



Attachment #4. Regulatory Approvals/Responses

For

Newman Sound Wharf Reconstruction

Basic Impact Analysis

Terra Nova National Park of Canada
Newman Sound, Newfoundland and Labrador

September 2015



Parks
Canada

Parcs
Canada



P.O. Box 5667
St. John's, NL A1C 5X1

November 5, 2015

Your file Votre référence

Our file Notre référence
15-HNFL-00448

Mr. Jerry Feltham
Project Manager, Newfoundland East Field Unit
Parks Canada Agency
Glovertown NL A0G 2L0

Dear Mr. Feltham:

Subject: Implementation of mitigation measures to avoid and mitigate serious harm to fish – Wharf Demolition, Replacement and Shoreline Erosion Protection, Newman Sound.

The Fisheries Protection Program (the Program) of Fisheries and Oceans Canada received your amended project description on October 15, 2015. Your proposal has been reviewed to determine whether it is likely to result in serious harm to fish which is prohibited under subsection 35(1) of the *Fisheries Act*.

The proposal has also been reviewed to determine whether it will adversely impact listed aquatic species at risk and contravene sections 32, 33 and 58 of the *Species at Risk Act*.

Our review consisted of:

- DFO Request for Review Application;
- Project description and Project site photographs; and
- Project related email notifying of eelgrass presence received October 15, 2015 from PWGSC

We understand that you propose to:

- Demolish / remove the existing "T" shaped timber crib and pile wharf, marginal timber crib wharf, timber crib walkway/shoreline protection, and concrete boat launch at Newman Sound;
- Construct a new timber crib marginal wharf (14.4 m x 3.6 m) within the location occupied by the demolished marginal wharf;
- Construct and new concrete (30 m x 4 m) boat launch, timber crib headblock and floating dock within location of demolished boat launch and finger pier respectively, and dredging (~1078 m²) area adjacent to the old and new structures;
- Install clean rock shoreline stabilization/erosion protection adjacent to the above noted area and at an area ~1600 m southwest of the above noted area;
- Deploy a floating sediment curtain to isolate the proposed project area to minimize potential effects of sedimentation during project related activities.

*

To avoid the potential of serious harm to fish and their habitat, we are recommending that the following mitigation measures be included into your plans:

- The proposed project should be carried out in such a manner that sediment, concrete and/or other project related material do not enter the waters of Newman Sound or any other adjacent water body.
- Dredging/excavation should be carried out during fall, winter, and/or early spring to coincide with periods of low eelgrass productivity. Dredging should be carried out during low tide and low wind/wave conditions to minimize turbidity, and to minimize the area that might be affected by turbidity to that area immediately adjacent to the project area.
- Dredging should be suspended whenever wind or tide conditions cause sediment to be visible outside the immediate project area.
- All dredged or excavated material should be disposed of at an approved site above the high water mark. If necessary adequate sedimentation control measures should be deployed around stored dredge material to minimize potential erosion and sedimentation from the material.

Provided that these mitigation measures are incorporated into your plans, the Program is of the view that your proposal will not result in serious harm to fish. The Program is also of the view that your proposal will not contravene sections 32, 33 or 58 of the *Species at Risk Act*. No formal approval is required from the Program under the *Fisheries Act* or the *Species at Risk Act* in order to proceed with your proposal.

If your plans change or if the description of your proposal is incomplete, or changes in the future, you should consult our website (<http://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html>) or consult with a qualified environmental consultant to determine if further review is required by the Program.

A copy of this letter should be kept on site while the work is in progress. Please contact Darrin Sooley (phone (709) 772-3521, fax 709 772-5562 or email darrin.sooley@dfo-mpo.gc.ca) if you have any questions in this respect. Please refer to the file number referenced above when corresponding with the Program.

Yours sincerely,



Tilman Bieger
Manager, Fisheries Protection, Regulatory Reviews
Ecosystems Management Branch, NL Region

Cc: Mark McNeil – PWGSC, Corner Brook



Environment
Canada

Environnement
Canada

Environmental Stewardship Branch
6 Bruce Street
Mount Pearl, NL A1N 4T3

23 September 2015

Mark McNeil
Environmental Services
Public Works and Government Services Canada
Suite 204, 1 Regent Square, Corner Brook, NL A2H 7K6

Dear Mr. McNeil:

**RE: Wharf demolition and reconstruction, Parks Canada Headquarters
Wharf, Newman Sound, Terra Nova National Park of Canada, NL**

EAS 2015-080

As requested in your email of 1 September 2015, Environment Canada (EC) has reviewed the project description for the above-noted project. Please note that our review comments, in areas related to EC's mandate, are provided to support your environmental management process for this project.

