



The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

Thomas S. Burack, Commissioner



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Burack

March 7, 2013

Her Excellency, Governor Margaret Wood Hassan
And the Executive Council
State House
Concord, New Hampshire 03301

REQUESTED ACTION

Authorize the Department of Environmental Services to enter into an agreement with Vanasse Hangen Brustlin, Inc., Bedford, NH, (VC #174584), to conduct a fluvial erosion hazard assessment in the Sugar River Watershed for a not to exceed contract value of \$86,615 effective upon Governor and Council approval through September 18, 2014. 100% Other (Interagency Pass-Thru Federal) Funds.

Funding is available in the account as follows:

	<u>FY 13</u>
03-44-44-440010-1841-102-500731	\$86,615
Dept of Environmental Services, Geologic Hazards Evaluation, Contracts for Program Services	

EXPLANATION

The purpose of this agreement is the performance of a fluvial erosion hazard assessment to identify areas on rivers within the Sugar River Watershed in western New Hampshire that are at greatest risk for erosion and channel adjustments during flood events. This watershed includes river reaches with eroding streambanks and that are undergoing river channel adjustments. This fluvial erosion hazard assessment will be completed during the 2013 summer season so that the data will be available for the local regional planning commission to incorporate into hazard mitigation plans for the communities within the watershed.

The primary purpose of this fluvial erosion hazard assessment is to undertake a field-based survey along lengths of the Sugar River and select tributaries within the watershed to examine river channel condition and characteristics of the banks. Bridges and culverts are also evaluated in terms of their potential to increase local damage to adjacent infrastructure and private property during floods. This information is particularly important, given that culvert washouts often occur during floods throughout the state. The data collected through this assessment will identify areas near the river that are most prone to flood and erosion impacts, providing a beneficial tool for hazard mitigation planning, flood evacuation strategies, and ongoing public safety protection efforts.

The selection of Vanasse Hangen Brustlin, Inc. was conducted through a prequalification to bid process posted on the DES website and in the Union Leader newspaper, followed by the submission of invitations to bid on this project to those firms that were deemed by a panel of reviewers to satisfy the specified prequalification criteria. Firms were prequalified for this bid based on qualifications in the understanding of river processes and experience conducting river geomorphology assessments elsewhere. This process is summarized in Attachment A. Invitations to bid were issued by the Department to four pre-qualified consulting firms, and three of the four firms submitted bids. These firms, and the bid proposal amounts are as follows:

Firm Name	Bid Proposal Amount
Field Geology Services	\$59,000
Fitzgerald Environmental Associates	\$53,885
Princeton Hydro	No bid submitted
Vanasse Hangen Brustlin, Inc. (VHB)	\$48,965

The bid schedule specified rates per item on a form that was supplied by the Department that provided sample project amounts. This ensured that all firms were bidding on the same sample project, thus maximizing consistency. Each submitted bid schedule was evaluated by tallying the bid schedule. The firm with the lowest tally, Vanasse Hangen Brustlin, Inc., was selected. Final project costs will differ from the sample project based upon the actual quantities of equipment and materials used on site. However, the amount paid per item will be based upon the rates provided by the firm on the bid schedule.

This contract has been approved by the Office of the Attorney General as to form, content and execution.

We respectfully request your approval.



Thomas S. Burack



Subject: Fluvial Erosion Hazard Geomorphology Assessment - Sugar River Watershed FORM NUMBER P-37 (version 1/09)

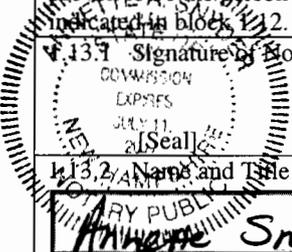
AGREEMENT

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, P.O. Box 95, Concord, NH 03301	
1.3 Contractor Name Vanasse Hangen Brustlin Inc.		1.4 Contractor Address 6 Bedford Farms Drive, Suite 607, Bedford, NH 03110-6532	
1.5 Contractor Phone Number (603) 644-0888	1.6 Account Number 03-44-44-440010-1841-102	1.7 Completion Date September 18, 2014	1.8 Price Limitation \$86,615.00
1.9 Contracting Officer for State Agency Shane Csiki, Environmentalist IV		1.10 State Agency Telephone Number (603) 271-2876	
1.11 Contractor Signature <i>Francis S. O'Callaghan</i>		1.12 Name and Title of Contractor Signatory FRANCIS S O'CALLAGHAN, EVP	
1.13 Acknowledgement: State of <u>NH</u> , County of <u>Merrimack</u> On <u>2/17/2013</u> , before the undersigned officer, personally appeared the person identified in block 1.12, or satisfactorily proven to be the person whose name is signed in block 1.11, and acknowledged that s/he executed this document in the capacity indicated in block 1.12.			
1.13.1 Signature of Notary Public or Justice of the Peace <i>Annette Snyder</i>			
1.13.2 Name and Title of Notary or Justice of the Peace Annette Snyder, Notary Public			
1.14 State Agency Signature <i>Nicki S. Quinn</i>		1.15 Name and Title of State Agency Signatory Thomas S. Burack, Commissioner	
1.16 Approval by the N.H. Department of Administration, Division of Personnel (if applicable) By: _____ Director, On: _____			
1.17 Approval by the Attorney General (Form, Substance and Execution) By: <i>[Signature]</i> On: <u>2/26/13</u>			
1.18 Approval by the Governor and Executive Council By: _____ On: _____			



2. EMPLOYMENT OF CONTRACTOR/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 A 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, this Agreement, and all obligations of the parties hereunder, shall not become effective until the date the Governor and Executive Council approve this Agreement ("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. 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, and 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, the State shall have the right to withhold payment until such funds become available, if ever, and shall have the right to terminate this Agreement immediately upon giving the Contractor notice of such termination. The State shall not be required to transfer funds from any other account 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 B which is incorporated herein by reference.
5.2 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. The State shall have no liability to the Contractor other than the contract price.
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 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.

