MEMORANDUM

To: Joint Fiscal Committee members
From: Daniel Dickerson, Fiscal Analyst
Date: August 23, 2017
Subject: Limited-Service Position Request #2886

Enclosed please find one (1) item, which the Joint Fiscal Office has received from the administration.

JFO #2886 – One (1) limited-service position within the Agency of Agriculture, Food and Markets (Agency). The position would both be titled Agricultural Engineer I and would be tasked with providing engineering support to farmers who are currently enrolled in or would like to apply to the USDA Environmental Quality Incentives Program (EQIP). Funding for the position would be split between the USDA Natural Resource Conservation Service (NRCS) and the Agency. The Agency would be reallocating money from its existing ecosystem restoration funds and NRCS will provide funding through an existing grant agreement. The available funding for salary, benefits and travel would be $600k (split 50/50 between NRCS and Agency) for the new position and one existing position over a three-year period. NRCS will provide office space and equipment for both positions and the Agency will provide indirect administrative support and services. The cumulative amount that the State will contribute over three years is $337k, while the amount that NRCS will contribute is $394k.

[JFO received 8/21/17]

Please review the enclosed materials and notify the Joint Fiscal Office (Daniel Dickerson at (802) 828-2472; ddickerson@leg.state.vt.us) if you have questions or would like an item held for legislative review. Unless we hear from you to the contrary by September 6, 2017 we will assume that you agree to consider as final the Governor’s acceptance of these requests.
The Vermont Agency of Agriculture, Food and Markets (VAAFM) received JFO approval #2541 in December 2011 for a multi-year grant from the US Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) to provide technical resources to Vermont farmers from the Strategic Watershed Action Team (SWAT) (aka Clean Water projects) to reduce the adverse impact to water quality from farm runoff.

USDA has offered to add $300K funding to support 1 more agricultural engineer for this program if VAAFM will match the funding. Please see the attached letter.

VAAFM has agreed to match the USDA funding through a partial reallocation of its existing base budget for Ecosystem Restoration and hereby requests one new Limited Service agricultural engineer position on this grant.

I recommend your approval of this position request.
STATE OF VERMONT
Joint Fiscal Committee Review
Limited Service - Grant Funded
Position Request Form

This form is to be used by agencies and departments when additional grant funded positions are being requested. Review and approval by the Department of Human Resources must be obtained prior to review by the Department of Finance and Management. The Department of Finance will forward requests to the Joint Fiscal Office for JFC review. A Request for Classification Review Form (RFR) and an updated organizational chart showing to whom the new position(s) would report must be attached to this form. Please attach additional pages as necessary to provide enough detail.

Agency/Department: Agriculture Date: 6/16/17
Name and Phone (of the person completing this request): Laura Dipietro 595-1990

Request is for:
- [x] Positions funded and attached to a new grant.
- [ ] Positions funded and attached to an existing grant approved by JFO #

1. Name of Granting Agency, Title of Grant, Grant Funding Detail (attach grant documents):
   USDA, EQIP Grant, Contribution Agreement

2. List below titles, number of positions in each title, program area, and limited service end date (information should be based on grant award and should match information provided on the RFR) position(s) will be established only after JFC final approval:

<table>
<thead>
<tr>
<th>Title* of Position(s) Requested</th>
<th># of Positions</th>
<th>Division/Program</th>
<th>Grant Funding Period/Anticipated End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture Eng.</td>
<td>1</td>
<td>Ag ARMS</td>
<td>8/1/17 - 9/30/20</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
   *Final determination of title and pay grade to be made by the Department of Human Resources Classification Division upon submission and review of Request for Classification Review.

3. Justification for this request as an essential grant program need:

   Excessive backlog on farms requesting assistance that requires engineering support. Maximizes use of federal funds for clean water projects.

I certify that this information is correct and that necessary funding, space and equipment for the above position(s) are available (required by 32 VSA Sec 56).

Signature of Agency or Department Head

Date

Approved/Denied by Department of Human Resources

Date

Approved/Denied by Finance and Management

Date

Approved/Denied by Secretary of Administration

Date

Comments:

DHR Approval from staffing / workload perspective
Dear Secretary Tebbetts,

As per discussions with Laura DiPietro on your staff, I would like to enter into a Contribution Agreement with the Vermont Agency of Agriculture, Food and Markets (VAAFM) to fund a staff person to provide engineering support to Vermont farmers who are currently enrolled in or would like to apply for the USDA Environmental Quality Incentives Program (EQIP).

Currently, VT NRCS and VAAFM share one partner engineer position together to achieve our shared engineering needs associated with water quality improvements on livestock farms, primarily dairy. With the new Required Agricultural Practices, the workload has increased over the past year and there remains a large backlog of applications for practices that require engineering expertise in both planning and design. I believe adding one additional staff person to these duties will improve customer service to Vermont farmers and expedite the application, contract development, and implementation of critical water quality practices across the state.

I currently have $200,000 available to commit to VAAFM for this purpose, with the expectation of receiving at least that much in match through VAAFM’s enhanced cost share for the implementation of structural best management practices on farms who are also enrolled in EQIP.

Please let me know if you have any questions regarding this request.

Sincerely,

Vicky M. Drew
State Conservationist

Cc: Laura DiPietro, VAAFM
Contribution Agreement

Between

THE VERMONT AGENCY OF AGRICULTURE, FOOD AND MARKETS

And the

NATURAL RESOURCES CONSERVATION SERVICE

UNITED STATES DEPARTMENT OF AGRICULTURE

I. AUTHORITIES


II. PURPOSE

The purpose of this agreement is to join in a partnership that will assist in delivering engineering and increased technical assistance to agricultural producers in the Lake Champlain Basin to reduce phosphorus loading and resulting adverse impacts to water quality in Lake Champlain.

III. OBJECTIVES

This agreement supports a cooperative undertaking between the VAAFM and NRCS to fund two engineers to be housed in the Middlebury and St. Albans Service Centers. Engineering work will be done jointly in NRCS's and VAAFM's contracts with no more than 50% of the work in VAAFM Best Management Practices (BMP) contracts and no less than 50% of the work in NRCS Environmental Quality Incentive Program (EQIP). The primary purpose of this agreement is to improve and accelerate technical assistance to landowners that will directly result in increased rates of conservation practice implementation.

Mutual Interest: VAAFM and NRCS have a common objective to reduce soil erosion and protect top soil; to help bring about the conservation, development and wise use of land, water, and related resources. The results of this effort will strengthen, increase, and encourage the voluntary approach and participation of private landowners required to successfully implement partner programs.

Therefore, VAAFM and NRCS deem it mutually beneficial to cooperate in this understanding, and hereby agree as follows:

IV. RESPONSIBILITIES OF THE PARTIES

A. NRCS will:

1. Provide up to $300,000.00 for salary and operating expenses and $94,000 of in-kind for other expenses (office space, computer use, vehicle use, and supplies) towards the cost of the work described in this agreement and attached budget via direct deposit. The cost to NRCS will not exceed $300,000.00 for this agreement period.

