

REQUEST FOR PROPOSAL (RFP)

# ENGLESBY BROOK WATERSHED FLOW RESTORATION PLAN DEVELOPMENT

SUMMARY

The City of Burlington (City) is issuing this Request for Proposals (RFP) for consultant services to assist in the development of the Englesby Brook Flow Restoration Plan required by the VT MS4 (2012) permit. Other MS4s (City of South Burlington, the University of Vermont and the VT Agency of Transportation) will participate for the portions of the watershed that overlap with their jurisdictional boundaries.

The City has received funding for this project from the Vermont Agency of Transportation.

PROPOSED PROJECT SCHEDULE

Monday, August 18 <sup>th</sup> , 2014	RFP released
Monday, August 25 <sup>th</sup> by noon	<i>Deadline for submission of questions</i>
Wednesday, August 27 <sup>th</sup> , by 4 pm	Response to questions posted on-line
Monday, September 8 <sup>th</sup> , by 2 pm	RFP submission deadline
Monday, September 15 <sup>th</sup> and Tuesday, September 16 <sup>th</sup>	<i>Consultant Interviews, if needed</i>
Wednesday, October 15 <sup>th</sup>	<i>Project kick off</i>
Friday, June 19 <sup>th</sup> , 2015	<i>Project completion deadline; (project may be completed earlier)</i>

All questions pertaining to the RFP should be submitted to Megan Moir, Stormwater Program Manager, by email ([mmoir@burlingtonvt.gov](mailto:mmoir@burlingtonvt.gov)) by noon on Monday, August 25, 2014. All addendums and answers to any questions received by the above time and date, will be posted by 4 pm Wednesday, August 27<sup>th</sup> at: <http://www.burlingtonvt.gov/RFP>



## I. Introduction

The City of Burlington is issuing this Request for Proposals (RFP) for consultant services to develop a Flow Restoration Plan (FRP) for the Englesby Brook watershed. An approximate watershed boundary is shown here:

[http://www.vtwaterquality.org/stormwater/images/sw\\_englesbymap.pdf](http://www.vtwaterquality.org/stormwater/images/sw_englesbymap.pdf)

The Englesby Brook watershed is approximately 570 acres in size and is located primarily in Burlington, Vermont with a small portion of the watershed located in South Burlington, Vermont. Additionally, two non-traditional MS4s, the University of Vermont (UVM) and the Vermont Agency of Transportation (VTRANS), also have impervious located within the watershed boundaries. South Burlington, UVM and VTRANS will be partners in the development of the FRP for Englesby Brook and the FRP will include their impervious surfaces when pursuing certain portions of the scope of work proposed below. However, the contract will be executed directly with Burlington, who will pursue an MOU clarifying the relationships amongst the other parties after the initial "impervious responsibility" assignment task (Task 2.3) is complete.

The selected consultant will collect data and identify a suite of Best Management Practices (BMPs) capable of attaining the flow reduction targets identified in the Englesby Brook Stormwater Total Maximum Daily Load (TMDL) prepared by ANR ([http://www.vtwaterquality.org/stormwater/docs/sw\\_eng\\_tmdl\\_approved.pdf](http://www.vtwaterquality.org/stormwater/docs/sw_eng_tmdl_approved.pdf))

Once BMPs are identified, the selected consultant will prepare a FRP that meets the requirements listed in the State of Vermont Agency of Natural Resources (ANR) draft Municipal Separate Storm Sewer Systems (MS4) permit:

[http://www.vtwaterquality.org/stormwater/docs/ms4/sw\\_Final\\_MS4\\_permit\\_12\\_5\\_12\\_adminrevised.pdf](http://www.vtwaterquality.org/stormwater/docs/ms4/sw_Final_MS4_permit_12_5_12_adminrevised.pdf)

Depending on available funds and the difficulty in meeting the Englesby Flow TMDL targets, the consultant may also be asked to briefly evaluate and summarize possible water quality improvement alternatives that could be pursued in addition to or in lieu of the implementation of the full suite of BMPs identified in the FRP.

This project is expected to commence on or before October 15, 2014 and will be completed no later than June 19, 2015.

## II. Background

Englesby Brook is on the Vermont Agency of Natural Resources (ANR) list of impaired waterbodies.

([http://www.anr.state.vt.us/dec/waterq/mapp/docs/mp\\_2008.State\\_Lists\\_Final.pdf](http://www.anr.state.vt.us/dec/waterq/mapp/docs/mp_2008.State_Lists_Final.pdf)).

The primary reason for impairment is listed as uncontrolled volume of stormwater runoff due to the high percentage of impervious surface. The watershed impervious is approximately 27%, however there are much higher percentages of effective impervious draining directly to the collection system. The watershed has a broad mix of uses, including commercial, residential, institutional and industrial land-uses, and also has a large amount of effective impervious associated with the municipal road network. The ANR released a TMDL for the Englesby Brook watershed that was approved by the U.S. Environmental Protection Agency in 2007.

[http://www.vtwaterquality.org/stormwater/docs/sw\\_eng\\_tmdl\\_approved.pdf](http://www.vtwaterquality.org/stormwater/docs/sw_eng_tmdl_approved.pdf)

The TMDL set targets for flow modification in the stream. The low flow target requires an 11.2% increase in stream flows during low flow conditions. The high flow target requires a 34.4% (including a 20 acre impervious future growth allocation) reduction in flows during the 1 year storm event.

ANR released the latest version of the MS4 permit in 2012. The permit requires MS4 regulated entities to prepare a FRP for the stormwater impaired watersheds located within their MS4 jurisdiction. The FRP must detail how the watershed can achieve the flow targets prescribed in the TMDL for that watershed.

There have already been several significant stormwater mitigation implementation efforts to date: a pond expansion in 2002 at the Burlington Country Club which provides treatment and some detention for approximately 150 acres from the country club and UVM, another pond system (meeting VSWMM 2002 fully) to mitigate another 130 acres of area from both Burlington and a part of South Burlington, and a shallow/marsh wetland provides treatment (but no detention) from another 40 acres. Additionally, UVM owns and operates a pond that provides 2002 VSWMM level treatment/detention for any UVM owned impervious in the Englesby watershed. Unfortunately, in spite of these efforts, Englesby still bears the characteristics of an urban, stormwater impaired stream.

The challenge in the pursuit of the Englesby FRP will be finding opportunities for additional treatment in such a built-out watershed which has generally low permeability soils, areas of shallow bedrock and also higher groundwater elevations. There is also left-over infrastructure in Englesby (an abandoned sewer pipe) which may be affecting the flow characteristics as well. The FRP process outlined by the state does not provide specific discussion of such challenges, but these must be addressed in order to provide a realistic approach for water quality improvements.

