The State of New Hampshire
Department of Environmental Services

Robert R. Scott, Commissioner

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February 10, 2025

Her Excellency, Governor Kelly A. Ayotte
and The Honorable Council
State House
Concord, New Hampshire 03301

REQUESTED ACTION

Authorize the New Hampshire Department of Environmental Services (NHDES) to enter into a contract with Verdantas LLC (Verdantas), Manchester, NH (Vendor Code #402436B001) in an amount not-to-exceed $300,000 to provide as needed engineering and technical support services for the Wastewater Engineering Bureau (WWEB), effective upon Governor & Council approval through December 31, 2025. 100% Septage Management Funds.

Funds are available in the account as follows:

	FY 2025
03-44-44-442010-5315-102-500731	$300,000

Dept. of Environmental Services, Septage Management Fund, Contracts for Program Services

EXPLANATION

NHDES seeks to contract with Verdantas to provide professional engineering and technical support to the WWEB for development of a per- and polyfluoroalkyl substances (PFAS) sludge model based on leaching potential in soils from biosolids land application, and for development of a recommended screening standard(s) to be implemented as part of the Sludge Quality Certification (SQC) program and Administrative Rules section Env-Wq 800, Sludge Management.

PFAS is impacting wastewater treatment systems in New Hampshire through its ubiquity and unknown use in industrial processes and household products that discharge to municipal wastewater treatment facilities (WWTFs) via collection systems, outside waste sources, and septage receiving. The PFAS impact passes through the WWTF into the effluent discharged and the sludge created from the treatment process. These impacts have raised concerns for biosolids land application not only in New Hampshire but across the United States.

Since 2017, NHDES has been actively investigating the impacts PFAS has on the SQC program. In the spring of 2019, NHDES implemented a monitoring requirement for PFAS in each SQC. Through funding from Legislation, NHDES conducted this sampling annually through 2023 but recently stopped when funds ran out. The Environmental Protection Agency (EPA) has recently published a multi-laboratory-validated method for PFAS analysis in sludge, wastewater, and other media. NH WWTFs will begin monitoring PFAS in their influent, effluent, sludge, and collection systems depending on their discharge permit requirements.

In 2019, NHDES also began planning and developing a soil and sludge PFAS leaching study to be contracted and conducted by the USGS. This study was completed in 2023. Through this three-phase study, NHDES has been able to obtain information on the background concentrations of PFAS in NH soils, establish new portioning coefficients for PFAS in soil and sludge, and collect field data to support information generated from the use of these parameters within a soil or sludge modeling program.

NHDES uses Maximum Contamination Limits and screening standards to regulate the distribution and land application of SQC sludge within Administrative Rule section Env-Wq 800, Sludge Management, and other guidance documents relating to NHDES soil remediation and Ambient Groundwater Quality Standards. By using these standards, the potential for groundwater and soil contamination from regulated compounds can be reduced from the land application of approved biosolids.

The objective of this contract is to provide professional engineering and technical support to NHDES in developing sludge standards for PFAS based on scientific data from sampling and comprehensive modeling. These proposed standards will be reviewed and evaluated for implementation through Env-Wq 800, Sludge Management.

The procurement process for this contract, further detailed in Attachment A, was conducted in accordance with NH RSA 21-I:22 by issuing a Request for Qualifications (RFQ), internal review and approval of qualifications, and ranking of the most qualified firms. The RFQ was posted on the State's Administrative Services Purchase and Property website as well as emailed to all the Consulting Engineering Firms listed on the NHDES Roster of Prequalified Licensed Engineering Firms at that time. Four firms responded to the solicitation and were independently evaluated by the Selection Team, also identified in Attachment A. All four firms were interviewed. Based upon their superior proposal and interview, the depth of technical experience and expertise, and the proposed staff for the project, the Selection Team unanimously recommended that the WWEB enter into a contract with the highest-ranking firm, Verdantas.

NHDES has negotiated terms and conditions for the services to be provided, billing rates and conditions, and a not-to-exceed cost for this contract with Verdantas. The contract has been approved by the Office of the Attorney General as to form, execution, and content.

We respectfully request your approval.

Robert R. Scott, Commissioner

Notice: This agreement and all of its attachments shall become public upon submission to Governor and Executive Council for approval. Any information that is private, confidential or proprietary must be clearly identified to the agency and agreed to in writing prior to signing the contract.

AGREEMENT

The State of New Hampshire and the Contractor hereby mutually agree as follows:

GENERAL PROVISIONS

1. IDENTIFICATION.

1.1 State Agency Name Department of Environmental Services		1.2 State Agency Address 29 Hazen Drive Concord, NH 03301	
1.3 Contractor Name Verdantas LLC		1.4 Contractor Address 186 Granite Stree, 3rd Floor, Suite A Manchester, NH 03101	
1.5 Contractor Phone Number (315) 930-3765	1.6 Account Unit and Class 03-44-44-442010-5315-102-500731	1.7 Completion Date 12/31/2025	1.8 Price Limitation $300,000
1.9 Contracting Officer for State Agency Patricia Chesebrough, PE Permitting and Compliance Engineer		1.10 State Agency Telephone Number (603) 271-7888	
1.11 Contractor Signature Date: 12/10/2024		1.12 Name and Title of Contractor Signatory Zackary Smith, AVP/EAR Practice Leader	
1.13 State Agency Signature Date: 2/10/25		1.14 Name and Title of State Agency Signatory Robert Scott, Commissioner	

1.15 Approval by the N.H. Department of Administration, Division of Personnel *(if applicable)*

By: Director, On:

1.16 Approval by the Attorney General (Form, Substance and Execution) *(if applicable)*

By: Keely Lovato On: 02/14/2025

1.17 Approval by the Governor and Executive Council *(if applicable)*

G&C Item number: G&C Meeting Date:

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Date 12-10-24

2. SERVICES TO BE PERFORMED. The State of New Hampshire, acting through the agency identified in block 1.1 ("State"), engages contractor identified in block 1.3 ("Contractor") to perform, and the Contractor shall perform, the work or sale of goods, or both, identified and more particularly described in the attached EXHIBIT B which is incorporated herein by reference ("Services").

