

## Homeowner Agreement

### To Participate in Florida Onsite Sewage Nitrogen Reduction Strategies Study

Nitrogen is an important concern for water quality. Animals, crops, ecosystems, and human health can be adversely impacted by the presence of nitrogen in water supplies. The environmental effects of nitrogen on groundwater and surface water can ultimately lead to the degradation of surface waters in watershed systems that have strong groundwater/surface water interactions. Nitrogen that enters surface water bodies via these interactions can lead to algal blooms and eutrophication. These processes lead to oxygen depletion in surface waters which can be harmful to natural aquatic life. In Florida, the protection of watersheds, in particular surface water bodies, has led to the legislation of protection of these areas (i.e., the Wekiva River Protection Act).

A research study to examine nitrogen reduction strategies for onsite sewage treatment and disposal systems in the State of Florida is underway. The project is being conducted by Hazen and Sawyer, P.C an environmental engineering firm under contract with the Florida Department of Health (FDOH).

One element of this research project is to prioritize nitrogen removal technologies under field conditions. To reach this goal, field-testing of nitrogen reducing technologies at home sites is needed to compare various treatment systems for their ability to remove nitrogen. Monitoring nitrogen reduction of the systems will occur at various locations in the State of Florida. In addition, the research project includes subsurface and groundwater monitoring which will be used to assess the current level of nitrogen reduction obtained by Florida soils and to assess groundwater impacts due to conventional and nitrogen removal systems.

The participation of select homeowners is essential for the success of this research program. Therefore, we are looking for volunteers to allow their onsite wastewater systems to be used for this project. All homeowners will remain anonymous in all data analysis and reporting. The study will last up to two years with all site visits scheduled at the homeowner's convenience. The work at each property may include:

- Property walkovers to characterize land uses and features
- Collection of information from the owner regarding water use and wastewater system data
- Installation of new wastewater treatment equipment
- Soil borings
- Installation of monitoring wells
- Collection of wastewater samples
- Monitor energy used and other operational costs

Hazen and Sawyer, P.C. will be responsible for: application for permits, modifications, operation, maintenance, monitoring, inspections, and removal or leaving the system in place at study termination. The project funds will cover the cost of any permits required, any new technology installed, maintenance costs, and restoration of property to original condition. All project payments will terminate upon site closure. The homeowner shall agree to not tamper with the system during the monitoring period. The site will be restored to the original condition upon completion of the study if desired by the homeowner. All homes participating in the study will receive a \$250 cash incentive.

If you are interested in becoming involved in this important research project, please fill in the information below and sign where indicated. We will coordinate all our activities with you and give you any additional information you require prior to beginning work at your property.

Thank you for taking the time to consider this request, and we look forward to your response.

Very truly yours,  
Hazen and Sawyer, P.C.

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_  
Telephone: \_\_\_\_\_  
Fax: \_\_\_\_\_  
Email: \_\_\_\_\_

Type of system installed/existing to be evaluated: Septic

**HOMEOWNER**

By: \_\_\_\_\_

**HAZEN AND SAWYER, P.C.  
10002 Princess Palm Avenue  
Registry One, Suite 200  
Tampa, FL 33619**

By: \_\_\_\_\_  
Damann L. Anderson

Title: Vice President

encl.: Residential Evaluation Survey

Damann L. Anderson

**RESIDENTIAL EVALUATION SURVEY**

Name: \_\_\_\_\_ Date: 2/10/11 Time: 12:42

Street Address: \_\_\_\_\_

City: LONGWOOD State: FL Zip Code: 32779

Mailing Address (if different from above):  
\_\_\_\_\_

Daytime Phone (Work or Cell): \_\_\_\_\_

Evening phone (Home or Cell): \_\_\_\_\_

Parcel #: \_\_\_\_\_

Designer: \_\_\_\_\_

Installer: \_\_\_\_\_ City : \_\_\_\_\_ State : \_\_\_\_\_

Property Size (acres or sq. ft.) : .75 ACRES. 2600 SQ FT HOME

**A. Home/Residents**

- 1. Is this your first home with an on-site wastewater treatment system? YES
- 2. Did you receive any septic system user information? NO
- 3. Did you receive the as-built drawing for the system? YES
- 4. Any additions to the home since septic system was built? SEPARATE SEPTIC BUILT