In recent years, the City of Burlington has updated the GIS mapping for the collection system in this area including most of the pipe invert elevations. While there may still be some areas requiring final QA/QC (which would be provided by the City upon data

gap identification by the consultant) this data should provide the foundation for accurate delineation of the separate storm sub-watersheds (since there are pockets of combined sewer-sheds within the “topographic” Englesby watershed) and accurate conceptual/preliminary engineering of BMP. The full data set (including available attributes) is available on the Mapping-Links page web at:

<http://www.burlingtonvt.gov/DPW/Stormwater-Management/>

The City of Burlington also has an updated impervious GIS layer based on 2011-2012 impervious data. While this GIS dataset does utilize automated classification for residential parcels, the City ROW and most commercial/industrial parcels have been manually digitized for accuracy. This dataset will be made available to the consultant selected for the project.

### III. Scope of Work

The following scope of services assumes that the consultant will not maintain a working copy of the ANR Best Management Practice Decision Support System (BMP DSS) tool in their office and all BMP data will have to be submitted to ANR for processing. Consultants that intend to maintain a working copy of the BMP DSS tool in their office should make the appropriate changes to the scope of work in their submission.

All electronic files, supporting data, GIS layers and documents generated by the retained consultant in the performance of this contract shall become the property of the City of Burlington and the other MS4s. The consultant may retain copies of the files and documents as well.

#### 1 Coordination Meetings

##### 1.1 Meet with MS4 Communities

Meet with representatives from the City of Burlington, City of South Burlington, the University of Vermont, and the Vermont Agency of Transportation to refine the scope of work and project schedule prior to starting work. Review BMPs that currently exist in the Englesby Brook watershed.

##### 1.2 Meet with ANR

If the consultant has not yet been directly involved in the development and submission of a Vermont Stormwater Impaired Flow Restoration Plan, the consultant shall meet with ANR staff to discuss work flow processes associated with submitting data for use with the BMP DSS. The consultant should also discuss requirements and format for submission of a final FRP. In all cases, the consultant will review the schedule for the project approved by

the City and the other MS4 as pertinent with ANR so that ANR can anticipate and plan for BMP DSS data submissions.

2 Evaluate existing baseline and “credit” model and create current baseline and “credit” model; identify “managed” and “un-managed” impervious responsibility

2.1 Review data in existing baseline model

Review all data ANR used to develop the baseline model for Englesby Brook (e.g. watershed drainage areas, BMPs identified and included in the model, BMP parameters, BMP drainage areas, etc.). Verify accuracy of data, including any differences in watershed areas due to improved mapping from Burlington regarding pockets of the watershed that drain to the combined sewer system. Determine if there are any BMPs that currently exist in the watershed, but are missing from ANR’s baseline model. The consultant will collect any information necessary to add missing BMPs to the existing model and submit this information to ANR for inclusion in the model. Information submitted to ANR must be in an acceptable format (Appendix A). The consultant will deliver to the City and other MS4s as pertinent updated model results that include all the BMPs that should exist in the Englesby Brook watershed baseline model.

2.2 Review data in existing “credit” model

Review all data ANR used to develop the “credit” model for Englesby Brook (e.g. BMPs identified and included in the model, BMP parameters, BMP drainage areas, etc. that will be considered credit toward meeting the TMDL targets). Verify accuracy of data. Determine if there are any BMPs that currently exist in the watershed, but are missing from ANR’s “credit” model. Determine if there are any BMPs that are not operating as designed. The consultant will collect any information necessary to add missing BMPs to the existing model and submit this information to ANR for inclusion in the model. Information submitted to ANR must be in an acceptable format (Appendix A). The consultant will deliver to the City and other MS4s as pertinent updated model results that include all the BMPs that currently exist in the Englesby Brook watershed and are being considered credit towards meeting the TMDL targets.

As part of the credit model evaluation, or at some other appropriate timeframe in the process, incorporate revisions (provided by the City and other MS4s) to the 20 acre future growth allocation listed in the Englesby Brook TMDL.

2.3 Identify “managed” and “unmanaged” impervious responsibility

Using boundaries provided by the MS4s, the consultant shall identify the impervious surface owned/operated by the non-traditional MS4s, the impervious draining to the MS4 collection system of Burlington and South Burlington, and where possible, any impervious surfaces owned by entities other than the MS4s which drains directly to Englesby Brook. The consultant shall then designate which areas of impervious are considered fully “managed” vs. “unmanaged” in accordance with the flow reduction requirements of the TMDL (i.e. meet the CPv standard outlined in the 2002 VSWMM). This information will then be used to provide a tabular accounting of the % responsibility for any remaining flow reduction targets.

3 Identify and define possible stormwater BMPs

3.1 Create a list of possible locations for stormwater BMP installation

Identify areas within the Englesby Brook watershed where BMPs could be installed. The BMPs identified must be expected to provide a significant contribution toward meeting the flow targets identified in the Englesby Brook TMDL. In addition, BMPs must meet the design standards approved by ANR. Evaluation of green infrastructure opportunities should be included in this task. The consultant will use the following resources as guidance (additional treatment beyond the guidelines may be needed in order to meet the TMDL targets) in determining the appropriateness and acceptance of BMPs:

- The Vermont Stormwater Management Manual  
([http://www.anr.state.vt.us/dec/waterq/stormwater/docs/sw\\_manual-vol1.pdf](http://www.anr.state.vt.us/dec/waterq/stormwater/docs/sw_manual-vol1.pdf))
- Stormwater Engineering Feasibility Analysis (EFA)
  - 2004 EFA  
([http://www.anr.state.vt.us/dec/waterq/stormwater/docs/sw\\_e\\_f\\_a\\_procedure.pdf](http://www.anr.state.vt.us/dec/waterq/stormwater/docs/sw_e_f_a_procedure.pdf))
  - Residual Designation Authority (RDA) EFA  
([http://www.vtwaterquality.org/stormwater/docs/swimpairedwatersheds/sw\\_rda\\_EFA.pdf](http://www.vtwaterquality.org/stormwater/docs/swimpairedwatersheds/sw_rda_EFA.pdf))
  -
- Vermont Agency of Transportation Stormwater Practices Research Project  
[http://www.aot.state.vt.us/ops/TechnicalServices/stormwater/documents/AOT-OPS\\_TechSvcSW\\_Stormwater\\_Research\\_Report.pdf](http://www.aot.state.vt.us/ops/TechnicalServices/stormwater/documents/AOT-OPS_TechSvcSW_Stormwater_Research_Report.pdf)
- Englesby Brook Stormwater TMDL
- MS4 permit (2012)

The consultant will conduct interviews with individuals who have “on the ground” knowledge of the area where possible BMPs have been identified. The consultant will conduct site visits and review records as necessary to confirm that there are no obvious factors that would prohibit the installation

of a BMP in the proposed location and any obvious factors that would be helpful in refining the list of BMPs in 3.2. The consultant will document potential BMPs and possible locations with photographs and notes in a format approved by the MS4's.