2. Provide the following as contacts:

<table>
<thead>
<tr>
<th>Program Contact</th>
<th>Administrative Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name: Robert Thompson</td>
<td>Name: Justin Tuthill</td>
</tr>
<tr>
<td>Address: 356 Mountain View Drive Colchester, VT 05446</td>
<td>Address: 356 Mountain View Drive Colchester, VT 05446</td>
</tr>
<tr>
<td>E-mail: <a href="mailto:bob.thompson@vt.usda.gov">bob.thompson@vt.usda.gov</a></td>
<td>E-mail: <a href="mailto:justin.tuthill@vt.usda.gov">justin.tuthill@vt.usda.gov</a></td>
</tr>
<tr>
<td>Phone: (802)951-6796 x232</td>
<td>Phone: (802)951-6796 x226</td>
</tr>
<tr>
<td>Fax: (802)655-0638</td>
<td>Fax: (802)655-0638</td>
</tr>
</tbody>
</table>
3. Provide on the job training and technical assistance as needed and when available. Provide access to NRCS references, technology and technical tools to the maximum extent possible and provide quality assurance.

B. VAAFM will:

1. Contribute $300,000.00 in funding, including $37,000 in In-direct expenses to support the costs of the project deliverables.

2. Provide two full time engineers in the Middlebury and St. Albans NRCS field offices to achieve the accomplishments and deliverables listed below in this agreement. The employees will have met all of the qualifications to perform the technical services required by this agreement, including:
   i. Compliance with all applicable Federal, State, Tribal, and local laws and requirements:
   ii. Meet applicable NRCS standards, specifications, and program requirements;
   iii. Be consistent with the conservation program goals and objectives in the agreement;
   iv. Incorporate, where appropriate, low-cost alternatives that address the resource issues and meet the objectives of both the program and program participants for which assistance is provided;
   v. Have been previously cleared to use the USDA network.

3. Ensure that delivery of technical assistance will follow NRCS processes and procedures. All engineering designs will meet conservation practice standards as described in the VT Field Office Technical Guide and installation will be according to VT Construction and Material Specifications. These documents are located at:
   https://efotg.sc.egov.usda.gov/treemenuFS.aspx, Section IV:
   - "Conservation Practices" folder
   - "Vermont Construction Specifications" folder

4. Submit quarterly progress reports to the attention of the NRCS Programmatic Contact.

5. Provide a statement prior to the end of each quarter, by the 15th of the month (that is, December, March, June and September), that estimates the earned but un-billed amount due under the agreement. This statement shall be submitted by e-mail to the NRCS ASTC-M&S (Justin Tuthill). The suggested format for submitting this information should state:

   "We have provided or anticipate providing goods or services that we have not requested payment for in the amount of:
   $______________________________, this represents NRCS portion only.

6. Be responsible for monitoring day-to-day project performance to ensure that project goals and performance are met, for containing costs, and for ensuring that progress is reported to NRCS in a timely manner. The NRCS liaison has technical oversight responsibilities for this agreement. Changes in plans that are seen as materially accelerating or delaying established performance schedules or resulting in cost deviations shall be reported immediately to the NRCS liaison identified in this agreement. Failure to provide notification of problems that could impact schedules or costs or failure to report performance in a timely manner will be considered performance deficiencies.

7. To work with and recognize NRCS in any public or legislative outreach deemed appropriate for aiding citizens in understanding the use of public funds and natural resources conservation benefits derived as a result of this cooperative effort.
8. Designate the following individuals as liaisons between the VAAFM and NRCS:

<table>
<thead>
<tr>
<th>Program Contact</th>
<th>Administrative Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name: Laura DiPietro</td>
<td>Marcey Hodgdon</td>
</tr>
<tr>
<td>Address: 116 State Street, Montpelier, VT 05620</td>
<td>116 State Street, Montpelier, VT 05620</td>
</tr>
<tr>
<td>E-mail: <a href="mailto:laura.dipietro@state.vt.us">laura.dipietro@state.vt.us</a></td>
<td><a href="mailto:marcey.hodgdon@state.vt.us">marcey.hodgdon@state.vt.us</a></td>
</tr>
<tr>
<td>Phone: (802)238-1289</td>
<td>(802)238-3567</td>
</tr>
</tbody>
</table>

9. Refer to the attached general provisions for all other fiscal and program reporting requirements.

10. By entering into this agreement, the undersigned attests that the VAAFM has not been convicted of a felony criminal violation under Federal or State law in the 24 months preceding the date of signature, nor has any officer or agent of the NRCC been convicted of a felony criminal violation under Federal or State law in the 24 months preceding the date of signature.

   By entering into this agreement, the undersigned attests that the VAAFM does not have any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

V. EXPECTED ACCOMPLISHMENTS AND DELIVERABLES

VAAFM will provide the following:

1. The Engineer’s scope of work is to plan, design, and provide construction inspection on conservation practices (mostly waste management systems) for farmers that have Environmental Quality Incentive Program (EQIP), and Best Management Practices (BMP) contracts in the Lake Champlain watershed. This includes field surveys, drafting and design in CADD, using job sheets, and providing construction inspection. Communications will be with landowners, contractors, Conservation District staff, and VT State Agencies.

2. The engineer will work under the direction and guidance of an experienced NRCS and VAAFM engineer for technical supervision. The engineer will follow NRCS’s Engineering Job Approval policy for all planning, design and implementation work. Work assignments will come from, and the work deliverables will be given to the technical supervisor and/or the NRCS District Conservationist for the Middlebury and St. Albans Field Offices in consultation with the VAAFM engineer. Administrative supervision will be provided by the VAAFM.

3. The engineer’s work assignments will include planning (Phase I), designing (Phase II), and installing (Phase III) of manure management practices. Target deliverables will be completion of 10 manure and wastewater management systems per year (which may include waste storage facilities, roof runoff structures, heavy use areas, underground outlets, waste treatments, and manure transfers). Other practices not identified above can count toward deliverables if approved by the supervisor. Credit will also be given for completing each phase of a project.

V. PERIOD OF PERFORMANCE
The agreement is effective upon the date of final signature and expires September 30, 2022

VI. RESOURCES REQUIRED
a. NRCS will:

Provide $300,000 in cash for salaries, benefits, travel and training as well as $94,000 of in-kind resources such as office space, computer and vehicle use to accomplish the deliverables under this agreement, according to the approved budget. This initial funding is expected to be expended by September, 2020. Funding for years 3-5 (2020-2022) is not fixed and will be contingent on the availability of future year funding as determined by NRCS. Additional funding, if available will require an amendment to this agreement.

b. The Recipient will:

Provide $300,000 in cash match for salaries, benefits, travel and training as well as $37,000 in indirect match to accomplish the deliverables under this agreement, according to the approved budget.

c. Budget Narrative

The Agricultural Engineering positions at the Agency of Agriculture, Food & Markets have two different levels of qualifications and service that can be provided based on experience. The Agricultural Engineer I position has a base annual salary and benefits costs of $78,062.59 and the Agricultural Engineer II has a base annual salary and benefits costs of $94,687.15. The operational costs which include travel and training are $8,720 per position annually. Travel and training include annual course development through opportunities such as the American Society of Mechanical Engineers which offers 3-4 days courses with registration fees typically around $2,000. With travel including airfare around the country ($1,500), car rental ($1,000 per trip) and hotel ($1,000 per trip) and meals ($500 per trip) the total costs for one training is around $6,000 which leaves around $2,720 to attend a conference annually such as the International Conference on Sustainable Agricultural Engineering ($1,200) plus hotel, travel and meals ($1,520). The total costs of travel, training and salaries and benefits with a 2.5% annual cost of living adjustment and 3% paygrade steps total $599,998.53 over 3 years. In this agreement NRCS provides for $300,000 of these costs for the first 3 years with the ability to extend into future years should additional funds become available. VAAFM will also provide $300,000 for salaries, benefits and travel/training. NRCS will provide office space and equipment for the position as in-kind expenses, where VAAFM will administer this position and provide in-kind indirect services at a cost of $37,000.

