

CHATHAM COUNTY PURCHASING DEPARTMENT

ADDENDUM NO. 2 TO Bid No. 12-0005-7

**FOR: Annual Contract for Specialized Water & Sewer Sampling and Analysis for Chatham County Public Works**

**PLEASE SEE THE FOLLOWING ADDITIONS, CLARIFICATIONS AND/OR CHANGES:**

1. **QUESTION:** Item 8 on the Bid Sheet - Is this supposed to be nitrate-nitrite?  
**RESPONSE:** *No, bid sheet is correct. Scope of Service for Pine Barren Waste Treatment Plant - 2. Quarterly should read Effluent-Nitrate Nitrogen.*
2. **QUESTION:** Item 1 on the Bid Sheet - Can you specify what is requested for the microbiological - is this just fecal coliform or is more needed?  
**RESPONSE:** *Fecal coliform bacteria only.*
3. **QUESTION:** Under the monthly samples for the Pine Barren Waste Treatment Plant, monthly pH samples are listed for both the influent and effluent (total of 2 samples per month). The bid sheet only lists one monthly pH sample (Item 4) - which is correct, or am I missing something?  
**RESPONSE:** *Under the monthly samples for the Pine Barren Waste Treatment Plant is one monthly ph sample and it is for the effluent only.*
4. **QUESTION:** The water system sampling requests monthly microbiological sampling for what appears to be 21 (assuming items J-N) require one sample. The bid sheet lists 22 monthly samples (Item1). Is one of these a duplicate or should there be an additional sample listed under the scope of work?  
**RESPONSE:** *The scope of work is correct and the Bid Sheet has been revised to reflect 21 samples monthly.*

**CHANGE:** Please replace the bid sheet with the revised bid sheet. Use revised bid sheet when submitting a bid.

**ADDITION: ATTACHED ARE SITE MAPS AND REQUIREMENTS FROM EPD FOR PINE BARREN AS SHOWN ON BID SHEET.**

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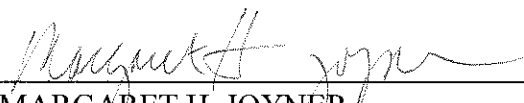
**THE BID OPENING SHALL REMAIN 2PM MARCH 1, 2012.**

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**THE BIDDER IS RESPONSIBLE FOR MAKING THE NECESSARY CHANGES AND MUST ACKNOWLEDGE RECEIPT OF ADDENDUM.**

2-27-12  
DATE

  
MARGARET H. JOYNER  
PURCHASING AGENT  
CHATHAM COUNTY

**REVISED**  
**CHATHAM COUNTY, GEORGIA**

**BID SHEET**

**BID NO. 12-0005-7**

**Item # Well Sites:**

- |   |                                                                         |                   |
|---|-------------------------------------------------------------------------|-------------------|
| 1 | Microbiological samples: (21) samples monthly _____ x 12 events = _____ | Total Annual Cost |
|   | Note: Postage for the following samples will be paid at postages rates. |                   |
| 2 | Fluoride Samples: (8) samples monthly _____ x 12 events = _____         | Total Annual Cost |

**Pine Barren WWTP:**

**Monthly:**

- |   |                                                                      |                   |
|---|----------------------------------------------------------------------|-------------------|
| 3 | BOD/TSS: (2) samples monthly _____ x 12 events = _____               | Total Annual Cost |
| 4 | ph: (1) samples monthly _____ x 12 events = _____                    | Total Annual Cost |
| 5 | Depth to Ground Water: (4) samples monthly _____ x 12 events = _____ | Total Annual Cost |

**Quarterly: (March, June, September & December)**

- |    |                                                                         |                   |
|----|-------------------------------------------------------------------------|-------------------|
| 6  | ph: (6) samples quarterly _____ x 4 events = _____                      | Total Annual Cost |
| 7  | Electrical Conductivity: (4) samples quarterly _____ x 4 events = _____ | Total Annual Cost |
| 8  | Nitrate-Nitrogen: (7) samples quarterly _____ x 4 events = _____        | Total Annual Cost |
| 9  | Fecal Coliform: (6) samples quarterly _____ x 4 events = _____          | Total Annual Cost |
| 10 | BOD/TSS: (2) samples quarterly _____ x 4 events = _____                 | Total Annual Cost |
| 11 | Dissolved Oxygen: (2) samples quarterly _____ x 4 events = _____        | Total Annual Cost |

**Bi-Annual Samples: (June) and December**

- |    |                                                                        |                   |
|----|------------------------------------------------------------------------|-------------------|
| 12 | Fecal Coliform Bacteria: (4) samples bi-annual _____ x 2 event = _____ | Total Annual Cost |
|----|------------------------------------------------------------------------|-------------------|

