AGREEMENT BETWEEN

LAKE COUNTY, FLORIDA AND

NODARSE & ASSOCIATES, INC

FOR

ON-CALL MONITORING WELL CONSTRUCTION/REPAIR AND

PROFESSIONAL GEOLOGIC AND HYDROGEOLOGIC SERVICES

RSQ # 08-0021

This is an Agreement between Lake County, Florida, a political subdivision of the State of Florida, hereinafter referred to as the COUNTY, by and through its Board of County Commissioners, and Nodarse & Associates, Inc., a Florida corporation, hereinafter referred to as CONSULTANT.

Recitals

WHEREAS, the COUNTY has publicly submitted a Request for Proposals (RFP), # 08-0021, for procurement of services under the Consultants' Competitive Negotiation Act, section 287.055, Florida Statutes, following the guidelines set forth under such Act; and

WHEREAS, RFP # 08-0021 did seek firms or individuals qualified to provide professional services for on call construction and repair of monitoring well and professional geologic and hydrogeologic services; and

WHEREAS, the CONSULTANT desires to perform such services subject to the terms of this Agreement; and

NOW, THEREFORE, IN CONSIDERATION of the mutual terms, understandings, conditions, premises, covenants and payment hereinafter set forth, and intending to be legally bound, the parties hereby agree as follows:

Article 1. Recitals

1.1 The foregoing recitals are true and correct and incorporated herein by reference.

Article 2. Scope of Professional Services

2.1 On the terms and conditions set forth in this Agreement, COUNTY hereby engages CONSULTANT to provide professional services for construction and repair of monitoring wells and professional geologic and hydrogeologic services as generally defined in the Scope of Services attached hereto and incorporated herein by reference as **Exhibit A.** The CONSULTANT acknowledges and agrees that if the work is assigned to the CONSULTANT, each individual project shall have a specific

Scope of Services agreed to by the parties and a task order shall be executed by both parties. The task order shall include all necessary provisions including but not limited to setting forth the time for payment, deliverables, electronic and printed formats and any other items relevant to the task. The task order shall be signed by both parties prior to the CONSULTANT performing any of the agreed upon work.

2.2 ALL TASK ORDERS SHALL BE REVIEWED AND APPROVED BY THE COUNTY ATTORNEY'S OFFICE PRIOR TO THE CONSULTANT BEGINNING ANY WORK ON THE ASSIGNED PROJECT OR PAYMENT BEING MADE TO THE CONSULTANT.

2.3 This Agreement shall be effective for the twelve month (12) month period immediately following the date of execution of the Agreement by the COUNTY. The COUNTY reserves the sole right to renew this Agreement for four (4) additional twelve (12) month periods. Labor prices for contract renewals shall be determined on an annual basis based upon the percentage change in the Consumer Price Index for the Orlando MSA. The base period shall be the month in which this Agreement was executed by the COUNTY.

2.4 The CONSULTANT shall coordinate, cooperate, and work with any other consultants retained by the COUNTY. CONSULTANT acknowledges that nothing herein shall be deemed to preclude the COUNTY from retaining the services of other persons or entities undertaking the same or similar services as those undertaken by the CONSULTANT or from independently developing or acquiring materials or programs that are similar to, or competitive with, the services provided under this Agreement.

2.5 CONSULTANT agrees that this shall be an open quantity contract. The COUNTY shall not guarantee to the CONSULTANT any minimum amount of work throughout the term of this Agreement. Furthermore, CONSULTANT agrees and acknowledges that in the event CONSULTANT cannot meet the COUNTY'S specifications including but not limited to time for completion, cost for individual project etc. that the COUNTY reserves the sole right to offer the individual project to the COUNTY'S alternate vendor(s).

2.6 Since this is a continuing contract under the provisions of section 287.055, Florida Statutes, individual projects authorized under this Agreement shall not exceed $1,000,000.00 in construction costs or $50,000.00 for study activities.

2.7 CONSULTANT shall be responsible for obtaining all required federal, state or local permits required to complete the project specific scope of work. Additionally, the CONSULTANT shall be responsible for the removal of all surplus material and debris occurring from this work if the materials or debris was generated as a result of the CONSULTANT'S work. The CONSULTANT shall take precautions against damage to public and private property during the course of its work. Should damage occur, by negligent omission or commission by the CONSULTANT, the CONSULTANT shall, at its own expense, restore damaged property to a condition similar or equal to that existing before damage was done. In the event CONSULTANT fails to correct the damage, the COUNTY shall have the option of correcting the damage and issuing a deductive change order to the CONSULTANT to deduct the amount of the corrective work from the contract balance.

Article 3. Payment

3.1 Payment shall be based upon the hourly billing rates set forth in **Exhibit B**, attached hereto and incorporated herein by reference. The personnel needed for each individual project shall be determined

once the CONSULTANT receives the Task Assignment Sheet. Upon reviewing the project specific scope of services, the CONSULTANT shall submit a list of specific tasks to be performed as part of the project, including any alternate tasks, and a detailed estimated cost sheet. A list of deliverables shall also be provided. The CONSULTANT and COUNTY hereby agree that the hours of service set forth in the cost sheet are projected hours of service and that the CONSULTANT'S actual time may be more or less than the budgeted hours. If acceptable, the COUNTY shall pay the CONSULTANT only for the total fee agreed upon for each project.

3.2 Invoices shall be submitted in duplicate to the requesting COUNTY department at P.O. Box 7800, Tavares, Florida 32778. Each invoice shall contain the RFP number and a detailed description of services and fees. The CONSULTANT shall keep a travel log indicating all dates of travel, mileage, etc..

3.3 The COUNTY shall make payment on all invoices in accordance with the Florida Prompt Payment Act, sections 218.70 through 218.79, Florida Statutes.