Required resources for years 1-3 are summarized in the following table:

<table>
<thead>
<tr>
<th></th>
<th>VAAFM</th>
<th>NRCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries</td>
<td>$150,612</td>
<td>$150,612</td>
</tr>
<tr>
<td>Benefits</td>
<td>$123,228</td>
<td>$123,228</td>
</tr>
<tr>
<td>Travel</td>
<td>$26,160</td>
<td>$26,160</td>
</tr>
<tr>
<td>Cash Total</td>
<td>$300,000</td>
<td>$300,000</td>
</tr>
<tr>
<td>Supplies (in-kind)</td>
<td>$43,000</td>
<td></td>
</tr>
<tr>
<td>Equipment (in-kind)</td>
<td>$51,000</td>
<td></td>
</tr>
<tr>
<td>In-direct cost</td>
<td>$37,000</td>
<td></td>
</tr>
<tr>
<td>Grand Total</td>
<td>$337,000</td>
<td>$394,000</td>
</tr>
</tbody>
</table>

Attachments:
General Terms and Conditions
I. APPLICABLE REGULATIONS

a. The recipient, and recipients of any sub awards under this award, agree to comply with the following regulations, as applicable. (The full text of Code of Federal Regulations references may be found at http://www.access.gpo.gov/nara/cfr/cfr-table-search.htm1#page1.)

1) 7 CFR Section 3015.205, “General Provisions for Grants and Cooperative Agreements with Institutions of Higher Education, Other Nonprofit Organizations, and Hospitals”
2) 7 CFR Part 3016, “Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments”
3) 7 CFR Part 3017, “Governmentwide Debarment and Suspension (Nonprocurement)”
4) 7 CFR Part 3018, “New Restrictions on Lobbying”
5) 7 CFR Part 3019, “Uniform Administrative Requirements for Grant and Other Agreements with Institutions of Higher Education, Hospitals, and Nonprofit Organizations”
6) 7 CFR Part 3021, “Governmentwide Requirements for Drug-Free Workplace (Financial Assistance)”
7) 7 CFR Part 3052, “Audits of States, Local Governments, and Nonprofit Organizations”
8) 2 CFR Part 215, “Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Nonprofit Organizations”
9) Office of Management and Budget (OMB) Circular No. A-102, “Uniform Administrative Requirements for Grants and Cooperative Agreements with State and Local Governments” (Including Indian Tribal governments)
10) 2 CFR Part 25, “Universal Identifier and Central Contractor Registration”
11) 2 CFR Part 170 “Reporting Subaward and Executive Compensation Information”

b. The recipient, and recipients of any subawards under this award, assures and certifies that it will comply with the following regulations, as applicable. (The full text of Code of Federal Regulations references may be found at http://www.access.gpo.gov/nara/cfr/cfr-table-search.htm1#page1.)

1) 7 CFR Part 3017, “Governmentwide Debarment and Suspension (Nonprocurement)”
2) 7 CFR Part 3018, “New Restrictions on Lobbying”
3) 7 CFR Part 3021, “Governmentwide Requirements for Drug-Free Workplace (Financial Assistance)”
4) 7 CFR Part 3052, “Audits of States, Local Governments, and Nonprofit Organizations”
6) 2 CFR Section 175, “Award Term for Trafficking in Persons”

b. Allowable project costs will be determined in accordance with the authorizing statute, the purpose of the award, and to the extent applicable to the type of organizations receiving the award, regardless of tier. The following portions of the Code of Federal Regulations are hereby incorporated by reference (the full text of Code of Federal Regulations references may be found at http://www.access.gpo.gov/nara/cfr/cfr-table-search.htm1#page1):

(1) 2 CFR Part 220, “Cost Principles for Institutions of Higher Education”
(2) 2 CFR Part 225, “Cost Principles for State and Local Governments (Including
II. UNALLOWABLE COSTS

The following costs are not allowed:

- Costs above the amount authorized for the project
- Costs incurred after the expiration of the award including any no-cost extensions of time
- Costs that lie outside the scope of the approved project and any amendments thereto
- Compensation for injuries to persons or damage to property arising from project activities

This list is not exhaustive. Questions about the allowability of particular items of costs should be directed to the NRCS administrative contact identified in the award.

III. CONFIDENTIALITY

- Activities performed under this award may involve access to confidential and potentially sensitive information about governmental and landowner issues. The term "confidential information" means proprietary information or data of a personal nature about an individual, or information or data submitted by or pertaining to an organization. This information must not be disclosed without the prior written consent of NRCS.

- The recipient’s personnel will follow the rules and procedures of disclosure set forth in the Privacy Act of 1974, 5 U.S.C. Section 552a, and implementing regulations and policies with respect to systems of records determined to be subject to the Privacy Act. The recipient’s personnel must also comply with privacy of personal information relating to natural resources conservation programs in accordance with section 1244 of Title II of the Farm Security and Rural Investment Act of 2002 (Public Law 107-171).

IV. PRIOR APPROVAL REQUIREMENTS

The following are the most common situations requiring prior approval. However, the recipient is also bound by any other prior approval requirements of the applicable administrative provisions and Federal cost principles.

- Purpose or Deliverables.—When it is necessary for the recipient to modify the purpose or deliverables, the recipient must submit a written request and justification for the change along with the revised purpose or deliverables of the award to the NRCS administrative contact.

  The request should contain the following:
  1. Grant or agreement number
  2. Narrative explaining the requested modification to the project purpose or deliverables
  3. A description of the revised purpose or deliverables
  4. Signatures of the authorized representative, project director, or both

- Subcontractual Arrangement.—The recipient must submit a justification for the proposed subcontractual arrangements, a statement of work to be performed, and a detailed budget for the subcontract to the NRCS administrative contact. Subcontractual arrangements disclosed in the application do not require additional postaward approval.

- Absence or Change in Project Leadership.—When a project director or the person responsible for the direction or management of the project—
  1. Relinquishes active direction of the project for more than 3 consecutive months or has a 25 percent or more reduction in time devoted to the project, the grantee must notify the NRCS administrative
contact in writing, identifying who will be in charge during the project director's absence. The notification must include the qualifications and the signature of the replacement, signifying his or her willingness to serve on the project.

2. Severs his or her affiliation with the grantee, the grantee's options include—
   i. Replacing the project director. The grantee must request written approval of the replacement from the NRCS administrative contact and must include the qualifications and the signature of the replacement signifying his or her willingness to serve on the project.
   ii. Subcontracting to the former project director's new organization. The grantee must request approval from the administrative contact to replace the project manager and retain the award, and to subcontract to the former project director's new organization certain portions of the project to be completed by the former project director.
   iii. Relinquishing the award. The grantee must submit to the NRCS administrative contact a signed letter by the grantee and the project director that indicates that the grantee is relinquishing the award. The letter must include the date the project director is leaving and a summary of progress to date. A final Standard Form (SF) 425 reflecting the total amount of funds spent by the recipient must be attached to the letter.