**Annual Samples (December):**

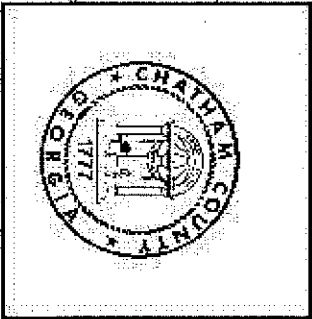
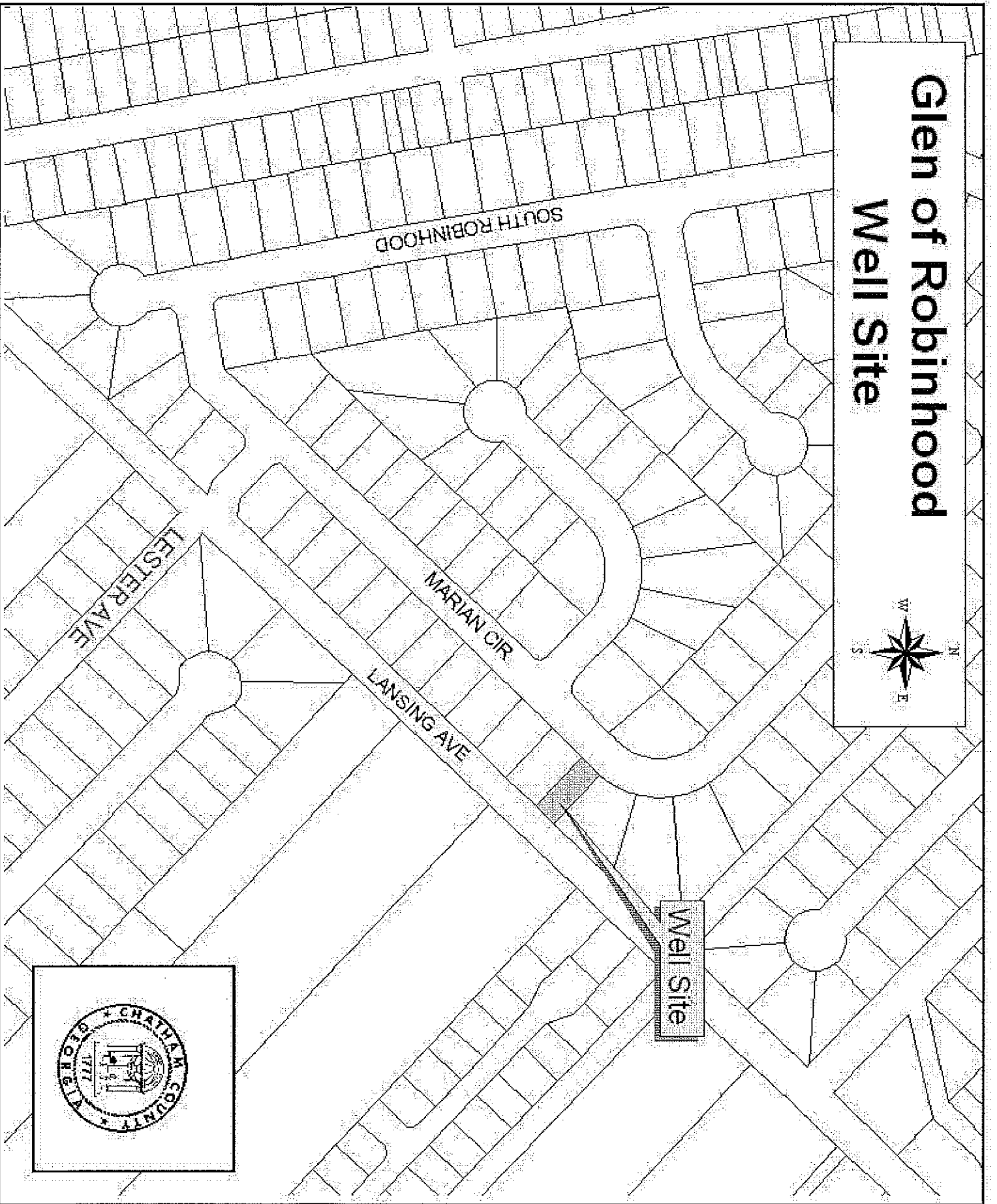
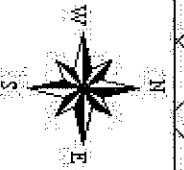
**Soil Fertility Test to include the following:**

- |    |                                                                                                              |                   |
|----|--------------------------------------------------------------------------------------------------------------|-------------------|
| 13 | Soil ph (1) samples _____ x 1 event = _____<br>(Phosphorus, Potassium, Calcium, Magnesium, Zinc & Manganese) | Total Annual Cost |
| 14 | (1) samples _____ x 1 event = _____                                                                          | Total Annual Cost |
|    | Note: The following samples will be taken only if ph cahanges by 1 unit.                                     |                   |
| 15 | Cation Exchange Capacity (1) samples _____ x 1 event = _____                                                 | Total Annual Cost |
| 16 | Percent Base Saturation (1) samples _____ x 1 event = _____                                                  | Total Annual Cost |

