

PERMIT TO CONSTRUCT

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

Date: **SEPTEMBER 20, 2018**

File No: **841.013.1**
Permit No: **WS9871-2018**

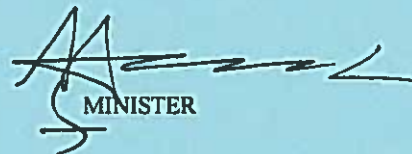
Permit Holder: **Town of Hopedale
PO Box 190
Hopedale NL A0P 1G0**

Attention: **Ms. Marjorie Flowers**

Re: **Hopedale - Sanitary Sewer and Roads Upgrades**

Permission is hereby given for : the installation of 692 m of 200 mm diameter PVC sewer main and related works and appurtenances as described in a specification entitled "Inuit Community Government Hopedale Various Road and Sanitary Sewer Upgrades" as well as a set of thirteen drawings as received from Wood Environment & Infrastructure Solutions on August 24, 2018 and additional information provided on September 18, 2018.

- 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 Municipal Affairs and Environment under Section 49 of the *Water Resources Act*.
- Failure to comply with the terms and conditions will render this Permit null and void, place the Permit Holder and their agent(s) in violation of the *Water Resources Act* and make the Permit Holder responsible for taking any remedial measures as may be prescribed by this Department.



MINISTER

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. 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.
5. 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.
6. 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 .
7. 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.
8. 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.
9. 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.
10. The attached Completion Report (Appendix C) for Permit No. 9871 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.
11. 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.
12. The wastewater system shall be operated and maintained in accordance with the Permit to Operate issued by this Department.
13. 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.
14. The Owner must update any drawings maintained of the wastewater system to reflect the modification or replacement of the works, where applicable.

Sewer Systems

15. Safety landings to be installed in all manholes over 5m in depth and in accordance with the Municipal Master Specification.
16. Storm water drainage, including roof drains, weeping tile drains, and street drainage, shall not be connected to the sanitary sewer system.

17. In the event that private or existing sewer lines are disturbed during construction, the lines are to be restored to their original *working* condition. Care shall be taken to ensure that soil or other material does not enter the lines to cause blockage.
18. Drop manholes must be provided for lateral sanitary sewers entering a manhole at an elevation of 600 mm or more above the manhole invert. Where the difference between the incoming sanitary sewer and the manhole invert is less than 600 mm, the invert should be filleted to prevent deposition of solids.
19. The flow channel through manholes should be made to conform in shape and slope to that of the sanitary sewer.
20. The direct connection of sanitary sewer service lines to manholes is prohibited unless the service enters at the flow line of the manhole. In this instance, filleting must be provided to prevent solids deposition.
21. All sanitary sewers shall be laid or covered with sufficient depth of suitable material to prevent frost penetration and damage from traffic loading.
22. For sanitary sewers with low percentage grade or slope, council accepts the slopes and any additional maintenance required if cleansing velocities are insufficient.

Miscellaneous

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

PPWSA General

24. 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.
25. Outside of this project an undisturbed (no cutting or ground disturbance) buffer zone of at least 150 metres shall be maintained around American Pond and Supplemental Pond, at least 50 metres along both sides of all streams and main tributaries running into American Pond and Supplemental Pond, and at least 30 metres around all ponds and along both sides of all other water bodies. Activity or development within these buffer zones is prohibited. All buffer zones must be marked with signs or flagging tape to avoid encroachment into the buffer zones.
26. 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.
27. All waste material is to be collected in refuse containers, and disposed of 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.*
28. 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.
29. Officials of the Department and the appropriate Municipal Authority, Operator, or Watershed Management Committee may visit the site to ensure compliance with this Permit.
30. Liaison is to be maintained with the appropriate Municipal Authority and Environmental Scientist. If there are any specific problems (ie sedimentation, fuel spill, other potential water quality impairment), the appropriate Town Manager/Clerk, must be notified immediately at (709)933-3864. The Environmental Scientist must also be notified immediately at (709)637-2542.
31. 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.
32. Motorized vehicles, including snowmobiles and ATVs, shall not be used to cross the frozen surface of the intake pond within the Protected Public Water Supply Area.
33. 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 637-2034 and the appropriate Municipal Authority or at (709)933-3864.
34. The location of the work is highlighted on the Location Map for this Permit attached as Appendix D.
35. 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.