3. EFFECTIVE DATE/COMPLETION OF SERVICES.

3.1 Notwithstanding any provision of this Agreement to the contrary, and subject to the approval of the Governor and Executive Council of the State of New Hampshire, if applicable, this Agreement, and all obligations of the parties hereunder, shall become effective on the date the Governor and Executive Council approve this Agreement, unless no such approval is required, in which case the Agreement shall become effective on the date the Agreement is signed by the State Agency as shown in block 1.13 ("Effective Date").

3.2 If the Contractor commences the Services prior to the Effective Date, all Services performed by the Contractor prior to the Effective Date shall be performed at the sole risk of the Contractor, and in the event that this Agreement does not become effective, the State shall have no liability to the Contractor, including without limitation, any obligation to pay the Contractor for any costs incurred or Services performed.

3.3 Contractor must complete all Services by the Completion Date specified in block 1.7.

4. CONDITIONAL NATURE OF AGREEMENT.

Notwithstanding any provision of this Agreement to the contrary, all obligations of the State hereunder, including, without limitation, the continuance of payments hereunder, are contingent upon the availability and continued appropriation of funds. In no event shall the State be liable for any payments hereunder in excess of such available appropriated funds. In the event of a reduction or termination of appropriated funds by any state or federal legislative or executive action that reduces, eliminates or otherwise modifies the appropriation or availability of funding for this Agreement and the Scope for Services provided in EXHIBIT B, in whole or in part, the State shall have the right to withhold payment until such funds become available, if ever, and shall have the right to reduce or terminate the Services under this Agreement immediately upon giving the Contractor notice of such reduction or termination. The State shall not be required to transfer funds from any other account or source to the Account identified in block 1.6 in the event funds in that Account are reduced or unavailable.

5. CONTRACT PRICE/PRICE LIMITATION/ PAYMENT.

5.1 The contract price, method of payment, and terms of payment are identified and more particularly described in EXHIBIT C which is incorporated herein by reference.

5.2 Notwithstanding any provision in this Agreement to the contrary, and notwithstanding unexpected circumstances, in no event shall the total of all payments authorized, or actually made hereunder, exceed the Price Limitation set forth in block 1.8. The payment by the State of the contract price shall be the only and the complete reimbursement to the Contractor for all expenses, of whatever nature incurred by the Contractor in the performance hereof, and shall be the only and the complete compensation to the Contractor for the Services.

5.3 The State reserves the right to offset from any amounts otherwise payable to the Contractor under this Agreement those liquidated amounts required or permitted by N.H. RSA 80:7 through RSA 80:7-c or any other provision of law.

5.4 The State's liability under this Agreement shall be limited to monetary damages not to exceed the total fees paid. The Contractor agrees that it has an adequate remedy at law for any breach of this Agreement by the State and hereby waives any right to specific performance or other equitable remedies against the State.

6. COMPLIANCE BY CONTRACTOR WITH LAWS AND REGULATIONS/EQUAL EMPLOYMENT OPPORTUNITY.

6.1 In connection with the performance of the Services, the Contractor shall comply with all applicable statutes, laws, regulations, and orders of federal, state, county or municipal authorities which impose any obligation or duty upon the Contractor, including, but not limited to, civil rights and equal employment opportunity laws and the Governor's order on Respect and Civility in the Workplace, Executive order 2020-01. In addition, if this Agreement is funded in any part by monies of the United States, the Contractor shall comply with all federal executive orders, rules, regulations and statutes, and with any rules, regulations and guidelines as the State or the United States issue to implement these regulations. The Contractor shall also comply with all applicable intellectual property laws.

6.2 During the term of this Agreement, the Contractor shall not discriminate against employees or applicants for employment because of age, sex, sexual orientation, race, color, marital status, physical or mental disability, religious creed, national origin, gender identity, or gender expression, and will take affirmative action to prevent such discrimination, unless exempt by state or federal law. The Contractor shall ensure any subcontractors comply with these nondiscrimination requirements.

6.3 No payments or transfers of value by Contractor or its representatives in connection with this Agreement have or shall be made which have the purpose or effect of public or commercial bribery, or acceptance of or acquiescence in extortion, kickbacks, or other unlawful or improper means of obtaining business.

6.4. The Contractor agrees to permit the State or United States access to any of the Contractor's books, records and accounts for the purpose of ascertaining compliance with this Agreement and all rules, regulations and orders pertaining to the covenants, terms and conditions of this Agreement.

7. PERSONNEL.

7.1 The Contractor shall at its own expense provide all personnel necessary to perform the Services. The Contractor warrants that all personnel engaged in the Services shall be qualified to perform the Services, and shall be properly licensed and otherwise authorized to do so under all applicable laws.

7.2 The Contracting Officer specified in block 1.9, or any successor, shall be the State's point of contact pertaining to this Agreement.

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Date 12-10-24

8. EVENT OF DEFAULT/REMEDIES.

8.1 Any one or more of the following acts or omissions of the Contractor shall constitute an event of default hereunder ("Event of Default"):

8.1.1 failure to perform the Services satisfactorily or on schedule;

8.1.2 failure to submit any report required hereunder; and/or

8.1.3 failure to perform any other covenant, term or condition of this Agreement.