Bedrooms 1

Bathrooms 2

Other \_\_\_\_\_

- 5. Type of use: PERMANENT

If seasonal, number of months used \_\_\_\_\_

- a. Number of people living in the home:
 

Adults (18-65):	<u>1</u> M	<u>1</u> F
Seniors (>65):	<u>   </u> M	<u>   </u> F
Children (<13):	<u>1</u> M	<u>2</u> F
Teenagers (13-17):	<u>   </u> M	<u>   </u> F

- b. Guests (Approximate number and frequency): 2 TIMES PER

MONTH \_\_\_\_\_

- c. Number of bedrooms: 4 Number of bathrooms: 3 1/2

- d. Number of pets: Dogs 1 Cats \_\_\_\_\_ Number of pet baths per month: 1

- 6. Number of showers per week: 15 -HALF ON NEW Number of baths per week: 2

- 7. Water supply: PRIVATE WELL \_\_\_\_\_

- 8. Do you have an in-home business? NO

If "yes", what type? \_\_\_\_\_

9. Do you use septic system additives? YES  
If "yes", what products? ENZYMES Frequency:  
OCCASSIONAL

**B. System** (completed by O&M service provider or homeowner if no service provider)

10. Type of pretreatment system:  Septic tank  ATU  Media filter  Constructed wetland  
a. Specific type of system  
b. Make and Model

11. How old is the system? 40 (years) /NEW ONE 6 YEARS Date of last pump out: 1  
YEAR FOR OLD ONE

12. Has the system ever backed up? YES  
13. Have the baffles ever been plugged? NOT SURE  
14. Effluent screen in septic tank outlet? ??  
15. Has effluent screen ever plugged? ?? Date(s):  
16. Has the system ever been repaired? ??

Record of System's Service:

17. Has effluent ever surfaced? ??  
18. Has the alarm ever sounded? ??  
19. Soil type – at drain field depth or lower:

20. Type of distribution/dispersal system: NOT SURE  
 Gravity  Trench  Pressure dose  Mound  Drip  Spray  
 Other:

21. Control system: DEMAND

22. Design rate for system: (GPD)

23. Septic tank size: (gallons) Pump tank: (gallons)

24. Sludge levels in septic tank: 1<sup>st</sup> compartment accumulation  
Floating materials  
2<sup>nd</sup> compartment accumulation  
Floating materials

25. Sludge level in pump tank: Accumulated  
Floating materials

26. Is the pump working? YES

27. Duration of pump cycle: \_\_\_\_\_ (minutes) Pump drawdown: \_\_\_\_\_

**C. Water Use**

28. Actual **indoor** water use (GPD): Average: \_\_\_\_\_ High: \_\_\_\_\_ Low: \_\_\_\_\_

Reading this data from: \_\_\_\_\_ cycle counter  
\_\_\_\_\_ hour meter on pump  
\_\_\_\_\_ water meter  
\_\_\_\_\_ other

29. Actual **outdoor** water use (GPD): Average: \_\_\_\_\_ High: \_\_\_\_\_ Low: \_\_\_\_\_

Reading this data from: \_\_\_\_\_ cycle counter  
\_\_\_\_\_ hour meter on pump  
\_\_\_\_\_ water meter  
\_\_\_\_\_ other

**D. Additional Information** (completed by homeowner or at site visit and evaluation)

30. Water supply:

a. Raw Water Quality Characteristics: Hardness \_\_\_\_\_ (gpg) Iron \_\_\_\_\_ (ppm)  
TDS \_\_\_\_\_ (ppm) pH \_\_\_\_\_ Chlorine (total or free) \_\_\_\_\_ (ppm)

b. Other Water Quality characteristics:

Hydrogen Sulfide \_\_\_\_\_ (ppm) Sulfates \_\_\_\_\_ (ppm) Alkalinity \_\_\_\_\_  
Other 1 \_\_\_\_\_ Other 2 \_\_\_\_\_ Other 3 \_\_\_\_\_  
Other Comments \_\_\_\_\_

31. Water treatment device(s):

a. Is a water softener used? YES Back flushes to: \_\_\_\_\_

Brand \_\_\_\_\_ Model/Year Installed \_\_\_\_\_

Regeneration Method? Timer / Demand Initiated Regeneration (Meter or Sensor)

