

PERMIT TO CONSTRUCT

Pursuant to the *Water Resources Act*, SNL 2002 cW-4.01, specifically Section(s) 36, 48

Date: **JULY 15, 2020**

File No: **842.144.1**
Permit No: **WS11165-2020**

Permit Holder: **Town of Channel-Port aux Basques**
PO Box 70
Port aux Basques NL
A0M 1C0
lmacisaac@portauxbasques.ca

Attention: **Mr. Leon MacIsaac**

Re: **Channel Port aux Basques - Grand Bay Bottom Sanitary Sewer Upgrades**

Permission is hereby given for : **the installation of 486 m of 200 mm diameter PVC sanitary sewer main, 62 m of 200 mm diameter HDPE sanitary sewer main, 85 m of 300 mm diameter HDPE sanitary sewer outfall pipe, 30 m of 150 mm diameter PVC sewage forcemain, 160 m of 100 mm diameter sewage forcemain, 92 m of 50 mm diameter PVC sewage forcemain, two above-ground self-priming sewage lift stations, one E-one sewage lift station and related works and appurtenances as described in a specification titled "Channel Port aux Basques, Grand Bay Bottom Sanitary Sewer Upgrades" as well as a set of revised drawings numbered CC19CPB111 (DMAE # 17-GI-20-00002), sheets C1 to C7 inclusive and E1 to E3 inclusive as received from Meridian Engineering Inc. on June 24, 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 Municipal Affairs and Environment under Section 49 of the *Water Resources Act*.



(for) 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. 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 .
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. 11165 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.

Water & Sewer Installation

15. Where the horizontal separation between watermains (including hydrant leads and drains) and gravity sanitary sewers is less than 3.0 metres, the watermain shall be laid in a separate trench, or on an undisturbed earth shelf located on one side of the sanitary sewer and at such an elevation that the invert of the watermain shall be a minimum of 450 mm above the crown of the sanitary sewer and 300 mm horizontally from the sanitary sewer measured edge to edge.
16. Watermains (including hydrant leads) crossing gravity sanitary sewers should be laid to provide a minimum vertical distance of 450 mm between the outside of the watermain and the outside of the sanitary sewer. This should be the case where the watermain is either above or below the sanitary sewer with preference to the watermain located above the sanitary sewer. At crossings, above or below, one full length of water pipe shall be located so both joints will be as far from the sanitary sewer as possible. Special structural support for the water and/or sewer pipes may be required.
17. There shall be at least **3.0 m** horizontal separation between water mains and sanitary sewer forcemains. Watermains crossing forcemains shall be laid to provide a minimum vertical separation of **450 mm** between the crown of the forcemain and the invert of the watermain. **Also in this regard, one full length of watermain should be centered over the forcemain so that both joints will be as far from the forcemain as possible.**

Sewer Systems

18. Safety landings to be installed in all manholes over 5m in depth and in accordance with the Municipal Master Specification.
19. Storm water drainage, including roof drains, weeping tile drains, and street drainage, shall not be connected to the sanitary sewer system.
20. 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.
21. 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.
22. The flow channel through manholes should be made to conform in shape and slope to that of the sanitary sewer.
23. 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.
24. All sanitary sewers shall be laid or covered with sufficient depth of suitable material to prevent frost penetration and damage from traffic loading.

Lift Stations and Forcemains

25. The sewage lift station must be equipped with a manual line transfer switch to accommodate an auxiliary power source during power outages.

26. Force mains shall enter the gravity sanitary sewer at a point not more than 600 mm above the flow line of the receiving manhole.
27. The direct connection of sanitary sewer services to sewage lift stations is not permitted. Connection may be made to a sanitary sewer main leading to the sewage lift station, or to a manhole immediately prior to the sewage lift station provided the sanitary sewer service lateral enters the manhole at the flow line.
28. Automatic air relief valves shall be placed at all high points in the forcemain to prevent air locking
29. Contingency plans must be established for mechanical and extended electrical failure for all sewage pumping stations. Alarm systems shall be activated in cases of power failure, pump failure, unauthorized entry, or any cause of pump station malfunction.
30. The proposed sewage pump station must be in compliance with the Department of Municipal Affairs and Environment *Municipal Water, Sewer and Roads Master Construction Specifications*.
31. A sewage pumping station shall be equipped with an alarm system that shall be activated in cases of power failure, pump failure, sump pump failure, unauthorized entry, or any cause of a pump station malfunction.
32. There shall be an airtight seal between the suction lift pumping station's enclosure and the wet well to prevent gases from entering the enclosure. In this regard if a sump is required for pump leakage in the enclosure, it shall not discharge to the wet well.
33. A sewage pumping station shall have a minimum suction line of 100 mm.

