

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

## PERMIT TO CONSTRUCT

Pursuant to the Water Resources Act, SNL 2002 cW-4.01, specifically Section(s) 37, 39, 48

Date:	SEPTEMBER 14, 2022	File No: <b>844.051.001</b> Permit No: <u>WS12760-2022</u>
Permit Holder:	Local Service District of New Chelsea to Lead Cove General Delivery Brownsdale NL A0B 1H0	
Attention:	Terry Button	
Re:	New Chelsea-New Melbourne-Brownsdale-Sibley's Cove	e-Lead Cove - Water System Upgrade

Permission is hereby given for : the installation of approximately 15 metres of HDPE water intake pipe and intake screen, 20 metres of 100 mm HDPE pre-insulated watermain, and all works and appurtenances described in a set of drawings titled "Local Service District New Chelsea - Lead Cove Water System Upgrade" as submitted by Harris & Associates Limited on August 19, 2022; MI project number 17-GI-22-00028.

- 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 and Climate Change under Section 49 of the *Water Resources Act*.

(for) MINISTER

### GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Environment and Climate Change

File No: **<u>844.051.001</u>** Permit No: **<u>WS12760-2022</u>** 

## **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 Digital Government and 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 this Department's 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 preconstruction and post-construction meetings so that they may attend, if deemed necessary. They can be reached at telephone (709) 729-2558.
- 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. 12760 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 pre-development 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. All new waterlines and appurtenances shall be hydrostatically tested in accordance with the *Municipal Water*, *Sewer and Roads Specifications*.
- 17. 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.

- 18. 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.
- 19. When crossing watercourses which are greater than 4.5 m in width, valves should be provided at both ends of water crossings so that the section can be isolated for testing or repair and the valves shall be easily accessible and not subject to flooding.
- 20. 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.
- 21. 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.
- 22. For the purpose of disinfecting new or upgraded watermains, connection may only be made to the existing watermain provided a valve is installed that maintains a water tight seal. This valve 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.
- 23. The existing watermain that is being taken out of service must be permanently disconnected so as not to create a cross-connection with the town's water distribution system.

#### Miscellaneous

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

## Intake

- 25. A water supply intake may be placed in Sibley's Cove Pond as part of the water supply system for the Local Service District of New Chelsea-New Melbourne-Brownsdale-Sibley's Cove-Lead Cove .
- 26. The intake shall be extended by 15 metres and consist of 200 mm diameter HDPE pipe equipped with an intake screen assembly.
- 27. The intake must be fitted with a removable mesh screen or a trash rack.
- 28. Intake ports must be located above the bottom of the stream, lake or impoundment, but at sufficient depth to be kept submerged at low water levels and below ice level. The intake structure must not draw air.
- 29. Adequate protection must be provided against clogging by sediment, debris, ice, frazil ice, wind, floatation and wave pressure.

## **PPWSA General**

- 30. All persons working on this project must be informed that they are within a Protected Public Water Supply Area, and must be made aware of all conditions of this Permit. A copy of this Permit must be on site during operations.
- 31. Equipment storage, maintenance facilities associated with this project, and all maintenance other than emergency repairs must not be located/carried out within the Protected Public Water Supply Area.
- 32. The Department reserves the right to require that the Permit Holder follow, and cover all costs incurred by the Permit Holder or this department, associated with any water quality monitoring program that may be ordered by the Minister for the purpose of ensuring that the water quality is maintained within acceptable guidelines.
- 33. The felling or disposing of trees, parts of trees, sawdust, bark, logging debris or slash into a water body or upon the frozen surface of a water body is strictly prohibited.
- 34. Treated wood shall not be used in a water body or within 150 meters of Sibley's Cove Pond measured from the high water mark. The use of creosote treated wood anywhere within the Protected Public Water Supply Area is strictly prohibited.
- 35. The Permit Holder must inspect the site daily, and any water quality impairment related problems are to be reported immediately to the Environmental Scientist at (709)729-4817.
- 36. Any changes in water quality resulting directly from this project, rendering the water unsuitable as a public water supply, are the responsibility of the Permit Holder. The Minister may order the Permit Holder to provide an alternate source of potable water to the affected community until water quality returns to an accepted level.
- 37. All vehicles and equipment must be in good working order with no leaking fuel, oil, or other harmful substances that could impair water quality.
- 38. All stationary motorized equipment and associated fuel tanks shall have metal trays, absorbent pads or impervious liners under them to catch and contain in excess of 110 % of the aggregate volume of any fuel, lubricant and oil.
- 39. Where permits, licences, approvals or authorizations are issued by multiple governments departments or agencies, in the case of similar conditions, the more stringent of those shall prevail; in the case of conflicting conditions, the Permit Holder shall seek clarification and direction in writing from each of the respective departments or agencies.