2. Transfers the award to his or her new organization, the authorized organization's representative at the new organization must submit the following to the NRCS administrative contact as soon as the transfer date is firm and the amount of funds to be transferred is known:
   i. The forms and certifications included in the application package. A project summary and work statement covering the work to be completed under the project (deliverables and objectives must be the same as those outlined in the approved proposal)
   ii. An updated qualifications statement for the project director showing his or her new organizational affiliation
   iii. Any cost-sharing requirements under the original award transfer to the new institution; therefore, cost-sharing information must be included in the proposal from the new organization.

Note: The transfer of an award from one organization to another can take up to 90 days to accomplish, which may result in a delay in the project director resuming the project at the new organization.

d. Budget Revisions.—Budget revisions will be in accordance with 7 CFR Section 3015.115.

e. No-Cost Extensions of Time.—When a no-cost extension of time is required, the recipient must submit a written request to the NRCS administrative contact no later than 30 days before the expiration date of the award. The request must contain the following:

   • The length of additional time required to complete the project and a justification for the extension
   • A summary of progress to date
   • An estimate of funds expected to remain unobligated on the scheduled expiration date
   • A projected timetable to complete the portions of the project for which the extension is being requested
   • Signature of the grantee and the project director
   • A status of cost sharing to date (if applicable)

Note: An extension will not exceed 12 months. Only in exceptional cases will more than one extension be granted. Requests for no-cost extensions received after the expiration of the award will not be granted.

V. PAYMENTS

a. Payment by NRCS to the entity will be made monthly or quarterly (whichever is mutually agreed upon by both parties) on a reimbursable or advanced basis upon completion of work outlined herein. Payment will be
executed upon the submission of a properly executed form SF-270. The SF-270 must cite the agreement number, remittance address, and billing period. The SF-270 must be sent to the NRCS program contact at the address identified in block 7 of the Notice of Grant/Agreement Award.

b. Unless otherwise specified in the award, the recipient must receive payments through electronic funds transfers.

c. Recipients requesting advances should request payments in amounts necessary to meet their current needs pursuant to procedures contained in the Federal administrative provisions and 31 CFR Part 205.

d. The method of payment between the recipient and its contractors will be in accordance with the policies and procedures established by the recipient except that the contractors may not use the USDA Office of Financial Management/National Finance Center method to request payments. If the grantee makes advance payments to contractors, the grantee must ensure that the timing of such payments is designed to minimize elapsed time between the advance payment and the disbursement of funds. Payment requests from the grantee’s contractors will not be sent to NRCS for review or approval.

e. Accounting records for all costs incurred under this award must be supported by source documentation. Such documentation includes, but is not limited to, canceled checks, paid bills, payroll records, and subcontract award documents. Labor cost charges to this award must be based upon salaries actually earned and the time actually worked on this award. All project costs must be incurred within the approved project period of this award, including any approved no-cost extension of time. Costs that cannot be supported by source documentation or that are incurred outside of the approved project period and budget may be disallowed and may result in award funds being returned to the Federal Government by the recipient.

VI. FINANCIAL REPORTING

a. Recipients must submit a Federal Financial Report (FFR), SF 425 and 425A, in accordance with the following schedule (recipients may download the applicable form at http://www.forms.gov):

<table>
<thead>
<tr>
<th>Quarterly Schedule</th>
<th>Report Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 1 to December 31</td>
<td>January 31</td>
</tr>
<tr>
<td>January 1 to March 31</td>
<td>April 30</td>
</tr>
<tr>
<td>April 1 to June 30</td>
<td>July 30</td>
</tr>
<tr>
<td>July 1 to September 30</td>
<td>October 30</td>
</tr>
</tbody>
</table>

Reports must be submitted on an accrual accounting basis. Failure to submit reports in accordance with the above schedule may result in suspension or termination of award.

c. A final Report must be submitted no later than 90 days after the completion of the award. For final FFRs, reporting end date must be the end date of the project or agreement period. The reports should be submitted to the NRCS administrative contact identified in award notifications.

VII. PERFORMANCE MONITORING AND REPORTING

a. The recipient is responsible for monitoring day-to-day performance and for reporting to NRCS. If the project involves subcontractual arrangements, the recipient is also responsible for monitoring the performance of project activities under those arrangements to ensure that approved goals and schedules are met.

b. Every 6 months the recipient must submit a written progress report. Each report must cover—
1. A comparison of actual accomplishments with the goals and objectives established for the reporting period and, where project output can be quantified, a computation of the costs per unit of output.

2. The reasons why goals and objectives were not met, if appropriate.

3. Additional pertinent information including, where appropriate, analysis and explanation of cost overruns or high unit cost.

c. The recipient must submit a final performance report within 90 days after completion of project.

VIII. SPECIAL PROVISIONS

a. The recipient assures and certifies that it will comply with the minimum-wage and maximum hour provisions of the Federal Fair Labor Standards Act.

b. Employees of NRCS will participate in efforts under this agreement solely as representatives of the United States. To this end, they may not participate as directors, officers, employees, or otherwise serve or hold themselves out as representatives of the recipient. They also may not assist the recipient with efforts to lobby Congress or to raise money through fundraising efforts. Further, NRCS employees must report to their immediate supervisor any negotiations with the recipient concerning future employment and must refrain from participation in efforts regarding such parties until approved by the agency.

c. Employees of the recipient will not be considered Federal employees or agents of the United States for any purposes under this agreement.

IX. PATENTS, INVENTIONS, COPYRIGHTS, AND ACKNOWLEDGMENT OF SUPPORT AND DISCLAIMER

a. Allocation of rights of patents, inventions, and copyrights must be in accordance with 7 CFR Section 3019.36. This regulation provides that small businesses normally may retain the principal worldwide patent rights to any invention developed with USDA support.

b. In accordance with 37 CFR Section 401.14, each subject invention must be disclosed to the Federal agency within 2 months after the inventor discloses it in writing to contractor personnel responsible for patent matters. Invention disclosure statements pursuant to 37 CFR Section 401.14(c) must be made in writing to:

   Acquisitions Division
   Grants and Agreements Team
   1400 Independence Avenue, SW.
   Room 5221 South Building
   Washington, DC 20250

c. USDA receives a royalty-free license for Federal Government use, reserves the right to require the patentee to license others in certain circumstances, and requires that anyone exclusively licensed to sell the invention in the United States must manufacture it domestically.

d. The following acknowledgment of NRCS support must appear in the publication of any material, whether copyrighted or not, and any products in electronic formats (World Wide Web pages, computer programs, etc.) that is substantially based upon or developed under this award:

   “This material is based upon work supported by the Natural Resources Conservation Service, U.S. Department of Agriculture, under number [recipient should enter the applicable award number here].”
In addition, all publications and other materials, except scientific articles or papers published in scientific journals, must include the following statement:

- "Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the views of the U.S. Department of Agriculture."

The recipient is responsible for ensuring that an acknowledgment of NRCS is made during news media interviews, including popular media such as radio, television, and news magazines, that discuss in a substantial way work funded by this award.