8.2 Upon the occurrence of any Event of Default, the State may take any one, or more, or all, of the following actions:

8.2.1 give the Contractor a written notice specifying the Event of Default and requiring it to be remedied within, in the absence of a greater or lesser specification of time, thirty (30) calendar days from the date of the notice; and if the Event of Default is not timely cured, terminate this Agreement, effective two (2) calendar days after giving the Contractor notice of termination;

8.2.2 give the Contractor a written notice specifying the Event of Default and suspending all payments to be made under this Agreement and ordering that the portion of the contract price which would otherwise accrue to the Contractor during the period from the date of such notice until such time as the State determines that the Contractor has cured the Event of Default shall never be paid to the Contractor;

8.2.3 give the Contractor a written notice specifying the Event of Default and set off against any other obligations the State may owe to the Contractor any damages the State suffers by reason of any Event of Default; and/or

8.2.4 give the Contractor a written notice specifying the Event of Default, treat the Agreement as breached, terminate the Agreement and pursue any of its remedies at law or in equity, or both.

9. TERMINATION.

9.1 Notwithstanding paragraph 8, the State may, at its sole discretion, terminate the Agreement for any reason, in whole or in part, by thirty (30) calendar days written notice to the Contractor that the State is exercising its option to terminate the Agreement.

9.2 In the event of an early termination of this Agreement for any reason other than the completion of the Services, the Contractor shall, at the State's discretion, deliver to the Contracting Officer, not later than fifteen (15) calendar days after the date of termination, a report ("Termination Report") describing in detail all Services performed, and the contract price earned, to and including the date of termination. In addition, at the State's discretion, the Contractor shall, within fifteen (15) calendar days of notice of early termination, develop and submit to the State a transition plan for Services under the Agreement.

10. PROPERTY OWNERSHIP/DISCLOSURE.

10.1 As used in this Agreement, the word "Property" shall mean all data, information and things developed or obtained during the performance of, or acquired or developed by reason of, this Agreement, including, but not limited to, all studies, reports, files, formulae, surveys, maps, charts, sound recordings, video recordings, pictorial reproductions, drawings, analyses, graphic representations, computer programs, computer printouts, notes, letters, memoranda, papers, and documents, all whether finished or unfinished.

10.2 All data and any Property which has been received from the State, or purchased with funds provided for that purpose under this Agreement, shall be the property of the State, and shall be returned to the State upon demand or upon termination of this Agreement for any reason.

10.3 Disclosure of data, information and other records shall be governed by N.H. RSA chapter 91-A and/or other applicable law. Disclosure requires prior written approval of the State.

11. CONTRACTOR'S RELATION TO THE STATE. In the performance of this Agreement the Contractor is in all respects an independent contractor, and is neither an agent nor an employee of the State. Neither the Contractor nor any of its officers, employees, agents or members shall have authority to bind the State or receive any benefits, workers' compensation or other emoluments provided by the State to its employees.

12. ASSIGNMENT/DELEGATION/SUBCONTRACTS.

12.1 Contractor shall provide the State written notice at least fifteen (15) calendar days before any proposed assignment, delegation, or other transfer of any interest in this Agreement. No such assignment, delegation, or other transfer shall be effective without the written consent of the State.

12.2 For purposes of paragraph 12, a Change of Control shall constitute assignment. "Change of Control" means (a) merger, consolidation, or a transaction or series of related transactions in which a third party, together with its affiliates, becomes the direct or indirect owner of fifty percent (50%) or more of the voting shares or similar equity interests, or combined voting power of the Contractor, or (b) the sale of all or substantially all of the assets of the Contractor.

12.3 None of the Services shall be subcontracted by the Contractor without prior written notice and consent of the State.

12.4 The State is entitled to copies of all subcontracts and assignment agreements and shall not be bound by any provisions contained in a subcontract or an assignment agreement to which it is not a party.

13. INDEMNIFICATION. The Contractor shall indemnify, defend, and hold harmless the State, its officers, and employees from and against all actions, claims, damages, demands, judgments, fines, liabilities, losses, and other expenses, including, without limitation, reasonable attorneys' fees, arising out of or relating to this Agreement directly or indirectly arising from death, personal injury, property damage, intellectual property infringement, or other claims asserted against the State, its officers, or employees caused by the acts or omissions of negligence, reckless or willful misconduct, or fraud by the Contractor, its employees, agents, or subcontractors. The State shall not be liable for any costs incurred by the Contractor arising under this paragraph 13. Notwithstanding the foregoing, nothing herein contained shall be deemed to constitute a waiver of the State's sovereign immunity, which immunity is hereby reserved to the State. This covenant in paragraph 13 shall survive the termination of this Agreement.

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14. INSURANCE.

14.1 The Contractor shall, at its sole expense, obtain and continuously maintain in force, and shall require any subcontractor or assignee to obtain and maintain in force, the following insurance:

14.1.1 commercial general liability insurance against all claims of bodily injury, death or property damage, in amounts of not less than $1,000,000 per occurrence and $2,000,000 aggregate or excess; and

14.1.2 special cause of loss coverage form covering all Property subject to subparagraph 10.2 herein, in an amount not less than 80% of the whole replacement value of the Property.

14.2 The policies described in subparagraph 14.1 herein shall be on policy forms and endorsements approved for use in the State of New Hampshire by the N.H. Department of Insurance, and issued by insurers licensed in the State of New Hampshire.

14.3 The Contractor shall furnish to the Contracting Officer identified in block 1.9, or any successor, a certificate(s) of insurance for all insurance required under this Agreement. At the request of the Contracting Officer, or any successor, the Contractor shall provide certificate(s) of insurance for all renewal(s) of insurance required under this Agreement. The certificate(s) of insurance and any renewals thereof shall be attached and are incorporated herein by reference.

15. WORKERS' COMPENSATION.

15.1 By signing this agreement, the Contractor agrees, certifies and warrants that the Contractor is in compliance with or exempt from, the requirements of N.H. RSA chapter 281-A *("Workers' Compensation")*.

