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) 36, 37, 48

Date: **APRIL 03, 2025**

File No: **844.080.004**
Permit No: **WS14059-2025**

Permit Holder: **67382 Newfoundland & Labrador Limited**
71 Airport Road
St. John's NL A1A 4Y3
toddcollins57@gmail.com

Attention: **Todd Collins**

Re: **Portugal Cove-St. Philips - Residential Subdivision Neary's Pond Road/Mallard's Lane**

Permission is hereby given for : **the installation of approximately 900 m of 200 mm PVC watermain, 900 m of 200 mm PVC sanitary sewer, 430 m of 100 mm HDPE sanitary sewer forcemain, new duplex submersible sewage lift station, a storm water detention pond, and all related appurtenances as described in the drawings titled, "Residential Subdivision Neary's Pond Road/Mallard's Lane" as received from MAE Design Limited on September 6, 2024 and revised drawings on March 19, 2025.**

- 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

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 pre-construction 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. 14059 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. 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 drinking water or wastewater system to reflect the modification or replacement of the works, where applicable.

Water Systems

15. Under no circumstances shall sewage be permitted to enter the waterline trench during or after construction.

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. Backflow prevention devices should/must be installed on service connections where there is a high risk of contamination of the potable water supply.

20. Drains in valve chambers shall be equipped with a backwater valve and screening to prevent the entry of insects, birds, and rodents.

21. 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.

22. 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.

23. 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 bacteriological quality. Sets of samples shall be collected 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.

24. 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.

25. 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.

26. Drain lines from air release/vacuum valves shall not discharge at the bottom of the chamber next to the floor drain unless there is an air gap on the line to prevent any possibility of backsiphonage of chamber water back into the potable water system. The air gap shall be located at a location on the line just above the crown of the watermain. If an air gap is not possible in this area, the drain line shall be shortened so it discharges higher than the crown of the watermain.

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.

28. 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.

Sewer Systems

29. Safety landings to be installed in all manholes over 5m in depth and in accordance with the Municipal Master Specification.

30. Storm water drainage, including roof drains, weeping tile drains, and street drainage, shall not be connected to the sanitary sewer system.

31. 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.

32. 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.

33. The flow channel through manholes should be made to conform in shape and slope to that of the sanitary sewer.

34. 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.

35. All sanitary sewers shall be laid or covered with sufficient depth of suitable material to prevent frost penetration and damage from traffic loading.

36. Where storm sewer and sanitary sewer service laterals are extended to property boundaries for future connections, the stub ends must be clearly marked to identify storm and sanitary lines to prevent possible cross-connections.

37. The additional wastewater produced by consumers who are serviced by this project must not result in an exceedance of the maximum rated capacity of the wastewater collection system or wastewater treatment plant as specified in the Permit to Operate.

38. Additional sewer services resulting from this project must not adversely affect the wastewater collection system causing surcharging or overflow conditions during peak flows.

Water & Sewer Installation

39. 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.

40. 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.

41. 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**.

Lift Stations and Forcemains

42. Forcemains shall enter the gravity sanitary sewer at a point not more than 600 mm above the flow line of the receiving manhole.

43. 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.

44. Automatic air relief valves shall be placed at all high points in the forcemain to prevent air locking

45. 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.

46. The proposed sewage pump station must be in compliance with the *Municipal Water, Sewer and Roads Master Construction Specifications*.

47. 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.

48. A sewage pumping station shall have a minimum suction line of 100 mm.

49. The proposed sewage lift station must be equipped with a manual line transfer switch to accommodate an auxiliary power source during power outages. A portable gas pump by itself is not acceptable.

Fuel Storage

50. All spills in excess of 70 litres shall be reported immediately to the 24 hour spill report line at 1-800-563-9089.

51. Refueling sites shall be located at least 30 metres from any water body or wetland.

52. The proponent is hereby informed that an application form for fuel storage must be obtained under the Storage and Handling of Gasoline and Associated Products Regulations, 2003.