**TOTAL ANNUAL COST** \_\_\_\_\_

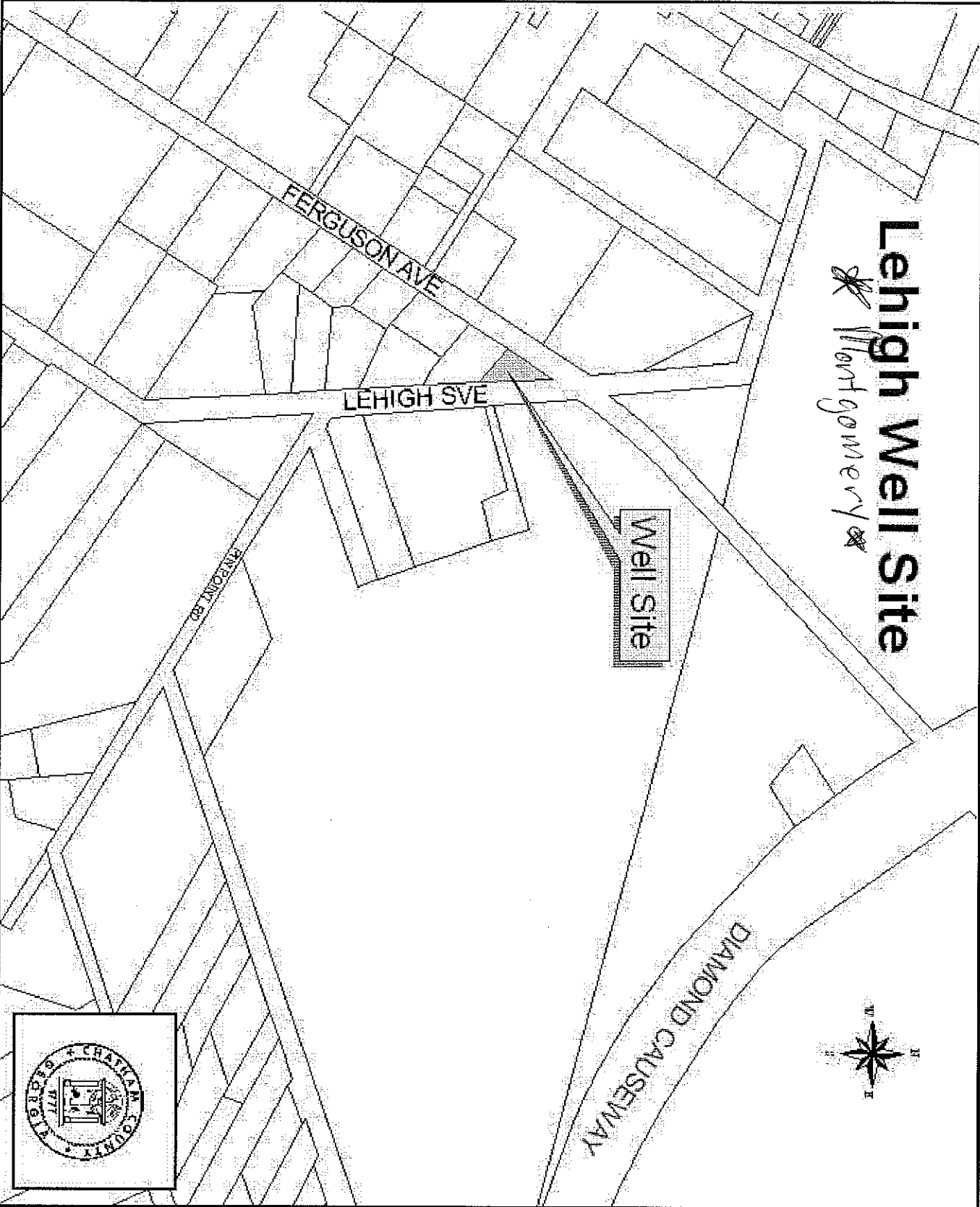
Bid includes all labor, insurance, overhead, profit, travel time and mileage.

