

Government of Newfoundland and Labrador Department of Environment, Climate Change and Municipalities Water Resources Management Division

PERMIT TO CONSTRUCT

Pursuant to the Water Resources Act, SNL 2002 cW-4.01, specifically Section(s) 37

Date:	OCTOBER 20, 2020	File No: <u>842.137.1</u> Permit No: <u>WS11416-2020</u>
Permit Holder:	Town of Burlington PO Box 39 Burlington NL A0K 1S0 info@townofburlington.ca	
Attention:	Mrs. Mary Lou Bartlett	
Re:	Burlington - Watermain Extension	

Permission is hereby given for : the installation of approximately 670 meters of 100 mm PVC C900 watermain, four post hydrants, and all related appurtenances to service four properties located on Bridge Street as shown in a set of three drawings entitled "Burlington Watermain Extension" as received from Cecon Ltd. on October 6, 2020.

- This Permit does not release the Permit Holder from the obligation to obtain appropriate approvals from other concerned municipal, provincial and federal agencies.
- The Permit Holder must obtain the approval of the Crown Lands Administration Division if the project is being carried out on Crown Land.
- This Permit is subject to the terms and conditions indicated in Appendices A and B (attached).
- It should be noted that prior to any significant changes in the design or installation of the proposed works, or in event of changes in ownership or management of the project, an amendment to this Permit must be obtained from the Department of Environment, Climate Change and Municipalities under Section 49 of the *Water Resources Act*.

(for) MINISTER

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APPENDIX A

Terms and Conditions for Permit

Water & Sewer General

- 1. Water pumped from excavations or work areas, or any runoff or effluent directed out of work sites, must have silt and turbidity removed by settling ponds, filtration, or other suitable treatment before discharging to a body of water. Effluent discharged into receiving waters must comply with the *Environmental Control Water and Sewage Regulations*, 2003.
- 2. All operations must be carried out in a manner that prevents damage to land, vegetation, and watercourses, and which prevents pollution of bodies of water.
- 3. Any areas adversely affected by this project must be restored to a state that resembles local natural conditions. Further remedial measures to mitigate environmental impacts on water resources can and will be specified, if considered necessary in the opinion of this Department.
- 4. All waste materials resulting from this project must be disposed of at a site approved by the Department of Service NL.
- 5. The works proposed must satisfy the requirements of the latest applicable codes and standards, and be consistent with or otherwise address the design criteria set out in the Department of Municipal Affairs and Environment publication *Guidelines for The Design, Construction, and Operation of Water and Sewerage Systems, 2005*, and as amended from time to time.
- 6. The work must be undertaken in strict compliance with the submitted documents and the latest version of the *Municipal Water, Sewer and Roads Master Construction Specifications*. A copy of all documents, including the *Municipal Water, Sewer and Roads Master Construction Specifications* must be available for viewing at the construction site office at all times.
- 7. Liaison is to be maintained with the Environmental Scientist representing the Drinking Water and Wastewater Section of this Department, during the construction and operation of the project. They shall be notified of the pre-construction and post-construction meetings so that they may attend, if deemed necessary. They can be reached at telephone (709)637-2034 **S**.
- 8. Officials of this Department may visit the project from time to time to ensure that work is carried out within the provisions of this Permit, and is not creating any environmental hazard.
- 9. Any changes in the approved works, or works other than those specified in the application, must be submitted, in writing, to this Department, and approved, in the form of an Amendment to this Permit, prior to any work.
- 10. Copies of this Permit, as well as any subsequent Amendments, must be provided to the contractor(s) who will be carrying out these works, and to the engineer's site representative.
- 11. The attached Completion Report (Appendix C) for Permit No. 11416 must be completed and returned to this Department upon completion of the approved works. Pictures must be submitted along with the completion report, showing the project site prior to and after development.
- 12. This Permit is valid for two years from the date of issue. Work must be completed by that date or the application and approval procedure must be repeated.

- 13. The drinking water and wastewater system shall be operated and maintained in accordance with the Permit to Operate issued by this Department.
- 14. Management of stormwater is the responsibility of the municipality or LSD. Stormwater management should focus on ensuring that the post-development stormwater runoff rate will be equal to or less than the predevelopment runoff rate. Any stormwater runoff has the potential to contribute to flooding downstream which may have liability issues for the municipality or LSD if not managed properly.
- 15. The Owner must update any drawings maintained of the drinking water or wastewater system to reflect the modification or replacement of the works, where applicable.