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 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 opportunity laws. In addition, the Contractor shall comply with all applicable copyright laws.
6.2 During the term of this Agreement, the Contractor shall not discriminate against employees or applicants for employment because of race, color, religion, creed, age, sex, handicap, sexual orientation, or national origin and will take affirmative action to prevent such discrimination.
6.3 If this Agreement is funded in any part by monies of the United States, the Contractor shall comply with all the provisions of Executive Order No. 11246 ("Equal Employment Opportunity"), as supplemented by the regulations of the United States Department of Labor (41 C.F.R. Part 60), and with any rules, regulations and guidelines as the State of New Hampshire or the United States issue to implement these regulations. The Contractor further 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 all rules, regulations and orders, and 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 Unless otherwise authorized in writing, during the term of this Agreement, and for a period of six (6) months after the Completion Date in block 1.7, the Contractor shall not hire, and shall not permit any subcontractor or other person, firm or corporation with whom it is engaged in a combined effort to perform the Services to hire, any person who is a State employee or official, who is materially involved in the procurement, administration or performance of this Agreement. This provision shall survive termination of this Agreement.
7.3 The Contracting Officer specified in block 1.9, or his or her successor, shall be the State's representative. In the event of any dispute concerning the interpretation of this Agreement, the Contracting Officer's decision shall be final for the State.

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) days from the date of the notice; and if the Event of Default is not timely remedied, terminate this Agreement, effective two (2) 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 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 treat the Agreement as breached and pursue any of its remedies at law or in equity, or both.

9. DATA/ACCESS/CONFIDENTIALITY/PRESERVATION.

9.1 As used in this Agreement, the word "data" shall mean all 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.

9.2 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.

9.3 Confidentiality of data shall be governed by N.H. RSA chapter 91-A or other existing law. Disclosure of data requires prior written approval of the State.

10. TERMINATION. In the event of an early termination of this Agreement for any reason other than the completion of the Services, the Contractor shall deliver to the Contracting Officer, not later than fifteen (15) 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. The form, subject matter, content, and number of copies of the Termination

Report shall be identical to those of any Final Report described in the attached EXHIBIT A.

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. The Contractor shall not assign, or otherwise transfer any interest in this Agreement without the prior written consent of the N.H. Department of Administrative Services. None of the Services shall be subcontracted by the Contractor without the prior written consent of the State.

13. INDEMNIFICATION. The Contractor shall defend, indemnify and hold harmless the State, its officers and employees, from and against any and all losses suffered by the State, its officers and employees, and any and all claims, liabilities or penalties asserted against the State, its officers and employees, by or on behalf of any person, on account of, based or resulting from, arising out of (or which may be claimed to arise out of) the acts or omissions of the Contractor. Notwithstanding the foregoing, nothing herein contained shall be deemed to constitute a waiver of the sovereign immunity of the State, which immunity is hereby reserved to the State. This covenant in paragraph 13 shall survive the termination of this Agreement.

14. INSURANCE.

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

14.1.1 comprehensive general liability insurance against all claims of bodily injury, death or property damage, in amounts of not less than \$250,000 per claim and \$2,000,000 per occurrence; and

14.1.2 fire and extended coverage insurance covering all property subject to subparagraph 9.2 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 his or her successor, a certificate(s) of insurance for all insurance required under this Agreement. Contractor shall also furnish to the Contracting Officer identified in block 1.9, or his or her successor, certificate(s) of insurance for all renewal(s) of insurance required under this Agreement no later than fifteen (15) days prior to the expiration date of each of the insurance policies. The certificate(s) of insurance and any renewals thereof shall be

attached and are incorporated herein by reference. Each certificate(s) of insurance shall contain a clause requiring the insurer to endeavor to provide the Contracting Officer identified in block 1.9, or his or her successor, no less than ten (10) days prior written notice of cancellation or modification of the policy.

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. Contractor shall furnish the Contracting Officer identified in block 1.9, or his or her 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. No failure by the State to enforce any provisions hereof after any Event of Default shall be deemed a waiver of its rights with regard to that Event of Default, or any subsequent Event of Default. No express failure to enforce any Event of Default shall be deemed a waiver of the right of the State to enforce each and all of the provisions hereof upon any further or other Event of Default on the part of the Contractor.

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.

19. CONSTRUCTION OF AGREEMENT AND TERMS. This Agreement shall be construed in accordance with the laws of the State of New Hampshire, and is binding upon and inures to the benefit of the parties and their respective successors and assigns. 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.

20. THIRD PARTIES. The parties hereto do not intend to benefit any third parties and this Agreement shall not be construed to confer any such benefit.

21. 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.

22. SPECIAL PROVISIONS. Additional provisions set forth in the attached EXHIBIT C are incorporated herein by reference.

23. 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.

24. 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 relating hereto.

EXHIBIT A

SERVICE AGREEMENT FOR FLUVIAL EROSION HAZARD GEOMORPHOLOGY ASSESSMENTS FOR SUGAR RIVER WATERSHED

EXHIBIT A: TECHNICAL SERVICES TO BE PROVIDED

1. DESCRIPTION OF PROJECT

The types of services required under this AGREEMENT shall be FLUVIAL GEOMORPHOLOGY ASSESSMENTS, as defined herein, which the DEPARTMENT may require until the completion date of this AGREEMENT.

2. SUPPLEMENTARY DEFINITIONS

In addition to terms defined elsewhere in this AGREEMENT, the following definitions shall be applicable:

2.1 GEOLOGIST

An employee or designated representative of the DEPARTMENT, responsible for observation of work performed by the CONTRACTOR and for communication with CONTRACTOR concerning the DEPARTMENT's project objectives and requirements. The term GEOLOGIST includes without limitation geologists, hydrogeologists, geomorphologists and other Earth scientists.

2.2 FLUVIAL GEOMORPHOLOGY ASSESSMENTS

The term FLUVIAL GEOMORPHOLOGY ASSESSMENTS shall refer to surveys of state rivers that incorporate both Geographic Information Systems and field analysis to identify areas of the stream system that have the potential to create future public safety hazards. These FLUVIAL GEOMORPHOLOGY ASSESSMENTS shall be conducted using PROTOCOLS, as defined in Paragraph 2.4.

2.3 DEPARTMENT

The term DEPARTMENT shall refer to the New Hampshire Geological Survey, a unit within the Office of the Commissioner, within the New Hampshire Department of Environmental Services. The DEPARTMENT is the primary entity responsible for the management of this AGREEMENT. In the absence of the New Hampshire Geological Survey, the DEPARTMENT shall refer to a division, bureau, or section within the New Hampshire Department of Environmental Services designated to manage this AGREEMENT by the Commissioner or his designee.