# Glen of Robinhood Well Site



# Lehigh Well Site

*Montgomery*



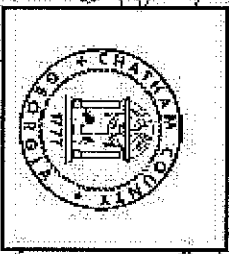
Well Site

FERGUSON AVE

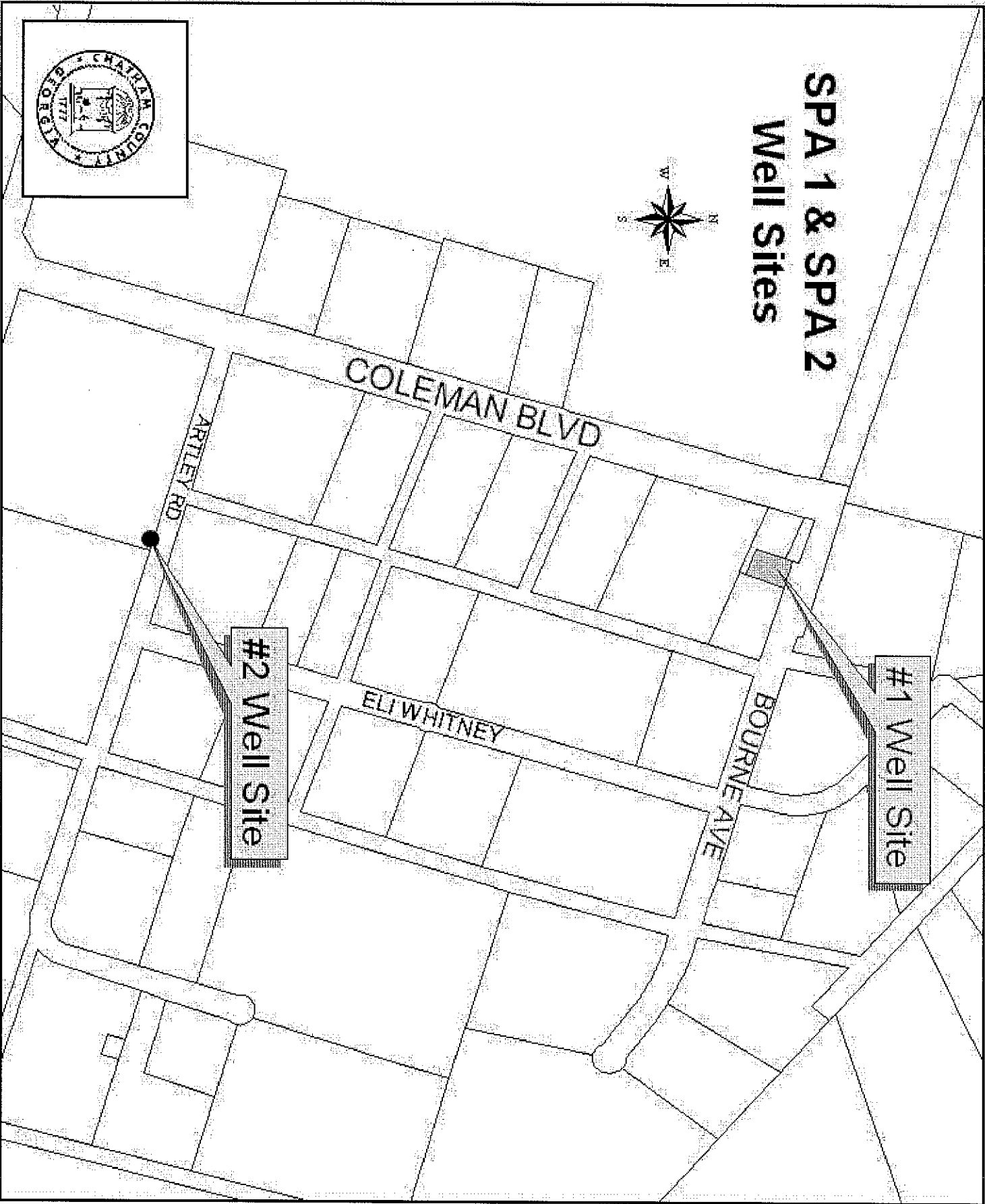
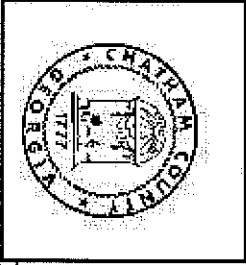
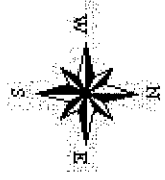
LEHIGH SVE

