

REQUEST FOR QUALIFICATIONS

City of Burlington

Stormwater Infrastructure Mapping Update and Development of GIS Based Asset Management and Hydrologic/Hydraulic Modeling Solutions Project

SUMMARY

The City of Burlington is requesting Statements of Qualifications (SOQs) from consultants for the update of stormwater infrastructure GIS based mapping and the development of GIS based asset management and hydrologic/hydraulic (H/H) modeling solutions in the City of Burlington, Vermont. The City is seeking a consultant or consultant team with expertise in GIS mapping services and GIS based asset management and H/H modeling solutions development necessary for a project such as outlined in the Suggested Scope of Service in Appendix A. The procurement process for selection of the Consultant will be a Qualifications Based Selection (QBS). We are not seeking a detailed scope of work or cost proposal at this time, however both will be requested once the most qualified firm is selected. The successful Consultant will be selected based upon their demonstrated ability to provide the highest qualified team to achieve the goals of the project through their SOQ and possible interview with the selection committee.

The City has received funding for this project from the Stormwater Mitigation/SAFETEA-LU Grant program administered by VTRANS.

PROPOSED PROJECT SCHEDULE

Friday, February 11, 2011	RFQ released
Monday, February 21 st by noon	Deadline for submission of questions in writing
Friday, February 25 th by 4 pm	Response to questions emailed
Wednesday, March 9 th by 4 pm	SOQ submission deadline
Tuesday, March 15 th and Wednesday, March 16 th	Consultant Interviews, as needed
March 18 th through April 1 st	Cost Negotiation and development of final scope of work with most qualified firm
Monday, April 18 th	Project kick off
Friday, December 16 th , 2011	Project completion

All questions pertaining to the RFQ should be submitted to the Municipal Project Manager (MPM) Megan Moir, Stormwater Administrator, by email (mmoir@ci.burlington.vt.us). Consultants wishing to receive the responses to all questions received should send an email to Megan Moir prior to Monday, February 21st at noon.

INTRODUCTION

The City of Burlington is requesting statement of qualifications for consultant services to:

- 1) Update the City's current GIS database of stormwater related infrastructure (manholes, storm lines, catch basins, outfalls, and City owned stormwater management facilities) through verification and geo-referencing of existing data sets as well as capture of new data;
- 2) Improve data attribution and data relationships (domains, topology, related tables etc.) to create a comprehensive inventory of City stormwater infrastructure essential for maintenance and operation tracking as well as hydrologic/hydraulic modeling;
- 3) Delineate/verify the separate storm and combined system sewersheds;
- 4) Assist the City with meeting long-term asset management goals of tracking inspection and maintenance of infrastructure and maintaining an up-to-date dataset, including developing and documenting workflow processes and providing recommendations regarding third party GIS based asset management software versus in-house programming
- 5) Assist the City with meeting long-term goal of maintaining an accurate hydrologic/hydraulic model by providing recommendations regarding system wide GIS based hydrologic/hydraulic modeling solutions

Background

The City's current GIS layer is comprised primarily of the hand digitized version of paper maps that were created in 1981 and updated in 1984. These layers are not accurately geo-referenced and do not have topological definitions. Significant upgrades (a large stormwater sewer separation project) occurred in the late 1980s and do not appear to have consistently been captured in the GIS. Additionally, upgrades (catch basin installations and possibly other separations etc.) have also occurred over the past 20+ years and have not been systematically recorded, with potentially some 650 catch basins not appearing in our current database. While city employees have done some work to update sections of the mapping as projects have required it, no formal mapping/inventory update work has been done since 1984.

Much of the City of Burlington (~60%) is served by the combined sewer system, with the remainder served by a separate stormwater sewer. At last count, there are approximately 2200-2500 catch basins (in both the combined and separate storm sewer-sheds) including approximately catchbasins that may not be accounted for in the existing database. There are 43 located municipal separate storm sewer outfalls and three combined sewer-sheds (Main WWTP, North WWTP and East WWTP) with 3 active combined sewer overflow outfalls. For both operational as well as regulatory reasons it is important to know which areas of the City drain to which systems, a necessity that is not always easily achieved with the existing dataset because of undefined attributes.

Additionally, while some of the combined sewer system has relatively detailed manhole inventory data sheets (paper format), little elevation or other detailed information exists for the separate storm-systems and for some of the newer features of the combined, preventing detailed hydrologic/hydraulic modeling from being easily accomplished. Combined with accurate subwatershed maps, detailed inventories of features within the collection system and up to date H/H modeling would be useful in the development of stormwater retrofits aimed at reducing the pollutants and excess volume in stormwater runoff.

In the long term, the City is also interested in implementing a GIS based asset management system to maintain inspection, maintenance and repair records for stormwater infrastructure. An asset management system would better enable the City to plan pro-actively for infrastructure capital improvements.

Consultant Skills Desired

Qualified consultants or consultant teams will have proven expertise in the following:

- Desktop and field based mapping and data collection of stormwater infrastructure
- Inventory and inspection of stormwater infrastructure (for collection of attribute data)
- GIS database development, workflow and management (ArcGIS 10), including, but not limited to
 - Topological definitions
 - Geometric networks
 - Domains
 - Service Records (using related tables or other means)
 - Editing in a multi-user, possibly mobile environment
 - Versioning
 - Archiving
 - AutoCad/ArcGIS interoperability
- Drainage area mapping
- Stormwater management
- Hydraulic/hydrologic modeling

Consultant firms may wish to partner with other consulting firms to provide the breadth of technical knowledge and experience that this request for qualifications seeks to capture.

Suggested Scope of Services and Deliverables

Additional information can be found in Appendix A, “Suggested Scope of Services and Deliverables.”

SUBMISSION REQUIREMENTS

Content

Please furnish four (4) hardcopies (double sided is preferred but not required) and one (1) digital PDF (CD) copy of the Statement of Qualifications with pages numbered consecutively.

Statement of Qualifications (SOQ)

The SOQ should be a narrative proposal that best represents your firm’s (or team of firms) qualifications to provide GIS technical services for the Stormwater Infrastructure Mapping Update and Asset Management System Implementation Plan projects. SOQ’s **must** include:

- Statement of understanding of the project
- A list of individuals (including sub-consultants) that will be committed to this project along with their:
 - ✓ **title and professional qualifications**
 - ✓ **expected duties**
 - ✓ **technical capacity** to complete their duties
 - ✓ **experience** with projects involving infrastructure mapping/inventory updates, GIS based asset management system implementation and stormwater system (closed network) hydraulic/hydrologic modeling

Note: The names and qualifications of any sub-consultants shall be included in this list. The individual's names, titles and expected duties should be included.

The proposals will be evaluated and awarded based on the personnel projected in the SOQ. Should the awarded consultant propose any substitutions to the project personnel, they must submit a letter to the City of Burlington request approval of such changes prior to utilization. This change will also need to be approved by VTRANS.

- Examples of the firm's (or team of firms) experience on relevant projects that have involved stormwater infrastructure inspection and mapping, resultant hydraulic/hydrologic modeling and ideally, GIS based asset management system implementation
- Examples of the firm's ability to meet schedules and project budgets
- Contact information for references from relevant projects
- Proposed schedule
- Any other information that you consider important.

Scope of Work and Cost Proposal (Fee)

Do not submit a scope of work or cost proposal at this time.

- A detailed scope of work will be requested after the most qualified firm is selected.
- A detailed cost proposal (fee) will be requested after the most qualified firm is selected.

All Statements of Qualification will become the property of the City of Burlington upon submission. The expense of preparing, submitting, and presenting a proposal is the sole responsibility of the consultant.