15.2 To the extent the Contractor is subject to the requirements of N.H. RSA chapter 281-A, Contractor shall maintain, and require any subcontractor or assignee to secure and maintain, payment of Workers' Compensation in connection with activities which the person proposes to undertake pursuant to this Agreement. The Contractor shall furnish the Contracting Officer identified in block 1.9, or any successor, proof of Workers' Compensation in the manner described in N.H. RSA chapter 281-A and any applicable renewal(s) thereof, which shall be attached and are incorporated herein by reference. The State shall not be responsible for payment of any Workers' Compensation premiums or for any other claim or benefit for Contractor, or any subcontractor or employee of Contractor, which might arise under applicable State of New Hampshire Workers' Compensation laws in connection with the performance of the Services under this Agreement.

16. WAIVER OF BREACH. A State's failure to enforce its rights with respect to any single or continuing breach of this Agreement shall not act as a waiver of the right of the State to later enforce any such rights or to enforce any other or any subsequent breach.

17. NOTICE. Any notice by a party hereto to the other party shall be deemed to have been duly delivered or given at the time of mailing by certified mail, postage prepaid, in a United States Post Office addressed to the parties at the addresses given in blocks 1.2 and 1.4, herein.

18. AMENDMENT. This Agreement may be amended, waived or discharged only by an instrument in writing signed by the parties hereto and only after approval of such amendment, waiver or discharge by the Governor and Executive Council of the State of New Hampshire unless no such approval is required under the circumstances pursuant to State law, rule or policy.

19. CHOICE OF LAW AND FORUM.

19.1 This Agreement shall be governed, interpreted and construed in accordance with the laws of the State of New Hampshire except where the Federal supremacy clause requires otherwise. The wording used in this Agreement is the wording chosen by the parties to express their mutual intent, and no rule of construction shall be applied against or in favor of any party.

19.2 Any actions arising out of this Agreement, including the breach or alleged breach thereof, may not be submitted to binding arbitration, but must, instead, be brought and maintained in the Merrimack County Superior Court of New Hampshire which shall have exclusive jurisdiction thereof.

20. CONFLICTING TERMS. In the event of a conflict between the terms of this P-37 form (as modified in EXHIBIT A) and any other portion of this Agreement including any attachments thereto, the terms of the P-37 (as modified in EXHIBIT A) shall control.

21. THIRD PARTIES. This Agreement is being entered into for the sole benefit of the parties hereto, and nothing herein, express or implied, is intended to or will confer any legal or equitable right, benefit, or remedy of any nature upon any other person.

22. HEADINGS. The headings throughout the Agreement are for reference purposes only, and the words contained therein shall in no way be held to explain, modify, amplify or aid in the interpretation, construction or meaning of the provisions of this Agreement.

23. SPECIAL PROVISIONS. Additional or modifying provisions set forth in the attached EXHIBIT A are incorporated herein by reference.

24. FURTHER ASSURANCES. The Contractor, along with its agents and affiliates, shall, at its own cost and expense, execute any additional documents and take such further actions as may be reasonably required to carry out the provisions of this Agreement and give effect to the transactions contemplated hereby.

25. SEVERABILITY. In the event any of the provisions of this Agreement are held by a court of competent jurisdiction to be contrary to any state or federal law, the remaining provisions of this Agreement will remain in full force and effect.

26. ENTIRE AGREEMENT. This Agreement, which may be executed in a number of counterparts, each of which shall be deemed an original, constitutes the entire agreement and understanding between the parties, and supersedes all prior agreements and understandings with respect to the subject matter hereof.

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EXHIBIT A
SPECIAL PROVISIONS

Add the following new sections to the end of the General Provisions:

25. STANDARD OF CARE. The Contractor shall complete the services required hereunder in accordance with the prevailing standard of care by exercising the skill and ability ordinarily required of consultants performing the same or similar services, under the same or similar circumstances, in the State of New Hampshire.

26. ACCESS. The State shall arrange for reasonable access to and make all provisions for the Contractor to enter upon public and private property as required for the Contractor to perform services hereunder.

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EXHIBIT B
SERVICES

1. WORK TO BE PERFORMED BY THE CONTRACTOR

1.1 Work Program: The Work Program, as described below in Section 2, contains certain technical and professional activities to be performed with the funds pursuant to this Agreement.

1.2 Contractor Assurance: Verdantas, heretofore known as the "Contractor", in consideration of the compensation to be provided pursuant to this Agreement, hereby covenants and agrees to perform and carry out in a satisfactory and proper manner, as determined by the New Hampshire Department of Environmental Services (NHDES), those activities identified and more particularly described below in the Work Program (individual work tasks and services).

1.3 Work Products: All materials, maps, plans, reports, specifications, documents, models, and other work products specified in the Work Program for preparation and submission by the Contractor shall be submitted to NHDES on or before the due dates, and in the number of copies and format specified in the Work Program.

2. WORK PROGRAM

2.1 Title: Sludge Quality Certification (SQC) Program PFAS Modeling and Screening Standard Development.

2.2 Study Areas: The project will review data from the NHDES Sludge Quality Certificate (SQC) PFAS sampling investigations, phases 1-3 of the USGS PFAS soil and sludge leaching study, the NEIWPCC BioHub, and any other applicable datasets to model PFAS standards for sludge in the SQC program.

2.3 Objective: Provide engineering services for development of a per- and polyfluoroalkyl substances (PFAS) sludge model based on leaching potential in soils from biosolids land application, and for development of a recommended screening standard(s) to be implemented as part of the Sludge Quality Certification (SQC) program and Administrative Rules section Env-Wq 800, Sludge Management.