Softening Regenerant? NaCl / KCl Salt per Regeneration (lbs) \_\_\_\_\_

Salt Purchased (lbs per month) \_\_\_\_\_

Estimated Brine Volume \_\_\_\_\_ (gallons) Combined Discharge TDS \_\_\_\_\_ (ppm)

Backwash Time \_\_\_\_\_ (min) Backwash Flow Rate \_\_\_\_\_ (gpm)

Backwash Volume \_\_\_\_\_ (gallons) Fast Rinse Time \_\_\_\_\_ (min)

Fast Rinse Flow Rate \_\_\_\_\_ (gpm) Fast Rinse Volume \_\_\_\_\_ (gallons)

Total Regeneration Water \_\_\_\_\_ (gallons) Total Time for Regeneration \_\_\_\_\_ (min)

Avg. Flow to Drain during Regeneration \_\_\_\_\_ (gpm) Regenerations per month \_\_\_\_\_

Average Daily Drain Water \_\_\_\_\_ (gallons)

b. Reverse osmosis? YES / NO Discharges to: \_\_\_\_\_

Brand \_\_\_\_\_ Model/Year Installed \_\_\_\_\_

Auto Shut Off? YES / NO Rated Capacity \_\_\_\_\_ (gallons/day)

Daily water consumed \_\_\_\_\_ (gallons) Stated Recovery Ratio \_\_\_\_\_

Estimated Daily Water to Drain \_\_\_\_\_ (gallons)

c. Backwashing Water Filter (iron, sediment, etc)? YES YES / NO

Back flushes to: \_\_\_? \_\_\_\_\_ Brand \_\_\_\_\_

Model/Year Installed \_\_1993\_\_\_\_\_ Regenerant (if any) \_\_\_\_\_

Regeneration Frequency \_\_\_?\_\_\_\_\_ Backwash Time \_\_60\_\_\_\_\_ (min)

BW Flow Rate \_\_\_\_\_ (gpm) BW Volume \_\_\_\_\_ (gallons)

Fast Rinse Time \_\_\_\_\_ (min) FR Flow Rate \_\_\_\_\_ (gpm)

FR Volume \_\_\_\_\_ (gallons) Total Regenerant Water \_\_\_\_\_ (gallons)

Total Time for Regeneration \_\_\_\_\_ (min) Avg. Flow to Drain \_\_\_\_\_ (gpm)

Regenerants Per Month \_\_\_\_\_ Average Daily Drain Water \_\_\_\_\_ (gallons)

d. Other Water Treatment Devices: \_\_\_\_\_

e. Treated Water Quality Characteristics:

Hardness \_\_\_\_\_ (gpg) Iron \_\_\_\_\_ (ppm)

TDS \_\_\_\_\_ (ppm) pH \_\_\_\_\_ Chlorine (free) \_\_\_\_\_ (ppm)

Other Water Quality characteristics:

Hydrogen Sulfide \_\_\_\_\_ (ppm) Sulfates \_\_\_\_\_ (ppm) Alkalinity \_\_\_\_\_

Other 1 \_\_\_\_\_ Other 2 \_\_\_\_\_ Other 3 \_\_\_\_\_

Other Comments  
\_\_\_\_\_

32. Is there an outside power supply? NO YES / NO

If yes, does it have its own breaker? \_\_\_\_\_

How many amps? \_\_\_\_\_

33. Is there an outside water spigot? NO YES / NO

If yes, does it require a key? \_\_\_\_\_



STATE OF FLORIDA  
 DEPARTMENT OF HEALTH  
 ONSITE SEWAGE TREATMENT AND DISPOSAL  
 SYSTEM  
 CONSTRUCTION PERMIT

PERMIT # [REDACTED]  
 APPLICATION #: [REDACTED] 3  
 DATE PAID: \_\_\_\_\_  
 FEE PAID: \_\_\_\_\_  
 RECEIPT #: \_\_\_\_\_  
 DOCUMENT #: [REDACTED]  
 OSTDS # [REDACTED]

CONSTRUCTION PERMIT FOR: OSTDS New

APPLICANT: [REDACTED]

PROPERTY ADDRESS: [REDACTED]