The City of Burlington retains the right to reject any and all SOQs received as a result of this solicitation, to waive any formality and any technicality, to negotiate with any qualified source, or to cancel in part or in its entirety this RFQ as in the best interest of the project. This solicitation in no way obligates the City of Burlington to award a contract. No negotiation will take place until the selection of the most qualified firm has been completed.

Submission Schedule

Statements of Qualifications (SOQ) are to be submitted to:

Megan J. Moir
Stormwater Administrator
Department of Public Works
645 Pine Street, Suite A
Burlington, VT 05401

SOQ's must be received at the City address above no later than **4:00 p.m. on Wednesday, March 9th, 2011**. SOQ's received after the deadline will not be accepted. Questions will be accepted up to **noon on Monday, February 21st**, after which a compiled list of all questions asked and answers will be furnished to all interested consultants. Consultants wishing to receive the responses to all questions received should send an email to Megan Moir prior to the question submission deadline above. It is the goal of the City to review the Statements of Qualifications and the Selection Committee to meet collectively and rank the firms within two weeks of the submission deadline. Interviews with top ranked consultants may begin shortly afterward and the selection of the most qualified firm and negotiations with that firm is anticipated to conclude by **April 1**. An anticipated start date for the project would be **Monday, April 18th**. Notification to all responding firms of the selection will follow immediately upon the decision of City.

Selection Process

The Selection Committee includes three Public Works staff members and the VTrans Project Supervisor. They will review and evaluate each statement of qualifications, based on the criteria below. Firms will then be ranked accordingly. The Selection Committee may interview the top ranked firms if it is deemed necessary in order to choose the highest qualified firm. Upon selection of the most qualified firm, a scope of work and cost proposal will be required and negotiations will begin with the top-ranked firm. If a scope of work and fee cannot be agreed upon within a reasonable time, negotiations with the top-ranked firm will be concluded and negotiations with the second-ranked firm will be initiated. If a satisfactory contract is not worked out with this firm, then this procedure will be continued until a mutually satisfactory contract is negotiated

Criteria for Selection

The following criteria, as a minimum, will be used to evaluate qualifications:

Review Criteria	Weight	Maximum Points	Weighted Points
Experience of Proposed Staff with Similar Projects	5	5	25
Understanding of the Project	5	5	25
Availability of Technical Disciplines	4	5	20
Qualifications Proposed Staff	3	5	15
Ability to Meet Schedules & Budgets	2	5	10
Knowledge of the Project Area	1	5	5
TOTAL			100

Contract Requirements

Consultants are advised to review all contract requirements listed below and in Appendix B (City of Burlington Contract Requirements), Appendix C (Burlington Livable Wage Ordinance) and Appendix D (VTRANS Pass Through Contract Requirements) in advance of submitting a proposal.

The Consultant, prior to being awarded a contract, shall apply for registration with the Vermont Secretary of State's Office to do business in the State of Vermont, if not already so registered. The registration form may be obtained from the Vermont Secretary of State, 109 State Street, Montpelier, VT 05609-1104. The fee is \$20.00. The telephone number is (802) 828-2386. The contract will not be executed until the Consultant is registered with the Secretary of State's Office. The successful Consultant will be expected to execute sub-agreements for each sub-consultant named in the proposal upon award of this contract.

A completed copy of the Agency's Form AF38 submitted to VTrans (not to the City) will also be required prior to being awarded a contract and to be submitted by the prime consultant as well as each firm designated as a Sub-consultant. The AF38 form should be completed at a level commensurate with the anticipated magnitude of proposed work. The information will be kept private with the Audit section of VTrans. Please note in the submittal if this information is currently on file with VTrans. Form AF38 can be found on the VTrans website (www.aot.state.vt.us/conadmin/relateddocs.htm). Complete audited

financial statements, balance sheets, etc. **do not** need to be submitted, if that information is on file with VTrans. If it is not on File it is to be submitted to the Audit section of VTrans and not to the City.

It is expected that all consultants will make good faith efforts to solicit DBE sub-consultants.

Prior to beginning any work, the Consultant shall obtain Insurance Coverage in accordance with the VTRANS Consultant Contract Provisions (Appendix D of this document). The certificate of insurance coverage shall be documented on forms acceptable to VTRANS.

Appeal Process

If the award of the contract aggrieves any firms, they may appeal in writing to the President of the City of Burlington City Council, at City Hall, 149 Church Street, Burlington, Vermont, 05404. The appeal must be post-marked within seven (7) calendar days following the date of written notice to award the contract. Any decision of the City is final.

APPENDIX A

SUGGESTED SCOPE OF SERVICES AND DELIVERABLES

The Consultant will work closely with the City of Burlington Stormwater Administrator and supplementary staff to develop a final scope of work designed to complete, to the maximum extent possible, the tasks listed below. City Engineering interns may also be available to assist with the data collection phase of the project. The following scope of services is suggested as a method to meeting the intended goals of the project and producing the desired deliverables; however consultants and/or the City may propose alternative methodologies. Additionally, the scope of services may be adjusted and the geographic extent reduced based on the results of the cost negotiation process with the top ranked consultant.

The suggested scope of work may include the following tasks:

- 1. Asset Inventory/Management Assessment**
 - a. Compile existing data
 - b. Assess user needs (short term and long term), for example:
 - i. Need for cross-disciplinary data sharing
 - ii. Mobile editing
- 2. GIS Model Update/Verification**
 - a. Develop database management framework to ensure data integrity of stormwater infrastructure dataset, to include the following as necessary:
 - i. Data domains
 - ii. Topology
 - iii. Improved Attribution
 - iv. Geometric networks
 - v. Management of feature inventory/inspection/maintenance data (related table vs. within feature attribute table)
 - b. Verify, update, geo-reference and ensure a unique identifier exists for all stormwater features including manhole, catch basin, and outfall locations for the separate stormwater and combined sewer system (using a combination of ortho-photography and GPS). Specifically:
 - i. Verify that all existing located data are correct and geo-referenced
 - ii. Update GIS database to reflect any changes made to the system that are currently available on plan sheets (1988 storm sewer separation and other documented changes)
 - iii. Locate and capture all “new” catch basins, manholes, sewer lines and outfall locations and connectivity
 - iv. Establish data integrity rules (domains, topology, geometric networks, attribution etc.) that will maintain data integrity during future data collection and edits
 - c. Sub-watershed/sewershed Delineation
 - i. Delineate/verify sub-watersheds/sewersheds for MS4 system – draining to Lake Champlain, Winooski River, Englesby Brook, Potash Brook, Centennial Brook and unnamed tributaries, including separate sewershed delineations for each of the outfall locations within these watersheds
 - ii. Delineate/verify sub-watersheds/sewersheds for Combined sewer system – draining to each of the 3 WWTPs

3. Long-term Asset Management System Development/Procurement

- a. Assist the City in the development or procurement of an asset management system to match documented needs in Assessment (task 1)
 - i. Provide recommendations on at least three (3) “off the shelf” asset management solutions and contrast with a possible “in-house” database management development (possibly to replicate South Burlington’s in-house stormwater asset management solution)
 - ii. Provide recommendations on mobile editing solutions (software/hardware)
 - iii. If appropriate (based on 3.a.i.) set up in-house elements of an asset management database to track infrastructure condition and maintenance activities
- b. Develop/document correct protocol sheets for various workflow tasks, including, but not limited to:
 - i. collecting and editing features with a GPS device
 - ii. AutoCad file import/export and interoperability within GIS
 - iii. Exporting and emailing subsets of GIS data for use by developers/consultants