3.4 CONSULTANT shall submit invoices at the end of each project documenting the percent of completion of each task and requesting payment based upon such percent completion. Alternative billing arrangements may be negotiated on a per project basis, depending on the size and scope of the project, i.e., monthly billing. Alternative billing provisions shall be expressly stated in the task order authorizing the work.

3.5 Other than the common expenses, travel expenses, administrative and technical support expenses and computer expenses as set forth in **Exhibit B**, the CONSULTANT shall not be entitled to payment for any expenses, fees, or other costs it may incur at any time and in any connection with its performance hereunder. The CONSULTANT hereby agrees that its hourly billing rates are fully loaded and includes all overhead and administrative expenses.

3.6 In the event a specific project is to be funded by state or federal monies, the CONSULTANT hereby agrees to comply with all requirements of the state or federal government applicable to the use of the monies, including receiving no payment until all required forms are completed and submitted.

Article 4. County Responsibilities

4.1 COUNTY shall promptly review the deliverables and other materials submitted by CONSULTANT and provide direction to CONSULTANT as needed. COUNTY shall designate one County staff member to act as COUNTY'S Project Administrator and/or Spokesperson.

4.2 COUNTY shall reimburse CONSULTANT, in accordance with the provisions of Article 3 above for required services timely submitted and approved and accepted by COUNTY in accordance with the terms of this Agreement.

4.3 The COUNTY will provide to the CONSULTANT all necessary and available GIS data, data developed and/or within the possession of the COUNTY, and any other data the COUNTY possesses that would be useful to the CONSULTANT in the completion of the required services.

Article 5. Special Terms and Conditions

5.1 Qualifications. Firms or individuals will be registered with the State of Florida and have obtained at least the minimum thresholds of education and professional experience required by the statutes to perform the services contained herein.

5.2 Termination This Agreement may be terminated by the COUNTY upon thirty (30) days advance written notice to the other party; but if any work or service/Task hereunder is in progress but not completed as of the date of termination, then this Agreement may be extended upon written approval of the COUNTY until said work or service(s)/Task(s) is completed and accepted.

A. Termination for Convenience. In the event this Agreement is terminated or cancelled upon the request and for the convenience of COUNTY with the required 30 day advance written notice, COUNTY shall reimburse CONSULTANT for actual work satisfactorily completed.

B. Termination for Cause. Termination by County for cause, default, or negligence on the part of CONSULTANT shall be excluded from the foregoing provision. Termination costs, if any, shall not apply. The 30-day advance notice requirement is waived in the event of termination for cause.

C. Termination Due to Unavailability of Funds in Succeeding Fiscal Years. When funds are not appropriated or otherwise made available to support continuation of performance in a subsequent fiscal year, this Agreement shall be canceled and the CONSULTANT shall be reimbursed for the reasonable value of any non-recurring costs incurred but not amortized in the price of the supplies or services/Tasks delivered under this Agreement.

5.3 Subletting of Contract. This Agreement shall not be sublet except with the written consent of the COUNTY'S Procurement Services Director. No such consent shall be construed as making the COUNTY a party to the subcontract or subjecting the COUNTY to liability of any kind to any subcontractor. No subcontract shall under any circumstances relieve the CONSULTANT of liability and obligations under this Agreement and all transactions with the COUNTY must be through the CONSULTANT.

5.4 Insurance and Bond. CONSULTANT shall provide and maintain during the entire term of this Agreement insurance in the following types and limits with a company or companies authorized to do business in the State of Florida. CONSULTANT shall not commence work under the Agreement until COUNTY has received an acceptable certificate or certificates of insurance evidencing the required insurance, which is as follows:

(X) General Liability insurance on forms no more restrictive than the latest edition of the Commercial General Liability policy (CG 00 01 or CG 00 02) of the Insurance Services Office or equivalent without restrictive endorsements, with the following minimum limits and coverage:

(X)	General Liability		
	(X)	Each Occurrence/General Aggregate	$500,000
	(X)	Products-Completed Operations	$500,000
	(X)	Personal & Adv. Injury	$500,000
	(X)	Fire Damage	$50,000

(X)	Medical Expense	$5,000
(X)	Contractual Liability	$300,000

(X) Automobile liability insurance, including owned, non-owned and hired autos with the following minimum limits and coverage:

Combined Single Limit	$300,000
or	
Bodily Injury (per person)	$100,000
Property Damage	$100,000

(X) **Lake County, A Political Subdivision Of The State Of Florida, And The Board Of County Commissioners,** shall be name as additional insured as their interest may appear on the:

(X) general liability policy
( ) automobile liability policy

(X) Workers' compensation insurance in accordance with Florida Statute, Chapter 440, and/or any other applicable law requiring workers' compensation (Federal, maritime, etc).

(X) Professional liability (medical malpractice, engineers, architect, consultant, environmental, errors and omissions, etc.) insurance as applicable, with minimum limits of $500,000 and annual aggregate of $1,000,000.

(X) Certificates of insurance shall provide for a minimum of thirty (30) days prior written notice to the COUNTY of any material change, non-renewal or cancellation of the required insurance, with ten (10) day written notice of cancellation due to non-payment of premium.

(X) Certificates of insurance shall identify the RFP number, contract, project, etc. in the Description of Operations section of the Certificate.

(X) CONSULTANT shall be responsible for subcontractors and their insurance.