- 40. The Permit Holder is required to ensure that adequate sanitary (bathroom) facilities are available or provided on site. This may be in the form of a portable toilet, chemical toilet, pit privy (outhouse), sub-surface disposal system, or municipal sewer system. If a portable toilet or chemical toilet is used, the waste water must be disposed of in a septic disposal system approved by Service NL, or at an approved waste disposal site, outside the Protected Public Water Supply Area in accordance with the Environmental Protection Act, SNL 2002 cE-14.2. If a pit privy (outhouse) or sub-surface disposal system is used, it must be located outside the required buffers, and be subject to Service NL standards, requirements and approval.
- 41. The issuance of this permit does not guarantee, nor set precedent, that additional or similar permits or amendments will be issued in this or any other Protected Public Water Supply Area for additional or similar activity or development.

## **Fuel Storage**

- 42. There shall be no bulk fuel storage associated with this project within the protected water supply area. Fuel shall be brought to the operating area in no more than two (2), 205 litre barrels or one (1) 500 litre slip tank. The Permit Holder is hereby informed that fuel storage and handling requires a separate approval under the *Storage and Handling of Gasoline and Associated Products Regulations*, CNR 775/96.
- 43. A complete oil spill clean-up kit must be on site at all times when gasoline or fuel powered equipment is being used or refueled. The kit must contain the following:
  - Fire pump and 100 metres of hose
  - Two hand operated fuel pumps
  - Six recovery containers such as empty 205 litre drums
  - Four shovels
  - Two pick axes
  - Ten metres of containment boom
  - Twenty-five absorbent pads
  - One hundred litres of loose absorbent material
- 44. Any spills of gasoline, fuel or oil, regardless of volume, shall be reported immediately to the Environmental Scientist at (709)729-4817. Furthermore, all spills in excess of 70 litres shall be reported immediately to the 24 hour spill report line at 1-800-563-9089.
- 45. Contaminated snow and soil must be removed from the site and disposed of at an approved location outside the protected public water supply area, in accordance with the *Environmental Protection Act, SNL 2002 cE-14.2*.
- 46. Refueling sites shall be located at least 150 metres from any water body or wetland.

#### Water Intake

- 47. The constructed works must be inspected regularly so that action can be taken to undertake repairs as required.
- 48. The installation of the water supply pipe must comply with the manufacturers specifications, particularly with regard to pipe zone bedding material, degree of compaction, and maximum minimum pipe cover for design loadings.

#### **General Alterations**

- 49. Any work that must be performed below the high water mark must be carried out during a period of low water levels.
- 50. Any flowing or standing water must be diverted around work sites so that work is carried out in the dry.
- 51. The use of heavy equipment in streams or bodies of water is not permitted. The operation of heavy equipment must be confined to dry stable areas.