4. Stormwater Feature Detailed Inventory

- i. Obtain detailed manhole, catch basin, pipe, outfall information for any “new” infrastructure
 1. Inlet/outlet orientation, elevations of inverts and rims
 2. Pipe material and diameter
 3. Other features to be determined by consultant and the City (condition, depth of sump, grate type etc.)
- ii. QA/QC existing paper combined sewer manhole inventory data (collected ~ early 1980s) and link/add the GIS

5. System Hydraulic/Hydrologic Modeling

- a. Conduct needs analysis
- b. Ensure that dataset attribution reflects features that would be necessary for accurate H/H modeling
- c. Provide recommendations for three (3) off the shelf H/H modeling solutions that interface with GIS dataset

6. Incorporate private stormwater infrastructure information into the GIS

- i. Include details regarding conveyance, treatment/detention system location/type, and connections to the City infrastructure or outfall locations
- ii. Link State Permit and As-Built Plan information (as available) [The City has much of this information compiled]

DELIVERABLES

1. Public stormwater collection system feature dataset geodatabase, including the following feature classes, and including attribute data in accordance with the final scope of work:
 - a. Catchbasins
 - b. Manholes
 - c. Sewer lines
 - d. Outfalls
 - e. City owned treatment systems
 - f. Subwatershed

2. Private stormwater collection system feature dataset including same items as above (if accomplished in final scope of work)
3. One (1) black & white copy a “wall map” of the stormwater collection system feature dataset consisting of several large format (24” x 36”) sheets displayed at appropriate scale and with appropriate symbology to distinguish collection system
4. One (1) 11x17 map book in digital format (PDF) of stormwater collection feature dataset at appropriate scale for field use and with appropriate symbology to distinguish collection system
5. One (1) digital and four (4) color large format (24” x 36”) hard copies of stormwater collection feature dataset with the subwatersheds delineations displayed.
6. Workflow “methodology sheets” : Documented step by step procedure for common workflow tasks, to include, but not limited to:
 - a. Collecting and importing new data from the field
 - b. Importing AutoCad data into GIS
 - c. Exporting and emailing subsets of GIS data for use by developers/consultants
7. Final Report. The Consultant will produce a final report that documents the methodology, accuracy of data, assumptions, data gaps, and identifies future data needs to support further stormwater management planning efforts.
8. GIS Asset Management Development/Procurement Recommendations Report (see task 3)
9. **Other deliverables to be determined by the City in development of the final scope of work with the top ranked firm.**

STANDARDS

- A. All documents should be provided in both paper and digital form in Microsoft Word or PDF format.
- B. All written reports should be double-sided where possible.
- C. All data, databases, reports, programs and materials, in digital and hard copy formats, created under this project shall become the joint property of the City of Burlington and the VTRANS.
- D. Invoices shall be submitted no more than monthly. All invoices must be accompanied by a progress report. The invoice shall indicate the invoice period, staff member(s) charging time to the project, summary of tasks worked on for the invoice period, hours worked, rate of pay, total cost, and any overhead or indirect expenses. Any direct expenses and materials shall be itemized and documented.
- E. Related spatial and/or geographic information must be developed in accordance with Vermont Geographic Information System (VGIS) standards as adopted by the Vermont Center for Geographic Information (VCGI).
- F. The data will be collected in a GIS Geodatabase feature dataset (NAD 83, Vermont State Plane, Meters). The attribute tables, at a minimum, will include a unique identifier for each feature class that will be related to the sewershed in which the feature is located. The sewershed identifier will relate to the outfall to which water entering that feature drains. The attribute tables will also include other information as above and as determined by the selected consultant and the City of Burlington.
- G. Metadata **MUST** accompany each feature class and include, at minimum, the method used to derive the layer and the definitions of each of the attributes. Data integrity controls should be established on all feature classes where possible to automate/require the entry of metadata when edits occur.

APPENDIX B
CITY OF BURLINGTON CONTRACTING PROVISIONS

This will be a "firm fixed-price" contract to cover the performance of all-eligible services, expenses, and materials. The amount and timing of payments will be determined during contract negotiations.

All rights, titles to and ownership of the data, material, and documentation resulting from this project and/or prepared for the City of Burlington pursuant to this contract shall remain with the City and/or VTRANS.

The City of Burlington will not be considered liable or obligated to the selected consultant(s) for all phases of this project in the event that the contract between the City and VTRANS is terminated for any reason.

All consultants, and any sub-consultants, must comply with any and all applicable laws, statutes, ordinances, rules, regulations, and/or requirements of federal, state, and local governments and agencies thereof, which relate to or in any manner affect the performance of this agreement. Those requirements imposed upon the City as a pass-through recipient of grant funds are thereby passed along to the consultant and any sub-consultants.

All consultants and any sub-consultants must carry adequate insurance coverage and proof of insurance will be required prior to contracts being issued for work. The Consultant shall, through its subcontracts, procure and maintain insurance during the term of this Agreement in the amounts and for the types of coverage indicated below.

With respect to all operations performed by the Consultant, contractors, agents or workers on this Agreement, the Consultant shall procure and maintain insurance as described (in Appendix D) below. The policy shall conform to the requirements listed in Appendix D.

Said insurance shall be maintained in full force and effect during the life of this Agreement and shall protect the Consultant, its employees, subcontractors, agents and representatives for personal injury and wrongful death, and for damages to property arising in any manner from the negligent or wrongful acts or failures to act of the Consultant, its employees, subcontractors, agents or representatives agents, or representatives in the performance of such work covered by this Agreement. Such insurance against legal liability shall be available so as to indemnify and save harmless the City, VTRANS and any or all of the officers, agents, and employees thereof resulting out of or in the consequences of acts, or failures to act, on the part of the Consultant in the performance of work covered by this Agreement.

Certificates showing the Consultant is carrying the above-described insurance in at least the above specified minimum amounts with an insurance company or companies authorized to do business in the State of Vermont shall be furnished to the City and its agent *by the insurance company* before commencement of the work and further provided that such policies of insurance shall be non-cancelable except after thirty days notice to the City, such notice of cancellation to be sent by the party proposing cancellation by registered mail, postage prepaid, with a return receipt of the addressee requested.

All consultants and any sub-consultants must affirm being an equal opportunity employer with an affirmative action plan. Consultant(s) shall further certify that it will comply with the provisions of the Americans with Disabilities Act. Disadvantaged Business Enterprises (DBE) are encouraged to apply.

The City of Burlington is an Equal Opportunity Employer

APPENDIX C

LIVABLE WAGE ORDINANCE SUMMARY

Pursuant to Ordinance Sections 21-80 through 21-85, Bidders are advised that certain contractors and subcontractors are required to comply with the City of Burlington's livable wage ordinance. The livable wage ordinance is applicable to service contracts with the City of Burlington, as opposed to purchasing of goods, where the total amount of the contract or contracts with the same person or entity exceeds \$15,000 for any twelve-month period. As of February 24, 2004, the livable wage for employees who receive health care benefits (i.e. employer cost or contribution of at least \$1.20 per hour) is \$11.92 per hour. The livable wage for employees who do not receive health care benefits is \$15.42 per hour.

An employee of a covered contractor must be paid the livable wage during the period of time he or she expends on furnishing services funded by the City. Covered employees must agree to the payment of the livable wage as a condition of entering into a covered service contract with the City, and includes temporary service workers. A covered employer who violates the livable wage ordinance may be barred from receiving a contract or grant from the City for a period of up to 2 years and may be subject to other civil enforcement remedies.

The affected employer shall agree to post a notice regarding the applicability of this ordinance in any workplace or location where employees or other persons contracted for employment are working. The affected employer shall agree to provide payroll records or other documentation as deemed necessary by the chief administrative officer of the City of Burlington within 10 business days from the receipt of the City's request. The affected employer shall inform employees making less than \$12 per hour of their possible right to the Earned Income Tax Credit under federal and state law.