53. A complete oil spill clean-up kit must be on site at all times when gasoline or fuel powered equipment is being used or refuelled. The kit must contain the following:
    - One hand operated fuel pump
    - One recovery container such as an empty 205 litre drum
    - One shovel
    - One pick axe
    - Five metres of containment boom
    - Five absorbent pads
    - Twenty-five litres of loose absorbent material

Storm Drainage Works

54. The storm sewer outfall must be set back to a reasonable distance and protected with riprap to prevent shoreline erosion and to allow settlement of the sediment particles before entering into the waterbody.

55. The storm sewer outfall will be placed as follows:

Outfalls ID	Location coordinate	Outfall diameter (mm)	Outfall length (m)	Outfall elevation (m)
Outfall 1	47.610873N, 52.83462W	450	20.5	150.39

56. Removal of streambank vegetation or trees is not permitted. Overhanging brush that collects snow and blocks ice movement may be pruned and cut back to allow free flow of water.

57. Outside the scope of work outlined in this Permit, a minimum 15 metre wide vegetated buffer zone must be maintained along the edge of all waterbodies in order to provide bank stability, maintain local aesthetics and to help protect water quality.

58. Outfalls 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.

59. A water quality monitoring program is not required at this time. However, the Department reserves the right to require that the Permit Holder sample, analyse, and submit results of water quality tests, for the purpose of ensuring that the water quality is maintained within acceptable guidelines. All analyses must be undertaken by a CALA accredited laboratory.

60. Adequate erosion protection must be provided in the area where storm/sewer outfall discharges.

61. To prevent erosion and to control sedimentation in drainage ditches with steep gradients, rock check dams must be installed at an interval such that the crest of each dam is level with the base of the one immediately above. The center of each dam must be lower than the sides.

General Alterations

62. Any work that must be performed below the high water mark must be carried out during a period of low water levels.

63. Any flowing or standing water must be diverted around work sites so that work is carried out in the dry.

64. 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.

65. 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.

66. 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.

67. 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.

68. 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.

69. 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.

70. The owners of structures are responsible for any environmental damage resulting from dislodgement caused by wind, wave, ice action, or structural failure.

71. 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.

72. 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.

73. The location of the work is highlighted on the Location Map for this Permit attached as Appendix D.

74. All work must be carried out within the Permit Holder's legal property boundaries.

75. This licence/permit does not constitute an acknowledgement of interest in any land claims adjacent.

Dam Safety

76. The dam has been conditionally identified as a very small dam. However, the consequences of failure of the dam should be reviewed periodically, since they may change with downstream development. If the consequences of dam operations or failure are likely to be unacceptable to the public the dam may be classified based on the 2007 Canadian Dam Association (CDA) guidelines and have to meet CDA best practices for that class of dam.

Dam Maintenance

77. The transportation of labour and materials to the site must be along existing access roads.

78. The dam and associated works shall be maintained according to the Canadian Dam Association Dam Safety Guidelines and associated Bulletins (most recent edition).

79. Any work that entails substantial upgrades or repairs to any dam component that: changes the structure or design of the dam, affects dam safety or the physical stability of the dam, poses a risk of potential dam failure, or is deemed of high risk or significant in scope by this Department shall require a separate approval.

Storm Water Detention Pond Dam

80. 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.

81. Reservoirs must be provided with a spillway of adequate capacity to safely discharge design flows at non-erosive velocities without causing flooding of the reservoir or damage to the spillway or section downstream channel.

82. The area to be flooded by the reservoir must be prepared by removing timber, brush, and slash up to the maximum water elevation.

83. The dam and spillway must be inspected regularly to identify any indications of structural failure, leaking, erosion or other problem so that immediate action can be taken to rectify the problem.

84. The dam and appurtenant structures shall be constructed at the following coordinates:

Name	Latitude (decimal degrees)	Longitude (decimal degrees)
Neary's Pond Road/Mallard's Lane Stormwater Detention Pond Dam	47.612711	-52.836134

85. To safely convey peak flows the dam(s) must be designed according to the following hydraulic criteria:

Name	Design Return Period (years)	Minimum Flow Capacity (m^3/s)
Neary's Pond Road/Mallard's Lane Stormwater Detention Pond Dam	100	1.336

86. The dam and associated works must be designed and constructed under the direct supervision of an engineer eligible for membership with the Professional Engineers and Geoscientists of Newfoundland and Labrador (or equivalent Canadian organization) who is able to demonstrate competence in the design, construction, and surveillance of dams.