(X) The Certificate holder shall be: LAKE COUNTY, A POLITICAL SUBDIVISION OF THE STATE OF FLORIDA, AND THE BOARD OF COUNTY COMMISSIONERS, P.O. BOX 7800,TAVARES, FL 32778-7800

CONSULTANT Liability Insurance policies shall be endorsed to add COUNTY as an additional insured for General Liability Insurance. Additionally, CONSULTANT shall be responsible for payment of all deductibles and self-insurance retention on CONSULTANT Liability Insurance policies. All of the policies of insurance so required to be purchased and maintained shall contain a provision or endorsement that the coverage afforded shall not be canceled, materially changed or renewal refused until at least thirty (30) calendar days written notice, or ten (10) days written notice of cancellation due to non-payment of premium, has been given to COUNTY by certified mail.

5.5 Indemnity. CONSULTANT shall indemnify and hold COUNTY and its agents, officers, commissioners or employees harmless for any damages resulting from failure of CONSULTANT to take out and maintain the above insurance. Additionally, CONSULTANT agrees for good and valuable

consideration in the amount of ten dollars ($10.00) to indemnify, and hold the Board of County Commissioners, Lake County, Florida, and its officers, commissions, employees and agents free and harmless from and against any and all losses, penalties, damages, settlements, costs, charges, professional fees or other expenses or liabilities to the extent resulting from the negligent act, error or omission of CONSULTANT, its agents, employees or representative, in the performance of CONSULTANT'S duties set forth in this Agreement.

5.6 Independent Contractor. CONSULTANT agrees that it shall be acting as an independent contractor and shall not be considered or deemed to be an agent, employee, joint venturer, or partner of COUNTY. CONSULTANT shall have no authority to contract for or bind COUNTY in any manner and shall not represent itself as an agent of COUNTY or as otherwise authorized to act for or on behalf of COUNTY. Additionally, CONSULTANT warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for CONSULTANT to solicit or secure this Agreement and that it has not paid or agreed to pay any person , company, corporation, individual, or firm other than a bona fide employee working solely for CONSULTANT any fee, commission, percentage, gift, or other consideration contingent upon on resulting from the award or making of this Agreement.

5.7 Ownership of Deliverables. Upon completion of and payment for a task CONSULTANT agrees all Tasks and/or deliverables under this Agreement, and other data generated or developed by CONSULTANT under this Agreement or furnished by COUNTY to CONSULTANT shall be and remain the property of COUNTY. CONSULTANT shall perform any acts that may be deemed necessary or desirable by COUNTY to evidence more fully transfer of ownership of all Tasks and/or deliverables to COUNTY. Additionally, CONSULTANT hereby represents and warrants that it has full right and authority to perform its obligations specified in this Agreement. CONSULTANT and COUNTY recognize that CONSULTANT'S work product submitted in performance of this Agreement is intended only for the project described in this Agreement. COUNTY'S alteration of CONSULTANT'S work product or its use by COUNTY for any other purpose shall be at COUNTY'S sole risk.

5.8 Return of Materials. Upon the request of the COUNTY, but in any event upon termination of this Agreement, CONSULTANT shall surrender to the COUNTY all memoranda, notes, records, drawings, manuals, computer software, and other documents or materials pertaining to the services hereunder, that were furnished to the CONSULTANT by the COUNTY pursuant to this Agreement. CONSULTANT may keep copies of all work product for its records.

5.9 **NO CLAIM FOR DAMAGES OR ANY CLAIM OTHER THAN FOR AN EXTENSION OF TIME SHALL BE MADE OR ASSERTED AGAINST THE COUNTY BY REASON OF ANY DELAYS.** No interruption, interference, inefficiency, suspension or delay in the commencement or progress of the work from any cause whatsoever, shall relieve the CONSULTANT of his duty to perform or give rise to any right to damages or additional compensation from the COUNTY. The CONSULTANT expressly acknowledges and agrees that the CONSULTANT shall receive no damages for delay. The CONSULTANT'S sole remedy, if any, against the COUNTY shall be the right to seek an extension to the contract time. However, this provision shall not preclude recovery of damages by the CONSULTANT for hindrances or delays due solely to fraud, bad faith or active interference on the part of the COUNTY. Otherwise, CONSULTANT shall be entitled to extensions of the Contract Time as the sole and exclusive remedy for such resulting delay, in accordance with and to the extent specifically provided above

5.10 Retaining Other Consultants. Nothing herein shall be deemed to preclude the COUNTY from retaining the services of other persons or entities undertaking the same or similar services as those undertaken by the CONSULTANT or from independently developing or acquiring materials or programs that are similar to, or competitive with, the services provided under this Agreement.

5.11 Accuracy. The CONSULTANT is responsible for the professional quality, technical accuracy, timely completion and coordination of all the services furnished hereunder. The CONSULTANT shall, without additional compensation, correct or revise any errors, omissions or other deficiencies in its designs, drawings, reports or other services.

5.12 Truth in Negotiation Certificate. For all lump-sum or cost-plus fixed fee agreements exceeding $150,000, the firm awarded the agreement must execute a truth in negotiation certificate stating that the wage rates and other factual unit costs are accurate, complete and current, at the time of contracting. Any agreement requiring this certificate shall contain a provision that the original agreement price and any additions shall be adjusted to exclude any significant sums by which the COUNTY determines the agreement price was increased due to inaccurate, incomplete, or non-current wage rates and other factual unit costs. All such agreement adjustments shall be made within one (1) year following the end of the contract. Execution of this Agreement constitutes execution of the Truth in Negotiation Certificate.

5.13 Codes and Regulations. All work completed under this Agreement shall conform to all applicable federal, state and local statutes, codes, regulations and ordinances.

5.14 Public Entity Crimes. A person or affiliate who has been placed on the convicted vendor list following a conviction of a public entity crime may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity in excess of the threshold amount provided in Florida Statutes, section 287.017 for Category Two for a period of thirty-six (36) months from the date of being placed on the convicted vendor list.