Exemptions to this ordinance include:

1. Contract work or grants to the same person or entity for under \$15,000.
2. Person(s) working:
 - a. As volunteers without pay.
 - b. In an approved apprenticeship program.
 - c. In youth employment programs.
 - d. As student workers.
 - e. In established educational internship programs.
3. Workers whose compensation includes tips.
4. Employees covered by a bargaining unit or labor union pursuant to rights conferred by state or federal law.

See next page for affidavit of compliance with livable wage ordinance



AFFADAVIT OF LIVABLE WAGE COMPLIANCE

NAME OF FIRM: _____

ADDRESS: _____

PHONE NO.: () _____ FAX NO.: () _____

CONTACT PERSON: _____ TITLE: _____

TYPE OF FIRM: Corporation Partnership Sole Proprietorship Other

BURLINGTON PROJECT NAME: _____

DEPARTMENT: _____ CITY CONTACT: _____

The above firm is doing business for the City of Burlington as: General Contractor
 Subcontractor Consultant Other: _____

Briefly describe the nature of work supplied by the firm: _____

1. Have you read the attached Livable Wage Ordinance Summary? Yes No
2. Do all your employees working on the above project, with the exception of noted exemptions, meet the requirements of this ordinance? Yes No
3. If not, please provide the position, employee name, date of hire and current rate of pay for each employee who does not meet the livable wage requirement.

POSITION	NAME	DATE OF HIRE	CURRENT RATE OF PAY

Note: Attach sheet with additional employees if necessary.

4. Total estimated additional compensation amount: \$ _____

APPLICANT UNDERSTANDS THAT INFORMATION PROVIDED HEREIN MAY BE AUDITED, AND FIRM MAY BE BARRED FROM FUTURE CONTRACTS FOR A PERIOD OF UP TO 2 YEARS AND SUBJECT TO CIVIL PENALTIES IF ANY OF THE ABOVE INFORMATION IS FALSIFIED.

Signature: _____ Title: _____

Date: _____ Witness: _____

APPENDIX D
VTRANS Pass Through Requirements

Consultant Contract Provisions
(Appendix E in Local Transportation Facilities Guidebook)

CONSULTANT CONTRACT ATTACHMENT:

CONTRACT PROVISIONS

Includes:

- 1. INDEMNIFICATION**
- 2. INSURANCE**
- 3. COMPLIANCE WITH LAWS**
- 4. CONTRACTUAL AGREEMENTS**
- 5. OPERATIONAL STANDARDS**
- 6. PROJECT DEVELOPMENT AND STANDARDS**
- 7. PAYMENT FOR SERVICES RENDERED**

OCTOBER, 1998

CONTRACT PROVISIONS:

Wherever used, abbreviations may be used in place of a word or phrase and definitions may be used to interpret statements for the meaning of words phrases or expressions. The intent and meaning for abbreviations and definitions shall be interpreted as herein set forth:

AASHTO	American Association of State Highway and Transportation Officials
AGC	Associated General Contractors of America
AIA	American Institute of Architects
ANR	Agency of Natural Resources
ANSI	American National Standards Institute
ASCE	American Society of Civil Engineers
AWS	American Welding Society
CADD	Computer Aided Drafting and Design
CES	Consultant Engineering Services
CFR	Code of Federal Regulations
DOT	United States Department of Transportation
EEO	Equal Employment Opportunity
EIS	Environmental Impact Statement
EDM	Electronic Data Media
FAA	Federal Aviation Administration
FAR	Federal Acquisition Regulation
FHWA	Federal Highway Administration, U.S. Department of Transportation
FRA	Federal Railroad Administration
FSS	Federal Specifications and Standards (General Services Administration)
FTA	Federal Transit Administration
SIR	Self Insured Retention
U.S.C.	United States Code
USEPA	United States Environmental Protection Agency
VAOT	Vermont Agency of Transportation
VOSHA	Vermont Occupational Safety and Health Act
VSA	Vermont Statutes Annotated

1. INDEMNIFICATION

The Consultant agrees, to the fullest extent permitted by the law, that it shall indemnify and hold harmless the City of Burlington (hereinafter "Municipality"), its officers, agents and employees from liability for damages to third parties, together with costs, including attorney's fees, incurred in defending such claims by third parties, to the extent such liability is caused by the negligent or intentional acts, errors, or omissions of the Consultant, its agents or employees, committed, in the performance of professional services to be provided by the Consultant under this Agreement.

The Municipality is responsible for its own actions. The Consultant is not obligated to indemnify the Municipality or its officers, agents and employees for any liability of the Municipality, its officers, agents and employees attributable to its, or their own, negligent acts, errors or omissions.

In the event the Municipality, its officers, agents or employees are notified of any claims asserted against it or them to which this Indemnification clause may apply, the Municipality or its officers, agents and employees shall immediately thereafter notify the Consultant in writing that a claim to which the Indemnification Agreement may apply has been filed.

2. INSURANCE

GENERAL: Prior to beginning any work the Consultant shall obtain the following Insurance Coverage. The certificate of insurance coverage shall be documented on forms acceptable to the Municipality. Evidence of compliance with minimum limits and coverages, evidenced by a certificate of insurance showing policies and carriers that are acceptable to the Municipality, must be received prior to the effective date of the Agreement. The insurance policy (ies) shall provide that insurance coverage cannot be canceled or revised without fifteen (15) days' prior notice to the Municipality. In the event that this Contract extends to greater than one year, evidence of continuing coverage must be submitted to the Municipality on an annual basis. Certified copies of any insurance policies may be required.

The Consultant is responsible to verify that:

- (a) All subconsultants, agents or workers meet the minimum coverages and limits plus maintain current certificates of coverage for all subconsultants, agents or workers.
- (b) All coverages shall include adequate protection for activities involving hazardous materials.
- (c) All work activities related to the agreement shall meet minimum coverages and limits.

No warranty is made that the coverages and limits listed herein are adequate to cover and protect the interests of the Consultant for the Consultant's operations. These are solely minimums that have been developed and must be met to protect the interests of the Municipality.

GENERAL LIABILITY AND PROPERTY DAMAGE:

- (a) With respect to all operations performed by the Consultant, subconsultants, agents or workers, it is the Consultant's responsibility to insure that general liability insurance coverage provides all major divisions of coverage including, but not limited to:
 - 1. Premises Operations
 - 2. Independent Contractors' Protective
 - 3. Products and Completed Operations
 - 4. Personal Injury Liability
 - 5. Contractual Liability
 - 6. Broad Form Property Damage
 - 7. Medical Expenses
 - 8. Collapse, Underground and Explosion Hazards
- (b) The policy shall be on an occurrence form with limits not less than:

1. General Aggregate	\$2,000,000
2. Products-Completed/Operations Aggregate	\$1,000,000
3. Personal & Advertising Injury	\$1,000,000
4. Each Occurrence	\$1,000,000
5. Fire Damage (Any one fire)	\$ 50,000
6. Med. Expense (Any one person)	\$ 5,000

WORKERS' COMPENSATION: With respect to all operations performed, the Consultant shall carry workers compensation insurance in accordance with the laws of the State of Vermont. Minimum limits for Employer's Liability:

- (a) Bodily Injury by Accident: \$100,000 each accident
- (b) Bodily Injury by Disease: \$500,000 policy limit, \$100,000 each employee

PROFESSIONAL LIABILITY INSURANCE:

- (a) General. This applies only to those Contracts specifically identified as requiring Errors & Omissions (**E&O**) Insurance. The Consultant shall carry architects/engineers professional liability insurance covering errors and omissions made during their performance of contractile duties with the following minimum limits:
 - \$1,000,000 - Annual Aggregate
 - \$1,000,000 - Per Occurrence
- (b) Deductibles. The consultant is responsible for any and all deductibles.
- (c) Coverage. Prior to performing any work, the Consultant agrees to provide evidence of **E&O** insurance coverage defined under this Section. In addition, the Contractor agrees to attempt to maintain continuous professional liability coverage for the period of the agreement and whenever applicable any construction work related to this agreement, and for a period of five years following substantial completion, if such coverage is reasonably available at commercially affordable premiums.