2.4 PROTOCOLS

The term PROTOCOLS shall refer to the New Hampshire implementation of the Vermont Stream Geomorphic Assessment Phase 2 Handbook, Rapid Stream Assessment Field Protocols, as developed by the Vermont Agency of Natural Resources, May 2007 version. These PROTOCOLS, as defined in this paragraph, shall be the basis for the types of data to be collected, unless otherwise indicated, or unless written correspondence

indicating modifications to the PROTOCOLS is provided to the CONTRACTOR by the DEPARTMENT.

3. SCOPE OF WORK

3.1 FLUVIAL GEOMORPHOLOGY ASSESSMENTS

The work to be performed under the terms of this AGREEMENT shall be FLUVIAL GEOMORPHOLOGY ASSESSMENTS, as defined under Paragraph 2.2 of this AGREEMENT, to be conducted within the Sugar River watershed. The Sugar River watershed was selected because it has been identified as a river system with repetitive flood losses. Work will be required both in selected rivers within the watershed and along their adjacent banks. Rivers throughout New Hampshire also incorporate many wetlands reaches, and thus, the CONTRACTOR shall be prepared to provide and use flotation equipment in such instances, unless a decision is made otherwise by the DEPARTMENT in consultation with the CONTRACTOR.

3.2 Purpose and Cooperation

The purpose of these FLUVIAL GEOMORPHOLOGY ASSESSMENTS is to obtain reliable data regarding the present state of river channel physical condition, enabling the delineation of Fluvial Erosion Hazard (FEH) zones, and an overall greater understanding of the existing physical condition of the river. FLUVIAL GEOMORPHOLOGY ASSESSMENTS also incorporate evaluations of the geomorphic condition at stream crossings. The CONTRACTOR shall provide the DEPARTMENT every opportunity to obtain all records related to these FLUVIAL GEOMORPHOLOGY ASSESSMENTS, including the accompaniment of the CONTRACTOR during field surveys, and the quality control of collected data, by and at the discretion of the GEOLOGIST, and determine every detail of the work as it progresses.

3.3 Equipment and materials to be furnished by the DEPARTMENT

The DEPARTMENT will provide the following items to the CONTRACTOR:

3.3.1 Plans for Field Survey

The DEPARTMENT will provide the CONTRACTOR with the Phase 1 data for the Sugar River watershed, as developed by the DEPARTMENT based on the New Hampshire implementation of the Phase 1 Vermont Stream Geomorphic Assessment Protocols, prior to commencement of the FLUVIAL GEOMORPHOLOGY ASSESSMENTS being conducted. The FLUVIAL GEOMORPHOLOGY ASSESSMENTS that are to be conducted under the terms of this AGREEMENT, are for a project total of 27 miles (Figure 1). The data products provided to the CONTRACTOR by the DEPARTMENT shall be the Phase 1 data reports, as defined by this subparagraph of this AGREEMENT. Phase 1 data reports shall be provided to the CONTRACTOR in electronic formats, including those derived in GIS for spatial data. Incorporated within these plans for field survey shall be a shapefile that identifies for the CONTRACTOR specific areas in which the DEPARTMENT requires definite valley wall field verifications, as described under Subparagraph 4.1.7. Additional ancillary data

that, in the judgment of the CONTRACTOR, may provide additional benefit for the successful completion of the work under this AGREEMENT, may be requested from the DEPARTMENT by the CONTRACTOR. Upon receipt of the Phase 1 data reports by the CONTRACTOR, the CONTRACTOR shall review these products and notify the DEPARTMENT if the CONTRACTOR wishes to suggest any modifications to the Phase 1 data products to ensure that the CONTRACTOR and DEPARTMENT are in agreement on the final Phase 1 data reports to be used in the conductance of these FLUVIAL GEOMORPHOLOGY ASSESSMENTS.

3.3.2 Landowner contacts for property access

The DEPARTMENT, or its designee, will be responsible for communicating with owners of properties that adjoin the river(s) that are to be assessed under this AGREEMENT by mail regarding access to property for purposes of FLUVIAL GEOMORPHOLOGY ASSESSMENT. In situations where property owner(s) deny access to property for the purpose of the completion of the work under this AGREEMENT, then the DEPARTMENT, in consultation with the CONTRACTOR, will modify the PROTOCOLS for those river reaches accordingly. Documentation by the DEPARTMENT relative to communication with landowners concerning property access will be provided to the CONTRACTOR. The CONTRACTOR shall not notify or contact private landowners without obtaining prior written approval from the DEPARTMENT.

3.4 Equipment and materials to be furnished by the CONTRACTOR

This AGREEMENT requires FLUVIAL GEOMORPHOLOGY ASSESSMENTS to be made utilizing specific materials, equipment, and preparatory products. Definitions of the equipment and preparatory products that are required to be provided by the CONTRACTOR, and that differ from or are in addition to the PROTOCOLS, are provided below. Equipment items specified herein under Subparagraphs 3.4.6 shall be provided if it is determined by the DEPARTMENT that a reach or reaches of the river(s) covered under this AGREEMENT require assessment using such equipment. The FLUVIAL GEOMORPHOLOGY ASSESSMENTS shall be conducted along river within the Sugar River watershed for a project total distance of 27 miles. Performance of FLUVIAL GEOMORPHOLOGY ASSESSMENTS other than specified in the project scope covered under this AGREEMENT, shall not be performed by the CONTRACTOR without prior approval of the DEPARTMENT.

3.4.1 Measuring tape

Measuring tape means a flexible form of ruler that is made of a non-stretchable material, preferably fiberglass or steel, with linear measurement capability of no less than 100 feet, incremented in tenths **and hundredths** of feet, **not** inches.

3.4.2 Rangefinder

Rangefinder means a device that allows the user to measure the distance to an object of interest using a laser beam with the measurement reported on an

electronic readout display, that is capable of measuring accurate distances up to 165 feet away.

3.4.3 Digital camera

Digital camera means a camera that takes photographs as digital images and stores them on a data card for later download to other electronic media, and that is capable of zooming into features of interest. The digital camera shall also be GPS-enabled and capable of collecting and storing the latitude/longitude point at which a photograph is collected, and for download of such points to an electronic medium.

3.4.4 Measuring rod

Measuring rod means a survey grade leveling rod that contains a measuring ruler scale that is capable of extending up to 18 feet in height, with scale increments in tenths **and hundredths** of feet, **not** inches.

3.4.5 GPS unit

GPS unit means a device capable of collecting accurate latitude/longitude information to a horizontal accuracy equal to or less than 2 meters. A separate GPS unit can be used as a supplement to the use of a GPS-enable digital camera, as specified and required under subparagraph 3.4.3, to improve precision where necessary.