5.15 Prohibition Against Contingent Fees. CONSULTANT warrants that they have not employed or retained any company or person, other than a bona fide employee working solely for the CONSULTANT to solicit or secure this Agreement and that they have not paid or agreed to pay any person, company, corporation, individual, or firm, other than a bona fide employee working solely for the CONSULTANT, any fee, commission, percentage, gift or other consideration contingent upon or resulting from the award or making of this Agreement.

5.16. Right to Audit. The County reserves the right to require CONSULTANT to submit to an audit by any auditor of the COUNTY'S choosing. CONSULTANT shall provide access to all of its records, which relate directly or indirectly to this Agreement at its place of business during regular business hours. CONSULTANT shall retain all records pertaining to this Agreement and upon request make them available to the COUNTY for three (3) years following expiration of the Agreement. CONSULTANT agrees to provide such assistance as may be necessary to facilitate the review or audit by the COUNTY to ensure compliance with applicable accounting and financial standards.

5.17 Public Records / Copyrights

A. All electronic files, audio and/or video recordings, and all papers pertaining to any activity performed by the provider for or on behalf of the COUNTY shall be the property of the COUNTY and will be turned over to the COUNTY upon request. In accordance with Florida "Public

Records" law, Chapter 119, Florida Statutes, each file and all papers pertaining to any activities performed for or on behalf of the COUNTY are public records available for inspection by any person even if the file or paper resides in the CONSULTANT'S office or facility.

B. Any copyright derived from any agreement derived from this Agreement shall belong to the author. The author and the CONSULTANT shall expressly assign to the COUNTY nonexclusive, royalty free rights to use any and all information provided by the CONSULTANT in any deliverable and/or report for the COUNTY'S use which may include publishing in COUNTY documents and distribution as the COUNTY deems to be in the COUNTY'S best interests. If anything included in any deliverable limits the rights of the COUNTY to use the information, the deliverable shall be considered defective and not acceptable and the CONSULTANT will not be eligible for any compensation. This specifically applies to the curriculum and training reference materials.

Article 6. General Conditions

6.1 This Agreement is made under, and in all respects shall be interpreted, construed, and governed by and in accordance with, the laws of the State of Florida. Venue for any legal action resulting from this Agreement shall lie in Lake County, Florida.

6.2 Neither Party may assign any rights or obligations under this Agreement to any other party unless specific written permission from the other party is obtained.

6.3 The captions utilized in this Agreement are for the purposes of identification only and do not control or affect the meaning or construction of any of the provisions hereof.

6.4 This Agreement shall be binding upon and shall inure to the benefit of each of the parties and of their respective successors and permitted assigns.

6.5 This Agreement may not be amended, released, discharged, rescinded or abandoned, except by a written instrument duly executed by each of the parties hereto.

6.6 The failure of any party hereto at any time to enforce any of the provisions of this Agreement will in no way constitute or be construed as a waiver of such provision or of any other provision hereof, nor in any way affect the validity of, or the right thereafter to enforce, each and every provision of this Agreement.

6.7 During the term of this Agreement CONSULTANT assures COUNTY that it is in compliance with Title VII of the 1964 Civil Rights Act, as amended, and the Florida Civil Rights Act of 1992, in that CONSULTANT does not on the grounds of race, color, national origin, religion, sex, age, disability or marital status, discrimination in any form or manner against CONSULTANT employees or applicants for employment. CONSULTANT understands and agrees that this Agreement is conditioned upon the veracity of this statement of assurance.

6.8 CONSULTANT shall at all times comply with all Federal, State and local laws, rules and regulations.

6.9 The invalidity or unenforceability of any particular provision of this Agreement shall not affect the other provisions hereof, and this Agreement shall be construed in all respects as if such invalid or unenforceable provisions were omitted.

6.10 Wherever provision is made in this Agreement for the giving, service or delivery of any notice, statement or other instrument, such notice shall be in writing and shall be deemed to have been duly given, served and delivered, if delivered by hand or mailed by United States registered or certified mail or sent by facsimile, addressed as follows:

If to CONSULTANT:

PG
Mark Mulligan, Project Manager
1675 Lee Road
Winter Park, Florida 32789

If to COUNTY:

County Manager
Lake County Administration Bldg.
Post Office Box 7800
Tavares, Florida 32778-7800

And cc: Leila Nodarse PE (same address)

Each party hereto may change its mailing address by giving to the other party hereto, by hand delivery, United States registered or certified mail notice of election to change such address.

Article 7. Scope of Agreement

7.1 This Agreement is intended by the parties hereto to be the final expression of their Agreement, and it constitutes the full and entire understanding between the parties with respect to the subject hereof, notwithstanding any representations, statements, or agreements to the contrary heretofore made.

7.2 This Agreement contains the following Exhibits:

Exhibit A	General Scope of Services
Exhibit B	Hourly Rates

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement on the respective dates under each signature: COUNTY through its Board of County Commissioners, signing by and through its Chairman, authorized to execute same by Board Action on the 16 day of September, 2008 and by CONSULTANT through duly authorized representative.

CONSULTANT

Name: Leila J. Nodarse PE
Title: CEO

T. Darlene Bradley

T. DARLENE BRADLEY
MY COMMISSION # DD 701538
EXPIRES: November 26, 2011
Bonded Thru Notary Public Underwriters

Agreement Between Lake County and Nodarse & Associates, Inc. for Monitoring Wells, Geologic and Hydrogeologic Services; RFP 08-0021

COUNTY

ATTEST:

Neil Kelly, Clerk
of the Board of County
Commissioners of Lake
County, Florida

LAKE COUNTY, through its
BOARD OF COUNTY COMMISSIONERS

Welton G. Cadwell
Chairman

This 16th day of September, 2008.