DIAMOND CAUSEWAY

UNLABELED STREET

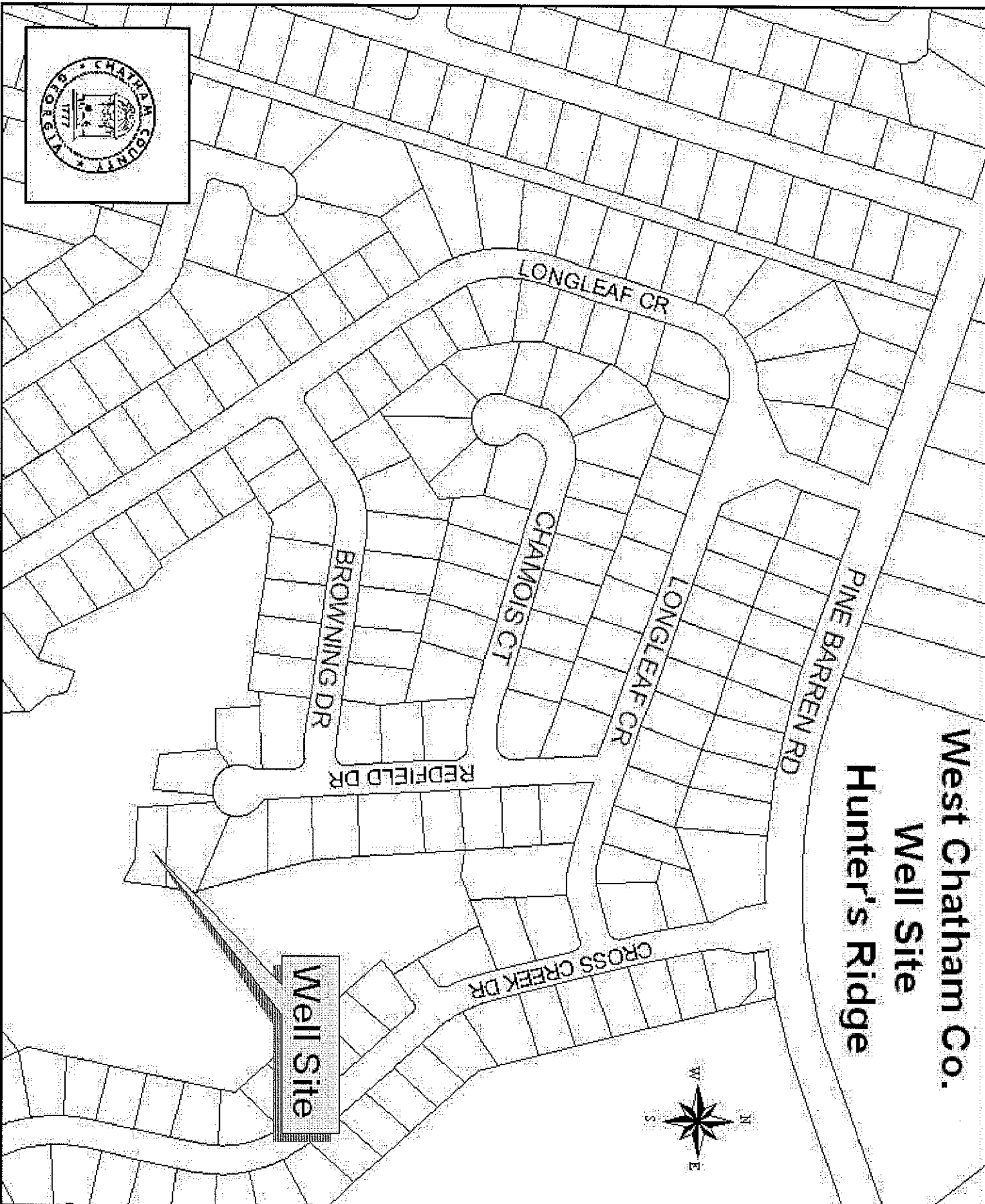
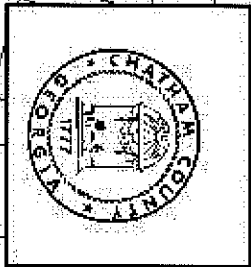


# SPA 1 & SPA 2 Well Sites



#1 Well Site

#2 Well Site



West Chatham Co.