It is understood that the proposed project involves demolition and removal of an existing pile structure finger pier wharf, concrete slipway, refueling wharf and native timber boardwalk. A new floating dock, boat launch, re-fuelling finger pier wharf will be re-installed in the footprint of the old structures. In addition, approximately 95 metres of erosion protection armourstone will also be added to the shoreline approximately 1600 m southwest of the main headquarters wharf site.

The project will also involve dredging of approximately 2250 cubic metres of sediment from the existing waterlot to accommodate the new structures and provide adequate access and berthage. The project will also involve construction of an approximately 55 m long temporary access road extending from an existing parking lot through a heavy wooded area.

Project activities will involve the use of heavy equipment such as excavators and dump trucks working from the existing shoreline or possibly a floating barge. Demolished materials will be removed from the project site and disposed of outside of Park boundaries, at a provincially approved waste disposal site.

The following EC comments stem from the department's mandate under the *Migratory Birds Convention Act* (MBCA) and Section 36 of the *Fisheries Act*. Pertinent EC expertise and related comments also originate with the *Canadian Environmental Protection Act* (CEPA), the *Canadian Wildlife Act*, and the *Species at Risk Act* as well as *Department of the Environment Act*.

REVIEW COMMENTS

Regulatory Requirements

Fisheries Act

Pollution prevention and control provisions of the *Fisheries Act* are administered and enforced by Environment Canada. The deposit of a deleterious substance to water frequented by fish may constitute a violation of the *Fisheries Act*, whether or not the water itself is made deleterious by the deposit. Subsection 36(3) of the *Fisheries Act* prohibits anyone from depositing or permitting the

deposit of a deleterious substance of any type in water frequented by fish, or in any place under any conditions where the deleterious substance, or any other deleterious substance that results from the deposit of the deleterious substance, may enter any such water. The notion of a deleterious substance applies both to fish and to fish habitat.

It is the responsibility of the proponent to ensure that all reasonable measures are conducted to prevent the release of substances deleterious to fish from their proposed activities. In general, compliance is determined at the last point of control of the substance before it enters waters frequented by fish, or, in any place under any conditions where a substance may enter such waters.

Migratory Birds Convention Act

Migratory birds, their eggs, nests, and young are protected under the *Migratory Birds Convention Act* (MBCA). Migratory birds protected by the MBCA generally include all seabirds except cormorants and pelicans, all waterfowl, all shorebirds, and most landbirds (birds with principally terrestrial life cycles). Most of these birds are specifically named in the Environment Canada (EC) publication, *Birds Protected in Canada under the Migratory Birds Convention Act*, Canadian Wildlife Service Occasional Paper No. 1.

Under Section 6 of the *Migratory Birds Regulations* (MBR), it is forbidden to disturb, destroy or take a nest or egg of a migratory bird; or to be in possession of a live migratory bird, or its carcass, skin, nest or egg, except under authority of a permit. It is important to note that under the current MBR, no permits can be issued for the incidental take of migratory birds caused by development projects or other economic activities.

Furthermore, Section 5.1 of the MBCA describes prohibitions related to deposit of substances harmful to migratory birds:

- “5.1 (1) No person or vessel shall deposit a substance that is harmful to migratory birds, or permit such a substance to be deposited, in waters or an area frequented by migratory birds or in a place from which the substance may enter such waters or such an area.
- (2) No person or vessel shall deposit a substance or permit a substance to be deposited in any place if the substance, in combination with one or more substances, results in a substance — in waters or an area frequented by migratory birds or in a place from which it may enter such waters or such an area — that is harmful to migratory birds.”

It is the responsibility of the proponent to ensure that activities are managed so as to ensure compliance with the MBCA and associated regulations.

Species at Risk

The proponents should also be reminded that the prohibitions under the *Species at Risk Act* (SARA) are now in force. The complete text of SARA, including prohibitions, is available at www.sararegistry.gc.ca.

It should be noted that Section 79 of the *Species at Risk Act* states:

- 79.** (1) Every person who is required by or under an Act of Parliament to ensure that an assessment of the environmental effects of a project is conducted, and every authority who makes a determination under paragraph 67(a) or (b) of the [Canadian Environmental Assessment Act, 2012](#) in relation to a project, must, without delay, notify the competent minister or ministers in writing of the project if it is likely to affect a listed wildlife species or its critical habitat.
- (2) The person must identify the adverse effects of the project on the listed wildlife species and its critical habitat and, if the project is carried out, must ensure that measures are taken to

avoid or lessen those effects and to monitor them. The measures must be taken in a way that is consistent with any applicable recovery strategy and action plans.