3.4.6 Depth finder

A depth finder, or fathometer, is a device used to determine the depth of the riverbed at a point through the use of underwater sound propagation, for which soundings taken in rapid succession can allow the creation of a bed profile along a cross-section. In situations in which a depth finder is required, as specified by the DEPARTMENT, the CONTRACTOR shall demonstrate to the DEPARTMENT how the depth information measured with such a device shall be recorded and logged.

3.4.7 Automatic level

An automatic level means a device, typically mounted to a tripod, used to read elevations from a measuring rod, allowing for precise elevations to be determined during survey.

3.4.8 Bed material sampler

A bed material sampler is used to collect sediment samples from the bed of a river, lake, or other waterbody. The device provides a mechanism that traps bed material within it after it has been deployed, typically by being lowered to the bed by a line attached to a reel, and retains the sediment sample upon retrieval to the surface where it can be opened and the collected sample analyzed.

3.4.9 Compass

A compass is a handheld unit that provides a reading of the direction in a frame of reference in relation to the surface of the Earth. Such a unit displays cardinal directions and azimuth direction and may be in either non-digital or digital form.

3.5 Equipment and materials condition

All equipment and materials required to be provided by the CONTRACTOR shall be properly maintained and in sound condition that is suitable for survey assessment. The GEOLOGIST may reject any equipment that does not, in their judgment, meet these conditions, and the CONTRACTOR will replace the rejected equipment without additional compensation.

3.6 Personnel

The CONTRACTOR shall furnish only qualified personnel for all phases of the project covered by this AGREEMENT that have been accepted as qualified by the DEPARTMENT during the prequalification process. If the CONTRACTOR finds it necessary to substitute personnel for those that have been already accepted as qualified, then such personnel may be substituted upon demonstration to the DEPARTMENT that the substitute meets the qualifications stipulated during the original prequalification process.

3.7 Notice to Proceed

The DEPARTMENT will issue a Notice to Proceed, notifying the CONTRACTOR to begin work on the project under this AGREEMENT. The Notice to Proceed will include a maximum dollar cost for the work that will not be exceeded by the CONTRACTOR. The Notice to Proceed will also include dates, set in consultation with the CONTRACTOR, for starting and completing work on the project under this AGREEMENT.

3.8 Pre-Job Meeting

Upon issuance of a Notice to Proceed by the DEPARTMENT to the CONTRACTOR, the CONTRACTOR shall provide representatives to meet with agents from the DEPARTMENT at the DEPARTMENT, unless the CONTRACTOR and DEPARTMENT mutually agree upon an alternative location. The purpose of the Pre-Job Meeting will be for the DEPARTMENT to provide the CONTRACTOR with the plans for field survey, as defined under subparagraph 3.3.1 for the project covered under this AGREEMENT, to provide the CONTRACTOR any additional protocols and procedures to be used in the conductance of the data collection activities covered under this AGREEMENT, to discuss the proposed scope of work, site and landowner access, and all other issues relating to the performance of the FLUVIAL GEOMORPHOLOGY ASSESSMENTS. During the Pre-Job Meeting, the CONTRACTOR shall also provide to the DEPARTMENT written documentation of its Quality Assurance procedures that the CONTRACTOR will employ upon the collected data prior to its first submission to the DEPARTMENT, as described in Paragraph 5.3.

3.9 Stakeholder Meeting

The CONTRACTOR shall attend a meeting in which the field assessments and plans are described to stakeholders. The presentation shall be at a mutually agreed upon time and date arranged by the DEPARTMENT, or its designee, and the stakeholders. The DEPARTMENT, or its designee, shall coordinate the meeting which shall be attended by the CONTRACTOR and the stakeholders designated by the DEPARTMENT.

3.10 Professional Conduct

The CONTRACTOR shall perform the work under this AGREEMENT in a professional and cooperative manner. The GEOLOGIST may disqualify CONTRACTOR's personnel from work if, in his or her judgment, these conditions are not met. The CONTRACTOR shall not be compensated separately for replacement of personnel rejected by the GEOLOGIST or for standby time resulting from the CONTRACTOR's failure to meet these conditions.

3.11 Inspection of the Work

The CONTRACTOR's work shall be done in accordance with this AGREEMENT under the general direction of the DEPARTMENT or its authorized representatives. The DEPARTMENT reserves the right to assign the GEOLOGIST to accompany the CONTRACTOR during assessments which are performed under this AGREEMENT.

4. METHODS OF FIELD ASSESSMENT

4.1 Protocols

The methods used by the CONTRACTOR in the performance of the FLUVIAL GEOMORPHOLOGY ASSESSMENTS shall be PROTOCOLS, as defined in Paragraph 2.4. Sections of the PROTOCOLS that have been modified as part of the New Hampshire implementation are defined in the following subparagraphs, and are applicable to the project defined under this AGREEMENT.

4.1.1 Sketches and Photographs

The PROTOCOLS stipulate that drawing a sketch of assessed reaches and segments is an essential component of field assessments. For the purposes of this AGREEMENT, the use of sketches is optional, and is at the discretion of the CONTRACTOR. Any sketches made by the CONTRACTOR in the performance of these FLUVIAL GEOMORPHOLOGY ASSESSMENTS shall be made in accordance with the descriptions provided in the PROTOCOLS, and shall be submitted to the DEPARTMENT upon completion of the project covered under this AGREEMENT. However, the CONTRACTOR shall collect a digital photographic log of the riverine system under assessment which shall be submitted to the DEPARTMENT upon completion of the FLUVIAL GEOMORPHOLOGY ASSESSMENTS, as described in Section 5 of this AGREEMENT. The Standard Photo Log form used to document pictures in the PROTOCOLS is not required under this AGREEMENT, unless the digital camera is at a location where a GPS point is not able to be obtained, in which case the feature shall be documented in writing and the location noted. Photographs shall be collected at each cross-section, and shall

include an upstream view, downstream view, right bank view, and left bank view, while ensuring that the cross-section with measuring tape stretched across the channel is incorporated into at least two photographs. Photographs shall be collected at all riverine features identified as components of the Feature Indexing Tool (FIT) within the PROTOCOLS.