3.2 Review list of possible BMP locations with the MS4's

Meet with the City and other MS4s as pertinent to discuss BMP locations and refine the list to determine which BMPs merit further data collection and design/development efforts. Additional efforts shall be directed towards developing a strong basis of design for each of the BMPs and should include verification of including drainage area capture, utility conflicts, depth to bedrock and outlet elevation constraints. The consultant should also identify any obvious issues that would affect the accuracy of the cost estimate (land ownership, access, additional permitting requirements etc.) The consultant will track the decision making process. At the end of the project, the consultant will provide a memo summarizing how BMPs and BMP locations were selected. This effort will include the identification of permitted-not built projects and stormwater treatment.

3.3 Create BMP DSS model input data

Develop BMP DSS model input data for selected BMPs. Data must be in a format approved by ANR for their inclusion in the BMP DSS tool (Appendix A).

3.4 Submit BMP data inputs to ANR

Review BMP data with the City and other MS4s as pertinent and submit to ANR. Obtain model results from ANR and analyze for accuracy and compliance with TMDL targets.

3.5 Model output discussion

Meet with the City and other MS4s as pertinent to discuss model output.

4 Refine model inputs

It is anticipated that final identification and selection of BMPs will be an iterative process. As such, the work tasks in section 3 will be repeated until flow targets identified in the TMDL are met and the results accepted by the City and other MS4s as pertinent. For the purpose of this RFP, assume at least three (3) and possibly more iterations will be required to meet TMDL flow reduction targets and optimize results.

5 Prepare Flow Restoration Plan

5.1 FRP Development

Following the City and other MS4s as pertinent acceptance of an optimized list of BMPs that meets TMDL targets the consultant will prepare a FRP. The

FRP must contain all the elements required in the Vermont ANR's 2012 MS4 permit (Appendix B).

#### 5.2 FRP Review and Approval

A draft FRP will be submitted to the City and other MS4s as pertinent for review and comment. The consultant will update the draft FRP based on comments collected and discussed at a joint meeting. For the purposes of this FRP, assume two (2) drafts and two meetings to collect comments prior to moving on to 5.3 ANR review.

#### 5.3 FRP Review by ANR

The consultant will submit an updated draft of the FRP to the ANR for review and comment. ANR comments and consultant draft response will be shared with City and other MS4s as pertinent for review and input by MS4's prior to the consultant finalizing the FRP under 5.4. This may require a joint meeting of the City and other MS4s as pertinent with the consultant.

#### 5.4 Finalize FRP

The FRP will be revised based on comments by ANR and finalized as appropriate based on input by City and other MS4s as pertinent under 5.3.

### 6 Supplemental Scope Item: Alternatives Analysis (*List as a SEPARATE line item in the COST PROPOSAL*)

Using the understanding gained during the pursuit of the FRP, and within the context of the overall water quality improvements for the Burlington area and the context of the Lake Champlain TMDL, the consultant will provide a summary analysis of possible alternatives that could be pursued in lieu of, or in addition to the implementation of the full suite of BMPs identified in the FRP. This analysis should include a discussion of the Lake side water quality benefits of full implementation of the Englesby Brook FRP as well as the likelihood of achievement of Class B Aquatic Life standards given the streams other characteristics. Implementation of the FRP should be compared to other possible strategies that could be pursued that would maximize water quality investment benefit for Lake Champlain. In particular, the consultant should consider whether implementation of the FRP and its elements will provide as much or more benefit towards phosphorus reductions as other possible strategies. The consultant should clearly identify any "low hanging fruit" listed in the FRP, but also evaluate the benefits of alternatives such as stream bank restoration/protection and/or other channel erosion mitigation and removal of abandoned infrastructure.

This effort is not intended to be a comprehensive alternatives analysis, but rather a summary of other watershed improvement strategies that may be

evaluated further depending on the shifting landscape of water quality goals and municipal funding.

The consultant shall list the cost of this task as separate from tasks 1-5 in the cost proposal.

Depending on the cost proposed and available funding the City may elect to include or not include this supplemental element as part of the final scope of work. The task may also be structured as a supplemental item of the contract that can be activated through amendment depending on the results of the FRP and the ease with which the TMDL target can be met.

#### IV. Proposal Requirements

Any questions regarding this RFP must be submitted by noon, August 25, 2014 via email to Megan Moir, Stormwater Program Manager at [mmoir@burlingtonvt.gov](mailto:mmoir@burlingtonvt.gov).

Answers to questions will be posted on-line at: <http://www.burlingtonvt.gov/RFP> by 4 p.m. on August 27, 2014. It is the responsibility of any consultant who intends to submit a proposal to check this page for the responses to the questions and for any addendums, which may be posted up until this date.

All consultants will be required to prepare a proposal containing both technical and cost information as part of this submission. In order to be considered responsive to this RFP, each proposal must conform to the following requirements:

- ♦ Submit three (3) paper copies and one (1) CD copy of the corresponding digital PDFs of the proposal (see requirements below) in one sealed package. The paper proposal must be double sided with no acetate or plastic covers. Number all pages in the proposal consecutively.
- ♦ Clearly indicate the following on the outside of the sealed packages:  
Project name (Englesby Brook Watershed Flow Restoration Plan Development),  
the name and address of the prime consultant along with the name and telephone number of the appropriate contact person.

Submissions must be received by 2:00 p.m., Monday, September 8<sup>th</sup>, 2014 at:

Megan Moir  
Water Resources Office  
Burlington Water Treatment Plant  
Burlington Department of Public Works  
234 Penny Lane  
Burlington, VT 05401

Proposals received after the deadline or at locations other than the above will not be accepted.

A. Required Technical Information

The Technical Proposal should include the following:

1. Cover Letter. [ 1 page maximum ]
2. Qualifications of the Consultant Firm(s) - Describe experience in areas needed to fulfill the project scope and any related experience that illustrates the firm's ability to carry out this project. Describe experience and familiarity working in the Englesby Brook watershed. Describe the firm's or understanding of requirements sought by ANR in development of a Flow Restoration Plan.
3. Scope of Work - A scope of work for the project detailing the consultant's proposed approach to the work tasks described in the RFP, and any recommended adjustments to the scope or individual tasks.
4. Proposed Schedule – The schedule should include completion of work tasks and deliverables as well as any key meetings.
5. Project Organization - Discuss project management structure and relate the job categories listed in the Cost Proposal to generalized project tasks.
6. Resumes of key staff (not exceeding 2 pages for each person), and a brief description of their roles in the project, and a brief description of their work on related projects. Clearly identify sub-consultant firms.
7. References (please provide a minimum of two, including the name and telephone number of the contact person).
8. The proposal, encompassing items 1 through 7 above, shall not exceed 20 pages.