LOT: 25 BLOCK: \_\_\_\_\_ SUBDIVISION: Ravensbrook

PROPERTY ID #: [REDACTED] [SECTION, TOWNSHIP, RANGE, PARCEL NUMBER]  
 [OR TAX ID NUMBER]

SYSTEM MUST BE CONSTRUCTED IN ACCORDANCE WITH SPECIFICATIONS AND STANDARDS OF SECTION 381.0065, F.S., AND CHAPTER 64E-6, F.A.C. DEPARTMENT APPROVAL OF SYSTEM DOES NOT GUARANTEE SATISFACTORY PERFORMANCE FOR ANY SPECIFIC PERIOD OF TIME. ANY CHANGE IN MATERIAL FACTS, WHICH SERVED AS A BASIS FOR ISSUANCE OF THIS PERMIT, REQUIRE THE APPLICANT TO MODIFY THE PERMIT APPLICATION. SUCH MODIFICATIONS MAY RESULT IN THIS PERMIT BEING MADE NULL AND VOID. ISSUANCE OF THIS PERMIT DOES NOT EXEMPT THE APPLICANT FROM COMPLIANCE WITH OTHER FEDERAL, STATE, OR LOCAL PERMITTING REQUIRED FOR DEVELOPMENT OF THIS PROPERTY.

SYSTEM DESIGN AND SPECIFICATIONS

T [ 900 ] GALLONS / GPD \_\_\_\_\_ CAPACITY  
 A [ 0 ] GALLONS / GPD \_\_\_\_\_ CAPACITY  
 N [ 0 ] GALLONS GREASE INTERCEPTOR CAPACITY [MAXIMUM CAPACITY SINGLE TANK:1250 GALLONS]  
 K [ 0 ] GALLONS DOSING TANK CAPACITY [ 0.00 ] GALLONS @ [ 0 ] DOSES PER 24 HRS #Pumps [ 0 ]

D [ 222 ] SQUARE FEET \_\_\_\_\_ SYSTEM  
 R [ 0 ] SQUARE FEET \_\_\_\_\_ SYSTEM  
 A TYPE SYSTEM: [x] STANDARD [ ] FILLED [ ] MOUND [ ] \_\_\_\_\_  
 I CONFIGURATION: [x] TRENCH [ ] BED [ ] \_\_\_\_\_

F LOCATION OF BENCHMARK: Nail Painted Orange Base of Pine In Back Yard

I ELEVATION OF PROPOSED SYSTEM SITE [ 14.00 ] [ INCHES / FT ] [ ABOVE / BELOW ] BENCHMARK/REFERENCE POINT

E BOTTOM OF DRAINFIELD TO BE [ 16.00 ] [ INCHES / FT ] [ ABOVE / BELOW ] BENCHMARK/REFERENCE POINT

D FILL REQUIRED: [ 0.00 ] INCHES EXCAVATION REQUIRED: [ 0.00 ] INCHES

O  
T  
H  
E  
R  
 Sleeve potable water lines within 10 feet of drainfield. Potable water lines may not be installed within 2 ft of drainfield. Private potable wells must be 75 feet from system. Non-potable wells must be 50 feet. Addition will not be connected to existing plumbing.

SPECIFICATIONS BY: Dale T Deal TITLE: Engineer

APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ Seminole CHD  
 Legacy Legacy Legacy

DATE ISSUED: 06/15/2004 EXPIRATION DATE: 12/15/2005

DH 4016, 08/09 (Obsoletes all previous editions which may not be used)

Incorporated: 64E-6.003, FAC

## NOTICE OF RIGHTS

A party whose substantial interest is affected by this order may petition for an administrative hearing pursuant to sections 120.569 and 120.57, Florida Statutes. Such proceedings are governed by Rule 28-106, Florida Administrative Code. A petition for administrative hearing must be in writing and must be received by the Agency Clerk for the Department, within twenty-one (21) days from the receipt of this order. The address of the Agency Clerk is 4052 Bald Cypress Way, BIN # A02, Tallahassee, Florida 32399-1703. The Agency Clerk's facsimile number is 850-410-1448.

Mediation is not available as an alternative remedy.

Your failure to submit a petition for hearing within 21 days from receipt of this order will constitute a waiver of your right to an administrative hearing, and this order shall become a 'final order'.