VALUABLE PAPERS INSURANCE: This applies only to those Contracts specifically identified as requiring Valuable Papers Insurance. The Consultant shall carry valuable papers insurance in a form and amount sufficient to ensure the restoration or replacement of any plans, drawings, field notes, or other data relating to the work, whether supplied by the Municipality or developed by the Consultant, subconsultant, worker or agent, in the event of loss, impairment or destruction of these documents. Such coverage shall remain in force until the final plans, and all related materials, have been delivered by the Consultant to, and accepted by, the Municipality.

The policy shall provide coverage on an each occurrence basis with limits not less than:

Valuable Papers	\$10,000
Electronic Data Media	\$10,000

AUTOMOBILE LIABILITY: The Consultant shall carry automobile liability insurance covering all motor vehicles, including owned, non-owned and hired, used in connection with the agreement. Each policy shall provide coverage with a limit not less than: \$1,000,000 - Combined Single Limit

3. COMPLIANCE WITH LAWS

GENERAL COMPLIANCE WITH LAWS: The Consultant shall comply with all applicable Federal, State and local laws.

Provisions of the Agreement shall be interpreted and implemented in a manner consistent with each other and using procedures that will achieve the intent of both parties. If, for any reason, a provision in the Agreement is unenforceable or invalid, that provision shall be deemed severed from the Agreement, and the remaining provisions shall be carried out with the same force and effect as if the severed provisions had never been a part of the Agreement.

ENVIRONMENTAL REGULATIONS: Any Contract in excess of one hundred thousand dollars shall comply with all applicable standards, orders or requirements issued under Section 306 of the Clean Air Act (42 U.S.C. § 1857(h)), Section 508 of the Clean Air Act (33 U.S.C. § 1368), Executive Order 11738, and Environmental Protection Municipality regulation (40 CFR Part 15), that prohibit the use, under non-exempt Federal Contracts, grants or loans, of facilities included on the EPA list of Violating Facilities. The provisions require reporting of violations to the grantor, Municipality and to the USEPA Assistant Administrator for Enforcement (EN-329).

CIVIL RIGHTS and EQUAL EMPLOYMENT OPPORTUNITY: During performance of the Agreement, the Consultant will not discriminate against any employee or applicant for employment because of race, age, color, religion, sex, national origin, physical disability or veteran status.

The Consultant shall comply with the applicable provisions of Title VI of the Civil Rights Act of 1964 as amended, Executive Order 11246 as amended by Executive Order 11375 and as supplemented by the Department of Labor regulations (41 CFR Part 60). The Consultant shall also comply with the rules, regulations and relevant orders of the Secretary of Labor, Nondiscrimination regulations 49 CFR § 21 through Appendix C, and Regulations under 23 CFR § 710.405 (b) . Accordingly, all subcontracts shall include reference to the above.

The Consultant shall comply with all the requirements of Title 21, VSA, Chapter 5, Subchapter 6 and 7, relating to fair employment practices to the extent applicable. A similar provision shall be included in any and all subcontracts.

DEBARMENT CERTIFICATION: When signing a Contract in excess of twenty five thousand dollars, the Consultant certifies under the penalty of perjury as directed by Federal laws (48 CFR 52.209-5), that, except as noted in the Agreement, the Consultant or any person associated therewith in the capacity of owner, partner, director, officer, principal investigator, project director, manager, auditor, or any position involving the administration of federal funds:

- (a) is not currently under suspension, debarment, voluntarily exclusion or determination of ineligibility by any Federal agency;
- (b) has not been suspended, debarred, voluntarily excluded or determined ineligible by any Federal agency within the past three (3) years;
- (c) does not have a proposed debarment pending; and

- (d) has not been indicted, convicted, or had a civil judgement rendered against him/her by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past three (3) years.

Exceptions will not necessarily result in denial of the Contract but will be considered in determining the Consultant=s responsibility. The Agreement shall indicate any exception and identify to whom or to what Municipality it applies and dates of action. Providing false information may result in criminal prosecution or administrative sanctions.

Exceptions shall be noted in the Contract:

LOBBYING: For any Agreement exceeding one hundred thousand dollars, the Consultant certifies by signing the Agreement, that to the best of their knowledge and belief on behalf of their signature:

- (a) No Federal appropriated funds have been paid or will be paid by or to any person influencing or attempting to influence an officer or employee of a government agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal Contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, or the extension, renewal, amendment or modification of any Federal Contract grant, loan or cooperative Agreement.
- (b) They will complete and submit, in accordance with its instructions, Standard Form-LLL "Disclosure Form to Report Lobbying", if any funds, other than Federal appropriated funds, have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of a government agency or a Member of Congress in connection with the Federal Agreement, grant loan, or cooperative Agreement.
- (c) They shall require that the language of this Certification be included in the award documents for all subawards at all tiers (including subcontractors, subgrants and contracts under grants, loans and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact, upon which reliance was placed when the Agreement was made or entered into. Submission of this certification is a prerequisite for making or entering into the Agreement, imposed by Section 1352, Title 31, U.S.C..

Section 1352 of Title 31, U.S.C., provides, in part, that no appropriated funds may be expended by the recipient of a Federal contract, grant, loan, or cooperative agreement to pay any person for influencing or attempting to influence an officer or employee of any government agency, Member of Congress, officer or employee of Congress, or employee of a Member of Congress, in the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, or the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative Agreement.

CHILD SUPPORT PAYMENTS: By signing the Contract the Consultant certifies, as of the date of signing the Agreement, that they are (a) not under an obligation to pay child support; or (b) is under such an obligation and is in good standing with respect to that obligation; or (c) has agreed to a payment plan with the Vermont Office of Child Support Services and is in full compliance with that plan. If the

Consultant is a sole proprietorship, the Consultant's statement applies only to the proprietor. If the Consultant is a partnership, the Consultant's statement applies to all general partners with a permanent residence in Vermont. If the Consultant is a corporation, this provision does not apply.

TAX REQUIREMENTS: By signing the Agreement, the Consultant certifies, as required by law under 32 VSA, Section 3113, that under the pains and penalties of perjury, he/she is in good standing with respect to payment, or in full compliance with a plan to pay, any and all taxes due the State of Vermont as of the date of signature on the Agreement.

ENERGY CONSERVATION: The Consultant shall recognize mandatory standards and policies relating to energy efficiency that are contained in the State energy conservation plan issued in compliance with the Energy Policy and Conservation Act P.L. 94-165.

4. CONTRACTUAL AGREEMENTS

REGISTRATION: The Consultant agrees to become registered with the Vermont Secretary of State's office as a corporation doing business in the State of Vermont. This registration must be complete prior to contract execution.