2.4 Background/Description: PFAS is impacting wastewater treatment systems in New Hampshire through its ubiquity and unknown use in industrial processes and household products that discharge to municipal wastewater treatment facilities (WWTFs) via

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collection systems, outside waste sources, and septage receiving. The PFAS impact passes through to the WWTF into the effluent discharged and the sludge created from the treatment process. These impacts have raised concerns for biosolids land application not only in New Hampshire but across the United States.

Since 2017, NHDES has been actively investigating the impacts PFAS has on the Sludge Quality Certificate (SQC) program. In the spring of 2019, NHDES implemented a monitoring requirement for PFAS in each SQC. Through funding from Legislation, NHDES conducted this sampling annually through 2023 but recently stopped when funds ran out. The Environmental Protection Agency (EPA) has recently published a multi-laboratory-validated method for PFAS analysis in sludge, wastewater, and other media. NH WWTFs will begin monitoring PFAS in their influent, effluent, sludge, and collection systems depending on their discharge permit requirements.

In 2019, NHDES also began planning and developing a soil and sludge PFAS leaching study to be contracted and conducted by the USGS that was completed in 2023. Through this three-phase study, NHDES has been able to obtain information on the background concentrations of PFAS in NH soils, establish new portioning coefficients for PFAS in soil and sludge, and collect field data to support information generated from the use of these parameters within a soil or sludge modeling program.

NHDES uses Maximum Contamination Limits (MCLs) and screening standards to regulate the distribution and land application of SQC sludge within Administrative Rule section Env-Wq 800, Sludge Management, and other guidance documents relating to NHDES soil remediation and AGQS. By using these standards, the potential for groundwater and soil contamination by regulated compounds can be reduced from the land application of approved biosolids.

The objective of this contract is to provide professional engineering and technical support to NHDES in developing PFAS sludge standards based on scientific data from sampling and comprehensive modeling. These proposed standards will be reviewed and evaluated for implementation into Env-Wq 800 Sludge Management during the next re-adoption of the rules in 2026.

2.5 Scope of Work: This agreement consists of the following scope of work:

Task #1 - Development of Conceptual Model(s) and Overall Approach

Scope: Define a primary and alternative conceptual site model that will be used for modeling. Define conceptual approach that will be used for developing standards (e.g., if flexible standards are proposed, define which parameters will be set as variables). For context, review the modeling approach (SESOIL) used by NHDES for contaminants with

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existing loading rates, and review setback distances in Env-Wq 806.08 rules.
Anticipated meetings (2): A project kick-off and a Task #1 completion update to discuss and agree upon the overall project approach and define a primary and alternative conceptual model.

Anticipated deliverables: Letter report.

Anticipated duration: Two months.

Task #2 – Identify & Review Existing Data Sources

Scope: Obtain and review data from the NHDES SQC PFAS sampling investigations, Phases 1-3 of the U.S. Geological Service PFAS soil and sludge leaching study, the NEIWPCC BioHub, and any other applicable datasets to determine if there are background PFAS concentrations to be used when modeling and developing standards for sludge in the SQC program. This may involve establishing various background sludge concentrations into categories of treatment technologies for Pathogen Reduction and Vector Attraction Reduction (PR/VAR) (Class A versus Class B sludges).

Review and obtain data sources that will inform physical aspects of the conceptual model and fate and transport properties for each applicable PFAS that will be modeled.

Anticipated meetings (1): Task #2 completion update to discuss identified data sources and usable parameters from these data sources.

Anticipated deliverables: Letter report listing identified existing data sources relevant to the project ("bibliography"), and the usable model parameters, findings, and/or assumptions that can be taken from these existing data sources for direct or indirect incorporation into the modelling effort.

Anticipated duration: Two months.

Task #3 – Review & Recommend Modeling Software

Scope: Review available modeling software and propose the most suitable software for development of the PFAS standard(s). The most suitable modeling program(s) will consider beneficial use of sludge, the type of soils and soil parameters typically found where the sludge is land applied, potential crop uptake, NH Ambient Groundwater Quality Standards (AGQS) for PFAS, and any other factors that will relate to the beneficial use of sludge in New Hampshire.

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Anticipated meetings (2): A Task #3 completion update to discuss relevant modeling software, advantages and limitations of various software, and recommendations for model selection.

Anticipated deliverables: A letter report listing relevant modeling software, advantages and limitations of various software, and recommendations for model selection.

Anticipated duration: Two months.

Task #4 – Modeling

Scope: Once the software is approved by NHDES, create the model that will support development of the PFAS standards for sludge. This includes the potential need to model for multiple classifications of sludge or soils due to distinct parameters observed and noted from Task #2. It is anticipated that up to 150 model simulations will be performed as part of this task, including modeling of a primary and alternative conceptual site model, three climate types, five soil types, and five PFAS (i.e., PFOS, PFOA, PFHxS, PFNA, and Gen X). If SESOIL is not the recommended software identified in Task 3, it is anticipated that five additional model simulations will be performed with the NHDES SESOIL model using PFAS-specific fate and transport input parameters identified as part of Task 2.

Anticipated meetings (4-6): Three to five meetings as needed to discuss and refine model parameters, assumptions, needed model runs, etc., and a Task #4 completion update to present model results, discuss findings, and review methodology for development of the standards.

Anticipated deliverables: A letter report transmitting the model results via figures, tables, etc., and providing a thorough description of development methodology, data sources, and any/all assumptions.

Anticipated duration: Three months.

Task #4A – Modeling Contingency

Scope: If requested by NHDES, up to 75 additional model simulations will be performed as part of this task to evaluate other conditions in addition to those specified in Task 4.

Anticipated meetings (2): One meeting to discuss model parameters, assumptions and needed model simulations, and a Task #4A completion update to present model results and discuss findings.

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Anticipated deliverables: A letter report transmitting the additional model results via figures, tables, etc., and discussion of findings including with reference to the findings presented in the Task 4 letter report.