Should this order become a final order, a party who is adversely affected by it is entitled to judicial review pursuant to Section 120.68, Florida Statutes. Review proceedings are governed by the Florida Rules of Appellate Procedure. Such proceedings may be commenced by filing one copy of a Notice of Appeal with the Agency Clerk of the Department of Health and a second copy, accompanied by the filing fees required by law, with the Court of Appeal in the appropriate District Court. The notice must be filed within 30 days of rendition of the final order.





STATE OF FLORIDA  
DEPARTMENT OF HEALTH  
ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM  
CONSTRUCTION INSPECTION AND FINAL APPROVAL

PERMIT [REDACTED]  
DOCUMENT [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

APPLICANT: [REDACTED]  
AGENT: \_\_\_\_\_  
PROPERTY ADDRESS: [REDACTED]  
LOT: 25 BLOCK: \_\_\_\_\_  
SUBDIVISION: Ravensbrook ID#: [REDACTED]

CHECKED [X] ITEMS ARE NOT IN COMPLIANCE WITH STATUTE OR RULE AND MUST BE CORRECTED.

- |                            |   |                        |   |
|----------------------------|---|------------------------|---|
| TANK INSTALLATION          |   | SETBACKS               |   |
| [ ]                        | [01] TANK SIZE [1] <u>900.00</u> [2] _____  | [ ]                    | [27] SURFACE WATER _____ FT                       |
| [ ]                        | [02] TANK MATERIAL <u>Concrete</u>  | [ ]                    | [28] DITCHES _____ FT                             |
| [ ]                        | [03] OUTLET DEVICE _____  | [ ]                    | [29] PRIVATE WELLS _____ FT                       |
| [ ]                        | [04] MULTI-CHAMBERED [ Y / N ] _____  | [ ]                    | [30] PUBLIC WELLS _____ FT                        |
| [ ]                        | [05] OUTLET FILTER _____  | [ ]                    | [31] IRRIGATION WELLS _____ FT                    |
| [ ]                        | [06] LEGEND 1. <u>64-060-04DC3</u> 2. _____   | [ ]                    | [32] POTABLE WATER _____ FT                       |
| [ ]                        | [07] WATERTIGHT _____   | [ ]                    | [33] BUILDING FOUNDATIONS _____ FT                |
| [ ]                        | [08] LEVEL _____  | [ ]                    | [34] PROPERTY LINES _____ FT                      |
| [X]                        | [09] DEPTH TO LID _____   | [ ]                    | [35] OTHER _____ FT                               |
| DRAINFIELD INSTALLATION    |   | FILLED / MOUND SYSTEM  |   |
| [ ]                        | [10] AREA [1] <u>225</u> [2] <u>0</u> SQFT  | [ ]                    | [36] DRAINFIELD COVER _____                       |
| [ ]                        | [11] DISTRIBUTION BOX _____ HEADER _____  | [ ]                    | [37] SHOULDERS _____                              |
| [ ]                        | [12] NUMBER OF DRAINLINES 1. <u>3.00</u> 2. _____                                   | [ ]                    | [38] SLOPES _____                                 |
| [ ]                        | [13] DRAINLINE SEPARATION _____   | [ ]                    | [39] STABILIZATION _____                          |
| [ ]                        | [14] DRAINLINE SLOPE _____  | ADDITIONAL INFORMATION |   |
| [X]                        | [15] DEPTH OF COVER _____   | [ ]                    | [40] UNOBSTRUCTED AREA _____                      |
| [ ]                        | [16] ELEVATION [ ABOVE / <input checked="" type="checkbox"/> BELOW ] BM <u>7.75</u> | [ ]                    | [41] STORMWATER RUNOFF _____                      |
| [ ]                        | [17] SYSTEM LOCATION _____  | [ ]                    | [42] ALARMS _____                                 |
| [ ]                        | [18] DOSING PUMPS _____   | [ ]                    | [43] MAINTENANCE AGREEMENT _____                  |
| [ ]                        | [19] AGGREGATE SIZE _____   | [ ]                    | [44] BUILDING AREA _____                          |
| [ ]                        | [20] AGGREGATE EXCESSIVE FINES _____  | [ ]                    | [45] LOCATION CONFORMS WITH SITE PLAN _____       |
| [ ]                        | [21] AGGREGATE DEPTH _____  | [ ]                    | [46] FINAL SITE GRADING _____                     |
| FILL / EXCAVATION MATERIAL |   | [ ]                    | [47] CONTRACTOR <u>John R Johnson (Acme Septi</u> |
| [ ]                        | [22] FILL AMOUNT _____  | [ ]                    | [48] OTHER <u>INFILTRATOR EQ36 (Single Chamb</u>  |
| [ ]                        | [23] FILL TEXTURE _____   | ABANDONMENT            |   |
| [ ]                        | [24] EXCAVATION DEPTH _____   | [ ]                    | [49] TANK PUMPED _____                            |
| [ ]                        | [25] AREA REPLACED _____  | [ ]                    | [50] TANK CRUSHED & FILED _____                   |
| [ ]                        | [26] REPLACEMENT MATERIAL _____   |                        |   |

