

## PERMIT FOR DEVELOPMENT

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

Date: **MAY 25, 2018**

File No: **550-01-01-07-060**  
Permit No: **PRO9667-2018**

Permit Holder: **Department of Transportation and Works  
Clareville Regional Office  
3 Duffett Place  
Clareville, NL A5A 1E9**

Attention: **Austin Ivany**

Re: **Elliston - Big Pond PPWSA - Linear Development - Dept. Transportation and Works**

Permission is hereby given for : upgrade and pave Route 238 as per Environmental Protection Plan (March 2018) project overview description within the Big Pond Protected Public Water Supply Area (used by the town of Elliston) with reference to the application dated Feb 9, 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**

---

**PPWSA General**

1. 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.
2. 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.
3. 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.
4. The attached Completion Report (Appendix C) for Permit No. 9667 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.
5. 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.
6. 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.*
7. 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 additional 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.
8. Officials of the Department and the appropriate Municipal Authority, Operator, or Watershed Management Committee may visit the site to ensure compliance with this Permit.
9. 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, Mayor, Chair of the Local Service District Committee, or Chair of the Water Supply Committee must be notified immediately at (709)468-2649. The Environmental Scientist must also be notified immediately at (709)729-4817.
10. Treated wood shall not be used in a water body or within 150 metres of the high water mark of any water body. The use of creosote or pentachlorophenol treated wood anywhere within the Protected Public Water Supply Area is strictly prohibited.
11. 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.
12. All vehicles and equipment must be in good working order with no leaking fuel, oil, or other harmful substances that could impair water quality.
13. 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.
14. 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.
15. Any streams not visible on a 1:50,000 scale map (including field identified streams) shall require a minimum buffer of 30 m.
16. The felling or disposing of trees, parts of trees, sawdust, bark, brush, debris or slash into a water body or upon the frozen surface of a water body is strictly prohibited. Sawdust, bark, and logs and/or brush must not be stored within 150 metres of Big Pond or 50 metres of any other body of water, and must be removed at regular intervals to prevent excessive accumulation inside the PPWSA.

### **Fuel Storage**

17. A complete oil spill clean-up kit must be on site in close proximity to active construction site all times when gasoline or fuel powered equipment is being used or refueled inside the PPWSA. 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
18. 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.
19. Any spills of gasoline, fuel or oil, regardless of volume, shall be reported immediately to the Environmental Scientist and the appropriate Municipal Authority or Watershed Management Committee by calling (709)729-4817 and (709)468-2649 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**

20. For clearing inside 150 metres of Big Pond and 50 metres within any main tributaries that run into Big Pond: The Permit Holder is to ensure that the appropriate best practices are employed to prevent any detrimental effects that could impact water quality.
21. The site must be inspected daily while activity is ongoing inside the PPWSA, and any water quality impairment related problems are to be reported immediately to the Environmental Scientist at (709)729-4817 and the appropriate Municipal Authority or Watershed Monitoring Committee at (709)468-2649.
22. 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.

### **Special Conditions**

23. Dust control measures shall be utilized when necessary inside the PPWSA to limit dust settlement on vegetation, Big Pond and any tributaries that run into Big Pond. Chemical based suppressions shall not be used inside a PPWSA, however water can be used to suppress dust.
24. The Permit Holder is required to undertake a water quality monitoring program as outlined below, and all water quality data must be submitted to this Department upon receipt from the laboratory.
- Grab water samples shall be collected near the intake area weekly during active construction phase of project when inside the PPWSA.
  - Water samples shall be collected before major construction begins, once per week while the operation is ongoing, and approximately 10 days after the completion of the project.
  - The following parameters shall be tested for: Alkalinity, Aluminium, Ammonia, Antimony, Arsenic, Barium, Boron, Bromide, Cadmium, Calcium, Chloride, Chromium, Colour, Conductivity, Copper, Dissolved Organic Carbon, Fluoride, Hardness, Iron, Lead, Magnesium, Manganese, Mercury, Nickel, Nitrate, Nitrite, pH, Potassium, Selenium, Sodium, Strontium, Sulphate, Total Dissolved Solids, Total Kjeldahl Nitrogen, Total Organic Carbon, Total Phosphorus, Turbidity, Uranium, Zinc, Total Suspended Solids.
  - Water temperature shall be taken at time of sampling and recorded on a field sheet along with sample identification number, location, date and time of sampling, and any special circumstances that may apply to the sample. Field sheets must be signed by person collecting the sample.
  - Special or extra samples may be required due to high rain events or specific incidents.
25. A sedimentation fence must be installed along the length of Big Pond. Dept. of Transportation and Works must inspect fence prior to construction activities beginning within 150m of Big Pond to ensure proper installation. Daily maintenance checks must be conducted while construction is on-going near Big Pond. Once no longer required, fence must be removed from site.

### **Culvert Design**

26. A 19 metre long - 800 mm diameter steel culvert may be installed across an Unnamed tributary flowing into Elliston Big Pond near the Town of Elliston.
27. The crossing structure must provide adequate capacity to safely discharge flood flows without causing backwater effects

upstream or increased flow velocity downstream.