Anticipated duration: Two months.

Task #5 – Develop Standards

Scope: Use the findings from Tasks #1 through #4 to develop PFAS standards for sludge.

Anticipated meetings (1): One Task #5 completion update to summarize how the model was translated into the proposed standards and justify recommended values as may be appropriate.

Anticipated deliverables: A letter report to summarize how the model was translated into a proposed standards and justify recommended values as may be appropriate.

Anticipated duration: Two months.

Task #6 – Prepare Final Report

Scope: Provide a final report, summarizing all work and findings, and presenting the proposed PFAS sludge standards. Different PFAS standards for different soil types and sludge classifications may be proposed. The final report shall clearly describe the modeling process and how the model was used to develop the proposed standards, including the relationships between parameters used in the modeling and the rationale for selecting the standards for each classification. The final report shall state all assumptions made during modeling and/or standards development, as well as append supporting data and other data, studies, and other documents referenced. Uniform Resource Locator (URL) links may be provided for online resources.

Anticipated meetings (1): One meeting, if needed, to discuss comments on the draft report.

Anticipated deliverables: A draft Project Report as described above for review by NHDES, incorporation of comments, and publishing of a Final Project Report.

Anticipated duration: Two months.

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2.6 Subcontractors: The Contractor may use subcontractor(s) where reasonable, appropriate and consistent with industry practice as indicated herein:

- Work shall not be assigned to a subcontractor without prior approval of NHDES.
- The Contractor shall be fully responsible to the State for any acts, errors and omissions of subcontractor(s).
- Subcontractor(s) shall be bound by the same terms and conditions as those that bind the Contractor to the State, but there shall be no direct contractual relationship between the subcontractor(s) and the State.
- The State reserves the right to negotiate subcontractor service markup rates and qualifications. The Contractor shall be responsible for delivering all reports and documentation generated by any subcontractor.

2.7 The State's Responsibilities: The State shall be responsible for providing the Contractor with the following:

- Assist the Contractor by placing at their disposal all available information pertinent to the Work Program including all reports, studies, and other information relative to the work.
- Make provisions for the Contractor to enter upon NHDES owned properties to perform the work assigned under this agreement.
- Provide other assistance as needed to facilitate the completion of assigned work in a timely and cost-effective manner.

2.8 Schedule for Reports, Forms, and other Documentation: Reports, forms, and other documentation will be compiled and presented as described in the Scope of Work presented in above.

2.9 Final Report Format: Electronic copies of all reports, forms, and other documentation shall be provided to NHDES.

2.10 Program Administration: The Contractor will meet or conference call with NHDES staff at the request of NHDES as needed throughout the project. The estimated number and nature of meetings has been described in the Scope of Work above.

2.11 Project Duration: The anticipated duration for each project task is described in the Scope of Work above. The Governor and Council approval for the project as a whole is valid through December 31, 2025.

Contractor Initials 2S
Date 12-10-24

EXHIBIT C
AGREEMENT PRICE, METHOD, AND TERMS OF PAYMENT

1. PROGRAM COSTS AND REVIEW

1.1 Program Costs: As used in this Agreement, the term "program costs" shall mean all expenses directly or indirectly incurred by Verdantas, heretofore referred to as the "Contractor", in the performance of the program activities determined by the New Hampshire Department of Environmental Services (NHDES) to be eligible and allowable for payment in accordance with this Agreement and scopes of services approved under the provisions of this Agreement.

The estimated hours and costs are broken down by task in the table below. The total charges for all services provided under this Agreement shall not exceed $300,000.00.

Task #	Task Name	Estimated Hours	Estimated Cost
1	Development of Conceptual Model	135	$29,800
2	Review of Existing Data Sources	190	$38,800
3	Review and Recommend Modeling Software	140	$34,900*
4	Modeling	340	$75,000
4A	Modeling (Contingency)	210	$43,200
5	Development of Standards	120	$26,200
6	Prepare Final Report	235	$52,100
	Total Budget	1,370	$300,000

*Includes $5,000 for purchase of software, if applicable.

1.2 Payment of Program Costs: Subject to the terms and conditions of this agreement, NHDES agrees to pay the Contractor all allowable program costs, provided, however, that in no event shall the total of all payments made by the NHDES pursuant to this Agreement exceed the amount of the contract price as set out in paragraph 1.8 of the General Provisions and that the program costs have been incurred prior to the completion date. Program costs may be paid if requested within 90 days after the completion date.

1.3 Payment of Reimbursable Program Costs: NHDES agrees to reimburse the Contractor for program costs, except that program costs may be retained until the NHDES determines that a particular program activity or portion of the program activity hereunder has been satisfactorily completed.

Contractor Initials ZS
Date 12-10-24

1.4 Conditions Precedent to Payment: Notwithstanding the foregoing provisions of this Section or anything to the contrary contained herein, it is understood and agreed that each payment shall be conditioned upon NHDES's determination that the project activities have been and are being performed in a satisfactory manner.

1.5 Review by NHDES; Disallowance of Costs: At any time during the performance of the program activities, and upon receipt of any interim work products, progress reports, final work products, or an audited financial report, NHDES may review all program costs incurred by the Contractor and all payments made to date. Upon such review NHDES shall disallow any expense items which are not allowable or are determined to be in excess of actual expenditures and shall, by written notice specifying the disallowed expenditures, inform the Contractor of any such disallowance. If NHDES disallows costs for which payment has not yet been made, it shall refuse to pay such costs.

If payment has been made with respect to costs that are subsequently disallowed, NHDES may deduct the amount of disallowed costs from any future payments under this Agreement or require that the Contractor refund to the NHDES the amount of the disallowed costs.