Canadian Environmental Protection Act

The proponent should also be aware of the potential applicability of the *Canadian Environmental Protection Act* (CEPA 1999). CEPA 1999 enables protection of the environment, and human life and health, through the establishment of environmental quality objectives, guidelines and codes of practice, and the regulation of toxic substances, emissions and discharges from federal facilities, international air pollution, and disposal at sea.

Under CEPA 1999 a substance is considered toxic if it is entering or may enter the environment in a quantity or concentration or under conditions that have or may have an immediate or long-term harmful effect on the environment or its biological diversity, constitute or may constitute a danger to the environment on which life depends; constitute or may constitute a danger in Canada to human life or health.

Migratory Birds and Species at Risk

The Canadian Wildlife Service of Environment Canada (EC-CWS) has reviewed the above project and offers the following comments:

Migratory Bird Sanctuary Regulations

Proposed activities do not contravene the Migratory Bird Sanctuary Regulations and no permit will be required.

Vegetation Clearing

Clearing vegetation during construction activities and placement of dredge spoils on vegetated uplands may cause disturbance to migratory birds, and may inadvertently cause the destruction of their nests and eggs (<https://www.ec.gc.ca/paom-itmb/default.asp?lang=En&n=8D910CAC-1>). Many species use trees, as well as brush, deadfalls and other low-lying vegetation for nesting, feeding, shelter and cover. This would apply to songbirds throughout the region, as well as waterfowl in wetland areas. Disturbance of this nature would be most critical during the breeding period. The breeding season for most birds within the project area occurs between April 15th and August 15st in this region, however some species protected under the MBCA do nest outside of this time period. Please see the webpage "General Nesting Periods of Migratory Birds in Canada" (Website: <http://www.ec.gc.ca/paom-itmb/default.asp?lang=En&n=4F39A78F-1>) for more specific information concerning the breeding times of migratory birds. This project area falls within zone "D3-4".

Environment Canada provides the following recommendations:

1. to avoid the risk of nest destruction, the proponent should avoid vegetation clearing during the most critical period of the migratory bird breeding season (see above).
2. to develop and implement a management plan that includes appropriate preventive measures to minimize the risk of impacts on migratory birds (See "Planning ahead to reduce risks to migratory bird nests", PDF: <http://www.ec.gc.ca/Publications/default.asp?lang=En&xml=50C4FE11-801E-4FE3-8019-B2D8537D76CF>). It is the responsibility of the individual or company undertaking the activities to determine these measures. For guidance on how to avoid the incidental take of migratory birds nests and eggs, please refer to the Avoidance Guidelines (Website: <http://www.ec.gc.ca/paom-itmb/default.asp?lang=En&n=AB36A082-1>). The management plan should include processes to follow should an active nest be found at any time of the year.

Disposal of Dredged Material

Care should be taken to not inadvertently create habitat that would be attractive to nesting migratory birds (e.g. ground nesting birds such as Piping Plover, terns or Killdeer) in areas where considerable

human activity is likely. While birds may choose to nest in deposits of dredged sediment, as documented in past cases in Atlantic Canada, this type of habitat would only be marginal for chick rearing.

For each year of proposed use, steps should be taken to ensure no nests or fledglings of migratory birds are present in areas where dredge material would be deposited. It is recommended that a professional ornithologist or a highly skilled birder be instructed to survey the entire area and vicinity where dredged materials would be placed for evidence of breeding migratory birds. Should any birds be found to be nesting or rearing chicks in the area, EC-CWS should be contacted for further instructions. In such an event, it is likely that it would be necessary to delay placement of dredge materials until birds have naturally migrated south.

Stockpiles

The proponent should be advised that certain species of migratory birds (e.g. Bank Swallows) may nest in large piles of dredge spoils and rocks that are left unattended/unvegetated during the breeding season (see Vegetation Clearing above). To discourage this, the proponent should consider measures to cover or to deter birds from these large piles of unattended soil during the breeding season. If migratory birds take up occupancy of these piles, any industrial activities (including hydroseeding or the placing of additional dredge spoils) will cause disturbance to these migratory birds and inadvertently cause the destruction of nests and eggs. Alternate measures will then need to be taken to reduce potential for erosion, and to ensure that nests are protected until chicks have fledged and left the area. For a species such as the Bank Swallow, the period when the nests would be considered active would include not only the time when birds are incubating eggs or taking care of flightless chicks, but also a period of time after chicks have learned to fly, because Bank Swallows return to their colony to roost.