- 52. All vehicles and equipment must be clean and in good repair, free of mud and oil, or other harmful substances that could impair water quality.
- 53. During the construction of concrete components, formwork must be properly constructed to prevent any fresh concrete from entering a body of water. Dumping of concrete or washing of tools and equipment in any body of water is prohibited.
- 54. Wood preservatives such as penta, CCA or other such chemicals must not be applied to timber near a body of water. All treated wood or timber must be thoroughly dry before being brought to any work site and installed.
- 55. The bed, banks and floodplains of watercourses, or other vulnerable areas affected by this project, must be adequately protected from erosion by seeding, sodding or placing of rip-rap.
- 56. Periodic maintenance such as painting, resurfacing, clearing of debris, or minor repairs, must be carried out without causing any physical disruption of any watercourse. Care must be taken to prevent spillage of pollutants into the water.
- 57. The owners of structures are responsible for any environmental damage resulting from dislodgement caused by wind, wave, ice action, or structural failure.
- 58. Sediment and erosion control measures must be installed before starting work. All control measures must be inspected regularly and any necessary repairs made if damage is discovered.
- 59. Fill material must be of good quality, free of fines or other substances including metals, organics, or chemicals that may be harmful to the receiving waters.
- 60. The location of the work is highlighted on the Location Map for this Permit attached as Appendix D.
- 61. All work must be carried out within the Permit Holder's legal property boundaries.

#### **Special Conditions**

62. Fill material must be obtained from an approved quarry site. It must not be taken from beaches or streams, and must not be dredged from a body of water.

### GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Environment and Climate Change

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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: David Peddle, C.Tech. Harris & Associates Limited 48 Crowdy Street, P.O. Box 699 Carbonear, NL A1Y 1C2 david.peddle@nf.aibn.com
- cc: Christa Skinner Environmental Scientist Water Resources Management Division Dept. of Environment and Climate Change P.O. Box 8700 4th Floor, West Block, Confederation Building St. John's, NL A1B 4J6 christavskinner@gov.nl.ca

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

cc: Ms. Paula Dawe, P.Eng. Manager, Drinking Water and Wastewater Section Water Resources Management Division Department of Environment and Climate Change P.O. Box 8700 4th Floor, West Block, Confederation Building St. John's, NL A1B 4J6 pauladawe@gov.nl.ca

cc: Richard Harvey, Ph.D., P.Eng. Manager, Water Rights, Investigations and Modelling Section Water Resources Management Division Department of Environment and Climate Change RHarvey@gov.nl.ca

- cc: Frank Norman (Eastern) Land Management Specialist Crown Lands Administration Department of Fisheries, Forestry and Agriculture Howley Building St. John's franknorman@gov.nl.ca
- cc: Mr. Inayat Rehman, P.Eng. Regional Engineer Department of Transportation and Infrastructure P.O. Box 8700 St. John's, NL A1B 4J6 inayatrehman@gov.nl.ca

- cc: Mr. Dean Shute (Harbour Grace Eastern) Manager of Operations, GSC-Harbour Grace Digital Government and Service NL 7-9 Roddick Crescent PO Box 512 Harbour Grace NL A0A 2M0 deanshute@gov.nl.ca
- cc: Fisheries Protection Division Ecosystem Management Branch Fisheries and Oceans Canada P.O. Box 5667 St. John's, NL A1C 5X1 FPP-NL@dfo-mpo.gc.ca



## **Appendix C - Completion Report**

Pursuant to the Water Resources Act, SNL 2002 cW-4.01, specifically Section(s) 37, 39, 48

Date:	SEPTEMBER 14, 2022	File No: <u>844.051.001</u> Permit No: <u>WS12760-2022</u>
Permit Holder:	Local Service District of New Chelsea to Lead Cove General Delivery Brownsdale NL A0B 1H0	
Attention:	Terry Button	
Re:	New Chelsea-New Melbourne-Brownsdale-Sibley's Cove-Lead C Upgrade	ove - Water System

Permission was given for : the installation of approximately 15 metres of HDPE water intake pipe and intake screen, 20 metres of 100 mm HDPE pre-insulated watermain, and all works and appurtenances described in a set of drawings titled "Local Service District New Chelsea - Lead Cove Water System Upgrade" as submitted by Harris & Associates Limited on August 19, 2022; MI project number 17-GI-22-00028.

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 and Climate Change 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 and Climate Change Water Resources Management Division PO Box 8700 St. John's NL A1B 4J6

File No: **<u>844.051.001</u>** Permit No: **WS12760-2022** 

# APPENDIX D Location Map for Permit



#### New Intake installation in Sibleys Cove Pond