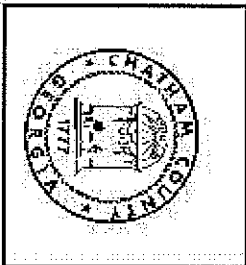
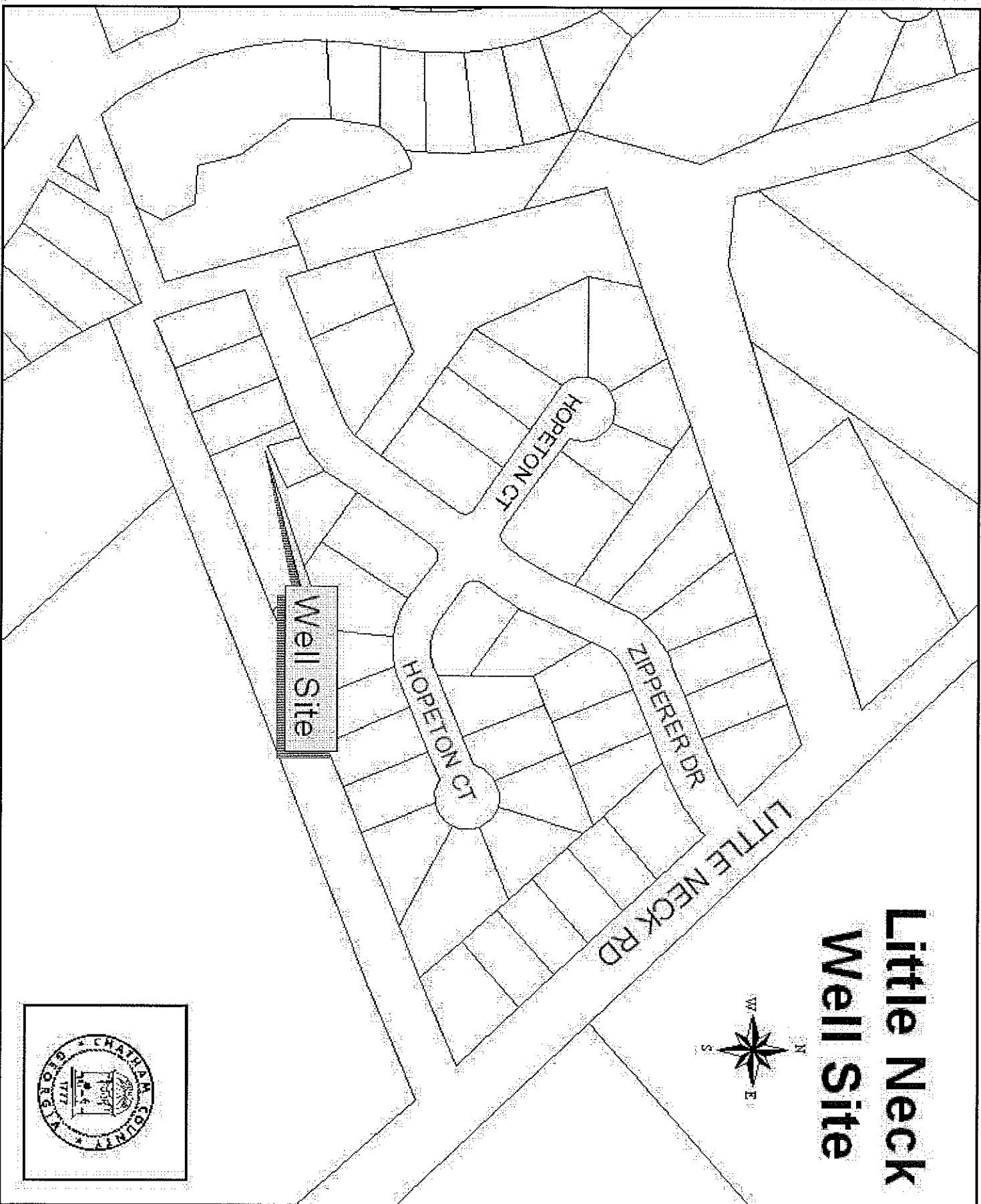
Well Site

Hunter's Ridge

Well Site



# Little Neck Well Site

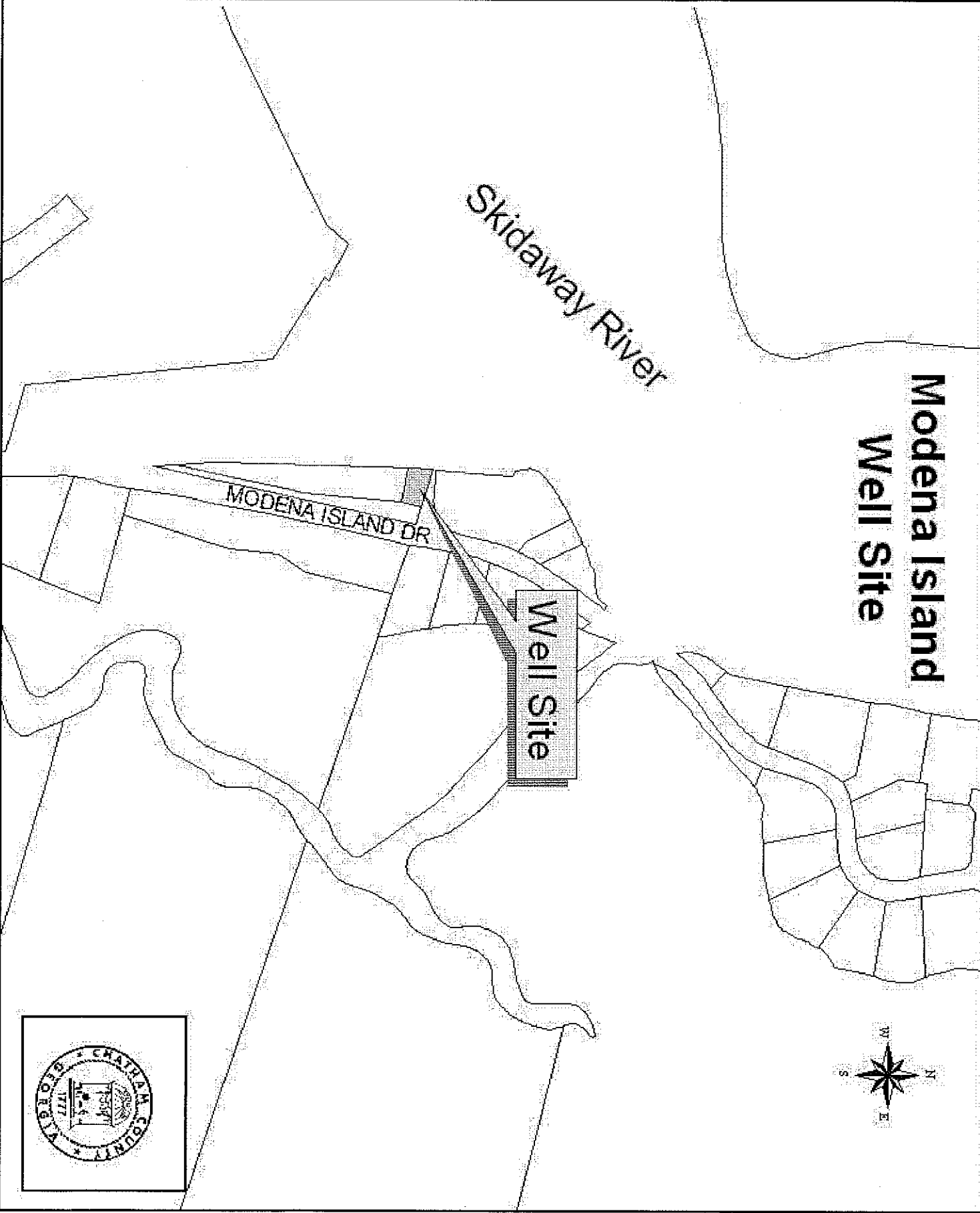
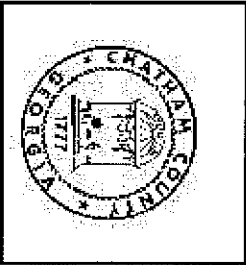
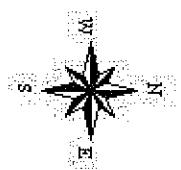