X. COST-SHARING REQUIREMENTS

a. If the award has specific cost-sharing requirements, the cost-sharing participation in other projects may not be counted toward meeting the specific cost-share requirement of this award, and must come from non-Federal sources unless otherwise stated in the applicable program announcement.

b. Should the recipient become aware that it may be unable to provide the cost-sharing amount identified in this award, it must—
   1. Immediately notify the NRCS administrative contact of the situation.
   2. Specify the steps it plans to take to secure replacement cost sharing.
   3. Indicate the plans to either continue or phase out the project in the absence of cost sharing.

c. If NRCS agrees to the organization's proposed plans, the recipient will be notified accordingly. If the organization's plans are not acceptable to NRCS, the award may be subject to termination. NRCS modifications to proposed cost sharing revisions are made on a case-by-case basis.

d. Failure by the recipient to notify NRCS in accordance with paragraph (b) above may result in the disallowance of some or all the costs charged to the award, the subsequent recovery by NRCS of some of the NRCS funds provided under the award, and possible termination of the award, and may constitute a violation of the terms and conditions of the award so serious as to provide grounds for subsequent suspension or debarment.

e. The recipient must maintain records of all project costs that are claimed by the recipient as cost sharing as well records of costs to be paid by NRCS. If the recipient's cost participation includes in-kind contributions, the basis for determining the valuation for volunteer services and donated property must be documented.

XI. PROGRAM INCOME

Income derived from patents, inventions, or copyrights will be disposed of in accordance with the recipient's own policies. General program income earned under this award during the period of NRCS support must be added to total project funds and used to further the purpose and scope of this award or the legislation under which this award is made.

XII. NONEXPENDABLE EQUIPMENT

Recipients purchasing equipment or products with funds provided under this award are encouraged to use such funds to purchase only American-made equipment and products. Title to nonexpendable equipment purchased with award funds will vest in the recipient upon completion of the award project and acceptance by NRCS of required final reports. When equipment is no longer needed by the recipient and the per-unit fair market value is less than $5,000, the recipient may retain, sell, or dispose of the equipment with no further obligation to NRCS. However, if the per-unit fair market value is
$5,000 or more, the recipient must submit a written request to the NRCS administrative contact for disposition instructions.

XIII. LIMIT OF FEDERAL LIABILITY

The maximum financial obligation of NRCS to the recipient is the amount of funds indicated in the award as obligated by NRCS. However, in the event that an erroneous amount is stated on the approved budget, or any supporting document relating to the award, NRCS will have the unilateral right to make the correction and to make an appropriate adjustment in the NRCS share of the award to align with the Federal amount authorized.

XIV. MODIFICATIONS AND TERMINATIONS

NRCS may amend or modify the award through an exchange of correspondence between authorized officials of the recipient and NRCS. The award is subject to termination if NRCS determines that the recipient has failed to comply with the terms and conditions of the award. In the event that the award is terminated, the financial obligations of the parties will be those set forth in 7 CFR Part 3015, Subpart N.

XV. AWARD CLOSEOUT

Award closeout is the process by which NRCS determines that all required project activities have been performed satisfactorily and all necessary administrative actions have been completed.
Budget Narrative

The Agricultural Engineering positions at the Agency of Agriculture, Food & Markets have two different levels of qualifications and service that can be provided based on experience. The Agricultural Engineer I position has a base annual salary and benefits costs of $78,062.59 and the Agricultural Engineer II has a base annual salary and benefits costs of $94,687.15. The operational costs which include travel and training are $8,720 per position annually. The total costs of travel, training and salaries and benefits with a 2.5% annual cost of living adjustment and 3% paygrade steps total $599,998.53 over 3 years. In this agreement NRCS provides for $300,000 of these costs for the first 3 years with the ability to extend into future years should additional funds become available. VAAFM will also provide $300,000 for salaries, benefits and travel/training. NRCS will provide office space and equipment for the position as in-kind expenses, where VAAFM will administer this position and provide in-kind indirect services at a cost of $37,000.

Table 1. NRCS and VAAFM costs specific to this grant showing the cash and in-kind contributions.

<table>
<thead>
<tr>
<th></th>
<th>VAAFM</th>
<th>NRCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries</td>
<td>$150,612</td>
<td>$150,612</td>
</tr>
<tr>
<td>Benefits</td>
<td>$123,228</td>
<td>$123,228</td>
</tr>
<tr>
<td>Travel</td>
<td>$26,160</td>
<td>$26,160</td>
</tr>
<tr>
<td>Cash Total</td>
<td>$300,000</td>
<td>$300,000</td>
</tr>
<tr>
<td>Supplies (in-kind)</td>
<td>$43,000</td>
<td>Middlebury &amp; St. Albans office space</td>
</tr>
<tr>
<td>Equipment (in-kind)</td>
<td>$51,000</td>
<td>Computer, CADD, furniture, surveying equipment, etc.</td>
</tr>
<tr>
<td>In-direct cost</td>
<td>$37,000</td>
<td></td>
</tr>
<tr>
<td>Grand Total</td>
<td>$337,000</td>
<td>$394,000</td>
</tr>
</tbody>
</table>
Table 3. Salary and Benefit Compensation Calculator for the Engineer I and II positions

<table>
<thead>
<tr>
<th>Position Information</th>
<th>State of Vermont Compensation Calculator FY18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is this a Classified, Exempt, Temporary or Trooper position?</td>
<td>Classified</td>
</tr>
<tr>
<td>Pay Grade</td>
<td>23</td>
</tr>
<tr>
<td>Step</td>
<td>2</td>
</tr>
<tr>
<td>Hourly Salary (if Classified, Temporary or Trooper position)</td>
<td>$24.12</td>
</tr>
<tr>
<td>Hourly Salary (if Exempt)</td>
<td>$25.00</td>
</tr>
<tr>
<td>Retirement Plan (if Exempt)</td>
<td>Defined Contribution</td>
</tr>
<tr>
<td>Health Insurance</td>
<td>SelectCare - Family</td>
</tr>
<tr>
<td>Dental Insurance</td>
<td>Family</td>
</tr>
<tr>
<td>Life Insurance</td>
<td>Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Compensation</th>
<th>Employee Contribution per pay period</th>
<th>Employee Contribution annually</th>
<th>State Contribution: Benefit to Employee annually</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Pay</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$50,169.60</td>
</tr>
<tr>
<td>Social Security &amp; Medicare</td>
<td>$147.61</td>
<td>$3,837.97</td>
<td>$3,837.97</td>
</tr>
<tr>
<td>Health Insurance</td>
<td>$216.68</td>
<td>$5,633.68</td>
<td>$2,253.47</td>
</tr>
<tr>
<td>Dental Insurance</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$1,278.94</td>
</tr>
<tr>
<td>Life Insurance</td>
<td>$2.72</td>
<td>$70.74</td>
<td>$211.72</td>
</tr>
<tr>
<td>EAP (Employee Assistance Plan)</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$29.64</td>
</tr>
<tr>
<td>Retirement - Defined Benefit</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Retirement - Defined Contribution*</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Total Estimated Compensation</td>
<td>$367.02</td>
<td>$9,542.39</td>
<td>$78,062.59</td>
</tr>
</tbody>
</table>

*available for exempt employees

Please note: This is an estimate of compensation based solely upon values entered by the user and current costs. This is not, and should not be construed as, a guarantee of compensation for any position. The above calculations do not include any Market Factor adjustments. Amounts indicated are pre-tax and effective for the 2018 Fiscal Year.
### State of Vermont Compensation Calculator FY18

This calculator is applicable for most Executive Branch positions for the State of Vermont.