#### **Culvert Installation**

28. To safely convey peak flows the culvert installation must be designed according to the following hydraulic criteria:

<b>Crossing Name / No.</b>	<b>Minimum Size (mm)</b>	<b>Number of Pipes</b>	<b>Length (m)</b>
Unnamed tributary flowing into Elliston Big Pond	800	1.0	19.0

29. Drainage ditches must collect and transport surface runoff in a manner that does not cause flooding, erosion or sedimentation of adjacent land or receiving waters.
30. Inlet and outlet areas of culvert installations must be adequately protected from erosion by placing rip-rap, fitted stone, or concrete headwalls.
31. Culvert installations must follow the stream channel gradient to the maximum extent possible and placed in line with the direction of the main flow to minimize disturbance to the channel. Culverts must not disrupt the flow of water or cause ponding at the upstream side of the installation.
32. In multiple culvert installations, one culvert must be set a minimum of 150 mm lower than the others to provide adequate water depth and velocity for fish passage during low flow conditions. In addition, multiple culverts must be installed within 0.6 to 0.9 metres apart for maximum stability.
33. Where pumping is used to bypass flow, cofferdams must be installed both above and below areas of construction. The Permit Holder must provide pumps with sufficient capacity to prevent washout of cofferdams.
34. Cofferdams must be properly designed and constructed of suitable materials to prevent leakage and to resist loss of any material as a result of erosion. Cofferdams must be removed upon completion of their intended function. All material must be removed carefully to prevent disturbance of the water body and to prevent water quality degradation.
35. Roadside embankments near the watercourse must be adequately protected from erosion by sodding, seeding or placing of rip-rap.
36. Grading and finishing of roadways or road embankments must not cause damage to culverts or allow road material to enter the watercourse.
37. All work involving minor alteration to the stream channel to permit culvert placement must be carried out at a time of low flow, and in a manner that prevents downstream siltation and unnecessary alteration of the channel.
38. Culverts must be inspected regularly so that immediate action can be taken to clear blockages caused by ice or debris or to undertake repairs as required.
39. The inlet and outlet of culverts must be clearly marked so that operators of road grading and snow clearing equipment can avoid blocking culverts.
40. Any damage to culverts during installation or due to inadequate capacity and/or improper construction must be reported to this Department. Damaged culverts must be replaced immediately to prevent overtopping, erosion, or flooding.

#### **General Alterations**

41. This Permit is valid until Dec. 31st, 2018. Work must be completed by that date or the application and approval procedure must be repeated or an amendment request may be made before expiry date.
42. If a culvert is installed in natural fish habitat it must be embedded a minimum of 150 mm below the natural streambed (up to a maximum of 1/3 of the culvert diameter).
43. Any work that must be performed below the high water mark must be carried out during a period of low water levels.
44. Any flowing or standing water must be diverted around work sites so that work is carried out in the dry.

45. 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*.
46. 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.
47. 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.
48. 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.
49. 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.
50. The owners of structures are responsible for any environmental damage resulting from dislodgement caused by wind, wave, ice action, or structural failure.
51. 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.
52. 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.
53. The location of culvert replacement is highlighted on the Location Map for this Permit attached as Appendix D.
54. All work must be carried out within the Permit Holder's legal property boundaries.

GOVERNMENT OF NEWFOUNDLAND AND LABRADOR  
Department of Municipal Affairs and Environment

File No: 550-01-01-07-060  
Permit No: PRO9667-2018

**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: Amir Ali Khan, Ph.D., P.Eng.  
Manager, Water Rights, Investigations and Modelling 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  
akhan@gov.nl.ca
- cc: Christa Skinner (E)  
Environmental Scientist, Drinking Water and Wastewater Section  
Water Resources Management Division  
Department of Municipal Affairs and Environment  
P.O. Box 8700  
4th Floor, West Block, Confederation  
St. John's, NL A1B 4J6  
christavskinner@gov.nl.ca
- cc: File Copy for Binder
- cc: Town of Elliston  
Ms. Donna Chaulk  
P.O. Box 115  
Elliston, NL A0C 1N0  
town\_elliston@yahoo.ca
- cc: Mohamed Mostafa, Ph.D., P.Eng., CEng MIEI., CPEng MIEAust.  
Environmental Engineer, Water Rights, Investigations and Modelling Section  
Water Resources Management Division  
Department of Municipal Affairs and Environment  
4th Floor, Confederation Building, West Block  
PO Box 8700, St. John's NL Canada A1B 4J6  
MohamedMostafa@gov.nl.ca
- cc: Mr. Rick Curran  
Director of Regional Operations Avalon , Service NL  
149 Smallwood Drive, Mount Pearl  
PO Box 8700  
St. John's NL A1B 4J6  
rjcurran@gov.nl.ca
- cc: Ms. Paula Dawe, P.Eng.  
Manager, 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 A1L 4J6  
pauladawe@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) 39, 48

Date: MAY 25, 2018

File No: 550-01-01-07-060  
Permit No: PRO9667-2018

Permit Holder: Department of Transportation and Works  
Clareville Regional Office  
3 Duffett Place  
Clareville, NL A5A 1E9

Attention: Austin Ivany

Re: Elliston - Big Pond PPWSA - Linear Development- Dept. Transportation and Works

Permission was given for : upgrade and pave Route 238 as per Environmental Protection Plan (March 2018) project overview description within the Big Pond Protected Public Water Supply Area (used by the town of Elliston) with reference to the application dated Feb 9, 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**

---



Second Attached Image File