It should be ensured that stockpiled dredge spoils are not placed in wetlands or watercourses or their buffers, or in the other sensitive habitats (e.g. habitats of Species at Risk or species of conservation concern).

Light Attraction and Migratory Birds

In Atlantic Canada, nocturnal migrants and night-flying seabirds (e.g. storm-petrels) are the migratory birds most at risk of attraction to lights and flares. Attraction to lights at night or in poor visibility conditions during the day may result in collision with lit structures or their support structures, or with other migratory birds. Disoriented migratory birds are prone to circling light sources and may deplete their energy reserves and either die of exhaustion or be forced to land where they are at risk of depredation.

To minimize risk of incidental take of migratory birds due to human-induced light, Environment Canada recommends at minimum the following beneficial management practices:

- The minimum amount of pilot warning and obstruction avoidance lighting should be used on tall structures.
- The use of only strobe lights at night, at the minimum intensity and minimum number of flashes per minute (longest duration between flashes) allowable by Transport Canada, is recommended.
- Using the minimum number of lights possible is recommended.
- The use of solid-burning or slow pulsing warning lights at night should be avoided.
- Lights should completely turn off between flashes.
- Lighting for the safety of the employees should be shielded to shine down and only to where it is needed, without compromising safety.

- Use of LED lights is highly recommended, as LED light fixtures are less prone to light trespass (i.e. are better at directing light where it needs to be, and do not bleed light into the surrounding area), and this property reduces the incidence of migratory bird attraction.

Other Coastal Infrastructure Activities

EC-CWS has the following recommended beneficial management practices for working on shorelines:

- Project staff should not approach concentrations of seabirds, sea ducks or shorebirds.
- Project staff should use the main navigation channels to get to and from the site; and should have well muffled vessels and machinery.
- Project staff should undertake any measures that may minimize or eliminate discharge of oily waste into the marine environment.
- Food scraps and other garbage left on beaches and other coastal habitats can artificially enhance the populations of avian and mammalian predators of eggs and chicks. The proponent should ensure that no litter (including food waste) is left in coastal areas by their staff and/or contractors
- If there is any noticeable change in seabird numbers or distribution at the location during operations, EC-CWS should be notified.

Species at Risk

The following species at risk (as listed on Schedule 1 of the *Species at Risk Act*) may occur within the study area: Olive-sided flycatcher (Threatened), Red Crossbill (*Rufa* subspecies; Endangered), Ivory Gull (Endangered) and Harlequin Duck (Special Concern). Though unlikely to be found within the project footprint, these species may occur within the study area and we request that sightings be reported to EC-CWS.

Wetlands

The proponent should be aware that as part of its commitment to wetlands conservation, the Federal Government has adopted *The Federal Policy on Wetland Conservation* (FPWC) with its objective to “promote the conservation of Canada’s wetlands to sustain their ecological and socio-economic functions, now and in the future.” In support of this objective, the Federal Government strives for the goal of No Net Loss of wetland function on federal lands or when federal funding is provided.

A copy of the FPWC can be found at: <http://publications.gc.ca/pub?id=9.686114&sl=0>.

EC-CWS recommends using a 30m buffer from the high water mark of any water body (1:100 year Flood Zone) in order to maintain movement corridors for migratory birds. Please see https://www.ec.gc.ca/paom-itmb/default.asp?lang=En&n=8D910CAC-1#_03_1_1 for further information concerning buffer zones.

In order to promote wetland conservation EC-CWS recommends the following:

- Developments on wetlands should be avoided.
- Where development does occur in the vicinity of wetlands, a minimum vegetation buffer zone of 30 m should be maintained around existing wetland areas.
- Hydrologic function of the wetland should be maintained.
- Runoff from development should be directed away from wetlands.

Fuel Leaks

The Canadian Wildlife Service of Environment Canada recommends that the proponent adhere to best practices with regard to fuelling and servicing equipment, using biodegradable fluids, fuel spills and spill contingency plans, to protect migratory birds and their habitats (described in more detail

under ***Management of Hazardous Materials and Waste***). Furthermore, the proponent should ensure that contractors are aware that under the *Migratory Birds Regulations*, “no person shall deposit or permit to be deposited oil, oil wastes or any other substance harmful to migratory birds in any waters or any area frequented by migratory birds.”

On-land Disposal and Site Disturbance

In general, impacts related to onshore disturbance should be designed so as to:

- place a priority on pollution prevention;
- facilitate compliance with the general prohibition against the deposit of a deleterious substance into waters frequented by fish (Section 36 of the *Fisheries Act*); and
- respect applicable Canadian Council of Ministers of the Environment (CCME) Canadian Environmental Quality Guidelines.