ADMINISTRATION REQUIREMENTS: By signing the Agreement the Consultant agrees to comply with the following provisions and certifies that he/she or they are in compliance with the provisions of 49 CFR § 18.36 Procurement (i) Contract Provisions with principal reference to the following:

- (a) Copeland "Anti-Kickback" Act. For any Federal-Aid Contracts or subcontracts for construction or repair, the Consultant agrees to comply with the Copeland "Anti-Kickback" Act, 18 U.S.C. § 874, as supplemented by Department of Labor Regulations, 29 CFR § 3.
- (b) Davis-Bacon Act. For any Federal-Aid construction contracts in excess of \$2,000, the Consultant agrees to comply with the Davis-Bacon Act 40 U.S.C. §§ 276a to a-7, as supplemented by Department of Labor Regulations, 29 CFR § 5.
- (c) Work Hours. For any Federal-Aid construction contracts in excess of \$ 2,000, or in excess of \$ 2,500 for other contracts involving employment of mechanics or laborers, the Consultant agrees to comply with the Contract Working Hours and Safety Standards Act, 40 U.S.C. §§ 327-330, as annexed by Department of Labor Regulations, 29 CFR § 5.
- (d) Proprietary Rights. The parties under the Agreement hereby mutually agree that, if patentable discoveries or inventions should result from work performed under the Agreement, all rights accruing from such discoveries or inventions shall be the sole property of the Consultant. The Consultant, however, agrees to and does hereby grant to the Municipality, the State of Vermont and the United States Government an irrevocable, nonexclusive, non-transferable, and royalty-free license to practice each invention in the manufacture, use, and disposition, according to law, of any article or material or use of method that may be developed, as a part of the work under the Agreement.
- (e) Publications. All data, EDM, valuable papers and documents produced under the terms of the Agreement, shall become the property of the Municipality. The Consultant agrees to allow access to all data, EDM, valuable papers and documents at all times. The Consultant shall not copyright any material originating under the Agreement without prior written approval of the Municipality.

PERSONNEL REQUIREMENTS AND CONDITIONS: A Consultant shall employ only qualified personnel, for responsible authority to supervise the work. The Municipality shall have the right to approve or disapprove key personnel assigned to administer activities related to the Agreement.

Except with the approval of the Municipality, during the life of the Agreement, the Consultant shall not employ:

- (a) Personnel on the payroll of the Municipality who are directly involved with the awarding, administration, monitoring, or performance of the Agreement or any project(s) that are the subjects of the Agreement.
- (b) Any person so involved within one (1) year of termination of employment with the Municipality.

The Consultant warrants that no company or person has been employed or retained, other than a bonafide employee working solely for the Consultant, to solicit or secure this Agreement, and that no company or person has been paid or has an agreement with the Consultant to be paid, other than a bonafide employee working solely for the Consultant, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or making of the Agreement. For breach or violation of this warranty, the Municipality shall have the right to annul the Agreement, without liability to the Municipality, and to regain all costs incurred by the Municipality in the performance of the Agreement.

The Municipality reserves the right to require removal of any person employed by a Consultant, from work related to the Agreement, for misconduct, incompetence, or negligence, in the opinion of the Municipality in the due and proper performance of its duties, or who neglects or refuses to comply with the requirements of the Agreement.

TRANSFERS, SUBLETTING, ETC: A Consultant shall not assign, sublet, or transfer any interest in the work, covered by an Agreement, without prior written consent of the Municipality and further, if any subconsultant participates in any work involving additional services, the estimated extent and cost of the contemplated work must receive prior written consent of the Municipality. The approval or consent to assign or sublet any portion of the work, shall in no way relieve the Consultant of responsibility for the performance of that portion of the work so transferred. The form of the subcontractor's agreement shall be as developed by the Consultant and approved by the Municipality. The Consultant shall ensure that adequate insurance coverage exists for any operations to be performed by any subconsultant.

The services of the Consultant, to be performed under the Agreement, are personal and shall not be transferred without written authorization of the Municipality and, when applicable, approved by the State of Vermont and FHWA. Any authorized subagreements, exceeding ten thousand dollars in cost, shall contain all of the same provisions specified for and attached to the original Agreement with the Municipality.

BEGINNING AND COMPLETION OF WORK: The Consultant agrees to begin performance of services, specified in the Agreement, in accordance with the terms of the Agreement, as arranged in negotiations with the Municipality, or within ten (10) days of the date of written notice to begin work by the Municipality, and to complete the contracted services by the completion dates specified in the Agreement.

Upon completion of all services covered under the Agreement and payment of the agreed upon fee, the Agreement with its mutual obligations shall be terminated.

CONTINUING OBLIGATIONS: The Consultant agrees that if, because of death or other occurrences, it becomes impossible to effectively perform its services in compliance with the Agreement, neither the Consultant nor its surviving members shall be relieved of their obligations to complete the Agreement. However, the Municipality may terminate the Agreement if it considers a death or incapacity of any members to be a loss of such magnitude that it would affect the firm's ability to satisfactorily execute the Agreement.

OWNERSHIP OF THE WORK: The Consultant agrees that the ownership of all studies, data sheets, survey notes, subsoil information, drawings, tracings, estimates, specifications, proposals, diagrams, calculations, EDM and other material prepared or collected by the Consultants, hereafter referred to as "instruments of professional service", shall become the property of the Municipality as they are prepared and/or developed during execution of the Agreement.

The Consultant shall surrender to the Municipality upon demand or submit for inspection at any time any instruments of professional service that have been collected, undertaken or completed by the Consultant pursuant to the Agreement. Upon completion of the work, in full, these instruments of professional service will be appropriately endorsed by the Consultant and turned over to the Municipality.

Data and publication rights to any instruments of service produced under this agreement are reserved to the Municipality and shall not be copyrighted by the Consultant at any time without written approval of the Municipality. No publications or publicity of the work, in part or in total, shall be made without the agreement of the Municipality, except that Consultants may in general terms use previously developed instruments of professional service to describe its abilities for a project in promotional materials.

RECORDS RETENTION: The Consultant agrees to retain, in company files, all books, documents, EDM, valuable papers, accounting records, and other evidence, pertaining to costs incurred for work performed under the Agreement, for a period of at least three (3) years after the final "date of acceptance" by the Municipality, unless otherwise notified by the Municipality. The Consultant further agrees that the Municipality, the State of Vermont, FHWA or other authorized representatives of the Federal Government, shall have access to all the above information for the purpose of review and audit during the Agreement period and anytime within the aforementioned retention period. Copies of all the above referenced information shall be provided to the Municipality if requested.

APPEARANCES:

- (a) Hearings and Conferences. The Consultant shall provide professional services required by the Municipality and necessary for furtherance of any work covered under the Agreement. Professional services shall include appropriate representation at design conferences, public gatherings and hearings, and appearances before any legislative body, commission, board, or court, to justify, explain and defend its contractual services covered under the Agreement.

The Consultant shall perform any liaison that the Municipality deems necessary for the furtherance of the work and participate in conferences with the Municipality, at any reasonable time, concerning interpretation and evaluation of all aspects covered under the Agreement.

The Consultant further agrees to participate in meetings with the Municipality, the State of Vermont, FHWA, and any other interested or affected participant, for the purpose of review or resolution of any conflicts pertaining to the Agreement. The Consultant shall be equitably paid for such services and for any reasonable expenses incurred in relation thereto in accordance with the Contract document.

- (b) Appearance as Witness. If and when required by the Municipality, a Consultant, or an appropriate representative, shall prepare and appear for any litigation concerning any relevant project or related Agreement, on behalf of the Municipality. The Consultant shall be equitably paid for such services and for any reasonable expenses incurred in relation thereto, in accordance with the Contract document.

CHANGES AND AMENDMENTS: No changes or amendments of the Agreement shall be effective unless documented in writing and signed by authorized representatives of the Municipality and the Consultant.