Approved as to form and legality:

Sanford A. Minkoff
County Attorney

EXHIBIT A: General Scope of Services

Section 2.1: Introduction

The County has need to establish a contract for new monitor well installation and repairs to existing monitor wells. The term well may include but not be limited to landfill and other monitoring wells, landfill gas vents and probes and piezometers. Related services may also include, but not be limited to, professional geologic and hydrogeologic services, monitoring well design, monitoring plan design, contamination assessments, field testing, Standard Penetration Tests (SPT), Shelby Tube samples, direct-push studies and similar related tasks. This work will be accomplished at the County's landfills and other locations.

The monitoring wells are used for ground water quality sampling and analysis and for water level measurements. They shall be constructed according to the specifications described in this scope of work and the well construction requirements and guidelines of the County. Easements for access to drilling sites, where required, will be obtained by the County. The Contractor shall be responsible for locating all underground utilities. The Project Manager or his designee will accompany the Contractor to all sites for an initial visit and will be available to consult with the Contractor during field operations to determine well/boring depth and other matters that may arise.

Most wells will be completed in unconsolidated sediments of the surficial or intermediate aquifers but some could be into the limestone of the Floridan aquifer. The number of wells to be constructed will depend on the monitoring requirements of the County. When drilling at landfills there is a possibility of encountering buried trash.

All new well installations shall be done under the direct supervision of, and all documents shall be signed and sealed by a Professional Geologist.

The Contractor shall notify the Project Manager or his designee prior the start of any field operations.

Section 2.2: Qualifications

The Contractor shall be legally qualified and licensed to practice Geology and to install water wells in the State of Florida. Contractor shall also have substantial experience in hydrogeologic and contamination assessment studies, SPT borings and installation and repair of ground water monitoring water wells at landfills. If the Contractor is licensed to practice only Geology, an approved licensed monitor well drilling sub-contractor may be used to meet the well drilling requirements. The Professional Geologist shall be licensed to practice by the State of Florida and the license current.

Section 2.3: Monitor Well Construction Specifications

The monitoring wells shall be constructed accordingly as specified by the County and consistent with all applicable Water Management District and FDEP requirements. Well construction shall allow monitoring of the intended zone while not allowing the movement of water into the zone

being monitored from surface, underlying, or overlying sources. Test borings and wells shall be performed and completed in such a manner as to prevent vertical migration of possible contaminants between zones/aquifers.

The new wells should be sufficiently plumb and straight so that sampling equipment can be installed or utilized. The monitoring wells shall be constructed, grouted and/or sealed to ensure that a representative sample can be obtained from the intended zone and to protect the resource from contamination.

After development, all wells shall produce water with turbidity less than 20 NTU, and at a sufficient rate and volume to produce a viable sample for analysis.

The Contractor is to furnish all labor, materials, tools, equipment, and contaminant- free water used for repairs, soil sampling, well construction and well development.

The Contractor shall be responsible for any applicable licenses and permits required to perform the work. The Contractor shall also be responsible for checking for utilities at all sites and assuring that these utilities will not be damaged or create a hazard during the drilling operation.

The Contractor shall supply a Professional Geologist, licensed in Florida, to direct all work under this contract including but not limited to preparing drilling logs, directing drilling, recommending total depth and screen locations of wells and preparing hydrological reports on drilling activities. The Contractor's Geologist, hereafter referred to as the Geologist, shall be an active participant in the well design, construction and drilling activities and shall be responsible for safety and following sound monitor well construction principles.

The Contractor shall take all reasonable precautions to avoid contamination of each well, cross-contamination between wells, and of the surrounding site. The use of fuels, lubricants, and other materials and chemicals necessary for drilling operations shall be closely monitored. No waste fluids, rubbish, or other foreign materials shall enter the well or be discarded on the ground without specific approval from the County. All equipment, including direct-push equipment shall be steam cleaned prior to coming on site and between each hole/well.

Upon completion of each well the Contractor shall be responsible for restoring the site as nearly as possible to its original condition, including the removal of bore hole sediments, rubbish, and excess or spilled materials resulting from, or used during the drilling operations and re-sod if required.

The water used for drilling and decontamination purposes and the tanks used for the transport of the water shall be clean and contaminant-free. It is the responsibility of the Contractor to obtain a source for all clean water needed for drilling and decontamination operations at all well locations.

If required by the County, prior to well construction an SPT boring shall be performed for split spoon and Shelby Tube sampling. The Geologist supplied by the Contractor shall personally supervise the drilling of this test hole. Split spoon samples 2 feet in length will be taken at a

minimum of 5-foot intervals to determine screen placement. Recommendations on the number of split spoon samples collected and analyzed may be recommended by the Geologist to the Project Manager or his designee. During the drilling of each SPT boring, formation samples shall be collected and placed in suitable containers. Samples shall be described by the Geologist using the Unified Soil Classification System. Permeability testing will be conducted on any confining unit encountered as required, and grain size analysis will be performed for zones where well screens are likely to be placed. The Contractor shall be responsible for the safe storage of the formation samples until accepted by the Project Manager. Each container shall be clearly and indelibly labeled with the following information: site name, boring identification, depth interval represented by the sample and date sample was taken. Sites that already have adequate well log data may not require test borings.

The Contractor shall abandoned all SPT and other test holes after completion with grout pumped from the bottom of the hole back to the surface unless they are to be utilized for the monitoring well.

The total depth, filter pack size, screen slot size and screen length for the monitor wells shall be recommended by the Geologist based on information from the test hole, grain size analysis, available well logs and other information. The Project Manager shall make the final determination of depth and screen placement. Approval of these recommendations by FDEP is generally required prior to monitor well installation.