Comments: \_\_\_\_\_

CONSTRUCTION [  APPROVED / DISAPPROVED ]: \_\_\_\_\_ Seminole CHD DATE: 06/24/2004  
Legacy Legacy Legacy

FINAL SYSTEM [ APPROVED /  DISAPPROVED ]: \_\_\_\_\_ Seminole CHD DATE: 06/24/2004  
Legacy Legacy Legacy

(Explanation of Violations on following page)

DH 4016, 08/09 (Obsoletes all previous editions which may not be used)

Incorporated: 64E-6.003, FAC



STATE OF FLORIDA  
DEPARTMENT OF HEALTH  
ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM  
CONSTRUCTION INSPECTION AND FINAL APPROVAL

APPLICATION [REDACTED]  
PERMIT #: [REDACTED]  
DOCUMENT [REDACTED]  
DATE PAID: 04/12/2004  
FEE PAID: 190.00  
RECEIPT #: [REDACTED]

<u>Violation Number</u>	<u>Comment</u>

EXPLANATION OF VIOLATIONS / REMARKS:

trench [08] Tank lid too deep., [14] Drainfield cover.

Search

Map Unit Legend

Seminole County, Florida (FL117)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
6	Astatula-Apopka fine sands, 0 to 5 percent slopes	7.5	73.2%
20	Myakka and EauGallie fine sands	2.2	21.5%
31	Tavares-Millhopper fine sands, 0 to 5 percent slopes	0.5	5.3%
<b>Totals for Area of Interest</b>			<b>10.3 100.0%</b>