B. Required Cost Information ( not to exceed two pages )

Cost information should be included with the proposal. The following information, listing the prime consultant and each sub-consultant separately, shall be submitted:

1. A schedule of staff to be assigned to the project, their hourly rates, and estimated hours per person by task.
2. Overhead rate and fee.

## V. Consultant Selection Procedures

All proposals will be evaluated using the criteria listed below by a selection committee. The committee will consist of up to 3 City of Burlington Water Resources staff members, and possibly representatives from the other MS4s. The successful consultant/consultant team will have the following experience:

- Experience with stormwater runoff and stormwater BMP H/H modeling
- Experience with urban stormwater retrofit planning
- Experience with siting, prioritizing, cost estimating and designing both green and grey infrastructure stormwater practices
- Other skills necessary for successful completion of this phase of the project.

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

Proposals will be ranked based on the following criteria:

- Qualifications of the firm and the personnel to be assigned to the project (20 pts)
- Experience of the personnel working together as a team to complete similar projects (15 pts)
- Demonstration of overall project understanding, insights into local conditions, insights into potential issues, and demonstrated understanding of the project deliverables (30 pts)
- Demonstrated knowledge of the project area and/or similar project areas (15 pts)
- Clarity of the proposal and creativity/thoughtfulness in addressing the scope of work (20 pts)

The selection committee may elect to interview consultants prior to final selection.

Once the technical proposal is discussed and ranked, the cost proposal will be reviewed for consistency with, and in light of, the evaluation of the technical proposal. The City of Burlington reserves the right to seek clarification of any proposal submitted and to select the proposal considered to best promote the public interest.

All proposals become the property of the City of Burlington upon submission. The cost of preparing, submitting and presenting a proposal is the sole expense of the consultant. The City of Burlington reserves the right to reject any and all proposals received as a result of this solicitation, to negotiate with any qualified source, to waive any formality and any technicalities or to cancel the RFP in part or in its entirety if it is in the best interest of the City of Burlington. This solicitation of proposals in no way obligates the City of Burlington to award a contract.

If the award of the contract aggrieves any firms, they may appeal in writing to the Burlington CAO at City Hall, 149 Church Street, Burlington, Vermont, 05401. The appeal must be post-marked within seven (7) calendar days following the date of emailed notice to award the contract. Any decision of the City is final.

## VI. Contractual Requirements

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.

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

Consultants are advised to review and be prepared to comply with the Burlington Local Ordinances provided in Appendix C and the City of Burlington Standard Insurance Provisions in Appendix D.

The City of Burlington reserves the right to alter or amend any or all of these provisions in the project contract.

# Appendix A

## Guidelines for Submitting Information for Input into the Vermont BMPDSS

Emily Schelley, Environmental Analyst, VT DEC Stormwater Program  
 March 28, 2011

During the development of the Flow Restoration Plans some municipalities will be working with VT DEC's Stormwater Program to model proposed BMPs using the Vermont BMPDSS. In order for us to be efficient about entering BMPs and getting model outputs, it is important that we are given sufficient information about the BMPs. We spend more time getting information ready to go into the BMPDSS than actually running it, so those of you who are submitting information can help us by making sure we have all the information for both the BMP *and* its drainage area, as described below.

**BMP information:** Probably the quickest way to get us the information on the BMP is to send the summary sheet from HydroCAD, if you have it. It doesn't matter what storm is modeled; it's the inputs that we are after (although you may also send the HydroCAD project itself).

Summary for Pond 1P: (new Pond)					
Inflow Area =	7.550 ac,	Inflow Depth =	0.88"	for 1yr event	
Inflow =	7.14 cfs @	11.99 hrs,	Volume=	0.552 af	
Outflow =	0.42 cfs @	14.12 hrs,	Volume=	0.549 af,	Atten= 94%, Lag= 127.8 min
Primary =	0.42 cfs @	14.12 hrs,	Volume=	0.549 af	
Routing by Stor-Ind method, Time Span= 5.00-60.00 hrs, dt= 0.02 hrs					
Peak Elev= 456.35' @ 14.12 hrs Surf.Area= 0.207 ac Storage= 0.306 af					
Plug-Flow detention time= 481.8 min calculated for 0.549 af (100% of inflow)					
Center-of-Mass det. time= 479.2 min ( 1,324.9 - 845.6 )					
Volume	Invert	Avail.Storage	Storage Description		
#1	454.00'	0.771 af	<b>Custom Stage Data (Irregular)</b> Listed below (Recalc)		
Elevation (feet)	Surf.Area (acres)	Perim. (feet)	Inc.Store (acre-feet)	Cum.Store (acre-feet)	Wet.Area (acres)
454.00	0.080	322.0	0.000	0.000	0.080
455.00	0.110	318.0	0.095	0.095	0.089
456.00	0.181	368.0	0.144	0.239	0.152
457.00	0.261	439.0	0.220	0.458	0.257
458.00	0.367	528.0	0.312	0.771	0.415
Device	Routing	Invert	Outlet Devices		
#1	Primary	454.00'	<b>2.0" Vert. Orifice/Gate</b> C= 0.600		
#2	Primary	455.00'	<b>3.0" Vert. Orifice/Gate</b> C= 0.600		
#3	Primary	456.50'	<b>5.0' long Sharp-Crested Rectangular Weir</b> 2 End Contraction(s)		
<b>Primary OutFlow</b> Max=0.42 cfs @ 14.12 hrs HW=456.35' (Free Discharge)					
1=Orifice/Gate (Orifice Controls 0.16 cfs @ 7.24 fps)					
2=Orifice/Gate (Orifice Controls 0.26 cfs @ 5.32 fps)					
3=Sharp-Crested Rectangular Weir ( Controls 0.00 cfs)					

Figure 1: HydroCAD Summary Sheet

Of course, not everyone uses HydroCAD. In the absence of a summary sheet, we still will need the same type of information.

- *Storage Information:* It is best to have stage vs. storage information rather than an overall pond volume. If stage vs storage data isn't available then as much information on the size and configuration as is available (height, width, length).
- *Orifice:* size(s) and height(s)
- *Weir:* height, length
- *Infiltration rate* (for infiltration practices) in inches per hour.
- *Void ratio:* if all or part of the storage volume is in a gravel bed or similar.