4.1.2 Use of GPS units

The CONTRACTOR shall use a unit capable of obtaining GPS data, as defined under subparagraphs 3.4.3 and 3.4.5 to document feature locations for later import into GIS software as a data layer. These feature locations shall include all those that are components of the FIT and locations of cross-sections as defined in Subparagraph 4.1.5. The GPS data files of the features surveyed shall be converted by the CONTRACTOR to a GIS datum and format decided upon by the DEPARTMENT before the files are submitted to the DEPARTMENT as an acceptable product.

4.1.3 Step 1.5 – Confinement

If it is impractical to measure the valley width at a location, the CONTRACTOR shall collect GPS point(s) that adequately locate the valley wall. Later, using GIS, the CONTRACTOR shall measure the valley width determined from the field-collected GPS points that delineate each side of the valley wall. This calculated width shall be recorded on the field form for this step.

4.1.4 Recording Step 2 Data

The data collected for the Step 2 section of the PROTOCOLS shall be commensurate with the 2009 version of the PROTOCOLS. The Step 2 information that is entered on the cross-section worksheet will be entered by the CONTRACTOR into an Excel workbook or its substitute, as determined by the DEPARTMENT, for plotting cross-sections that are measured in the field, and for determination of ratios including those for incision, width/depth, and entrenchment. The CONTRACTOR shall use GPS to index the location of all cross-sections, and shall complete two (2) cross-sections, using measuring tape, as defined in Subparagraph 3.4.1 and wading rod, as defined in Subparagraph 3.4.4, per reach assessed unless an exception is granted by the GEOLOGIST. If the CONTRACTOR deems it necessary to segment a reach, based upon field evidence described in the PROTOCOLS, then the requirement of two (2) cross-sections shall become applicable to each segment within a reach. A third cross-section in a reach may be assessed if the addition of such cross-section will allow refinement of the ability to type the stream within a reach. The decision to assess a third cross-section shall be made by the DEPARTMENT, in consultation with the CONTRACTOR. In the event that the river reach is too deep for wading, and the reach is not within an impoundment, the CONTRACTOR, in consultation with the DEPARTMENT, shall determine if collection of cross-section data within the bankfull channel shall be performed by boat or canoe. If such collection is determined to be undertaken, the boat or canoe shall be tied to a tagline that is fixed across the channel at the cross-section. Measuring rod readings will then be collected along the cross-section from the boat or canoe affixed to the established tagline. The employment of such procedures in the event of a non-wadeable condition may also

necessitate the use of equipment as defined under Subparagraph 3.4.6, if deemed appropriate by the CONTRACTOR, in consultation with the DEPARTMENT.

4.1.5 Step 2.3 – Bankfull Mean Depth

While the tape is stretched across the channel at the bankfull elevation, the CONTRACTOR shall use the measuring rod to determine a minimum of 10 bankfull depths at evenly spaced intervals across the channel. The spacing interval used to measure depths across the channel shall be determined by dividing the bankfull width by 11. In addition, the CONTRACTOR shall measure the bankfull depth at additional locations on the established cross-section where morphological change occurs that would otherwise not be captured using 10 measurements. Locations on a cross-section in which additional bankfull depth measurements shall be collected include when the character of the bed material changes from one dominant size class to another, based upon experienced field observation, and where a change in bed elevation is not gradual, such as a sharp drop or rise in bed elevation on the cross-section. In cases where a cross-section traverses a major feature, such as a bar, or exposed bed, measurements shall also be taken of the start, middle, and end of such feature. At all locations where a bankfull depth measurement is collected, the distance across the channel from the left bankfull pin and the corresponding bankfull depth shall be recorded by the CONTRACTOR.

4.1.6 Step 2.12 – Bed Substrate Composition

The CONTRACTOR shall ensure that the total number of bed substrate sampling points, and the resulting percentages of size classes 1 through 6 total 100 percent. In the event that the river reach is too deep for wading, the CONTRACTOR, in consultation with the DEPARTMENT, shall use a bed sampling device, as defined under subparagraph 3.4.8. The sampler will be operated from a boat or canoe in straight reaches of the channel away from the influence of meander bends and the dominant bed particle size shall be estimated based upon such visual assessment of the collected sample.

4.1.7 Valley Wall Field Verifications

While the valley walls are delineated in GIS during Phase 1, it is critical that the locations of valley walls be verified in the field during the assessment, as these locations frequently bound the final Fluvial Erosion Hazard zones. The locations of valley walls shall be field verified using GPS at all locations for which cross-sections are collected in each reach. Additionally, the CONTRACTOR shall be in possession of a hardcopy or digital GIS map of the valley walls, as provided by the DEPARTMENT. The CONTRACTOR, while assessing a reach, shall make visual evaluations of the match between the locations of the valley wall in the field compared to the map. The CONTRACTOR may verify the locations of valley walls using one of two methods. The CONTRACTOR may collect GPS points at the location of the valley wall in the field, or the CONTRACTOR shall measure the distance and compass bearing, using a device as defined in Subparagraph 3.4.9, from the streambank where a GPS point is collected to the valley wall and record this measurement in a manner that clearly identifies the association of the measurement

with the point collected. In all cases, verifications shall be attempted when the actual valley wall and the Phase 1 mapped valley wall are not reasonably congruent, and such measurements shall be attempted in those areas identified by the DEPARTMENT as specifically requiring verification. The CONTRACTOR shall collect a number of points that is no fewer than a total of five (5) per mile within a specified reach, unless a different number is required for a reach, based on agreement between the CONTRACTOR and the DEPARTMENT. The CONTRACTOR shall provide documentation to the DEPARTMENT indicating that the stipulations in this section pertaining to valley wall field verifications have been completed. These points shall be imported into a GIS and the Phase 1 valley wall shall be adjusted utilizing these points by the DEPARTMENT.

4.1.8 Bridge and culvert assessments

For each river reach or segment that is assessed, each bridge or culvert that crosses the channel shall be geomorphically assessed using the established New Hampshire Culvert Assessment Protocol. This protocol shall be provided to the CONTRACTOR by the DEPARTMENT during the Pre-Job Meeting, as described in Paragraph 3.8.

4.1.9 Directionality of photographs

Should the digital camera, as defined under Subparagraph 3.4.3, used by the CONTRACTOR in the performance of tasks under this AGREEMENT possess the capability to record the compass directionality of collected photographs, then the collected compass directionality information recorded with the photographs shall be provided to the DEPARTMENT upon submittal of all collected photographs to the DEPARTMENT. If the digital camera, as defined under Subparagraph 3.4.3, used by the CONTRACTOR in the performance of tasks under this AGREEMENT does not possess the capability to record the compass directionality of collected photographs, then upon submittal of all collected photographs to the DEPARTMENT, all photographs of cross-section locations, as stipulated in Subparagraph 4.1.1 shall be accompanied by documentation indicating the picture number and the appropriate view for each photograph collected at cross-sections.