In terms of site disturbance the following ‘best practices’ should be reflected in efforts to manage impacts so as to respect the above-noted objectives:

- install siltation control structures (e.g. silt curtains, cofferdams, sediment fences) prior to beginning any activities involving disturbance of the site and work along the shoreline if appropriate;
- schedule work to avoid periods of heavy precipitation;
- maintain a vegetated buffer zone, as appropriate and where possible, to protect surface waters;
- immediately stabilize any disturbed areas along the shoreline to prevent erosion;
- monitor the integrity and effectiveness of the siltation control structures daily for the duration of the project; and
- upon completion of the project, only remove silt control structures when suspended sediment concentrations within any contained water have returned to background conditions.

Construction

At the project planning stage, all available construction materials should be considered (e.g., untreated wood, treated wood, pre-cast concrete, corrosive-resistant steel, plastic lumber), and those materials best suited to the conditions and intended use of the structure should be selected. Analysis of the preferred construction material should include a consideration of the full life-cycle of the material (ease of use, design factors associated with the construction material, maintenance requirements, and final disposal). Environmental implications (e.g. storm and ice damage) associated with each life-cycle phase should also be considered. For example, it may not be cost effective to use pressure treated wood for a coastal structure that may be destroyed or damaged by storm surge during the life expectancy of the structure.

Pressure Treated Wood

The long-term impacts of pressure treated wood in aquatic environments remains uncertain, and therefore, EC urges that a precautionary approach be taken. If pressure treated wood (e.g. Chromated Copper Arsenate [CCA]) is determined to be the most suitable material for the project, the proponent is encouraged to incorporate the following standards into the planning and management of construction activities:

- the product should be approved for use by Health Canada’s Pest Management Regulatory

Agency, which sets out use limitations for all treated wood products under the *Pest Control Products Act*;

- only wood treated according to the 2006 industry publication entitled “Best Management Practices for the Use of Treated Wood in Aquatic and Other Sensitive Environments” should be used (this report and its 2006 amendment and 2007 addendum are available at <http://www.WWPInstitute.org/>). These BMPs ensure that surface pesticide residual is minimized and only small amounts of pesticide are released over the life span of the structure;
- only proper construction techniques should be used (e.g. keep as much of the product above the high water mark as possible, capture sawdust to avoid entry into water bodies);
- the use of pressure treated wood in *freshwater* environments is discouraged; and,
- according to Hutton and Samis (2000), the use limitation restriction for Ammoniacal Copper Quaternary (ACQ) treated wood does not allow its use in aquatic environments when submerged (this report is available online at <http://www.dfo-mpo.gc.ca/Library/245973.pdf>); however, it can be used for above-water applications such as decking.

Concrete Production

Discharges from project work involving the use of concrete, cement, mortars and other Portland cement or lime-containing construction materials may have a high pH, and work should be planned and conducted to ensure that sediments, debris, concrete, and concrete fines are not deposited, either directly or indirectly into the aquatic environment. Any potentially contaminated water (e.g. exposed aggregate wash-off, wet curing, equipment and truck washing), should be prevented from entering the aquatic environment unless it can be confirmed that this water will not be deleterious to fish or harmful to migratory birds. Containment facilities should be provided at the site as required.

Suspension of Sediments

The disturbance of substrate during in-water activities increases sediment concentrations and turbidity in the water column. This disturbance may alter light penetration, temperature and water chemistry regimes, and may affect photosynthesis. The CCME (Canadian Council of Ministers of the Environment) *Canadian Environmental Quality Guidelines* (1999) recommend that, for protection of marine waters, human activities should not cause suspended solids levels to increase by more than 10% of the natural conditions expected at the time. The guidelines also recommend that no solid debris, including floating or drifting materials or settleable matter, be introduced into marine and estuarine waters.

Management of Hazardous Materials and Waste

In order to ensure compliance with Section 36 (3) of the *Fisheries Act* and with the *Migratory Birds Convention Act* and related Regulations, provisions for the management of hazardous materials (e.g. fuels, lubricants) and wastes (e.g. contaminated soil, sediments, waste oil) should be identified and implemented so as to ensure the risk of chronic and accidental releases is minimized. Additionally, the following mitigation recommendations are made with respect to the transport, storage, use and disposal of petroleum products and toxic substances which, when employed, may minimize impacts to nearby receiving waters:

- Even small spills of oil can have very serious effects on migratory birds and fish. Therefore, every effort should be taken to ensure that no oil spills occur in the area. Refuelling and maintenance activities should be undertaken on level terrain, at least 30m from any surface water (including shorelines), on a prepared impermeable surface with a collection system to ensure oil, gasoline and hydraulic fluids do not enter surface waters. Waste oil should be disposed of in an approved manner.
- Biodegradable alternatives to petroleum-based hydraulic fluid for heavy machinery and

chainsaw bar oil are commonly available from major manufacturers. Such biodegradable fluids should be considered for use in place of petroleum products whenever possible, as a standard for best practices.