APPENDICES: The Municipality may attach, to these specifications, appendices containing various forms and typical sample sheets for guidance and assistance to the Consultant in the performance of the work. It is understood, however, that such forms and samples may be modified, altered, and augmented from time to time by the Municipality as occasions may require. It is the responsibility of the Consultant to ensure that they have the latest versions applicable to the Agreement.

EXTENSION OF TIME: The Consultant agrees to prosecute the work continuously and diligently and no charges or claims for damages shall be made by the Consultant for delays or hindrances, from any cause whatsoever, during the progress of any portion of services specified in the Agreement. Such delays or hindrances, if any, may be compensated for by an extension of time for such reasonable period as the Municipality may decide. Time extensions shall be granted by amendment, only for excusable delays, such as delays beyond the control of the Consultant and without the fault or negligence of the Consultant.

SETTLEMENTS OF MISUNDERSTANDINGS: In order to prevent misunderstandings and litigation, it is mutually agreed by all parties that the selectboard and/or city council shall act as referee on all questions arising under the terms of an Agreement and that the decision of this governing body in such cases shall be binding upon both parties.

Agreements subjecting costs to final audit, an administrative review regarding the audit will be sent to the Consultant. Any dispute arising from an administrative decision shall be appealed in writing within thirty (30) days of receipt.

FAILURE TO COMPLY WITH TIME SCHEDULE: It is mutually understood and agreed to, that neither party hereto shall be held responsible for delay in performing the work encompassed herein, when such delay is due to unforeseeable causes such as acts of God, or a public enemy, fire, strikes, floods, or legal acts of public authorities. In the event that any such causes for delay are of such magnitude as to prevent the complete performance of the Agreement within two (2) years of the originally scheduled completion date, either party may by written notice request to amend or terminate the Agreement.

MUNICIPALITY'S OPTION TO TERMINATE: The Agreement may be terminated in accordance with the following provisions:

- (a) Breach of Contract. Administrative remedies - the Municipality reserves the right to terminate a Contract for breach of Contract agreements. Termination for breach of Contract will be without further compensation to the Consultant.
- (b) Termination for Cause. The Municipality reserves the right, upon written notice to the Consultant, to terminate the Agreement, as of a date to be specified by the Municipality, if the Consultant fails to complete the designated work to the satisfaction of the Municipality, within the time schedule agreed upon. The Consultant shall be compensated on the basis of the work performed and accepted by the Municipality at the date of final acceptance of the Agreement.
- (c) Termination for Convenience. In addition to its rights and options to terminate an Agreement as provided herein, the Municipality may, at any time prior to completion of services specified under an Agreement, terminate the Agreement by submitting written notice to a Consultant, within not less than fifteen (15) days prior to the effective date, via certified or registered mail, of its intention to do so. If the termination is for the Municipality's convenience, payment to the Consultant will be made promptly for the amount of any fees earned to the date of the notice of termination, less any payments previously made. However, if a notice of termination is given to a Consultant prior to completion of twenty (20) percent of the estimated services, as set forth in the approved Work Schedule and Progress Report, the Consultant will be reimbursed for that portion of any reasonable and necessary expenses incurred to date of the notice of termination, that are in excess of the amount earned under its approved fee to the date of said termination. Such requests for reimbursement shall be supported with factual data and shall be subject to the Municipality's approval.

The Consultant shall make no claim for additional compensation against the Municipality by reason of such termination.

5. OPERATIONAL STANDARDS

RESPONSIBILITY FOR SUPERVISION: The Consultant shall assume primary responsibility for general supervision of Consultant employees and his/her or their subconsultants for all work performed under the Contract and shall be solely responsible for all procedures, methods of analysis, interpretation, conclusions and contents of work performed under the Agreement.

INDEPENDENCE: The Consultant shall act in an independent capacity and not as officers or employees of the Municipality.

WORK SCHEDULE AND PROGRESS REPORT: Prior to initiating any work, the Consultant shall prepare, and submit to the Municipality, a general work schedule showing how the consultant will complete the various phases of work in order to meet the completion date in the contract. The Municipality will use this general work schedule to monitor the consultant.

During the life of the Contract the Consultant will make monthly progress reports indicating the work achieved through the date of the report. The Consultant shall link the monthly progress reports to the general schedule submitted.

The report shall indicate any matters that have or are anticipated to adversely affect progress of the work. The Municipality may require the Consultant to prepare a revised work schedule, in the event that a specific progress achievement falls behind the scheduled progress by more than thirty (30) days.

UTILITIES: Whenever a facility or component of a private, public, or cooperatively-owned utility will be affected by any proposed construction, the Consultant will counsel with the Municipality, plus achieve any necessary contacts and discussions with the affected owners, regarding any requirement necessary for revisions of facilities or existing installations, both above and below ground. Any such installations must be completely and accurately exhibited on any detail sheets or plans. The Consultant shall inform the Municipality, in writing, of any such contacts and the results thereof.

PUBLIC RELATIONS: Whenever it is necessary to perform work in the field, particularly with respect to reconnaissance, the Consultant will endeavor to maintain good relations with the public and any affected property owners. Personnel employed by or representing the Consultant shall conduct themselves with propriety. The Consultant agrees to inform property owners and/or tenants, in a timely manner, if there is need for entering upon private property as an agent of the Municipality, in accordance with VSA Title 19 § 35 and § 503, in order to accomplish the work under the Agreement. The Consultant agrees that any work will be done with minimum damage to the land and disturbance to the owner. Upon request of the Consultant, the Municipality shall furnish a letter of introduction to property owners soliciting their cooperation and explaining that the Consultant is acting as an agent of the Municipality.

INSPECTION OF WORK: The Municipality shall, at all times, have access to the Consultant's work for the purposes of inspection, accounting, and auditing, and the Consultant shall provide whatever access is considered necessary to accomplish such inspections. At any time, the Consultant shall permit the Municipality or representative for the Municipality the opportunity to inspect any plans, drawings, estimates, specifications, or other materials prepared or undertaken by the Consultant pursuant to execution of the Agreement.

Conferences, visits to a site, or an inspection of the work, may be held at the request of any involved party or by representatives of the Municipality, the State of Vermont or FHWA.

WRITTEN DELIVERABLES: Written deliverables, presented under terms of the Agreement, shall be on 8 1/2" by 11 paper, consecutively printed on both sides. Reports shall be bound and have a title page that identifies the name and number of the project and publication date. The report shall have a table of contents and each page shall be numbered successively. Draft reports shall be identified as such.

6. PROJECT DEVELOPMENT AND STANDARDS

PLANS RECORDS AND AVAILABLE DATA: The Municipality agrees to make available, at no charge, for the Consultant's use all available data related to the Agreement including any preliminary plans, maps, drawings, photographs, reports, traffic data, calculations, EDM, valuable papers, topographic survey, utility location plats, or any other pertinent public records.

DESIGN STANDARDS: Unless otherwise specifically provided for in the Agreement, or directed in writing, Consultant services, studies or designs, that include or make reference to plans, specifications, special provisions, computations, estimates, or other data necessary for construction of a designed facility, shall be in conformance with applicable portions of the following specifications, manuals, codes or regulations, including supplements to or revisions thereof, adopted and in effect prior to award of the Agreement:

- (a) VAOT=S latest edition of the Standard Specifications for Construction.
- (b) VAOT=S Bridge Design Manual.
- (c) All applicable AASHTO roadway, traffic, bridge, bicycle and pedestrian policies, guides and manuals.
- (d) VAOT=S Manual on Survey.
- (e) VAOT=S Right-of-Way Manual.
- (f) The Highway Capacity Manual - Special Report 209.
- (g) The ANSI/AASHTO/AWS D-1.5, Bridge Welding code.
- (h) The MUTCD and Vermont Supplement requirements.
- (i) The Standard Specifications for Structural Supports for Highway Signs, Luminaries and Traffic Signals
- (j) Other Municipality directives and guidelines current at the time of the Agreement and as may be issued by the Municipality during the progress of the design.