4.2 Assessments Plan

The Assessments Plan has been developed for the FLUVIAL GEOMORPHOLOGY ASSESSMENTS that are to be conducted under this AGREEMENT, for the Sugar River watershed as depicted in Figure 1. ESRI-format GIS data for the Sugar River watershed are available from the DEPARTMENT and shall be provided to the CONTRACTOR in preparation for field survey. If the DEPARTMENT determines additional survey work needs to be undertaken, the locations of rivers where additional survey work may be conducted shall be determined by the DEPARTMENT in consultation with the CONTRACTOR. When the locations of the additional work are finalized by the DEPARTMENT, in consultation with the CONTRACTOR, the DEPARTMENT shall provide the CONTRACTOR an assessment plan detailing the additional locations of FLUVIAL GEOMORPHOLOGY ASSESSMENTS and a Notice to Proceed for those additional assessments. Such changes will be performed based upon the cost schedule

submitted per the bid of the CONTRACTOR that is agreed upon between the CONTRACTOR and the DEPARTMENT.

4.3 Obstructions

The DEPARTMENT makes no representations as to the character of the ground on which FLUVIAL GEOMORPHOLOGY ASSESSMENTS are to be made, or that any FLUVIAL GEOMORPHOLOGY ASSESSMENTS locations will be free of obstructions that could preclude completion of an assessment for a part of or complete reach. If field conditions indicate the need to address any obstructions that may prevent a complete assessment, the manner in which the new conditions will be addressed shall be approved by the DEPARTMENT.

5. WORK SCHEDULES AND PROGRESS REPORTS

5.1 Assignment Start Date

The CONTRACTOR shall begin work on the start date specified in the Notice to Proceed, or on a later date that is mutually agreed upon by the CONTRACTOR and the DEPARTMENT. Once given Notice to Proceed, the CONTRACTOR shall work at a pace that ensures that the project will be completed no later than the completion date specified in the Notice to Proceed.

5.2 Assignment Completion Date

The completion date for all work on this project will be specified in the Notice to Proceed, but shall be no later than September 18, 2014. The DEPARTMENT shall establish the completion date after consultation with the CONTRACTOR. Extension of the completion date beyond that originally specified in the Notice to Proceed shall be at the discretion of the DEPARTMENT, after consultation with the CONTRACTOR.

5.3 Submission of Materials and Reports, and Quality Assurance

After completing the FLUVIAL GEOMORPHOLOGY ASSESSMENTS specified under this contract, the CONTRACTOR shall enter all data collected using the PROTOCOLS into the geomorphic database which is maintained by the DEPARTMENT for this purpose, instructions for which shall be provided to the CONTRACTOR by the DEPARTMENT. At the time of submission of the collected data to the DEPARTMENT, the CONTRACTOR shall also submit GIS files, in a format agreed upon by the CONTRACTOR and the DEPARTMENT, of the revised stream centerlines, valley walls, indexed features and any sketches. The GIS files of the indexed river features shall include, but not be limited to, alluvial fans, river corridor encroachments, grade controls, bank erosion, mass failures, bank revetments, debris jams, water withdrawals, stormwater inputs, beaver dams, flood chutes, headcuts, stream fords, channel alterations, cross-section locations, and locations of large woody debris. The CONTRACTOR shall also submit the log of photographs and photograph directionality information collected during the field assessments, and the Excel workbooks containing the collected cross-section information, as described in Section 4.1.4. The DEPARTMENT shall review all of the submitted data for accuracy, and will provide the CONTRACTOR with a list of comments to be addressed. The CONTRACTOR shall then work with the

DEPARTMENT in addressing the items on the DEPARTMENT's list of comments to bring the data into compliance with the DEPARTMENT's review. These deficiencies shall be completed prior to the Public Presentation. Upon final acceptance of the data collected by the CONTRACTOR, the CONTRACTOR shall submit final versions of stream centerlines, valley walls, mapped river features, and photocopies of all field sheets which may be submitted electronically, to the DEPARTMENT which shall become the final version of the data produced under this AGREEMENT. Written narrative-style reach reporting shall not be required under this AGREEMENT.

5.4 Public presentation

The DEPARTMENT reserves the right to require the CONTRACTOR to present the results of all FLUVIAL GEOMORPHOLOGY ASSESSMENTS work to the public upon completion. The CONTRACTOR should be prepared to address the work performed under this AGREEMENT in a narrative style verbally during the public presentation, utilizing photographs and the data collected to provide the public an understanding regarding the condition of the assessed rivers within the Sugar River watershed. Any such presentation shall be at a mutually agreed upon time and date arranged by the DEPARTMENT or its designee. The DEPARTMENT shall coordinate the meeting which shall be attended by the CONTRACTOR as designated by the DEPARTMENT.

6. SITE DISTURBANCE

The CONTRACTOR shall leave all work sites in a neat and workmanlike manner. The CONTRACTOR shall exercise every caution in not damaging property, and shall repair any damage that may occur. Any property damage resulting from the CONTRACTOR's work shall be immediately reported to the DEPARTMENT. On completion of work at a specific location, the CONTRACTOR shall remove all equipment and materials.

EXHIBIT B

CONTRACT PRICE, METHOD AND TERMS OF PAYMENT

The following provisions are ADDED to those listed in the State of New Hampshire Agreement Form P-37.

5.5 Payment schedule and stipulations

The work performed under this AGREEMENT shall be paid for in accordance with the following schedule and stipulations:

5.5.1 Method of measurement

The amount of work to be paid for shall be the quantity of work, satisfactorily performed by the CONTRACTOR under the terms of the AGREEMENT, completed and accepted by the DEPARTMENT as conforming to these specifications.

5.5.2 Basis of payment and definition of pay items

The accepted quantity of work will be paid for at the contract unit prices as defined below.

ITEM NO. 1 Pre-Assessment Coordination

ITEM NO. 1.1 Pre-Job Meeting

As stipulated in Paragraph 3.8, prior to mobilization for field work, at least one staff representative is required to attend a pre-job meeting. This item includes all costs of travel to and from the meeting, and personnel costs for attendance.