If the BMP design includes something unique, like a valve-orifice, we will need a stage vs discharge relationship for the outlet, if not a HydroCAD file.

**Drainage Area:** Drainage areas are entered into the BMPDSS by way of a shapefile. A shapefile (in Vermont State Plane projection) is requested for each BMP.

The drainage areas also need to nest inside the subwatershed polygons. Our subwatersheds are based on those created by Pioneer, which are available to download through VCGI: [http://www.vcgi.org/dataware/?page=../search\\_tools/search\\_action.cfm&query=theme&theme\\_id=012-9999](http://www.vcgi.org/dataware/?page=../search_tools/search_action.cfm&query=theme&theme_id=012-9999). If the BMP being proposed is only in the preliminary design stage, such that a thorough analysis of the site is not being done, I would encourage you to base the drainage area off the Pioneer subwatersheds. If a retrofit is being proposed to an existing BMP, it is likely that VTANR already has delineated a drainage area, which can be provided upon request.

## Appendix B – Flow Restoration Plan Requirements Specified in ANR’s MS4 Permit (2012)

e) For those small MS4s that discharge to stormwater-impaired waters with EPA-approved stormwater TMDLs the permittee shall comply with the following requirements:

(1) The permittee shall develop and submit a comprehensive Flow Restoration Plan (FRP) for the portion of each stormwater-impaired watershed within the permittee’s boundaries. Permittees that discharge into the same stormwater-impaired watershed may elect to cooperate to develop a single FRP for the watershed. The FRP shall be submitted to the Secretary **no later than three years after the date of issuance of an authorization to discharge to the permittee under this general permit.** The FRP shall contain the following elements:

(a) **Identification of Required Controls.** An identification of the suite of necessary stormwater BMPs that will be used to achieve the flow restoration targets. If a stormwater-impaired watershed includes lands outside the boundaries of a small MS4 permittee, the FRP shall address the permittee’s commensurate share of necessary BMP implementation based on percent impervious land cover.

(b) **Design and Construction Schedule.** A design and construction schedule for the stormwater BMPs that have been identified by the permittee as necessary to achieve the flow restoration targets. The schedule shall include a discussion of any necessary permits or other regulatory approvals necessary for implementation of the required BMPs. The schedule shall provide for implementation of the required BMPs as soon as possible, **but no later than 20 years from the effective date of this permit** or from the date of the permittee’s designation as a regulated small MS4, whichever is later.

(c) **Financial Plan.** A financing plan that estimates the costs for implementing the FRP and describes a strategy for financing the FRP. The financing plan shall include the steps each permittee will take to implement the financing plan.

(d) **Regulatory Analysis.** A regulatory analysis that identifies and describes what, if any, additional regulatory

authorities, including but not limited to the authority to require low impact development BMPs, the permittee will need in order for the permittee to implement the FRP.

**(e) Identification of Regulatory Assistance.** An identification of regulatory assistance that the permittee will need from the Secretary in order to effectively implement the FRP. This should include an assessment of aspects of the FRP where the regulatory analysis indicates that the permittee's authority may not be sufficient to effectively implement the FRP. For example, use of residual designation authority pursuant to 40 C.F.R. §122.26.

**(f) Third-Party Implementation.** An identification of the name of any party, other than the permittee, that is responsible for implementing any portion of the FRP.

(2) Upon approval by the Secretary, the Flow Restoration Plan shall be a part of the permittee's SWMP. Any failure of the permittee to comply with the SWMP, including but not limited to the design and construction schedule in the approved FRP, shall constitute a violation of this permit.

(3) Schedule of Compliance: The permittee shall implement measures necessary to achieve the flow restoration target in the TMDL no later than 20 years after the effective date of this permit or the date of the permittee's designation as a regulated small MS4, whichever is later. Subject to the requirements of section IV.J.3 of this permit, the Secretary may adjust a permittee's flow restoration targets during the term of this permit if justified by monitoring data or other relevant information.

The following FRP development and implementation schedule shall apply. All milestone dates are calculated from the date of issuance of an authorization to discharge to the permittee under this general permit.

The Secretary will include a reporting schedule in each permittee's authorization specifying the due dates for each of these deliverables. When FRP reporting deadlines coincide with the annual report due date, one report may be submitted.

**The permittee shall, according to the following schedule:**

# APPENDIX C- Burlington Local Ordinances

## ARTICLE VI. LIVABLE WAGES\*

\*Cross references: Personnel, Ch. 24.

### Sec. 21-80. Findings and purpose.

In enacting this article, the city council states the following findings and purposes:

- (a) Income from full-time work should be sufficient to meet an individual's basic needs;
- (b) The City of Burlington is committed to ensuring that its year-round employees (full and part time) have an opportunity for a decent quality of life and are compensated, and not dependent on public assistance, to meet their basic needs;
- (c) The city is committed, through its contracts with vendors and provision of financial assistance, to encourage the private sector to pay its employees a livable wage and contribute to employee health care benefits;
- (d) The creation of jobs that pay livable wages promotes the prosperity and general welfare of the city and its residents, increases consumer spending with local businesses, improves the economic welfare and security of affected employees and reduces expenditures for public assistance;
- (e) It is the intention of the city council in passing this article to provide a minimum level of compensation for city employees and employees of entities that enter into service contracts or receive financial assistance from the City of Burlington.

(Ord. of 11-19-01)

### Sec. 21-81. Definitions.

As used in this article, the following terms shall be defined as follows:

- (a) *Contractor* or *vendor* is a person or entity that has a contract with the City of Burlington primarily for the furnishing of services (as opposed to the purchasing of goods) where the total amount of the contract or contracts exceeds fifteen thousand dollars (\$15,000.00) for any twelve-month period, including any subcontractors of such contractor or vendor. A person or entity that has a contract with the City of Burlington for the use of property under the jurisdiction of the board of airport commissioners, or any person or entity that has a sublease or other agreement to perform services on such property, shall also be considered a contractor under this article.
- (b) *Grantee* is a person or entity that is the recipient of financial assistance from the City of Burlington in the form of grants administered by the city, including any contractors or subcontractors of the grantee, that exceeds fifteen thousand dollars (\$15,000.00) for any twelve-month period.
- (c) *Covered employer* means the City of Burlington (except that the Burlington School Department shall not be considered a covered employer), a contractor or vendor or a grantee as defined above.
- (d) *Covered employee* means an "employee" as defined below, who is employed by a "covered employer," subject to the following:

(1) An employee who is employed by a contractor or vendor is a "covered employee" during the period of time he or she spends on furnishing services funded by the city, notwithstanding that the employee may be a seasonal employee;

(2) An employee who is employed by a grantee who spends at least half of his or her time on activities funded by the city is a "covered employee".