In case of any conflict with the guidelines referenced, the Consultant is responsible to identify and follow any course of direction provided by the Municipality.

DEVELOPMENT OF PLANS: Unless otherwise indicated in an Agreement, the provisions of these specifications shall apply to any contract requiring preliminary engineering services in connection with highway, bridge, bicycle and pedestrian survey and design. The Consultant is responsible for the development of any and all work outlined in an Agreement.

The Municipality shall establish the termini of the project and may substantiate other conditions relative to locations established in the Agreement. When required under the Agreement, the Consultant will produce an acceptable survey and/or set of plans between such termini and follow any established provisions.

Endorsement of a recommended alignment made, by the Municipality, does not relieve the Consultant of the responsibility for making changes occasioned as a result of an alignment not conforming to standards or good engineering practices when the design is advanced. Nor is the Consultant relieved of changes developed by normal refinements.

Changes in work or Supplemental Agreements, requested or required of the Consultant by the Municipality, involving extra work or additional services must be properly documented and approved prior to initiating action of any work.

METRICATION: All work performed under a Contract shall be designed to comply with metrication units if specified in the Request for Proposals or the Scope of Work. Guide requirements for metric conversion shall follow criteria outlined in an AASHTO publication "Guide To Metric Conversion", copyright 1993. Copies of the Guide Requirements are available from AASHTO, 444 North Capitol St., N.W., Suite 225, Washington, DC 20001.

Unless otherwise required for special cases, the Consultant shall use the following conversions for metric units:

- (a) Lengths. For lengths less than 1 kilometer use meters. For lengths less than 1 meter use millimeters. For lengths less than 1 millimeter use micrometers.

- (b) Mass. For a mass less than 1 metric ton use kilograms. For a mass less than 1 kilogram use grams. For a mass less than 1 gram use milligrams.
- (c) Liquid Volume. For liquid volumes less than 1 cubic meter use liters. For liquid volumes less than 1 liter use milliliters. A liter is one thousandth of a cubic meter or 1000 cubic centimeters.
- (d) Solid Volume. For a solid volume less than 1 cubic meter use cubic millimeters.
- (e) Area. For an area less than 1 hectare use square meters. For an area less than 1 square meter use square millimeters.
- (f) Basic Engineering Conversion Factors.

1. Mass/Unit Length	Pounds/Linear Foot to kilograms/meter (kg/m)
2. Mass/Unit Area	Pounds/Square Foot to kilograms/square meter (kg/M ²)
3. Mass Density	Pounds/Cubic Foot to kilograms/cubic meter(kg/M ³ ;))
4. Force	Pounds to newtons (N)
5. Pressure	Pounds/Square Foot to Pascal (Pa = N/M ²)
6. Bending Moment	Newton - meter (N*m)

ELECTRONIC DATA MEDIA: Consultant, subconsultants, or any representatives performing work related to the Agreement, are responsible to insure that all data and information created or stored on EDM is secure and can be duplicated if the EDM mechanism is subjected to power outage or damage.

REVIEWS AND ACCEPTANCES: All preliminary and detailed designs, plans, specifications, estimates or other documents prepared by the Consultant, shall be subject to review and endorsement by the Municipality.

Approval for any inspections or sequences of progress of work shall be documented by letters, memoranda or other appropriate written means.

A frequency for formal reviews shall be set forth in the Agreement. Informal reviews, conducted by the Municipality will be performed as deemed necessary. The Consultants shall respond to all official comments regardless of their source. The Consultant shall supply the Municipality with written copies of all correspondence relating to formal and informal reviews.

No acceptance shall relieve a Consultant of their professional obligation to correct any defects or errors in their work at their own expense.

7. PAYMENT FOR SERVICES RENDERED

PAYMENT PROCEDURES: The Municipality shall pay, or cause to be paid to the Consultant or the Consultant=s legal representative, progress payments, that may be monthly or as otherwise accepted by the Municipality, as determined by the percentage of work completed, as documented by a progress report of such work duly attested, for each phase of the required services covered by the Agreement. When

applicable, for the type of payment specified in the Agreement, the progress report shall summarize actual costs and any earned portion of fixed fee.

All invoices and correspondence shall indicate the applicable project name, project number and the Agreement number. When relevant, the invoice shall further be broken down in detail between projects.

When applicable, for the type of payment specified in the Agreement, expenses for meals and travel shall be limited to the current approved in-state rates, as determined by the State of Vermont=s labor contract, and need not be receipted. All other expenses are subject to approval by the Municipality and must be accompanied with documentation to substantiate their charges.

Invoices shall be submitted to the Municipality; one original and three (3) copies are required.

No approval given or payment made under an Agreement, shall be conclusive evidence of the performance of said Agreement, either wholly or in part thereof, and no payment shall be construed to be acceptance of defective work or improper materials.

The Municipality agrees to pay the Consultant and the Consultant agrees to accept, as full compensation, for performance of all services rendered and expenses encompassed in conformance therewith, the type of fee specified in the Contract.

- (a) Indirect Cost Rates. For actual cost contracts, the Consultant is responsible for furnishing the Municipality with independently-prepared, properly supported, Indirect Cost Rates, in accordance with 48 CFR 52.216-7, for all time periods covered under the Agreement. These rates must be developed in accordance with the cost principles in 48 CFR Part 31. A Consultants overhead rate shall be based upon an actual audited overhead rate, unless otherwise specified in the Agreement.

(b) Contract Types. Contracts shall conform with 48 CFR Part 16 - TYPES OF CONTRACTS.

PAYMENT FOR ADDITIONS OR DELETIONS: The Municipality may, upon written notice, and without invalidating the Agreement, require any changes to, additions to, or deletions from, the originally contemplated extent of the work, prior to completion of the Agreement by means of an amendment to the original contract. Any adjustments of this nature shall be executed under the appropriate fee established in the Agreement, based on the adjusted quantity of work, except that any claim for extension of time caused thereby shall be adjusted at the time of ordering such addition or deletion.

PAYMENT FOR EXTRA WORK, ADDITIONAL SERVICES OR CHANGES: The Municipality may, upon written notice, and without invalidating the Agreement, require changes resulting from revision or abandonment of work already satisfactorily performed by the Consultant or changes in the scope of the work.

The value of such changes, to the extent not reflected in other payments to the Consultant, shall be incorporated in an amendment and be determined by mutual agreement, in one or more of the following ways:

- (a) Fixed Price. By a price that is not subject to any adjustment on the basis of the Contractor's expenses experienced in performing the work. The Contractor is fully responsible for all costs and resulting profit or loss.
- (b) Rate Schedule. By unit prices designated in the Agreement, or by unit prices covered under any subsequent Agreements.
- (c) Actual Cost. By amounts determined on the basis of actual costs incurred, as distinguished from forecasted expenditures.

No changes, for which additional fee payment is claimed, shall be made unless pursuant to a written order from the Municipality, and no claim shall be valid unless so ordered.

The Consultant agrees to maintain complete and accurate records, in a form satisfactory to the Municipality for all time devoted directly to same by Consultant employees. The Municipality reserves the right to audit the records of the Consultant related to any extra work or additional services. Any such services rendered shall be subject, in all other respects, to the terms of the Agreement. When changes are so ordered, no additional work shall be performed by the Consultant until an Agreement amendment has been fully executed, unless written notice to proceed is issued by the Municipality. Any claim for extension of time, that may be necessitated as a result of extra work or additional services and changes, shall be given consideration and evaluated insofar as it directly relates to the change.