ITEM NO. 1.2 Review of Phase 1 Data Reports

Upon submission to the CONTRACTOR by the DEPARTMENT of Phase 1 data reports, the CONTRACTOR shall review the Phase 1 data reports and work with the DEPARTMENT to achieve agreement between the CONTRACTOR and DEPARTMENT on the final Phase 1 data reports to use. This item includes all costs of personnel to review the data, and adjust as appropriate, based upon consultation with the DEPARTMENT.

ITEM NO. 1.3 Stakeholder Meeting

As stipulated in Paragraph 3.9, CONTRACTOR shall attend a stakeholder meeting before assessments begin. This item includes all costs of travel to and from the stakeholder meeting and personnel costs for attendance.

ITEM NO. 2 Phase 2 Geomorphic Assessments

ITEM NO. 2.1 Field personnel and travel costs

For the field personnel costs portion of this project, payment will be made to support the personnel necessary to conduct the assessments, and travel to and from the work site, as directed in the Notice to Proceed, on a per river assessment mile basis. This item supports the costs for survey personnel and travel to and from the work site. The CONTRACTOR shall submit monthly invoices to the DEPARTMENT for the personnel costs incurred in the preceding months beginning with the time the Notice to Proceed is issued to the time at which the field work phase of the scope of work covered under this AGREEMENT is completed.

ITEM NO. 2.2 Field Data Reduction and Reports Costs

Upon completion of the field data collection phase of the work covered under this AGREEMENT, materials and reports are required to be compiled and submitted to the DEPARTMENT, as specified under Paragraph 5.3 of Exhibit A. This item will be paid separately from payment for work conducted for field data collection. This item includes all costs for personnel to compile the data and reports, and for corrections to data and reports required by the DEPARTMENT subsequent to initial review of submitted data by the DEPARTMENT.

ITEM NO. 3 Post-Assessment Presentations

ITEM NO. 3.1 Public Presentation

As stipulated in Paragraph 5.4, the DEPARTMENT reserves the right to require the CONTRACTOR to attend a public presentation to present the final data and report to members of the public. This item includes all costs of travel to and from the public meeting and personnel costs for attendance.

5.6 The total cost of all work, expenses and profit under this AGREEMENT shall not exceed **\$86,615.00**. No payment will be made for work performed in excess of this amount. The budget for this project will be prepared on a task order basis from the schedule of charges and the total amount charged will be based on the per item cost in the bid schedule.

5.7 The rates tabulated in the Cost Schedule shall include all charges attributed to direct costs, fringe benefits, payroll taxes, overhead, direct expenses and profit and shall be used in billing for all work done under this AGREEMENT.

5.8 The DEPARTMENT will once each month make a progress payment to the CONTRACTOR on the basis of an estimate of the total amount of work done to the time of the estimate and its value as prepared by the CONTRACTOR and approved by the DEPARTMENT. The CONTRACTOR may choose the option of submitting a single bill, upon completion of the work, in lieu of monthly bills. The CONTRACTOR may also choose the option of submitting a bill to the DEPARTMENT upon completion of an item number, as specified under subparagraph 5.5.2. Final payments will be based on quantities of work completed and accepted by the DEPARTMENT.

EXHIBIT C

SPECIAL PROVISIONS

The following provisions are ADDED to those listed in the State of New Hampshire Agreement Form P-37.

12.1 All subcontracts shall be in writing. A copy of any subcontracts issued shall be submitted to the DEPARTMENT.

14.4 No proposal or bid bond is required.

25. REVISIONS TO REPORTS, PLANS OR DOCUMENTS. The CONTRACTOR shall perform such additional work as necessary in order to correct errors in the work specified under this AGREEMENT, caused by errors or omissions by the CONTRACTOR, without undue delays and without additional costs to the DEPARTMENT.

VANASSE HANGEN BRUSTLIN, INC.

Certificate of Vote

**Fluvial Erosion Hazard Geomorphology Assessment
Sugar River Watershed**

I, Robert Brustlin, hereby certify that I am the duly elected
President of Vanasse Hangen Brustlin, Inc.

I hereby certify the following is a true copy of Vote taken at a
meeting of the Board of Directors of the Corporation, duly called and held
on January 31, 2013, at which a quorum of the Board was present and
voting.

VOTED:

*That Francis O'Callaghan is the duly elected Executive
Vice President of Vanasse Hangen Brustlin, Inc. and is
hereby authorized to execute contracts, bonds, and
proposals in the name and behalf of said company and affix
its corporate seal thereto; and such execution of any
contract or obligation in this company's name on its behalf
under seal of the company, shall be valid and binding upon
this company.*

I hereby certify that said vote has not been amended or repealed
and remains in full force and effect as of this date, and that Francis
O'Callaghan is the duly elected Executive Vice President of this
Corporation

ATTEST:

Date: 2-12-13

RS Brustlin

State of New Hampshire Department of State

CERTIFICATE

I, William M. Gardner, Secretary of State of the State of New Hampshire, do hereby certify that VANASSE HANGEN BRUSTLIN, INC. a(n) Massachusetts corporation, is authorized to transact business in New Hampshire and qualified on December 11, 1986. I further certify that all fees and annual reports required by the Secretary of State's office have been received.



In TESTIMONY WHEREOF, I hereto set my hand and cause to be affixed the Seal of the State of New Hampshire, this 13th day of February, A.D. 2013

A handwritten signature in cursive script, appearing to read "William M. Gardner".