(e) *Employee* means a person who is employed on a full-time or part-time regular basis (i.e., nonseasonal). "Employee" shall not refer to volunteers working without pay or for a nominal stipend, persons working in an approved apprenticeship program, persons who are hired through youth employment programs or student workers or interns participating in established educational internship programs.

(f) *Employer assisted health care* means health care benefits provided by employers for employees (or employees and their dependents) at employer cost or at an employer contribution towards the purchase of such health care benefits provided that the employer cost or contribution consists of at least one dollar and twenty cents (\$1.20) per hour. (Said amount shall be adjusted every two (2) years for inflation, by the chief administrative officer of the city.)

(g) *Livable wage* has the meaning set forth in section 21-82.

(Ord. of 11-19-01)

Sec. 21-82. Livable wages required.

(a) Every covered employer shall pay each and every covered employee at least a livable wage as established under this article.

(1) For a covered employer that provides employer assisted health care, the livable wage shall be at least nine dollars and ninety cents (\$9.90) per hour on the effective date of this article [Dec. 19, 2001].

(2) For a covered employer that does not provide employer assisted health care, the livable wage shall be at least eleven dollars and sixty-eight cents (\$11.68) per hour on the effective date of this article [Dec. 19, 2001].

(3) Tipped covered employees and other covered employees whose compensation consists of more than hourly wages shall be paid an hourly wage which, when combined with the other compensation, will at least equal the livable wage as established under this article.

(b) The amount of the livable wage established in this section shall be adjusted by the chief administrative officer of the city, as of JulyMarch first of each year based upon a report of the Joint Fiscal Office of the State of Vermont that describes the basic needs budget for a single person utilizing a model of two (2) adults residing in a two (2) bedroom living unit in an urban area with the moderate cost food plan. Should there be no such report from the joint fiscal office, the chief administrative officer shall obtain and utilize a basic needs budget that applies a similar methodology. Prior to MayMarch first of each calendar year, the chief administrative officer will provide public notice of this adjustment by publishing a notice in a newspaper of general circulation, by posting a written notice in a prominent place in City Hall, by sending written notice to the city council and, in the case of covered employers that have provided an address of record to the chief administrative officer, by written letter to each such covered employer.

(c) Covered employers shall provide at least twelve (12) compensated days off per year for full-time covered employees, and a proportionate amount for part-time covered employees, for sick leave, vacation or personal leave.

(Ord. of 11-19-01)

Sec. 21-83. Applicability.

(a) This article shall apply to any service contract or grant, as provided by this article that is awarded or entered into after the effective date of the article [Dec. 19, 2001]. After the effective date of the article, entering into any agreement or an extension, renewal or amendment of any contract or grant as defined herein shall be subject to compliance with this article.

(b) The requirements of this article shall apply during the term of any service contract subject to the article. Covered employers who receive grants shall comply with this article during the period of time the city's funds are being expended.

(Ord. of 11-19-01)

Sec. 21-84. Enforcement.

(a) The City of Burlington shall require, as a condition of any contract or grant covered by this section, that the affected covered employer submit a written certification, under oath, confirming payment of a livable wage as a condition of entering into said contract or grant. The affected covered employer shall agree to post a notice regarding the applicability of this section in any workplace or other location where employees or other persons contracted for employment are working. The affected covered employer shall agree to provide payroll records or other documentation, as deemed necessary by the chief administrative officer of the City of Burlington within ten (10) business days from receipt of the city's request.

(b) The City of Burlington shall have the right to modify, terminate and/or seek specific performance of any contract or grant with an affected covered employer from any court of competent jurisdiction, if the affected covered employer has not complied with this article.

(c) Any covered employer who violates this article may be barred from receiving a contract or grant from the city for a period up to two (2) years from the date of the finding of violation.

(d) A violation of this article shall be a civil offense subject to a civil penalty of from twoone hundred dollars (\$2100.00) to five hundred dollars (\$500.00). All law enforcement officers and any other duly authorized municipal officials are authorized to issue a municipal complaint for a violation of this article. Each day any covered employee is not compensated as required by this article shall constitute a separate violation.

(Ord. of 11-19-01; Ord. of 2-17-04)

Sec. 21-85. Other provisions.

(a) No affected covered employer shall reduce the compensation, wages, fringe benefits or leave available to any covered employee in order to pay the livable wage required by this article. Any action in violation of this paragraph shall be deemed a violation of this article subject to the remedies of section 21-84.

(b) Where pursuant to a contract for services with the city, the contractor or subcontractor incurs a contractual obligation to pay its employees certain wage rates, in no case except as stated in subsection 21-85(c), shall the wage rates paid pursuant to that contract be less than the minimum livable wage paid pursuant to this article.

(c) Notwithstanding subsection 21-85(b), where employees are represented by a bargaining unit or labor union pursuant to rights conferred by state or federal law and a collective bargaining labor agreement is in effect governing the terms and conditions of employment of those employees, this chapter shall not apply to those employees, and the collective bargaining labor agreement shall control.

(d) Covered employers shall inform employees making less than twelve dollars (\$12.00) per hour of their possible right to the Earned Income Tax Credit under federal and state law.

(e) The chief administrative officer of the city shall have the authority to promulgate rules as necessary to administer the provisions of this article, which shall become effective upon approval by the city council.

(Ord. of 11-19-01)

#### Sec. 21-86. Exemptions.

A partial or complete exemption from the requirement of this article may be authorized based upon a determination that compliance with the livable wage requirement would cause substantial economic hardship. Requests for exemption shall be submitted to the chief administrative officer. The finance board of the city shall consider the request for exemption with prior notice provided to the city council. A unanimous decision by the finance board shall be final. A split decision by the finance board is reviewable by the city council not later than the next meeting of the city council which occurs after the date of the finance board decision.

(Ord. of 11-19-01)

#### Sec. 21-87. Severability.

If any part or parts or application of any part of this article is held invalid, such holding shall not affect the validity of the remaining parts of this article.

(Ord. of 11-19-01)

Secs. 21-88, 21-89. Reserved.



# Livable Wage Ordinance

**\*\*EFFECTIVE JULY 1, 2014\*\***

Are You  
Receiving  
A Livable  
Wage?

The Burlington Livable Wage Ordinance requires that if you are working on a specific City of Burlington service contract or subcontract above a certain amount your employer must pay you at least \$13.94 an hour with health insurance.