Outfalls and Overflows

34. A minimum of 3.0 metres of water cover at L.N.T. is required over the outfall outlet, and the end of the outfall shall extend a minimum of 30.0 metres from the mean low water mark.
35. The outfall or overflow shall be installed in such a manner as to protect against the effects of tides, floodwater, ice or other hazards to ensure continuous function.
36. A sign shall be posted indicating the location of the outfall.

Infilling

37. The slopes along the perimeter of infilled areas must be no steeper than two horizontal to one vertical (2H:1V).
38. The constructed works must be inspected regularly so that action can be taken to undertake repairs as required.
39. 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.
40. The natural course of any stream must not be altered.
41. Infilling must not cause increased water elevation upstream or increase flow velocity downstream of the site. Reduction of the natural cross sectional area of any watercourse is not permitted.
42. Infilling must not disrupt the established surface drainage pattern of the area.
43. Infilling must not cause increased water elevation upstream or increase flow velocity downstream of the site.
44. Before infilling, any vegetation and topsoil must be completely removed and under no circumstances shall it be used as fill material. Topsoil must be stored and reused in final landscaping of the infilled area.

45. The constructed works must comply with all other terms and conditions provided in the Crown Lands grant, lease, or license for occupancy.
46. Select heavy rocks must be placed along the toe of any infilling to provide slope stability and erosion protection.
47. A minimum 15 metre wide vegetated buffer zone must be maintained along the edge of the waterbody in order to provide bank stability and maintain local aesthetics.
48. All work must be carried out within the Permit Holder's legal property boundaries.

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. 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.
54. 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.
55. The owners of structures are responsible for any environmental damage resulting from dislodgement caused by wind, wave, ice action, or structural failure.
56. 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.
57. 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.
58. The location of the work is highlighted on the Location Map for this Permit attached as Appendix D.

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, 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), 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. Scott Smith, P.Eng.
Meridian Engineering Inc.
10 Thompson Street
Clarenville, NL, A5A 1Y9
ssmith@meridianengineering.ca
- 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: 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
- 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. Chris Power, P. Eng.
Regional Engineer, Western Regional Office
Department of Municipal Affairs and Environment
6th Floor, Sir Richard Squires Building
P.O. Box 2006
Corner Brook, NL A2H 6J8
ChrisPower@gov.nl.ca
- cc: Ms. Susan Hoddinott (Western/Labrador)
Regional Director
Service NL
PO Box 2006
Corner Brook NL A2H 6J8
SusanHoddinott@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) 36, 48

Date: **JULY 15, 2020**

File No: **842.144.1**

Permit No: **WS11165-2020**

Permit Holder: **Town of Channel-Port aux Basques
PO Box 70
Port aux Basques NL
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lmacisaac@portauxbasques.ca**

Attention: **Mr. Leon MacIsaac**

Re: **Channel Port aux Basques - Grand Bay Bottom Sanitary Sewer Upgrades**

Permission was given for : **the installation of 486 m of 200 mm diameter PVC sanitary sewer main, 62 m of 200 mm diameter HDPE sanitary sewer main, 85 m of 300 mm diameter HDPE sanitary sewer outfall pipe, 30 m of 150 mm diameter PVC sewage forcemain, 160 m of 100 mm diameter sewage forcemain, 92 m of 50 mm diameter PVC sewage forcemain, two above-ground self-priming sewage lift stations, one E-one sewage lift station and related works and appurtenances as described in a specification titled "Channel Port aux Basques, Grand Bay Bottom Sanitary Sewer Upgrades" as well as a set of revised drawings numbered CC19CPB111 (DMAE # 17-GI-20-00002), sheets C1 to C7 inclusive and E1 to E3 inclusive as received from Meridian Engineering Inc. on June 24, 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 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