2. PAYMENT PROCEDURE

NHDES shall pay to the Contractor the total reimbursable program costs in accordance with the following requirements and in accordance with the Contractor's Table of Rates:

Reimbursement requests for program costs shall be made by the Contractor. Documentation of reimbursable and matching costs may include invoices for supplies, equipment, services, contractual services, and a report of personnel, travel and indirect costs. For projects that demonstrate progress solely through the submission of interim progress reports, payments shall be made upon receipt, review and approval of the interim progress report and accompanying payment request form.

Contractor Initials ZS
Date 12-10-24

verdantas

Contract Rate Schedule

Professional Services	Hourly Rate	Support	Hourly Rate
Senior Consultant I	$240.00	Administrative Coordinator	$95.00
Senior Consultant II	$270.00		
Senior Consultant III	$295.00	**CAD/GIS/Data Management**	**Hourly Rate**
Senior Project Manager	$235.00	Senior GIS Specialist	$160.00
Engineer/Scientist	$170.00		
Senior Engineer/Scientist	$220.00		

NOTES:

1. Standard Billing Rates: Our standard billing rates are reviewed no less than annually and may be adjusted at those times.
2. Expert Testimony: Litigation, expert witness, and all other legal and court related appearances will be billed at twice the standard fee schedule rate. There is a minimum eight-hour charge per day and a minimum overall fee of $2,000.00 per case.
3. Higher Hourly Rates: Certain services, such as emergency/rapid response consulting, may be subject to higher hourly billing rates as agreed upon on a project-specific basis.
4. Overtime: Overtime for time worked on a project exceeding 8 hours per day, Holidays, and/or Sundays will be billed at 1.5 times the standard rate.
5. Field Equipment and Supplies: Field equipment and in-house supplies will be billed at fixed unit prices, subject to periodic updates.
6. Subcontractors and Project Expenses: All project-related expenses are chargeable at cost plus 10% or in accordance with the specific project agreement. Subcontractor charges, costs of rental of specialized equipment, and any other costs not associated with normal overhead are billed at cost plus 15% or in accordance with the specific project agreement.
7. Mileage: The mileage for personal vehicles will be billed at the current United States Internal Revenue Service reimbursement rate.
8. General Terms and Conditions: Please refer to the General Terms and Conditions for further details.

Corporate Resolution

I, Jesse Kropelnicki, hereby certify that I am duly elected CEO and President of Verdantas LLC. I hereby certify the following is a true copy of a vote taken at a meeting of the Board of Directors/shareholders, duly called and held on December 4th, 2024,

at which a quorum of the Directors/shareholders were present and voting.

VOTED: That Zackary Smith, AVP/EAR Practice Leader is duly authorized to enter a contract on behalf of Verdantas LLC with the Department of Environmental Services, State of New Hampshire and further is authorized to execute any documents which may in his judgment be desirable or necessary to effect the purpose of this vote.

I hereby certify that said vote has not been amended or repealed and remains in full force and effect as of the 4th of December, 2024. I further certify that it is understood that the State of New Hampshire will rely on this certificate as evidence that the person listed above currently occupies the position indicated and that they have full authority to bind the corporation and that the corporation as the general partner has full authority to bind the limited partnership to the specific contract indicated. This authority **shall remain valid for thirty (30)** days from the date of this Corporate Resolution.

DATED: 12/4/24

ATTEST: _____

Jesse Kropelnicki, Chief Executive Officer and President

EXECUTIVE PRESIDENT

IN WITNESS WHEREOF, I have hereunto set my hand as the Chief ~~Financial~~ Officer and ~~Secretary~~ of the Verdantas LLC, this 4th day of December, 2024.

Jesse Kropelnicki, Chief Executive Office and President

STATE OF MASS

COUNTY OF Norfolk

On this the 4TH of December, 2024, before the undersigned officer, personally appeared Jesse Kropelnicki, Chief Executive Officer and President, who acknowledged himself to be the person who executed the foregoing instrument for the purpose therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Name notary public/JOP, USHA MALIK

My Commission Expires: 06/07/2030

USHA MALIK
Notary Public, Commonwealth of Massachusetts
My Commission Expires June 7, 2030

State of New Hampshire
Department of State

CERTIFICATE

I, David M. Scanlan, Secretary of State of the State of New Hampshire, do hereby certify that VERDANTAS LLC is a Ohio Limited Liability Company registered to transact business in New Hampshire on October 06, 2010. I further certify that all fees and documents required by the Secretary of State's office have been received and is in good standing as far as this office is concerned.

Business ID: **637086**
Certificate Number: **0006812867**

IN TESTIMONY WHEREOF,
I hereto set my hand and cause to be affixed the Seal of the State of New Hampshire, this 26th day of November A.D. 2024.

David M. Scanlan
Secretary of State

VERDALL-01 RJONES

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 1/13/2025

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Ames & Gough
8300 Greensboro Drive
Suite 980
McLean, VA 22102

CONTACT NAME:
PHONE (A/C, No, Ext): (703) 827-2277 FAX (A/C, No): (703) 827-2279
E-MAIL ADDRESS: admin@amesgough.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Allied World Assurance Company (U.S.) Inc.	19489
INSURER B : Transportation Insurance Company A(XV)	20494
INSURER C : Continental Casualty Company (CNA) A, XV	20443
INSURER D : Allied World Surplus Lines Insurance Co. A XV	24319
INSURER E : Underwriters At Lloyds of London	15642
INSURER F :	