# \$13.94

If you are working on a specific City of Burlington service contract or subcontract above a certain amount your employer must pay you at least \$15.83 an hour without health insurance.

# \$15.83

What Are  
Your Rights  
Under the  
Livable Wage?

All employees who work directly on a City of Burlington service contract or a subcontract may be eligible. To find out if you are covered by the Livable Wage Ordinance you may call the Office of the Chief Administrative Officer at 802/865-7000.

Are You  
Eligible to  
Receive The  
Livable Wage?

Covered employees are required to be paid at least the above amounts. If you are covered and your employer reduces your pay, your employer shall be considered in violation. You are protected by law if you assert your rights under the Livable Wage Ordinance.

Why Report A  
Livable Wage  
Violation?

If your employer is required to be paying you the Livable Wage and is not, he or she may be required to pay you back wages and be subject to any other appropriate action as outlined in the Ordinance.

Employee  
Earned  
Income Tax  
Credit

Are you raising a family and making less than \$30,000? If so, you could be eligible to receive the Earned Income Tax Credit (EITC.) You may even be eligible if your income is so low that you do not owe any taxes. The EITC can reduce your taxes or provide a cash refund. There is a federal and state EITC, so ask about both. To find out if you qualify and how to get this benefit speak to your employer's payroll clerk or call IRS at 1.800.TAX.1040.

Certification of Compliance with the City of Burlington's Livable Wage Ordinance

I, \_\_\_\_\_, on behalf of \_\_\_\_\_  
(Contractor) and in connection with the \_\_\_\_\_ (project),  
hereby certify under oath that (1) Contractor shall comply with the City of Burlington's  
Livable Wage Ordinance; (2) as a condition of entering into this contract or grant,  
Contractor confirms that all covered employees, as defined by Burlington's Livable Wage  
Ordinance, shall be paid a livable wage for the term of the contract as determined and  
adjusted annually by the City of Burlington's Chief Administrative Officer, (3) a notice  
regarding the applicability of the Livable Wage Ordinance shall be posted in the workplace  
or other location where covered employees work, and (4) payroll records or other  
documentation, as deemed necessary by the Chief Administrative Officer, shall be provided  
within ten (10) business days from receipt of the City's request.

Dated at \_\_\_\_\_, Vermont this \_\_\_ day of \_\_\_\_\_, 20\_\_.

By: \_\_\_\_\_  
Duly Authorized Agent

Subscribed and sworn to before me: \_\_\_\_\_  
Notary

Burlington, Vermont, Code of Ordinances >> PART II - CODE OF ORDINANCES >> **Chapter 21 - OFFENSES AND MISCELLANEOUS PROVISIONS >> ARTICLE VIII. - UNION DETERRENCE >>**

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## **ARTICLE VIII. - UNION DETERRENCE**

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[Sec. 21-100. - Policy.](#)

[Sec. 21-101. - Definitions.](#)

[Sec 21-102. - Implementation](#)

[Sec. 21-103. - Enforcement](#)

[Secs. 21-104—21-110. - Reserved.](#)

### **Sec. 21-100. - Policy.**

It is the policy of the City of Burlington to limit letting contracts to organizations that provide union deterrence services to other companies.

*(Ord. of 3-27-06/4-26-06)*

### **Sec. 21-101. - Definitions.**

- (a) *Contractor or vendor.* A person or entity that has a contract with the City of Burlington primarily for the furnishing of services (as opposed to the purchasing of goods), including any subcontractors of such contractor or vendor.
- (b) *Government funded project.* Any contract for services which involves any City funds and the total amount of the contract is fifteen thousand dollars (\$15,000.00) or more. Burlington School Department contracts shall not be considered government funded projects under this article.
- (c) *Union deterrence services.* Services provided by a contractor, subcontractor or vendor that are not restricted to advice concerning what activities by an employer are prohibited and permitted by applicable laws and regulations, but extend beyond such legal advice to encouraging an employer to do any of the following:
  - 1) Hold captive audience, (i.e., mandatory) meetings with employees encouraging employees to vote against the union;
  - 2) Have supervisors force workers to meet individually with them to discuss the union;
  - 3) Imply to employees, whether through written or oral communication, that their employer may have to shut down or lay people off if the union wins the election;
  - 4) Discipline or fire workers for union activity;
  - 5) Train managers on how to dissuade employees from supporting the union.
- (d) *Substantial portion of income.* For the purposes of this article, substantial portion of income shall mean greater than ten (10) percent of annual gross revenues or one hundred thousand dollars (\$100,000.00), whichever is less.

*(Ord. of 3-27-06/4-26-06)*

### **Sec 21-102. - Implementation**

- (a) No contract for a government funded project shall be let to any contractor, subcontractor, or vendor who

- 1) Advises or has advised an employer to conduct any illegal activity in its dealings with a union.
  - 2) Advertises union deterrence services as specialty services;
  - 3) Earns a substantial portion of its income by providing union deterrence services to other companies in order to defeat union organizing efforts.
- (b) Prior to the commencement of work on a government funded project a contractor, subcontractor or vendor shall provide written certification that it has not advised the conduct of any illegal activity, it does not currently, nor will it over the life of the contract provide union deterrence services in violation of this article.

*(Ord. of 3-27-06/4-26-06)*

### **Sec. 21-103. - Enforcement**

- (a) Any contractor, subcontractor or vendor who files false or materially misleading information in connection with an application, certification or request for information pursuant to the provisions of this article or provided union deterrence services during the life of a contract for a government funded project shall be deemed to be in violation of this article.
- (b) The City of Burlington shall have the right to modify, terminate and or seek specific performance of any contract for a government funded project if the contractor, subcontractor or vendor has not complied with this article.

*(Ord. of 3-27-06/4-26-06)*

### **Secs. 21-104—21-110. - Reserved.**

Certification of Compliance with the City of Burlington's  
Union Deterrence Ordinance

I, \_\_\_\_\_, on behalf of \_\_\_\_\_ (Contractor)  
and in connection with \_\_\_\_\_ (City contract/project/grant),  
hereby certify under oath that \_\_\_\_\_ (Contractor) has not  
advised the conduct of any illegal activity, and it does not currently, nor will it over  
the life of the contract advertise or provide union deterrence services in violation of  
the City's union deterrence ordinance.

Dated at \_\_\_\_\_, Vermont this \_\_\_ day of \_\_\_\_\_, 20\_\_.

By: \_\_\_\_\_  
Duly Authorized Agent

Subscribed and sworn to before me: \_\_\_\_\_  
Notary

## Article VII Outsourcing

It is the policy of the City of Burlington to let service contracts to contractors, subcontractors and vendors who perform work in the United States.