Skidaway River

# Modena Island Well Site

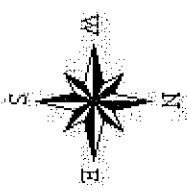
MODENA ISLAND DR

Well Site





# Runaway Point Well Site



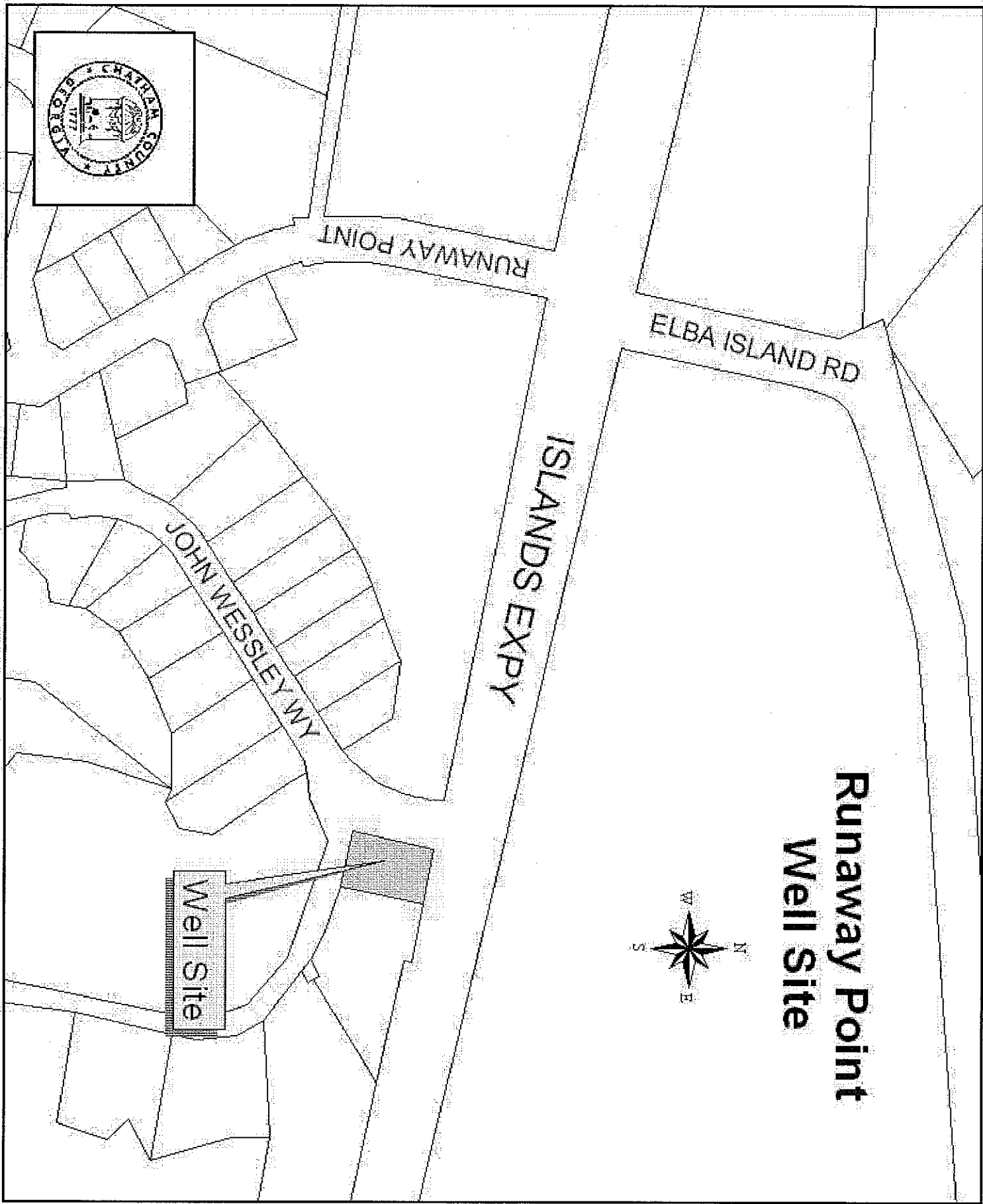
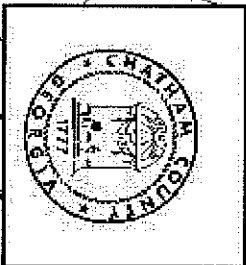
ISLANDS EXPY