- Drums of petroleum products or chemicals should be tightly sealed against corrosion and rust and surrounded by an impermeable barrier in a dry, water-tight building or shed with an impermeable floor.
- In order to ensure that a quick and effective response to a spill event is possible, spill response equipment should be readily available on-site. Response equipment, such as adsorbents and open-ended barrels for collection of cleanup debris, should be stored in an accessible location on-site. Personnel working on the project should be knowledgeable about response procedures. The proponent should consider developing a contingency plan specific to the proposed undertaking to enable a quick and effective response to a spill event. The proponent should indicate how the contingency plans will be prepared, and response measures implemented, to reflect site-specific conditions and sensitivities. In developing a contingency plan, it is recommended that the Canadian Standards Association publication Emergency Planning for Industry CAN/CSA-Z731-03, be consulted as a useful reference.
- The proponent should report any spills of petroleum or other hazardous materials to the Environmental Emergencies 24 Hour Report Line (St. John's 709-772-2083; other areas 1-800-563-9089).

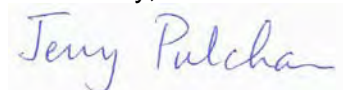
Effects of Weather and Climate on the Project

Over its lifetime, coastal infrastructure will be sensitive to the impacts of wind, waves, storm surge, sea ice and sea level rise. Global average sea level rise projections range from 18 to 59 cm over the next century (Intergovernmental Panel on Climate Change). Some recent trends in research indicate that due to ice sheet melt, this range can be much higher than the projected 59cm by the year 2100. Coastal erosion will add to the effects of sea level rise. Sea level rise and crustal subsidence will exacerbate the effects of winds, waves and storm surges. In addition, climate warming will also lead to an increase in the water-holding capacity of the atmosphere, and more intense precipitation events are likely over the coming decades. This may affect local flooding and infrastructure drainage. In considering the full life-cycle of the project, any sensitivity to climate change should be identified and adjustments made if necessary. It may be more cost-effective to adjust design criteria at this stage than to retrofit in future.

Historical data and local area knowledge should be utilized to determine adequacy of design. Based on an analysis of the potential effects of climate and weather elements, mitigation should be focused on minimizing risk of environmental damage and other accidents. Climatological data can be found at <http://www.climate.weatheroffice.ec.gc.ca/>, and value-added data can be obtained from EC's Climate Services. Contact: 1-900-565-1111 or email: weather.info.meteo@ec.gc.ca. Hydrometric station data, both archived and real-time, are available at <http://www.ec.gc.ca/rhc-wsc/>. The proponent is also encouraged to regularly consult EC's local forecast at <http://www.weatheroffice.ec.gc.ca/>.

I trust that this information will be of assistance in your review of this project. If you wish to discuss these comments or have further questions, please do not hesitate to contact me at 709-772-4313 or via email at jerry.pulchan@ec.gc.ca at your convenience.

Yours truly,



Jerry Pulchan
Environmental Assessment Analyst
Environmental Protection Operations Directorate- Atlantic

Cc: M. Hingston

September 11, 2015

File No: GA/GSC/9090

Mr. Mark McNeil
Public Works and Government Services Canada
Environmental Services
Suite 204, 1 Regent Square
Corner Brook, NL A2H 7K6

RE: Wharf Reconstruction, Newmans Sound, Terra Nova National Park, NL

Dear Mr. McNeil,

Service NL has received and reviewed your request of September 8, 2015, regarding the above mentioned project. Based on the results of treated wood analyses provided, the Service NL has no objections to the disposal of CCA and creosote treated timber at the lined landfill located at the Central Newfoundland Waste Management Facility with prior permission from the owner/operator.

Should you have any questions regarding this matter, please contact the undersigned at 256-1423.