Drilling method will be determined by the Project Manager in consultation with the Geologist. The preferred method for drilling the monitoring wells is the hollow stem auger for shallow wells and mud rotary for Floridan aquifer wells. Direct-push technology and other options may also be approved. A temporary casing may be required to prevent vertical migration of possible contaminants.

New 2 or 4 inch, Schedule 40, threaded PVC casing, PVC "Vee-Wire Monitoring Screen", "Schumasoil" high density porous polyethylene well screen or other product approved by the Project Manager, shall be used for well construction. The Project Manager must approve any equivalent products prior to installation. A 10 to 20-foot screen will generally be used depending on monitoring requirements and formation. The Geologist shall recommend screen slot or porosity and obtain approval from FDEP, if required.

Prior to installation, all casing and screen material shall be steam cleaned with contaminant-free water. Casing lengths shall be flush threaded with a watertight seal so that the resulting joint has the same structural integrity as the casing itself. Solvents or PVC glue shall not be used. The wells shall be cased from 36 inches above land surface to the top of the screen unless otherwise specified. Screen or open-hole lengths will be determined based on field conditions and monitoring requirements.

The filter pack and bentonite seal shall be placed so that no bridging occurs. The filter sand around the screen shall extend from the bottom of the borehole to approximately 2 feet above the top of the screened interval. Approximately 2 to 3 feet of bentonite pellets shall be used as a seal

placed on top of the filter pack and then compacted. If this interval is above the water table fine sand shall be used as a seal.

Type I Portland cement grout shall be emplaced by the tremie method from above the seal to no closer than 2-feet below the surface. The minimum thickness of grout between the outer casing and the annular wall shall be 2 inches. The grout shall be placed in such a manner as to ensure the entire filling of the annular space in one continuous operation.

Unless otherwise specified in writing the well PVC casing shall extend 36 inches above the land surface and be covered with a vented PVC cap. A loosely fitting slip cap shall be used unless a threaded cap is specified. A protective aluminum cover with lockable top shall be installed around the PVC well casing after the grout has cured, generally 24 to 48 hours. The aluminum protective cover shall have a locking cap that slips down over the protective cover. The cap design shall not use a hinge. The thickness of the aluminum in the cover shall be no less than 1/8-inch. The County will provide all locks. The protective cover shall be *IES Drilling Supplies* brand (anodized inside and outside, T-60/63 Aircraft aluminum, bend strength 2000 lbs, Schedule 10 thickness, .125" wall) or equivalent with a slip over top. The Project Manager must approve all equivalent products.

This protective cover shall be steamed cleaned thoroughly with contaminant free water prior to installation and shall be installed in a plumb position. The protective cover shall allow easy access to the well casing and allow easy removal of the casing cap. The top of the protective cover shall extend approximately 6-inches above the top of the PVC cap. The aluminum cover shall have a small drain hole near the cement pad so that water can drain and not accumulate inside the protective cover.

The space between the protective aluminum cover and the PVC casing shall be filled to within 2-inches of the top of the casing with clean sand. A cap on top of the casing shall be used during placement of the sand in order to not introduce sand into the well.

A 4 foot by 4 foot, 6-inch thick concrete pad shall be constructed around the well to support the protective cover. The pad shall be installed such that the well is in the center of the pad. The pad shall slope away from the cover to allow for drainage. The well name shall be permanently affixed to the concrete pad.

Well development shall be performed prior of acceptance of the well. Water produced during landfill well development may be adequately treated by the onsite leachate collection system. Contractors shall propose and submit a written contingency plan for disposing of water developed from wells that may not be appropriate for disposal by the onsite system. All development water will be containerized until waste characterization is finalized. A surge block shall be used alternately with a pump and/or bailer so that material that has been agitated and loosened by the surging action is removed. Each well shall be developed by this cycle of surging and pumping/bailing until the water is clear and sediment free. Using compressed air for development is prohibited due to the potential for air to enter the filter pack. Surging procedures shall be employed to loosen bridges and move material toward the well intake. The surge block assembly shall be of sufficient weight to free-fall through the water in the borehole and create an

outward surge. The surge block shall permit some of the fluid to bypass the block on the downward stroke around the perimeter of the surge block and/or through a bypass valve. The surge block shall be lowered to the top of the well screen, if below the water level, and operated in a pumping action with a typical stroke of about 3 feet. The surging shall start at the top of the well screen and incrementally and gradually move downward to the bottom of the screened interval. Surging at each incremental depth shall be initially gentle, with the surging energy gradually increased during the development process. The surge block shall be removed at regular intervals and a pump or bailer shall be used to remove turbid water from the well. If the well pumps dry, the removal of turbid water shall be performed with a bailer. The use of introduced fluids or air into the screened zone shall be avoided. Well development shall be continued until representative formation water free of the effects of well construction is obtained. Where clean water (or water used to mix mud) has been used during construction of the well, its pH and conductivity shall be recorded for comparison with water produced from the well during development. Representative formation water shall be assumed to have been obtained when pH, temperature and conductivity readings are stable and the water is clear, turbidity not more than 20 NTUs, and the minimum periods of development specified herein have been completed. The Contractor's Geologist shall perform final testing of pH, temperature, turbidity and conductivity.

The County shall be responsible for only the costs of the first two hours of development unless additional time is agreed to in writing.

The Contractor shall perform a slug test with analysis for all new wells immediately after completion of development. Slug test data and analysis shall be reported with other well completion records.

All drilling, sampling and well development equipment shall be steam cleaned with clean, contaminant-free water prior to coming on site. This shall also be performed after completion of each well at a safe down gradient distance from that well site before mobilizing to the next well.

Where specified, monitoring well pumps shall be provided and installed by the Contractor within 20 days of well completion. These pumps shall meet the specifications, as specified in Section 2.9.