36. All vehicles and equipment must be in good working order with no leaking fuel, oil, or other harmful substances that could impair water quality.
37. All stationary motorized equipment and fuel tanks shall have metal trays, absorbent pads or impervious liners under them to catch any leaking fuel or oil.
38. Drainage from roads and other disturbed areas into any body of water must first be discharged into a settling pond, a vegetated area or pass through a sedimentation fence where all suspended material can settle out before draining into any body of water.
39. Any streams not visible on a 1:50,000 scale map (including field identified streams) shall require a minimum buffer of 30 m.
40. For any clearing inside buffer zones: no ground disturbance (no disturbance to the root mat, no grubbing, or removal of soil) shall take place in the buffer zones. The Permit Holder is to ensure that the appropriate best practices are employed to prevent any detrimental effects that could impact water quality. Where possible, work in buffer zones shall be completed when the ground is frozen.

Fuel Storage

41. 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. Refueling sites shall be located at least 150 metres from any water body or wetland. 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.
42. 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
43. 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*.
44. Any spills of gasoline, fuel or oil, regardless of volume, shall be reported immediately to the Environmental Scientist and the appropriate Municipal Authority by calling 637-2034 and (709) 933-3864 respectively. Furthermore, all spills in excess of 70 litres shall be reported immediately to the 24 hour spill report line at 1-800-563-9089.

Protected Miscellaneous

45. Every effort must be made to avoid soil, sediment or rock from eroding into the ponds, with special care taken within the 150m buffer around the ponds as this area may be sensitive to erosion and sedimentation issues. Road widening activities (filling in) must occur on the land side of the existing road and not on the side adjacent to American Pond.
46. The Permit Holder is required to provide this Department with all documentation, information and data which may be requested or required in order to carry out the inspection or investigation.
47. Wood and brush removed from the work site must not be stored within undisturbed buffer zones of any water body.

Special Conditions

48. There will be no use of ammonium nitrate-fuel mixtures inside the 150m buffer of American Pond and Supplemental Pond due to the production of toxic by-products (ammonia).
49. All 'shock tubes' and detonation wires are to be recovered and removed after each blast.
50. If multiple charges are required, time delay detonation initiators (blasting caps) should be used to reduce the overall detonation to a series of discrete explosions. Time delays for discrete explosions should be greater than 25ms.
51. To limit the potential impacts on the ponds, the magnitude of the explosions shall be limited to only those which are absolutely necessary. Explosions must be designed to ensure no adverse effects to American Pond or Supplemental Pond that may impact drinking water quality or quantity.

52. Blasting shall be performed under the direct supervision of a blaster who is present at the project and who holds a valid blaster's certificate which authorizes the performance of the particular type of work that the blaster is to conduct or supervise.
53. Blasting mats will be used to control fly rock and debris from blasting activities.

APPENDIX B
Special Terms and Conditions for Permit

1. 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 and/or Ministerial orders and guidelines, as determined by this Department, the Minister may, after providing ten (10) day notice to the Permit Holder, 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), or consultant(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. Chris Blanchard, B.Tech.(Env), ASCT
Environmental Scientist
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- cc: Ms. Carla Hayes, P.Tech
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Appendix C - Completion Report

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

Date: **SEPTEMBER 20, 2018**

File No: **841.013.1**
Permit No: **WS9871-2018**

Permit Holder: **Town of Hopedale
PO Box 190
Hopedale NL A0P 1G0**

Attention: **Ms. Marjorie Flowers**

Re: **Hopedale - Sanitary Sewer and Roads Upgrades**

Permission was given for : the installation of 692 m of 200 mm diameter PVC sewer main and related works and appurtenances as described in a specification entitled "Inuit Community Government Hopedale Various Road and Sanitary Sewer Upgrades" as well as a set of thirteen drawings as received from Wood Environment & Infrastructure Solutions on August 24, 2018 and additional information provided on September 18, 2018.

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 Municipal Affairs and Environment 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 Municipal Affairs and Environment
Water Resources Management Division
PO Box 8700
St. John's NL A1B 4J6

APPENDIX D
Location Map for Permit