William M. Gardner
Secretary of State



CERTIFICATE OF LIABILITY INSURANCE

OP ID: PB

DATE (MM/DD/YYYY)

02/12/2013

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 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 Poole Professional Ltd. 107 Audubon Rd. #2, Ste. 305 Wakefield, MA 01880 Christopher A. Poole	Phone: 781-245-5400 Fax: 781-245-5463	CONTACT NAME: PHONE (A/C, No, Ext): E-MAIL ADDRESS: PRODUCER CUSTOMER ID #: VANAS-1	FAX (A/C, No):																				
	INSURED Vanasse Hangen Brustlin, Inc. VHB Engineering, Surveying Landscape Arch., PC Vanasse Hangen Brustlin, PC MSCW, Inc. & VHB, VHB Eng. NC, PC P. O. Box 9151 Watertown, MA 02471		<table border="1"> <tr> <th colspan="2">INSURER(S) AFFORDING COVERAGE</th> <th>NAIC #</th> </tr> <tr> <td>INSURER A :</td> <td>XL Specialty Insurance Company</td> <td>37885</td> </tr> <tr> <td>INSURER B :</td> <td></td> <td></td> </tr> <tr> <td>INSURER C :</td> <td></td> <td></td> </tr> <tr> <td>INSURER D :</td> <td></td> <td></td> </tr> <tr> <td>INSURER E :</td> <td></td> <td></td> </tr> <tr> <td>INSURER F :</td> <td></td> <td></td> </tr> </table>	INSURER(S) AFFORDING COVERAGE		NAIC #	INSURER A :	XL Specialty Insurance Company	37885	INSURER B :			INSURER C :			INSURER D :			INSURER E :			INSURER F :	
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COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

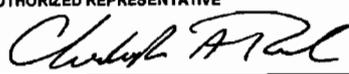
THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE 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 SUBR		POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
		INSR	WVD					
	GENERAL LIABILITY <input type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC						EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$	
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS						COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$	
	<input type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> DEDUCTIBLE <input type="checkbox"/> RETENTION \$	<input type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS-MADE					EACH OCCURRENCE \$ AGGREGATE \$	
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	<input type="checkbox"/> Y <input type="checkbox"/> N	<input type="checkbox"/> N/A				<input type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$	
A	Arch/Eng. E&O incl Pollution Lia			DPR9702302 FULL PRIOR ACTS	07/19/2012	07/19/2013	Each Claim Aggregate	1,000,000 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

For professional liability coverage, the aggregate limit is the total insurance available for all covered claims presented within the policy period. The limit will be reduced by payments of indemnity and expenses. 30 day notice of cancellation except 10 day notice of cancellation for non-payment of premium.

CERTIFICATE HOLDER**CANCELLATION**

DOENS-1 Dept. of Environmental Serv. NH Geological Survey 29 Hazen Drive P. O. Box 95 Concord, NH 03302-0095	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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ATTACHMENT A
Procurement of Fluvial Erosion Hazard Geomorphology Assessments Contractors

On October 17, 2011, an invitation to prequalify to bid was announced and posted publicly. The Department of Environmental Services received eleven prequalification packages. The firms were ranked, based upon qualifications in the understanding of river processes and in experience conducting river geomorphology assessments elsewhere, as posted in the invitation to prequalify. The firms, and their resulting rankings are:

Firm Name	Location	Rank
Vanasse Hangen Brustlin, Inc.	Bedford, NH	1
Field Geology Services, LLC	Farmington, ME	2
Fitzgerald Environmental Associates, LLC	Colchester, VT	3
Inter-Fluve	Cambridge, MA	4
Princeton Hydro	Glastonbury, CT	5
Gomez & Sullivan Engineers, P.C.	Henniker, NH	6
Headwaters Hydrology, PLLC	Littleton, NH	7
Milone & MacBroom	Burlington, VT	8
Gorrill-Palmer Consulting Engineers, Inc.	Gray, ME	9
New England Environmental	Amherst, MA	10
Parish Geomorphic	Fredericton, New Brunswick, Canada	11

The state staff team members interviewed the top six ranked firms, and the interviewees were ranked so to allow the top four ranked firms to be invited to bid on projects, as described in the prequalification to bid announcement originally posted. The list, scoring and ranking of firms interviewed by the state staff team is as follows:

Firm Name	Reviewer Scores					Total Score	Rank
	#1	#2	#3	#4	#5		
Field Geology Services	92.5	96	91	98	85	462.5	1
Fitzgerald Environmental	90	90	88	97.5	88	453.5	2
Princeton Hydro	90.5	95	77	100	90	452.5	3
VHB	90.5	86	88	90	98	452.5	3
Inter-Fluve	93.75	89	85	91	91	449.75	5
Gomez & Sullivan Engineers ¹	84	77	-	86	83	412.5 ¹	6

¹ Reviewer #3 was not present for this interview. Therefore, the score for this firm was proportionally adjusted to allow ranking with the other firms. The scores provided in the table above for Gomez & Sullivan Engineers sum to 330. Based upon the 100 points available to each reviewer, which provided a total of 400 points, the score received (330 points) was divided by 400 to achieve a value of 0.825. To compare this score with the others, a total of 500 points possible with the presence of all five reviewers was multiplied by 0.825 to achieve a final score of 412.5.

These proposals were evaluated by the following five state staff team members:

Staff Member	Agency	Title	Experience
Greg Barker	NHDES	Hydrogeologist	27 Years geology experience
Frederick Chormann	NHDES	State Geologist	26 Year geology experience
Jacque Colburn	NHDES	Lakes & Rivers Coordinator	20 Year experience coordinating and evaluating watershed management contract projects
Shane Csiki	NHDES	Fluvial Geomorphology Specialist	10 years experience river science
Lance Harbour	NHDOS	State Hazard Mitigation Officer	Coordinator of all state hazard mitigation planning activities

**New Hampshire Geological Survey
New Hampshire Department of Environmental Services
Fluvial Geomorphic Assessments
CONTRACTOR'S BID SCHEDULE**

CONTRACTOR Vanasse Hangen Brustlin, Inc.

(Contractor Name)

ITEM NOS	QUANTITY & PAY UNIT	ITEMS AND UNIT PRICES BID IN WORDS	UNIT PRICES		AMOUNT	
			DOLLARS	CENTS	DOLLARS	CENTS
1.1	1 Each	Pre-Job Meeting Six-Hundred-Sixty DOLLARS PER EACH	\$	660 00	\$	660 00
1.2	30 Hour	Review of Phase 1 Data Reports Fifty-Five DOLLARS PER HOUR	\$	55 00	\$	1,650 00
1.3	1 Each	Stakeholder Meeting Six-Hundred-Sixty DOLLARS PER EACH	\$	660 00	\$	660 00
2.1	27 Mile	Assessments - Field personnel and travel costs One-Thousand-Three-Hundred-Thirty-Five DOLLARS PER MILE	\$	1,335 00	\$	36,045 00
2.2	170 Hour	Field Data Reduction and Reports Costs Fifty DOLLARS PER HOUR	\$	50 00	\$	8,500 00
3.1	1 Each	Public Presentation One-Thousand-Four-Hundred-Fifty DOLLARS PER EACH	\$	1,450 00	\$	1,450 00
Grand Total			\$	48,965.00	\$	48,965.00