ELBA ISLAND RD

RUNAWAY POINT

JOHN WESLEY WY

Well Site



B.1. PREAPPLICATION TREATMENT PLANT MONITORING

Treatment Pond System

The weekly average flow of effluent from the wastewater treatment pond to the storage pond must not exceed 0.075 MGD. For monitoring purposes, influent shall refer to the influent to the treatment pond and effluent shall refer to the discharge from the storage pond to the sprayfields.

Parameters	Discharge Limitation Monthly Average, mg/L unless otherwise specified	Monitoring Requirements	
		Measurement Frequency	Sample Location
Flow (MGD)	0.060	Seven Days/Week	Influent and Effluent
Biochemical Oxygen Demand (5-Day)	50	One Day/Month	Influent and Effluent
Total Suspended Solids	90	One Day/Month	Influent and Effluent
pH, standard units (minimum – maximum)	Report	One Day/Month	Effluent
Nitrate-Nitrogen	Report	One Day/Quarter	Effluent

Continuous recording measurements are required for effluent flow monitoring. If influent flow monitoring is required, instantaneous flow measurements are acceptable.

B.3. GROUNDWATER MONITORING REQUIREMENTS

Groundwater leaving the land application system boundaries must not exceed maximum contaminant levels for drinking water. The groundwater shall be monitored from each groundwater monitoring well by the permittee for the parameters and at the frequency listed below:

Parameter	Measurement Frequency
Depth to Groundwater	One Day/Month
pH, standard units	One Day/Quarter
Electrical Conductivity	One Day/Quarter
Nitrate-Nitrogen	One Day/Quarter
Fecal Coliform Bacteria	One Day/Six Months

Where there are categorical and/or significant industrial discharges to the sewer system, the permittee may be required to sample for additional parameters. These parameters may include heavy metals and organic compounds.

B.4. SURFACE WATER MONITORING

The water quality of any surface water adjacent to or traversing the land application site shall be monitored. Grab samples collected upstream and downstream of the sprayfield area shall be monitored for the parameters and at the frequency listed below:

Parameter	Measurement Frequency
Biochemical Oxygen Demand (5-Day)	One Day/Quarter
Suspended Solids	One Day/Quarter
Dissolved Oxygen	One Day/Quarter
pH, standard units	One Day/Quarter
Fecal Coliform Bacteria	One Day/Quarter
Nitrate-Nitrogen	One Day/Quarter

B.2. SOIL MONITORING REQUIREMENTS

Representative samples shall be collected from each major soil series present within the spray field area. The samples shall be analyzed in accordance with the latest edition of Methods of Soil Analysis (published by the American Society of Agronomy, Madison, Wisconsin) or other methods approved by the Division. The soil samples shall be analyzed for the parameters and at the frequency listed below:

Parameter	Measurement Frequency
pH, standard units	One Day/Year
Cation Exchange Capacity	If pH changes by one unit
Percent Base Saturation	If pH changes by one unit
Soil Fertility Test*	One Day/Year

\*This testing is to be done in December of each year. The soil fertility testing is to include soil pH and phosphorus, potassium, calcium, magnesium, zinc, and manganese using the Mehlich I extraction procedure.

Where there are categorical and/or significant industrial discharges to the sewer system, the permittee may be required, upon written notification by the Division, to sample for additional parameters. These parameters may include heavy metals and organic compounds.