The Contractor shall provide the County accurate records of well construction, well development, slug test analysis and lithology. A detailed "as-built" monitoring well installation report including slug test results and lithologic information for each site where wells are drilled shall be provided to the County within fifteen days after well completion at a site or, not more than thirty days after any individual well has been completed. This report shall at a minimum contain a completed FDEP Completion Report form plus specific construction information about the materials and depths of well components, a detailed lithologic description, the depth and descriptions of any split spoon samples, depth to water, permeability testing, slug testing, pump information, specific well development information and if applicable, water quality results. Lithologic descriptions shall be based on the ASTM Unified Soil Classification System and include data on color, type of material, and grain size at regular intervals, especially at lithologic changes. This report shall be in both a text and graphical format, containing a location plan showing boring locations and diagrams of individual well construction and materials

encountered. All locations shall be reported in State Plane System coordinates using GPS. All reports shall be submitted in electronic PDF format either via e-mail or CD. Documents scanned into PDF format are not acceptable.

Section 2.4: Well Repairs

The scope of well repairs will consist of repairs to damaged monitor wells and where required installation of protective bollards around each well (if not already present). An example of repairs to a well might include wells hit by a vehicle with the protective casing being damaged, PVC casing broken and/or concrete pad broken. It may also include replacement of a protective cover or the cap or hinge on an existing protective cover. A repair might involve removing the protective cover and repairing the casing and/or pad and returning the well to a usable condition. If an existing protective cover can not be reused a new square aluminum protective cover, a 4-foot by 4-foot concrete pad and a new (County furnished) padlock be installed. The cover and/or pad shall be centered on the well. The cover should be set into the ground approximately 2 feet with the casing extending 3-feet above ground surface. County standard for protective covers is a square aluminum cover with a locking cast aluminum slip over cap with no hinge. Should a well casing be damaged to the extent that dirt fell into the casing, the well will also need to be redeveloped to remove any soil or sediment from the casing and to yield water representative of the formation which supplies water to the well.

If a well is damaged to where it can not be returned to a usable condition, it will be abandoned by grouting as specified below. A new well may be authorized to be installed.

Pricing for repairs should take under consideration, that if the well is not repairable, only mobilization, removable of the old cover and pad and abandonment shall be charged. Conversely, abandonment will not be reimbursable if a well is repaired. Disposal of old materials is the responsibility of the Contractor.

Section 2.5: Deliverables

The Contractor shall furnish all drilling equipment, materials, and capable personnel to perform the formation sampling, the monitoring well construction, well completion, well development and sampling pumps according to specifications.

The new and repaired wells shall be delivered in a "ready to sample" condition. In the case of new wells they shall be producing a sufficient quantity and quality of water to meet their designed purpose.

The Contractor shall provide to the County reports as described above not later than 20 days after completion of work. All reports shall be signed and sealed by the Geologist overseeing the project.

The County will accept each well only after all well repairs, construction, development, sampling, cleanup and reporting has been performed in a satisfactory manner.

New wells not meeting specifications that are unable to be rehabilitated shall be properly abandoned and replaced with another well meeting specifications at the sole expense of the Contractor.

Section 2.6: Performance Schedule

Work required under this contract shall be provided to the Contractor in a written Work Order format from the County Project Manager that lists the specific tasks to be accomplished. The Contractor shall respond with a written time and cost estimate based on the unit costs below and the time frames required to complete the services. The Contractor and the Project Manager shall mutually agree on the exact time frame to start and complete the Work Order.

At the beginning of each task, the Contractor and the County Project Manager shall establish a schedule of work hours to be followed. Each task shall proceed in a timely manner, with no delays in completion of each task. Work shall follow a Monday through Friday schedule, with no work performed on County holidays unless otherwise agreed upon in advance. If work must continue into darkness, the Contractor shall provide sufficient lighting to provide safe working conditions. Overtime shall not be approved unless specifically approved by the County in writing.

Section 2.7: Cost Breakdown

All charges for individual items shall be contained in the Fee Schedule Form contained herein. Any charges for items not included in the Fee Schedule Form shall be at a rate not higher than the standard prevailing rate for similar services in the Central Florida area.

The County will reimburse the Contractor for actual cost of permits required and will provide site plan information and/or maps required to obtain permits.

Section 2.8: Proposed Tasks

There are currently about 6 wells that require repairs. Additionally, new landfill cells are currently under going permit review and will require monitoring wells. Not all the tasks to be performed under this RFP have been fully determined at this time.

Section 2.9 Dedicated Monitoring Well Pumps

SAMPLE INTEGRITY: Dedicated monitoring well bladder pumps and associated equipment must be constructed from recommended and approved EPA and FDEP materials for the collection of truly representative samples. Materials and lift mechanisms must meet the latest

United States Environmental Protection Agency standards to guard the integrity of every sample. Low flow sampling equipment may also be specified.