#### Using the calculator:
- Enter position- and employee-specific values into yellow fields (to left) from drop-down menu
- Cells in gray may not be applicable based on previous values entered
- Cells below are automatically updated to display applicable employee and State contributions which constitute the estimated compensation for this position

#### Position Information
- **Is this a classified, Exempt, Temporary or Trooper position?** Classified
- **Pay Grade**: 25
- **Step**: 2
- **Hourly Salary (if Classified, Temporary or Trooper position)**: $27.13
- **Hourly Salary (if Exempt)**: $27.13
- **Retirement Plan (if Exempt)**: SelectCare - Family
- **Health Insurance**: Family
- **Dental Insurance**: Family
- **Life Insurance**: Yes

#### Compensation

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Employee Contribution per pay period</th>
<th>Employee Contribution annually</th>
<th>State Contribution: Benefit to Employee annually</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Pay</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$56,430.40</td>
</tr>
<tr>
<td>Social Security &amp; Medicare</td>
<td>$166.04</td>
<td>$4,316.93</td>
<td>$4,316.93</td>
</tr>
<tr>
<td>Health Insurance</td>
<td>$216.68</td>
<td>$5,633.68</td>
<td>$22,534.72</td>
</tr>
<tr>
<td>Dental Insurance</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$1,778.94</td>
</tr>
<tr>
<td>Life Insurance</td>
<td>$3.06</td>
<td>$79.57</td>
<td>$238.14</td>
</tr>
<tr>
<td>EAP (Employee Assistance Plan)</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$29.64</td>
</tr>
<tr>
<td>Retirement - Defined Benefit</td>
<td>$0.00</td>
<td>$3,752.62</td>
<td>$9,858.39</td>
</tr>
<tr>
<td>Retirement - Defined Contribution*</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td><strong>Total Estimated Compensation</strong></td>
<td>$385.78</td>
<td>$13,782.79</td>
<td>$94,687.15</td>
</tr>
</tbody>
</table>

*available for exempt employees

---

*Other benefits may include: (click for hyperlink)*

- Deferred Compensation
- Leave (Annual, Personal, Sick)
- Elder Care
- LTD (Long-Term Disability)
- Flex Spending
- Tuition Reimbursement
- Holidays
- Wellness

Please note: this is an estimate of compensation based solely upon values entered by the user and current costs.

This is not, and should not be construed as, a guarantee of compensation for any position.

The above calculations do not include any Market Factor adjustments.

Amounts indicated are pre-tax and effective for the 2018 Fiscal Year.
VERMONT DEPARTMENT OF PERSONNEL
Request for Classification Review
Position Description Form A

This form is to be used by managers and supervisors to request classification of a position (filled or vacant) when the duties have changed, and by managers and supervisors to request the creation of a new job class/title (for a filled, vacant, or new position), and by employees to request classification of their position.

This form was designed in Microsoft Word to download and complete on your computer. This is a form-protected document, so information can only be entered in the shaded areas of the form.

If you prefer to fill out a hard copy of the form, contact your Personnel Officer.

To move from field to field use your mouse, the arrow keys or press Tab. Each form field has a limited number of characters. Use your mouse or the spacebar to mark and unmark a checkbox.

Where additional space is needed to respond to a question, you might need to attach a separate page, and number the responses to correspond with the numbers of the questions on the form. Please contact your Personnel Officer if you have difficulty completing the form.

The form must be complete, including required attachments and signatures or it will be returned to the department's personnel office. All sections of this form are required to be completed unless otherwise stated.

INSTRUCTIONS: Tell us about the job. The information you provide will be used to evaluate the position. It will not be used in any way to evaluate an employee's performance or qualifications.

Answer the questions carefully. The information you give will help ensure that the position is fairly evaluated. Here are some suggestions to consider in completing this questionnaire:

Tell the facts about what an employee in this position is actually expected to do.

Give specific examples to make it clear.

Write in a way so a person unfamiliar with the job will be able to understand it.

Describe the job as it is now; not the way it was or will become.

Before answering each question, read it carefully.

To Submit this Request for Classification Review: If this is a filled position, the employee must sign the original* and forward to the supervisor for the supervisor's review and signature. The Personnel Officer and the Appointing Authority must also review and sign this request before it is considered complete. The effective date of review is the beginning of the first pay period following the date the complete Request for Classification Review is date stamped by the Classification Division of the Department of Personnel.

*An employee may choose to sign the form, make a copy, submit original to supervisor as noted above, while concurrently sending the copy to the Classification Division, 144 State Street, Montpelier, with a cover note indicating that the employee has submitted the original to the supervisor and is submitting the copy as a Concurrent filing.

If this is a request (initiated by employees, VSEA, or management) for review of all positions in a class/title please contact the appropriate Classification Analyst or the Classification Manager to discuss the request prior to submitting.
Request for Classification Review
Position Description Form A

For Department of Personnel Use Only

<table>
<thead>
<tr>
<th>Notice of Action #</th>
<th>Date Received (Stamp)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action Taken:</td>
<td></td>
</tr>
<tr>
<td>New Job Title</td>
<td></td>
</tr>
<tr>
<td>Current Class Code</td>
<td>New Class Code</td>
</tr>
<tr>
<td>Current Pay Grade</td>
<td>New Pay Grade</td>
</tr>
<tr>
<td>Current Mgt Level</td>
<td>B/U OT Cat. EEO Cat. FLSA</td>
</tr>
<tr>
<td>New Mgt Level</td>
<td>B/U OT Cat. EEO Cat. FLSA</td>
</tr>
<tr>
<td>Effective Date:</td>
<td></td>
</tr>
<tr>
<td>Date Processed:</td>
<td></td>
</tr>
</tbody>
</table>

Classification Analyst ___________________________ Date ___________________________

Comments:

Willis Rating/Components:  Knowledge & Skills: __________ Mental Demands: __________ Accountability: __________
Working Conditions: __________ Total: __________

Incumbent Information:
Employee Name: __________ Employee Number: __________
Position Number: __________ Current Job/Class Title: Agricultural Engineer
Agency/Department/Unit: AFM-WQ Work Station: Williston Zip Code: 05495
Supervisor’s Name, Title, and Phone Number: Robert Achilles, Agricultural Engineering Section Chief (802) 917-1397

How should the notification to the employee be sent: Employee’s work location 34 Harvest Lane, Williston, Vermont 05495 or other address, please provide mailing address: __________

New Position/Vacant Position Information:
New Position Authorization: _______ Request Job/Class Title: __________
Position Type: _______ Permanent or _______ Limited / Funding Source: _______ Core, _______ Partnership, or _______ Sponsored
Vacant Position Number: _______ Current Job/Class Title: __________
Agency/Department/Unit: _______ Work Station: _______ Zip Code: _______
Supervisor’s Name, Title and Phone Number: __________

Type of Request:
☒ Management: A management request to review the classification of an existing position, class, or create a new job class.
☐ Employee: An employee’s request to review the classification of his/her current position.
1. Job Duties

This is the most critical part of the form. Describe the activities and duties required in your job, noting changes (new duties, duties no longer required, etc.) since the last review. Place them in order of importance, beginning with the single most important activity or responsibility required in your job. The importance of the duties and expected end results should be clear, including the tolerance that may be permitted for error. Describe each job duty or activity as follows:

- **What** it is: The nature of the activity.
- **How** you do it: The steps you go through to perform the activity. Be specific so the reader can understand the steps.
- **Why** it is done: What you are attempting to accomplish and the end result of the activity.

