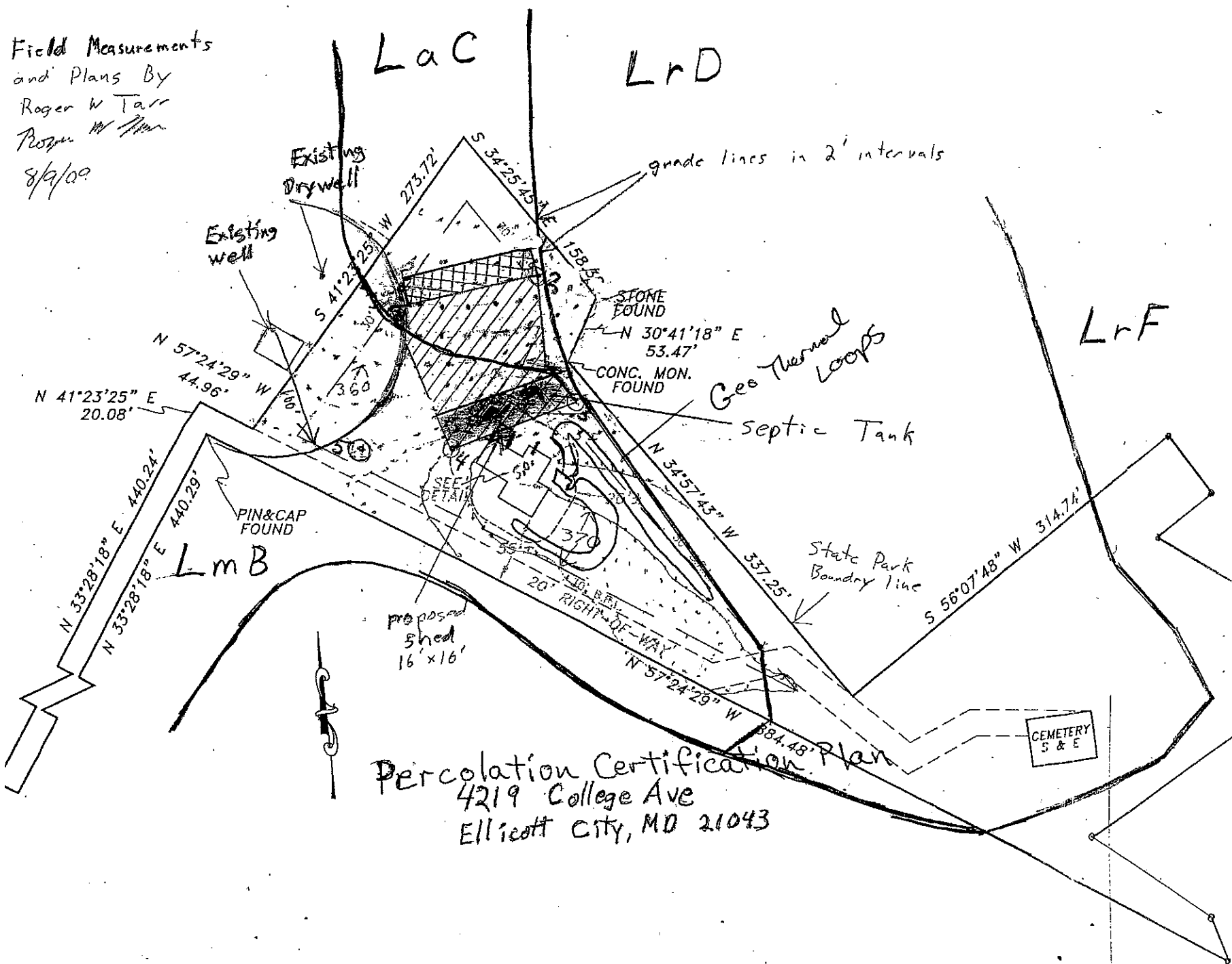


Job #:  
Performed for:  
Tarr

Scale: 1/8" = 1'0"  
Page 3  
Right-Suite Residential  
6.0.119 RSR27852  
2009-Dec-01 11:20:05  
C:\Documents and Settings\DanMy...

M09001039

Field Measurements  
and Plans By  
Roger W Tarr  
8/9/09



Percolation Certification  
4219 College Ave  
Ellicott City, MD 21043

**NOTES**

1. ALL EXISTING WELLS AND SEPTIC SYSTEMS WITHIN 100 FEET OF SUBJECT PROPERTY BOUNDARIES ARE REPRESENTED TO THE BEST OF MY KNOWLEDGE AND BELIEF.
2. TOPOGRAPHY ON THIS PLAT IS FROM HOWARD COUNTY GIS (2006) AND IS VERIFIED TO ACCURATELY REPRESENT THE RELATIVE ELEVATION CHANGES ON AND NEAR THE SUBJECT PROPERTY.
3. THE LOT SHOWN HEREON COMPLIES WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND DEPARTMENT OF ENVIRONMENT.
4. ANY CHANGES TO A PRIVATE SEWAGE EASEMENT SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
5. THIS AREA DESIGNATES A PRIVATE SEWAGE EASEMENT AS REQUIRED BY THE MARYLAND DEPARTMENT OF ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS EASEMENT ARE RESTRICTED. THIS EASEMENT SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWAGE EASEMENT. RECORDATION OF A REVISED SEWAGE EASEMENT SHALL NOT BE NECESSARY.
6. THE PURPOSE FOR THIS PERCOLATION CERTIFICATION PLAN IS TO ADJUST AND CONFIRM THE BOUNDARIES OF THE EXISTING SEPTIC EASEMENT IN SUPPORT OF A BUILDING PERMIT APPLICATION FOR A TOOL SHED ADDITION.
7. THE SEPTIC TANK AND TRENCHES WILL BE INSTALLED PRIOR TO HEALTH DEPARTMENT APPROVAL OF ANY BUILDING PERMIT APPLICATION.
8. THE SUBJECT PROPERTY WILL BE SERVED BY A PUBLIC WATER SOURCE.
9. PERC TEST LOCATIONS, AND THE ORIGINAL SEPTIC EASEMENT BOUNDARY, ARE BASED ON FIELD LOCATION OF TESTS 2 AND 3, AND THE DISTANCES RECORDED BY THE ENVIRONMENTAL SANITARIAN CONDUCTING THE TESTS.
10. HOUSE LOCATION IS BASED ON LOCATION SURVEY BY NTT (2009).

I CERTIFY THAT THE INFORMATION SHOWN HEREON IS BASED ON WORK PERFORMED BY ME OR BY MY DIRECTION, AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

*Roger W Tarr* 9/23/09  
(SIGNATURE) (DATE)

APPROVED FOR PUBLIC WATER AND PRIVATE SEWERAGE SYSTEMS  
HOWARD COUNTY HEALTH DEPARTMENT

(SIGNATURE) (DATE)

OWNER: Roger W Tarr  
DRAWN BY: NAME/DATE Roger W Tarr 9/23/09

Approved ~~Percolation~~ Plan  
Howard County Health Department  
*Roger W Tarr*  
Signature 12/22/09  
Date

\* Ground loop approved  
for location shown on plan  
See As-built for space  
location. Sept tanks ok.  
1"=100'

**Key**

- Elev
- Topo Lines
- ① perc tests passed
- original septic field
- added field
- removed field