Regards,



Courtney Hunt, CPHI(C)
Environmental Protection Officer

Copy: Ed Evans - Central Newfoundland Waste Management

August 17, 2015

File No: GA/GSC/9078

Mr. Mark McNeil
Environmental Services
Public Works and Government Services Canada
Suite 204, 1 Regent Square
Corner Brook, NL A2H 7K6

**RE: Dredge Material Disposal – Newman Sound,
Terra Nova National Park Headquarters Wharf, NL**

Dear Mr. McNeil,

Service NL has received and reviewed your request of August 5, 2015, regarding the above mentioned project. The project proposes removal and disposal of approximately 2250 cubic meters of primarily sand-pebble material.

Based on the results of chemical analysis provided, the Government Service Centre has no objections to the disposal of dredge material at the Central Newfoundland Waste Management Facility. The soil can be utilized for backfill material and any unused material should be stockpiled on site for future use. Prior approval from the owner/operator is required.

Should you have any questions regarding this matter, please feel free to contact the undersigned at 256-1423.

Regards,



Courtney Hunt, CPHI(C)
Environmental Protection Officer

Copy: Ed Evans – Central Newfoundland Waste Management



Navigation Protection Program
95 Foundry Street, 6th Floor
Moncton N.B. E1C 8K6

Your file

Our file
2009-700121 (8200-09-1092)

October 19, 2015

Terra Nova National Park
General Delivery
Glovertown, NL A0G 2L0

Attention: Karen Wolfrey

RE: Notice to the Minister under the *Navigation Protection Act* for review of the removal of Wharves and Slipway, located at Newman Sound, Terra Nova National Park, Bonavista Bay, in the Province of Newfoundland and Labrador

Our assessment of your work has determined that it is not likely to substantially interfere with navigation.

Therefore your work is permitted under section 9(1) – Removal, of the *Navigation Protection Act* (NPA) and you may proceed per the attached plans in accordance with the following terms and conditions:

1. Prior to the commencement of decommission activities the proponent is to liaison with the Canadian Coast Guard, Aids to Navigation branch, to facilitate removal and discontinuance of the existing wharf light LL # 442.5
2. A notice to shipping is to be issued prior to commencement and upon completion of work. To issue a notice to shipping the proponent is to contact Canadian Coast Guard Traffic Services at 709 695 2168 or via email at: notshippax@dfo-mpo.gc.ca.
3. Construction material and debris are not allowed to become waterborne.
4. All in water works and associated underwater structures are to be removed in their entirety from the waterway in accordance with the approved plans.
5. Depths are to be returned to their pre constructed level.
6. 0.4 meter yellow spar buoys complete with flashing yellow lights having a Flash Characteristic of Fl 0.5 sec; Eclipse 3.5 sec and retro reflective tape are to be placed and maintained to mark the outer seaward leading limits of the removal activities and all temporary awash works. When removal is completed these are to be removed.
7. During construction all floating debris must be contained in the immediate area and removed from the water in a timely manner.
8. If a containment device is placed in the water it must be marked at 40-meter intervals by 0.4 meter yellow cautionary floats

9. Any barges and equipment used in the construction must be visible at all times and be marked in accordance with the Collision Regulations of the Canada Shipping Act.
10. Upon completion of the removal the proponent is to send completed as removed plans with depth soundings to DFO Canadian Hydrographic Services and to Navigation Protection Program – Atlantic.

Please note that permission relates only to the effect of your work on navigation under the NPA. It is the owner's responsibility to comply with any other applicable laws and regulations.

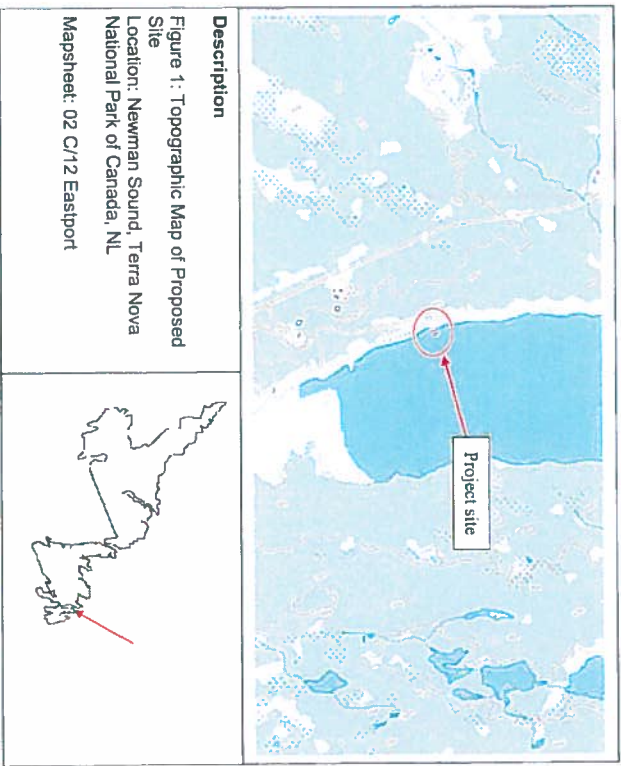
Should you have any questions, please do not hesitate to contact our office in Moncton by phone at (506) 851-3113, by fax at (506) 851-7542 or by e-mail at NPPATL-PPNATL@tc.gc.ca.