Water Systems

- 16. Wherever possible, water distribution system layouts should be designed to eliminate dead-end sections. Where dead-end mains cannot be avoided, they should be provided with a fire hydrant, blow off, or other acceptable measures taken to prevent problems associated with stagnation.
- 17. Under no circumstances shall sewage be permitted to enter the waterline trench during or after construction.
- 18. All new waterlines and appurtenances shall be hydrostatically tested in accordance with the *Municipal Water*, *Sewer and Roads Specifications*.
- 19. Water mains must not pass within 15 metres of any part of a sewage disposal system. Water service lines must not pass within 7.5 metres of a sewage disposal system. In general the following conditions should be met in regards to water service lines:
 - (a) There should be no joint in the service line between the building and the connection to the watermain.
 - (b) The groundwater level should not be above the service line.
 - (c) The service line should be located upslope of the sewage disposal system.

If the above conditions are not met, consideration should be given to increasing the distance between the service line and the sewage disposal system, providing extra protection against contamination.

- 20. All components, lubricants and chemicals provided shall be compatible for use with drinking water and shall meet the requirements of ANSI/NSF 60 Drinking Water Treatment Chemical Standard and ANSI/NSF 61 Drinking Water and System Component Standard and any other standard applicable to potable water.
- 21. All buildings receiving a water service only must have their sewage disposal systems inspected and approved by the Regional Office of Service NL before connection to the water system. Buildings with an inadequate method of sewage disposal must not be permitted to connect to the system.
- 22. Buildings or homes to be connected to this system must have their private supplies permanently disconnected so as not to create a cross-connection with the town's water distribution system.
- 23. All new lines and appurtenances must be disinfected by an approved method described in the latest edition of the AWWA C651 Standard for Disinfecting Watermains and using only chlorine products that meet the NSF 60 standard.

- 24. After final flushing and before the new water main is commissioned into service, bacteriological sampling must be conducted as per the latest edition of the AWWA C651 Standard for Disinfecting Watermains. Two acceptable options are available: (1) two consecutive sets of bacteriological samples, taken at least 16 hours apart, must be collected and tested for bacteriological quality, or (2) following a 16 hour rest period two consecutive sets of samples, taken 15 minutes apart, must be collected and tested for every 366 m of new water main including the end of the main line and the end of each branch line. These sampling locations shall be determined by the engineer. A copy of test results must be submitted to this Department (Water Resources Management Division) before the new watermain is placed into service. In the event of any bacteria detected in the sample results, flushing and re-sampling may be attempted or the disinfection process will need to be repeated until results for two consecutive sets of samples are bacteria free. Where necessary, this Department should be contacted to determine provisions for the disposal of heavily chlorinated water.
- 25. For the purpose of disinfecting new or upgraded watermains, connection may only be made to the existing watermain provided a value is installed that maintains a water tight seal. This value may be operated to flush the new water extension before disinfection and post disinfection provided adequate measures and procedures are followed to avoid a backflow and contamination of the existing system.
- 26. The additional maximum demand for water exerted by consumers who are serviced by this project must not result in an exceedance of the available yield of the water source, maximum rated capacity of the water distribution system, or drinking water treatment plant as specified in the Permit to Operate.
- 27. Additional water services resulting from this project will not adversely affect the distribution system's ability to maintain a minimum pressure of 140 kPa (20 psi) at ground level at all points in the distribution system under maximum day demand plus fire flow conditions.

Miscellaneous

28. The Permit Holder must prevent erosion of drainage ditches, streams or other natural bodies of water by installing rip-rap and/or sodding.