For example a Tax Examiner might respond as follows: *(What)* Audits tax returns and/or taxpayer records. *(How)* By developing investigation strategy; reviewing materials submitted; when appropriate interviewing people, other than the taxpayer, who have information about the taxpayer's business or residency. *(Why)* To determine actual tax liabilities.

Planning and engineering at a journeyman to advanced professional level for the Agency of Agriculture, Food & Markets involving the development, design, construction and management of agricultural waste storage and management systems, review and development of nutrient management planning, environmental monitoring systems/programs and other infrastructures to prevent and remediate environmental contamination. This position will provide expertise in specialized planning and engineering projects, planning and engineering advice and guidance to Farmers, Agency and sister Agencies staff, Partners Organizations, and private sector engineers, consultants, or contractors.

The Agricultural Engineer I position assists in the planning and the preparation of engineering designs for collection, transfer, storage and treatment of agricultural wastes and the review and development of field based conservation practices in accordance to USDA Natural Resources Conservation Service (NRCS) technical standards and specifications or equivalent standards. Provides planning, technical and regulatory assistance to Vermont farmers in the viability, sustainability, and economical feasibility regarding how construction and management practices will impact their farm.

Under the guidance of a VAAFM or NRCS professional engineer prepares design documents for practices and structures to include material standards and quantities, construction standards and acceptable site modifications. Conducts field investigations and soil and water sampling to obtain planning and design data for engineering practices or environmental monitoring systems commonly installed on farms. Generate construction layouts and as-builds with support as needed from Agricultural Engineer/Planner II. Performs field inspections and provide regulatory compliance recommendations during construction to document that conservation practices and structures will meet construction standards. Record the installation of groundwater monitoring wells by farm operators and well drillers. Implement procedures and protocols for surface and groundwater sampling projects.

Under the guidance of a VAAFM or NRCS planner or under a certified nutrient manager planner review and develop manure and wastewater handling plans and nutrient management plans. Perform field inspections and regulatory compliance recommendation for cropping, cultivation, rotation, yields and nutrient applications timing and rates. Evaluation and the implantation of field based conservation practices. Implement procedures and protocols for the importation and handling of wastes and nutrients.
Conduct environmental sampling to ensure compliance with construction standards, waste management system operation practices, farm operation permit conditions and other agricultural practices regulations.
Performs related duties as required.

2. Key Contacts
This question deals with the personal contacts and interactions that occur in this job. Provide brief typical examples indicating your primary contacts (not an exhaustive or all-inclusive list of contacts) other than those persons to whom you report or who report to you. If you work as part of a team, or if your primary contacts are with other agencies or groups outside State government describe those interactions, and what your role is. For example: you may collaborate, monitor, guide, or facilitate change.

Work is performed under the general supervision of the Agriculture Engineering Section Chief and as applicable under an Agricultural Engineer II.
Position will coordinate with federal agencies such as the NRCS engineering and planning staff; USDA Farm Service Agency (FSA) planning staff; and may work with the Environmental Protection Agency (EPA); and the Army Corp of Engineers.
Position will coordinate with state agencies such as the Vermont Agency of Natural Resources, engineering and scientific staff in the Concentrated Animal Feeding Operation, Stream Alternations, Waste and Wastewater Permitting, Dam Permitting, and the Geological Survey Sections; Vermont Agency of Transportation; partners such as UVM Extension, Vermont Land Trust, Farmer Groups, and Watershed Groups; and private sector engineers and environmental consultants.
Position will work with agriculture equipment dealers, material suppliers and contractors to determine feasibility and practically of installation of waste management installations.
The Agricultural Engineer I position mostly communicates at the planner and engineering technician level in peer to peer communications.

3. Are there licensing, registration, or certification requirements; or special or unusual skills necessary to perform this job?
Include any special licenses, registrations, certifications, skills; (such as counseling, engineering, computer programming, graphic design, strategic planning, keyboarding) including skills with specific equipment, tools, technology, etc. (such as mainframe computers, power tools, trucks, road equipment, specific software packages). Be specific, if you must be able to drive a commercial vehicle, or must know Visual Basic, indicate so.

Education and Experience: Bachelor's degree in agricultural, civil, environmental or structural engineering or a bachelor's degree in natural resources, plant or soil science AND two (2) or more years of professional level engineering experience that is fundamental to the planning, design, construction, and management of agricultural waste systems.
OR
Education and Experience: Associate's degree in agricultural, civil, environmental, or structural engineering or a associate's degree in natural resources, plant or soil science AND four (4) or more years of professional level engineering experience that is fundamental to the planning, design, construction, and management of agricultural waste systems.
OR

Education and Experience: Master's degree in agricultural, civil, environmental, or structural engineering or master's degree in natural resources, plant or soil science AND one (1) or more or professional level engineering experience that is fundamental to the design, construction, and management of agricultural waste systems.

Recommended to have passed the Fundamentals of Engineering (FE) exam and achieving an Engineer Intern or Engineer-in-Training status or certification in NRCS's Manure and Wastewater Handling and Storage or Land Treatment Practices.

Knowledge of engineering principles and practices used in the planning, design and construction of earthen impoundments, reinforced concrete structures, storm and wastewater handling and treatment, hydrogeology modeling, and water quality and pollution prevention efforts. Knowledge of the materials, methods and equipment including the preparation of cost estimates and specifications.

Knowledge of plant and soil science principles and practices used to develop site specific conservation practices to be implemented, including appropriate production and field practices to reduce or control runoff of nutrients to waters. Knowledge of the nitrogen or phosphorus cycle and nutrient application rates and timing.

Ability to inspect work under construction and evaluation its conformity with specifications. Ability to review plans, cost estimates, and specification prepared by others. Ability to maintain and establish working relationships. Ability to communicate effectively orally and in writing.

Develop working knowledge of state and federal laws, regulations affecting agricultural water quality and Best Management Practices to prevent discharges. Gain working knowledge of NRCS technical references, especially the National Engineering Manual, the Engineering Field Handbook, the Agricultural Waste Management Field Handbook, and other technical releases and guidance. Gain working knowledge of UVM Nutrient Recommendations for Field Crops in Vermont or other university recommendations that are appropriate for Vermont's geographic conditions.

Ability to use a total station, robotic or GPS enabled survey equipment to create spatial maps for planning, design, layout and as-built documentation of projects.

Ability to prepare, design, and reviews plans generated by Computer Assisted Design (CAD) or CAD type programs.

Ability to use ArcGIS and the Agency of Natural Resources Atlas to create spatial maps for planning and design of projects.

Proficiently use of Microsoft Suite programs.

4. Do you supervise?

In this question "supervise" means if you direct the work of others where you are held directly responsible for assigning work; performance ratings; training; reward and discipline or effectively recommend such action; and other personnel matters. List the names, titles, and position numbers of the classified employees reporting to you:

No. However, as part of the work and protecting state investments the Agricultural Engineer I is responsible to supervise the work of equipment dealers, material suppliers, and contractors during the installation of conservation practices on farms to ensure that the practices meet or exceed standards.
5. In what way does your supervisor provide you with work assignments and review your work?

This question deals with how you are supervised. Explain how you receive work assignments, how priorities are determined, and how your work is reviewed. There are a wide variety of ways a job can be supervised, so there may not be just one answer to this question. For example, some aspects of your work may be reviewed on a regular basis and in others you may operate within general guidelines with much independence in determining how you accomplish tasks.