DESCRIPTION AND SPECIFICATIONS OF EQUIPMENT REQUIRED:

TYPE	COMPONENT DESCRIPTION
Bladder Pumps	• Dedicated bladder pump for 2 or 4-inch PVC cased wells • Approximately 44" long • 316 Type stainless steel body, Teflon bladder • Teflon connecting fittings • Will withstand 120 psi continuous operating pressure with no modifications • Pump at 0.50 gpm from a depth of 100', with 25' of submergence using 3 SCFM of air at 100 psi • No sample contact with other than Teflon or stainless steel • No air/water sample contact • Field replaceable Teflon bladder (type 62-TFE) • Certified contaminant-free at receipt; pumps must be cleaned according to EPA standards for absence of purgeable halocarbons (601), Purgeable aromatics (602), and Base/neutrals and acid extractables (625). Cleaning verified by an independent laboratory with documentation provided • Must fit inside a standard 2-inch well casing or larger • Will pump dry without damage • All pumps, fittings and attachments must be compatible with Lake County's present Well Wizard equipment
Purge Pumps	• Gas displacement pumps • 316 Type stainless steel • Pump at .50 gpm from a depth of 100', with 25' of submergence using 3 SCFM of air at 100 psi • Certified contaminant-free at receipt; pumps must be cleaned according to EPA standards for absence of purgeable halocarbons (601), Purgeable aromatics (602), and Base/neutrals and acid extractables (625). Cleaning verified by an independent laboratory with documentation provided • Will pump dry without damage • All pumps, fittings and attachments must be compatible with Lake County's present Well Wizard equipment • Withstand 125 psi without damage
Bladder Pump Tubing	• Virgin grade Teflon • No sample contact with other than Teflon

- Fully visible and accessible for inspection, replacement or coupling with standard compression fittings
- Air supply and sample/water discharge tube continuously bonded to each other (no adhesives or mechanical fasteners) for ease of handling, yet manually separable and sealable with standard compression fittings
- Cut to exact length to the nearest foot as specified for each well plus 18-inches for discharge tube
- Sample discharge provides a separate flow path without exposure to pump drive air or purge water
- Bladder pump tubing pre-assembled to the pump and well cap, and factory tested for leakage
- Purge tubing shall be separate from that provided for the bladder pumps
- Purge tubing shall be terminated into a flexible Teflon tube permanently attached just above the top of the cap

Well Pump Caps
2-inch and 4-inch

- Non-lockable design with quick-connect fittings for pump supply on top, and compression type fittings underneath
- Discharge tube shall pass uninterrupted through the cap
- Provided with a minimum of a 0.75" diameter port, to allow for portable electronic water level device
- Teflon elbows for sample discharge or connection for sample discharge and polyethylene for purge discharge
- No glued construction
- All PVC construction except for fittings

EXHIBIT B: Rates

FEE SCHEDULE FORM

RFP TITLE: On Call Construction & Repair of Monitoring Wells and Professional Geologic and Hydrogeologic Services

NOTES:

- Lake County is exempt from all taxes (Federal, State, Local). Pricing should be less all taxes. A Tax Exemption Certificate will be furnished upon request.
- The vendor shall not alter or amend any of the information (including, but not limited to stated units of measure, item description, or quantity) stated in the Pricing Section. If any quantities are stated in the pricing section as being "estimated" quantities, vendors are advised to review the "Estimated Quantities" clause contained in Section 1 of this solicitation.
- All pricing shall be FOB Destination unless otherwise specified in this solicitation document
- All pricing submitted shall remain valid for a 90 day period. By signing and submitting a response to this solicitation, the vendor has specifically agreed to this condition.

Standard Fees	Units	Unit Cost
Professional Geologist	Per hour	$120.00
Staff Geologist	Per hour	$ 80.00
Environmental Technician	Per hour	$ 60.00
Drafting	Per hour	$ 45.00
Clerical/administration	Per hour	$ 40.00
Labor for repair	Per hour	$ 60.00
Equipment to clean/redevelop well	Per hour	$ 50.00
Waste Containerization (including drum but not disposal)	Per 55 gal Drum	$ 50.00
New 6-inch aluminum protective well cover & concrete pad	Each	$250.00
New 8-inch aluminum protective well cover & concrete pad	Each	$545.00
Abandonment of 2-inch well	Per foot depth	$ 6.00
Abandonment of 4-inch well	Per foot depth	$ 8.00
Mobilization to site	Per project	$450.00
2-inch Sch. 40 threaded PVC casing	Per foot	$ 2.20
4-inch Sch. 40 threaded PVC casing	Per foot	$ 5.50
2-inch Johnson PVC "Vee-wire" well screen or approved equivalent	Per foot	$ 22.00
4-inch Johnson PVC "Vee-wire" well screen or approved equivalent	Per foot	$ 33.50

Install four bollards around one well (materials & labor)	Per well	$750.00
Install six bollards around cluster of 2 or 3 wells cluster (materials & labor)	Per well cluster	$900.00
Slug test and analysis	Per well	$900.00
Dedicated bladder sampling pump	Per pump	$795.00
Dedicated purge pump	Per pump	$215.00
Bonded tubing for pump	Per foot	$ .50
Pump well cap 2-inch with sampling tube	Each	$ 40.00
Pump well cap 4-inch with sampling tube	Each	$ 50.00
Test Hole (SPT)	Per foot	$ 14.00
Split Spoon Sample	Each	$ 15.00
Shelby Tube Sample	Each	$175.00
Drilling of Bore Hole – Hollow Stem Auger	Per foot	$ 12.00
2-Inch Well		
Drilling of Bore Hole – Mud Rotary	Per foot	$ 15.00
Cost and Installation of 2" Sch. 40 threaded PVC casing	Per foot	$ 17.00
Cost and Installation of 2" Johnson PVC "Vee-wire" well screen or approved equivalent	Per foot	$ 34.00
Provide and Install bentonite seal	Each	$ 25.00
Provide and Install cement grout	Per foot	$ 6.00
4-inch Well		
Drilling of Bore Hole – Mud Rotary	Per foot	$ 19.00
Cost and Installation of 4" Sch. 40 threaded PVC casing	Per foot	$ 22.50
Cost and Installation of 4" Johnson PVC "Vee-wire" well screen or approved equivalent	Per foot	$ 50.50
Provide and Install bentonite seal	Each	$ 35.00
Provide and Install cement grout	Per foot	$ 8.00
Other Items (Please Specify)		

All materials and labor must meet County's specifications unless otherwise agreed to in writing.