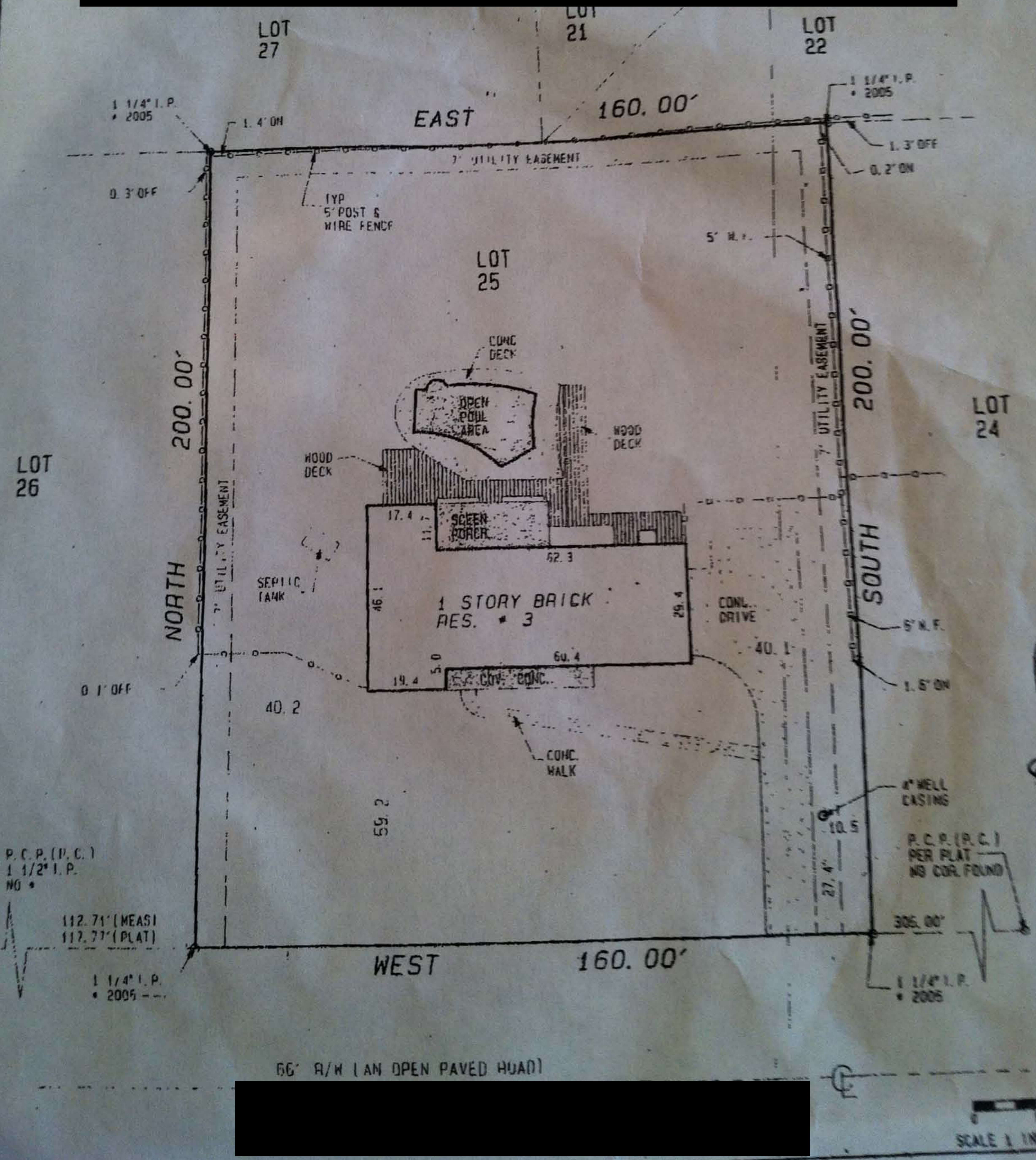
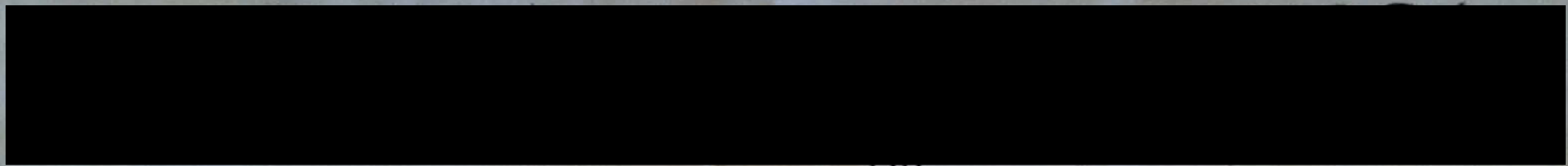
Soil Map

Legend

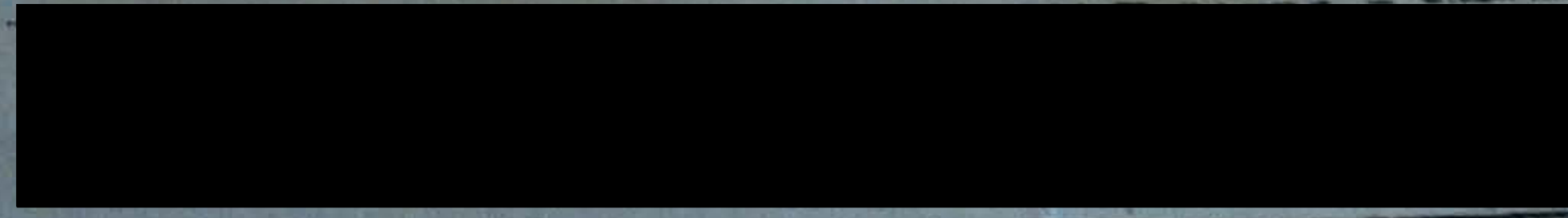
Navigation and tool icons: Home, Back, Forward, Print, Scale (not to scale), Measure, Info, Download, AOI, and other map controls.



# PLAT OF SURVEY FOR



66' R/W (AN OPEN PAVED ROAD)



SCALE 1 INCH = 15 FEET