Request for engineering and technical assistance are though multiple channels ranging from farmers, other VAAFM and DEC staff, our Partners, and through the Agricultural Engineering Section Chief. Position will require establishing priorities that are reviewed by the Agricultural Engineering Section Chief.

This position requires level of independence and the ability to anticipate project needs in order to complete the essential and supplementary tasks. The underlying responsibilities are mostly created by the projects that are assigned in this position and hence any changes in the project require preparedness in understanding how the workload on the project changes.

Communication with Agricultural Engineering Section Chief may lapse for a couple of days while field work is being completed.

6. Mental Effort

This section addresses the mental demands associated with this job. Describe the most mentally challenging part of your job or the most difficult typical problems you are expected to solve. Be sure to give a specific response and describe the situation(s) by example.

- For example, a purchasing clerk might respond: In pricing purchase orders, I frequently must find the cost of materials not listed in the pricing guides. This involves locating vendors or other sources of pricing information for a great variety of materials.

- Or, a systems developer might say: Understanding the ways in which a database or program will be used, and what the users must accomplish and then developing a system to meet their needs, often with limited time and resources.

Plan, developed and implement $5,000 to $100,000 infrastructural changes on farms that will be adopted by the farmer so that the farm can meet regulatory requirements. Typically the process will require the coordination of federal, other state agencies, our partners, architect and engineering firms, equipment dealers, suppliers and contractors.

Assist in the develop of new techniques and technologies that will intergrate the waste management activities on the farm and addressing the environmental issues while providing an economically and managable solution for the farm.

7. Accountability

This section evaluates the job’s expected results. In weighing the importance of results, consideration should be given to responsibility for the safety and well-being of people, protection of confidential information and protection of resources.

What is needed here is information not already presented about the job’s scope of responsibility. What is the job’s most significant influence upon the organization, or in what way does the job contribute to the organization’s mission?

Provide annualized dollar figures if it makes sense to do so, explaining what the amount(s) represent.
For example:

- A social worker might respond: To promote permanence for children through coordination and delivery of services;
- A financial officer might state: Overseeing preparation and ongoing management of division budget: $2M Operating/Personal Services, $1.5M Federal Grants.

The goal of position is to assist farms so that they can manage their operations more economically while protecting water resources and meeting state water quality requirements.

The Agricultural Engineer I has the ability to implement a project from planning and design through construction and implementation.

Accountability to provide a recommendation to the Agricultural Engineer II or the Agricultural Engineering Section Chief for the release of state cost share funds to farms.

Six to 12 project annual with aggregate total of $300,000 to $500,000.

8. Working Conditions

The intent of this question is to describe any adverse conditions that are routine and expected in your job. It is not to identify special situations such as overcrowded conditions or understaffing.

a) What significant mental stress are you exposed to? All jobs contain some amount of stress. If your job stands out as having a significant degree of mental or emotional pressure or tension associated with it, this should be described:

<table>
<thead>
<tr>
<th>Type</th>
<th>How Much of the Time?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assist and/or design of water quality projects</td>
<td>60%</td>
</tr>
<tr>
<td>Assist in the design components for projects that require</td>
<td>20%</td>
</tr>
<tr>
<td>require individual designs and solutions that are adapted</td>
<td></td>
</tr>
<tr>
<td>from previous designs, imagination, and initiative.</td>
<td></td>
</tr>
<tr>
<td>Regulatory and enforcement discussion with farms</td>
<td>10%</td>
</tr>
</tbody>
</table>

b) What hazards, special conditions or discomfort are you exposed to? (Clarification of terms: hazards include such things as potential accidents, illness, chronic health conditions or other harm. Typical examples might involve exposure to dangerous persons, including potentially violent customers and clients, fumes, toxic waste, contaminated materials, vehicle accident, disease, cuts, falls, etc.; and discomfort includes exposure to such things as cold, dirt, dust, rain or snow, heat, etc.)

<table>
<thead>
<tr>
<th>Type</th>
<th>How Much of the Time?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working around animals, agricultural equipment and heavy equipment</td>
<td>10%</td>
</tr>
<tr>
<td>during planning and installation of conservation practices.</td>
<td></td>
</tr>
<tr>
<td>Working around and with pumps, tanks, boilers, and engines</td>
<td>5%</td>
</tr>
<tr>
<td>Entering confined spaces and possible oxygen deficient environments</td>
<td>2%</td>
</tr>
<tr>
<td>or falls while climbing or working around silos or walls.</td>
<td></td>
</tr>
</tbody>
</table>
c) What weights do you lift; how much do they weigh and how much time per day/week do you spend lifting?

<table>
<thead>
<tr>
<th>Type</th>
<th>How Heavy?</th>
<th>How Much of the Time?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey and soil sampling equipment</td>
<td>20 to 70 lbs</td>
<td>10%</td>
</tr>
<tr>
<td>Hand tool</td>
<td>5 to 20 lbs</td>
<td>5%</td>
</tr>
</tbody>
</table>

d) What working positions (sitting, standing, bending, reaching) or types of effort (hiking, walking, driving) are required?

<table>
<thead>
<tr>
<th>Type</th>
<th>How Much of the Time?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office (sitting at desk)</td>
<td>70%</td>
</tr>
<tr>
<td>Field (planning, surveying, oversight of construction)</td>
<td>30%</td>
</tr>
</tbody>
</table>

Additional Information:
Carefully review your job description responses so far. If there is anything that you feel is important in understanding your job that you haven't clearly described, use this space for that purpose. Perhaps your job has some unique aspects or characteristics that weren't brought out by your answers to the previous questions. In this space, add any additional comments that you feel will add to a clear understanding of the requirements of your job.

Employee's Signature (required): ___________________________ Date: __________________
Supervisor's Section:

Carefully review this completed job description, but do not alter or eliminate any portion of the original response. Please answer the questions listed below.

1. What do you consider the most important duties of this job and why?

2. What do you consider the most important knowledge, skills, and abilities of an employee in this job (not necessarily the qualifications of the present employee) and why?

3. Comment on the accuracy and completeness of the responses by the employee. List below any missing items and/or differences where appropriate.

4. Suggested Title and/or Pay Grade:

   Agricultural Engineer I, PG 23

Supervisor's Signature (required): ___________________________ Date: 6/30/17

Personnel Administrator's Section:

Please complete any missing information on the front page of this form before submitting it for review.

Are there other changes to this position, for example: Change of supervisor, GUC, work station?

   ☐ Yes ☐ No  If yes, please provide detailed information.

Attachments:

☐ Organizational charts are required and must indicate where the position reports.
☐ Draft job specification is required for proposed, new job classes.

Will this change affect other positions within the organization? If so, describe how, (for example, have duties been shifted within the unit requiring review of other positions; or are there other issues relevant to the classification review process).
Suggested Title and/or Pay Grade:

Ag Engineer I, Pg 23

Personnel Administrator's Signature (required):

Date:

Appointing Authority's Section:

Please review this completed job description but do not alter or eliminate any of the entries. Add any clarifying information and/or additional comments (if necessary) in the space below.

(--- Suggested Title and/or Pay Grade: Ag Engineer I, Pg 23

Appointing Authority or Authorized Representative Signature (required) Date

(--- Suggested Title and/or Pay Grade: Ag Engineer I, Pg 23

Appointing Authority or Authorized Representative Signature (required) Date