INSURED
Verdantas LLC
6397 Emerald Parkway
Suite 200
Dublin, OH 43016

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY						EACH OCCURRENCE	$ 1,000,000
	CLAIMS-MADE X OCCUR			0313-8888	6/30/2024	6/30/2025	DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 300,000
	X Contractual Liab.						MED EXP (Any one person)	$ 25,000
							PERSONAL & ADV INJURY	$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$ 2,000,000
	POLICY X PRO-JECT LOC						PRODUCTS - COMP/OP AGG	$ 2,000,000
	OTHER:						STOP GAP	$ 1,000,000
B	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
	X ANY AUTO			6080642405	6/30/2024	6/30/2025	BODILY INJURY (Per person)	$
	OWNED AUTOS ONLY / SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	HIRED AUTOS ONLY / NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	$
								$
A	X UMBRELLA LIAB X OCCUR			0313-8889	6/30/2024	6/30/2025	EACH OCCURRENCE	$ 10,000,000
	EXCESS LIAB CLAIMS-MADE						AGGREGATE	$ 10,000,000
	DED X RETENTION $ 10,000							$
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY						X PER STATUTE OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N N	N / A		6080642422	6/30/2024	6/30/2025	E.L. EACH ACCIDENT	$ 1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	$ 1,000,000
D	Professional Liab.			0313-8886	6/30/2024	6/30/2025	Per Claim/Aggregate	10,000,000
E	Excess Liability			ENVX0000418-24	6/30/2024	6/30/2025	Per Claim/Aggregate	5,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
Cyber Liability Policy #C-4LRY-073428-CYBER-2023 (Insurer: Coalition Insurance Solutions, Inc.) – 12/27/23 - 6/30/25 – $5,000,000 Per Claim/Aggregate

Drone Liability Policy #SIHL 1-Q710 (Insurer: USAIG Insurance Group) – 6/30/2024 – 6/30/2025 - $10,000,000 Per Occurrence/Aggregate

New Hampshire Department of Environmental Services is included as additional insured with respect to General Liability, Automobile Liability and Umbrella Liability when required by written contract. General Liability includes Additional Insured coverage for On-Going & Completed Operations as required by written contract. General Liability, Automobile Liability and Umbrella Liability are primary and non-contributory over any existing insurance and limited to
SEE ATTACHED ACORD 101

CERTIFICATE HOLDER

New Hampshire Department of Environmental Services
6 Hazen Drive, PO Box 95
Concord, NH 03302

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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AGENCY CUSTOMER ID: VERDALL-01 RJONES

LOC #: 1

ADDITIONAL REMARKS SCHEDULE

AGENCY		NAMED INSURED
Ames & Gough		Verdantas LLC 6397 Emerald Parkway Suite 200 Dublin, OH 43016
POLICY NUMBER SEE PAGE 1		
CARRIER SEE PAGE 1	NAIC CODE SEE P 1	EFFECTIVE DATE: SEE PAGE 1

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,

FORM NUMBER: ACORD 25 FORM TITLE: Certificate of Liability Insurance

Description of Operations/Locations/Vehicles:
liability arising out of the operations of the named insured and when required by written contract. General Liability, Automobile Liability, Umbrella Liability and Workers Compensation policies include a waiver of subrogation in favor of the additional insured where permissible by state law and when required by written contract. 30-day Notice of Cancellation will be issued on the General Liability, Automobile Liability, Workers Compensation and Professional Liability policies in accordance with policy terms and conditions.

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Attachment A
Wastewater Engineering Bureau
Sludge Quality Certification (SQC) Program PFAS Modeling and Screening Standard Development
Rankings for Firms Responding to Request for Qualifications

Written Proposal Ranking*

RFQ Respondent Firm	Selection Criteria #1 Experience of Firm (35 Points)	Selection Criteria #2 Project Team (25 points)	Selection Criteria #3 Example Projects (15 Points)	Selection Criteria #4 Project Management (15 Points)	Selection Criteria #5 Quality of Proposal (10 Points)	Total Points (max 100)	Rank
Verdantas	29.0	22.0	13.0	12.3	8.3	84.7	1
Stantec	30.7	21.0	12.3	11.0	8.0	83.0	2
Tetra Tech	32.3	19.0	12.3	12.3	6.7	82.7	3
Brown & Caldwell	29.7	15.7	10.3	10.7	6.7	73.0	4

Interview Ranking*

RFQ Respondent Firm	Selection Criteria #1 Experience of Firm (35 Points)	Selection Criteria #2 Project Team (25 points)	Selection Criteria #3 Example Projects (15 Points)	Selection Criteria #4 Project Management (15 Points)	Selection Criteria #5 Quality of Proposal (10 Points)	Total Points (max 100)	Rank
Verdantas	34.0	24.3	14.3	14.3	8.7	95.7	1
Tetra Tech	33.0	22.7	14.0	13.0	7.7	90.3	2
Stantec	29.0	19.0	12.3	7.7	6.3	74.3	3
Brown & Caldwell	24.0	14.3	9.3	8.3	6.0	62.0	4

Combined Written Proposal & Interview Ranking**

RFQ Respondent Firm	Selection Criteria #1 Experience of Firm (35 Points)	Selection Criteria #2 Project Team (25 points)	Selection Criteria #3 Example Projects (15 Points)	Selection Criteria #4 Project Management (15 Points)	Selection Criteria #5 Quality of Proposal (10 Points)	Total Points (max 100)	Rank
Verdantas	31.5	23.2	13.7	13.3	8.5	90.2	1
Tetra Tech	32.7	20.8	13.2	12.7	7.2	86.5	2
Stantec	29.8	20.0	12.3	9.3	7.2	78.7	3
Brown & Caldwell	26.8	15.0	9.8	9.5	6.3	67.5	4

Selection Team Members

Name	Title	Bureau	Years of Service
Anthony Drouin	Residuals Management Supervisor	Wastewater Engineering Bureau	4
Patty Chesebrough	Permitting & Compliance Engineer	Wastewater Engineering Bureau	1
Wade Pelham	Sludge & Septage Coordinator	Wastewater Engineering Bureau	22

* Average of selection team member scores.
** Average of selection team member scores for both written proposal and interview.