87. The dam and associated works shall be designed according to the Canadian Dam Association Dam Safety Guidelines and associated Bulletins (most recent edition).

88. The detention pond must be constructed such that detained water has sufficient retention time to mimic natural flow conditions as if the catchment area had remained undeveloped.

89. The detention pond must provide enough storage for any captured sediment.

90. The finished upstream sides of the earthen dam structures shall have a minimum slope of 2 horizontal to 1 vertical. The finished downstream sides of the earthen dam structures shall have a minimum slope of 2 horizontal to 1 vertical.

91. The dam shall be constructed with a storm sewer inlet with an invert elevation of 151.37, a storm sewer outlet 450 mm diameter pipe with an invert elevation 151.16, and an emergency spillway with an invert elevation of 153.01.

92. The upstream and downstream slopes of the embankment dam shall be covered with topsoil and hydroseeded.

93. The dam(s) must have the following dimensions:

Name	Height/Elevation of Dam (m)	Elevation of Spillway (m)	Maximum Water Elevation (m)	Minimum Water Elevation (m)
Neary's Pond Road/Mallard's Lane Stormwater Detention Pond Dam	2.0 / 153.16	153.01	152.757	151.16

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. Robin Summers, P.Eng.
MAE Design Limited
P.O. Box 17162, Stn. Kelligrews
615 Conception Bay Highway
Conception Bay South, NL, A1X 3H1
robin@maedesign.net

cc: Ms. Paula Dawe, P.Eng.
Manager, Water Rights, Investigations and Modelling 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: Eastern Lands Office
Fisheries & Land Resources
P.O. Box 8700
Howley Building, Higgins Line
St. John's NL A1B 4J6
easternlandsoffice@gov.nl.ca

cc: Mr. Terry Battcock
Manager of Operations (Environmental Health)
Digital Government and Service NL
149 Smallwood Drive, Mount Pearl
PO Box 8700
St. John's NL A1B 4J6
tbattcock@gov.nl.ca

cc: Ms. Deneen Spracklin, 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
dspracklin@gov.nl.ca

cc: Fish and Fish Habitat Protection Program
Aquatic Ecosystems Branch
Fisheries and Oceans Canada
P.O. Box 5667
St. John's, NL A1C 5X1
dfo.fppnl-ppptnel.mpo@dfo-mpo.gc.ca

cc: Town of Portugal Cove-St. Philip's
Town Manager
1119 Thorburn Road
Portugal Cove-St. Philip's, NL A1M 1T6
pcsp@pcsp.ca

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

Appendix C - Completion Report

Pursuant to the *Water Resources Act*, SNL 2002 cW-4.01, specifically Section(s) 36, 37, 48

Date: **APRIL 03, 2025**

File No: **844.080.004**
Permit No: **WS14059-2025**

Permit Holder: **67382 Newfoundland & Labrador Limited**
71 Airport Road
St. John's NL A1A 4Y3
toddcollins57@gmail.com

Attention: **Todd Collins**

Re: **Portugal Cove-St. Philips - Residential Subdivision Neary's Pond Road/Mallard's Lane**

Permission was given for : **the installation of approximately 900 m of 200 mm PVC watermain, 900 m of 200 mm PVC sanitary sewer, 430 m of 100 mm HDPE sanitary sewer forcemain, new duplex submersible sewage lift station, a storm water detention pond, and all related appurtenances as described in the drawings titled, "Residential Subdivision Neary's Pond Road/Mallard's Lane" as received from MAE Design Limited on September 6, 2024 and revised drawings on March 19, 2025.**

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: **844.080.004**
Permit No: **WS14059-2025**

APPENDIX D
Location Map for Permit

Town of Portugal Cove-St. Phillip's - Residential Development