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APPENDIX B

Special Terms and Conditions for Permit

- The Permit Holder and its agent(s), subcontractor(s), and consultant(s) shall keep all systems and works in good condition and repair and in accordance with all laws, by-laws, directions, rules and regulations of any governmental authority. The Permit Holder or its agent(s), subcontractor(s), or consultant(s) shall immediately notify the Minister if any problem arises which may threaten the structural stability of the systems and works, endanger public safety and/or the environment or adversely affect others and/or any body of water either in or outside the said Project areas. The Permit Holder and its agent(s), subcontractor(s), and consultant(s) shall be responsible for all damages suffered by the Minister and Government resulting from any defect in the systems and works, operational deficiencies/inadequacies, or structural failure.
- 2. The Permit Holder and its agent(s), subcontractor(s), and consultant(s) shall operate the said Project and its systems and works in a manner which does not cause any water related and/or environmental problems, including but not limited to problems of erosion, deposition, flooding, and deterioration of water quality and groundwater depletion, in or outside the said Project areas. The Permit Holder and its agent(s), subcontractor(s), and consultant (s) shall be responsible for any and all damages associated with these problems caused as a result of changes, deficiencies, and inadequacies in the operational procedures by the Permit Holder or its agent(s), subcontractor(s), or consultant(s).
- 3. If the Permit Holder or its agent(s), subcontractor(s), or consultant(s) fails to perform, fulfil, or observe any of the terms and conditions, or provisions of this Permit, as determined by this Department, the Minister may, without notice, amend, modify, suspend or cancel this Permit in accordance with the *Water Resources Act*.
- 4. The Permit Holder and its agent(s), subcontractor(s), and consultant(s) indemnify and hold the Minister and Government harmless against any and all liabilities, losses, claims, demands, damages or expenses including legal expenses of any nature whatsoever whether arising in tort, contract, statute, trust or otherwise resulting directly or indirectly from granting this Permit, systems and works in or outside the said Project areas, or any act or omission of the Permit Holder or its agent(s), subcontractor(s), or consultant(s) in or outside the said Project areas, or arising out of a breach or non-performance of any of the terms and conditions, or provisions of this Permit by the Permit Holder or its agent(s), subcontractor(s).
- 5. This Permit is subject to all provisions of the *Water Resources Act* and any regulations in effect either at the date of this Permit or hereafter made pursuant thereto or any other relevant legislation enacted by the Province of Newfoundland and Labrador in the future.
- 6. This Permit shall be construed and interpreted in accordance with the laws of the Province of Newfoundland and Labrador.

cc: Mr. Bradley Burton CECON Limited 93 Edinburgh Ave Gander, NL, A1V 1C9 bburton@cecon.ca

cc: Ms. Deneen Spracklin, P.Eng. Environmental Engineer, Drinking Water and Wastewater Section Water Resources Management Division Department of Municipal Affairs and Environment P.O. Box 8700 4th Floor, West Block, Confederation Building St. John's, NL A1B 4J6 dspracklin@gov.nl.ca

cc: Mr. Wilf Maloney, P. Eng. Regional Engineer, Central Regional Office Department of Transportation and Infrastructure PO Box 2222 Gander, NL A1V 2N9 WilfMaloney@gov.nl.ca

 cc: Mr. Wayne Lynch (Central) Regional Director (Central) Digital Government and Service Newfoundland and Labrador P.O. Box 2222 Gander, NL A1V 2N9 waynelynch@gov.nl.ca

cc: Mr. Chris Blanchard, B.Tech.(Env), AScT Environmental Scientist Water Resources Management Division Department of Municipal Affairs and Environment P.O. Box 2006 Corner Brook, NL A2H 6J8 cblancha@gov.nl.ca



Government of Newfoundland and Labrador Department of Environment, Climate Change and Municipalities Water Resources Management Division

Appendix C - Completion Report

Pursuant to the Water Resources Act, SNL 2002 cW-4.01, specifically Section(s) 37

Date:	OCTOBER 20, 2020	File No: <u>842.137.1</u>	
		Permit No: WS11416-2020	
Permit Holder:	Town of Burlington		
	PO Box 39		
	Burlington NL A0K 1S0		
	info@townofburlington.ca		
Attention:	Mrs. Mary Lou Bartlett		

Re: Burlington - Watermain Extension

Permission was given for : the installation of approximately 670 meters of 100 mm PVC C900 watermain, four post hydrants, and all related appurtenances to service four properties located on Bridge Street as shown in a set of three drawings entitled "Burlington Watermain Extension" as received from Cecon Ltd. on October 6, 2020.

I (the Permit Holder named above or agent authorized to represent the Permit Holder) do hereby certify that the project described above was completed in accordance with the plans and specifications submitted to the Department of Environment, Climate Change and Municipalities and that the work was carried out in strict compliance with the terms and conditions of the Permit issued for this project.

Date:

Signature:

This completion report must be completed and forwarded to the following address upon completion of the approved work.

Department of Environment, Climate Change and Municipalities Water Resources Management Division PO Box 8700 St. John's NL A1B 4J6