(Ord. of 11-21-05/12-21-05)

### Sec. 21-91. - Definitions.

(a)

*Contractor or vendor.* A person or entity that has a contract with the City of Burlington primarily for the furnishing of services (as opposed to the purchasing of goods), including any subcontractors of such contractor or vendor.

(b)

*Government funded project.* Any contract for services which involves any city funds and the total amount of the contract is fifty thousand dollars (\$50,000.00) or more. Burlington School Department contracts shall not be considered government funded projects under this article.

(c)

*Outsourcing.* The assigning or reassigning, directly, or indirectly through subcontracting, of services under a government funded project to workers performing the work outside of the United States.

(Ord. of 11-21-05/12-21-05)

### Sec. 21-92. - Implementation.

(a)

No contract for a government funded project shall be let to any contractor, subcontractor, or vendor who is outsourcing, or causing the work to be performed outside of the United States or Canada.

(b)

Prior to the commencement of work on a government funded project a contractor, subcontractor or vendor shall provide written certification that the services provided under the contract will be performed in the United States or Canada.

(Ord. of 11-21-05/12-21-05)

### Sec. 21-93. - Exemption.

An exemption from requirements of this article may be authorized by the chief administrative officer based upon a determination that the services to be performed for the government funded project are not available in the United States or Canada at a reasonable cost. Any such exemption decision by the chief administrative officer shall be reported to the board of finance in writing within five (5) days. The board of finance may, if it should vote to do so, override the exemption decision if such vote occurs within fourteen (14) days of the date of the chief administrative officer's communication to such board.

(Ord. of 11-21-05/12-21-05)

Sec. 21-94. - Enforcement.

(a)

Any contractor, subcontractor or vendor who files false or materially misleading information in connection with an application, certification or request for information pursuant to the provisions of this article or outsources work on a government funded project shall be deemed to be in violation of this article.

(b)

A violation of this article shall be a civil offense subject to a civil penalty of from one hundred dollars (\$100.00) to five hundred (\$500.00). All law enforcement officers and any other duly authorized municipal officials are authorized to issue a municipal complaint for a violation of this article. Each day any violation of any provision of this article shall continue shall constitute a separate violation.

(c)

The City of Burlington shall have the right to modify, terminate and or seek specific performance of any contract for a government funded project if the contractor, subcontractor or vendor has not complied with this article.

*(Ord. of 11-21-05/12-21-05)*

Secs. 21-95—21-99. - Reserved.

Certification of Compliance with the City of Burlington's Outsourcing Ordinance

I, \_\_\_\_\_, on behalf of \_\_\_\_\_  
(Contractor) and in connection with the \_\_\_\_\_ (project),  
hereby certify under oath that (1) Contractor shall comply with the City of Burlington's  
Outsourcing Ordinance (Ordinance §§ 21-90 – 21-93); (2) as a condition of entering into  
this contract or grant, Contractor confirms that the services provided under the above-  
referenced contract will be performed in the United States or Canada.

Dated at \_\_\_\_\_, Vermont this \_\_\_\_ day of \_\_\_\_\_, 2013.

By: \_\_\_\_\_  
Duly Authorized Agent

Subscribed and sworn to before me: \_\_\_\_\_  
Notary

## Appendix D: Standard City of Burlington Insurance Requirements

### INSURANCE:

Prior to beginning any work the CONTRACTOR shall obtain the following insurance coverage from an insurance company registered and licensed to do business in the State of Vermont and having an A.M. Best insurance rating of at least A-, financial size category VII or greater ([www.ambest.com](http://www.ambest.com)). The certificate of insurance coverage shall be documented on forms acceptable to the CITY. Evidence of compliance with minimum limits and coverages, evidenced by a certificate of insurance showing policies and carriers that are acceptable to the CITY, must be received prior to the effective date of the Agreement. The insurance policies shall provide that insurance coverage cannot be canceled or revised without thirty (30) days prior notice to the CITY. In the event that this Contract extends to greater than one year, evidence of continuing coverage must be submitted to the CITY on an annual basis. Certified copies of any insurance policies may be required. Each policy (with the exception of professional liability and workers compensation) shall name the CITY as an additional insured for the possible liabilities resulting from the CONTRACTOR's actions or omissions. It is agreed that the liability insurance furnished by the CONTRACTOR is primary and non-contributory for all the additional insureds.

The CONTRACTOR is responsible to verify and confirm in writing to the CITY that:

- (a) All SUB-CONTRACTORS, agents or workers meet the minimum coverages and limits plus maintain current certificates of coverage for all SUB-CONTRACTORS, agents or workers. SUB-CONTRACTORS must comply with the same insurance requirements as the CONTRACTOR.
- (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 CONTRACTOR for the CONTRACTOR's operations. These are solely minimums that have been developed and must be met to protect the interests of the CITY.

### *GENERAL LIABILITY AND PROPERTY DAMAGE:*

With respect to all operations performed by the CONTRACTOR, SUB-CONTRACTORS, agents or workers, it is the CONTRACTOR's responsibility to insure that general liability insurance coverage, on an occurrence form, provides all major divisions of coverage including, but not limited to and with limits not less than:

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

1. General Aggregate	\$2,000,000
2. Products-Completed/Operations Aggregate	\$2,000,000
3. Personal & Advertising Injury	\$1,000,000
4. Each Occurrence	\$1,000,000
5. Fire Damage (Any one fire)	\$ 250,000
6. Med. Expense (Any one person)	\$ 5,000

*WORKERS' COMPENSATION:* With respect to all operations performed, the CONTRACTOR shall carry workers compensation insurance in accordance with the laws of the State of Vermont and ensure that all SUB-CONTRACTORS and subcontractors carry the same workers' compensation insurance for all work performed by them under this contract. Minimum limits for Employer's Liability:

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

*PROFESSIONAL LIABILITY INSURANCE:*

(a) General. The CONTRACTOR shall carry architects/engineers/professional liability insurance covering errors and omissions made during their performance of contractile duties with the following minimum limits:

\$3,000,000 - Annual Aggregate  
 \$1,000,000 - Per Occurrence

(b) Deductibles. The CONTRACTOR is responsible for any and all deductibles.

(c) Coverage. Prior to performing any work, the CONTRACTOR 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:* The CONTRACTOR 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 CITY or developed by the CONTRACTOR, SUB-CONTRACTOR, 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 CONTRACTOR to, and accepted by, the CITY.

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 CONTRACTOR shall carry commercial 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 for each occurrence.

UMBRELLA LIABILITY:

\$1,000,000 Each Event Limit

\$1,000,000 General Aggregate Limit