Respectfully,

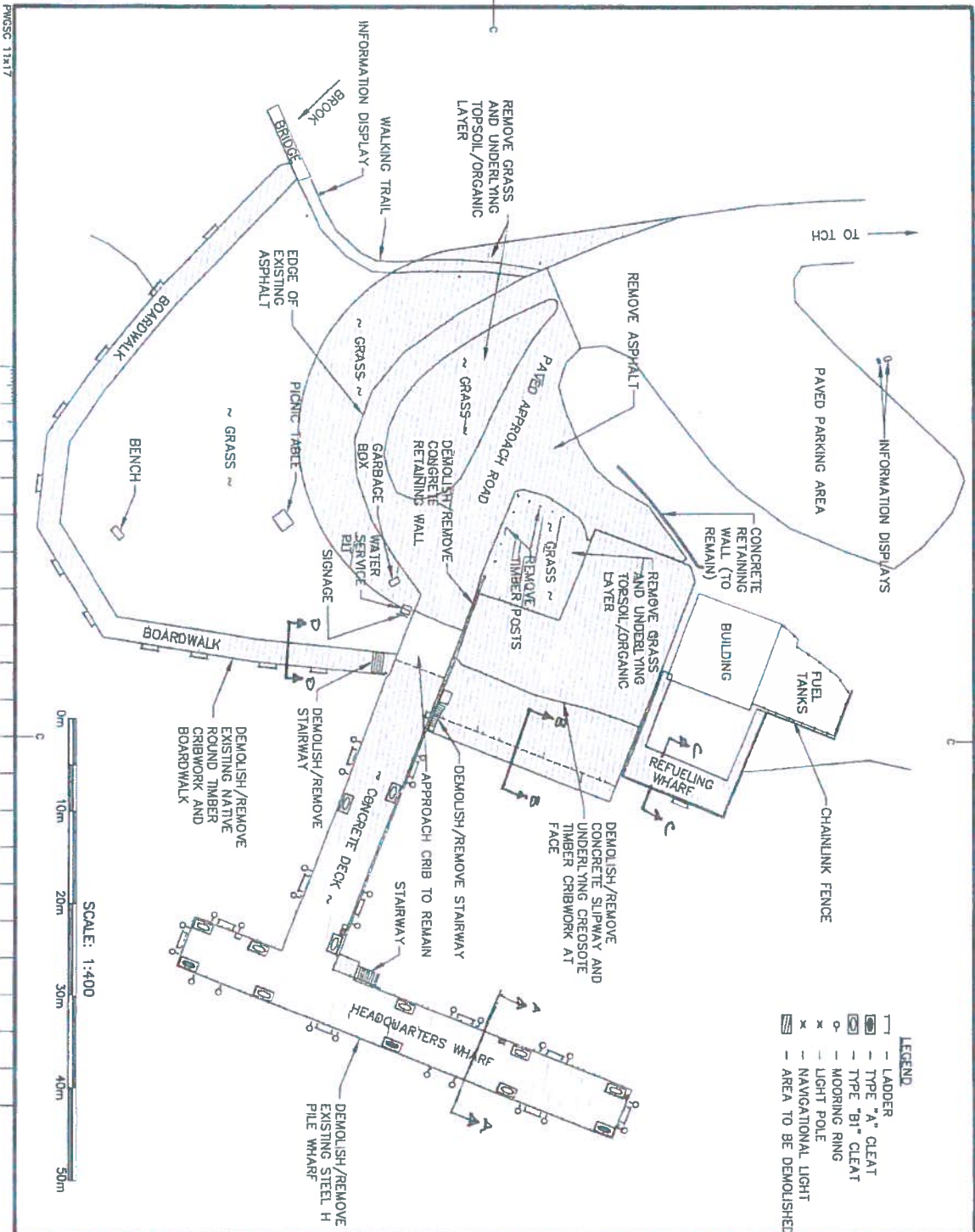
A handwritten signature in blue ink, appearing to read 'Bill Bennett', with a long horizontal flourish extending to the right.

Bill Bennett
Officer
Navigation Protection Program
Programs Group
Transport Canada
Atlantic Region

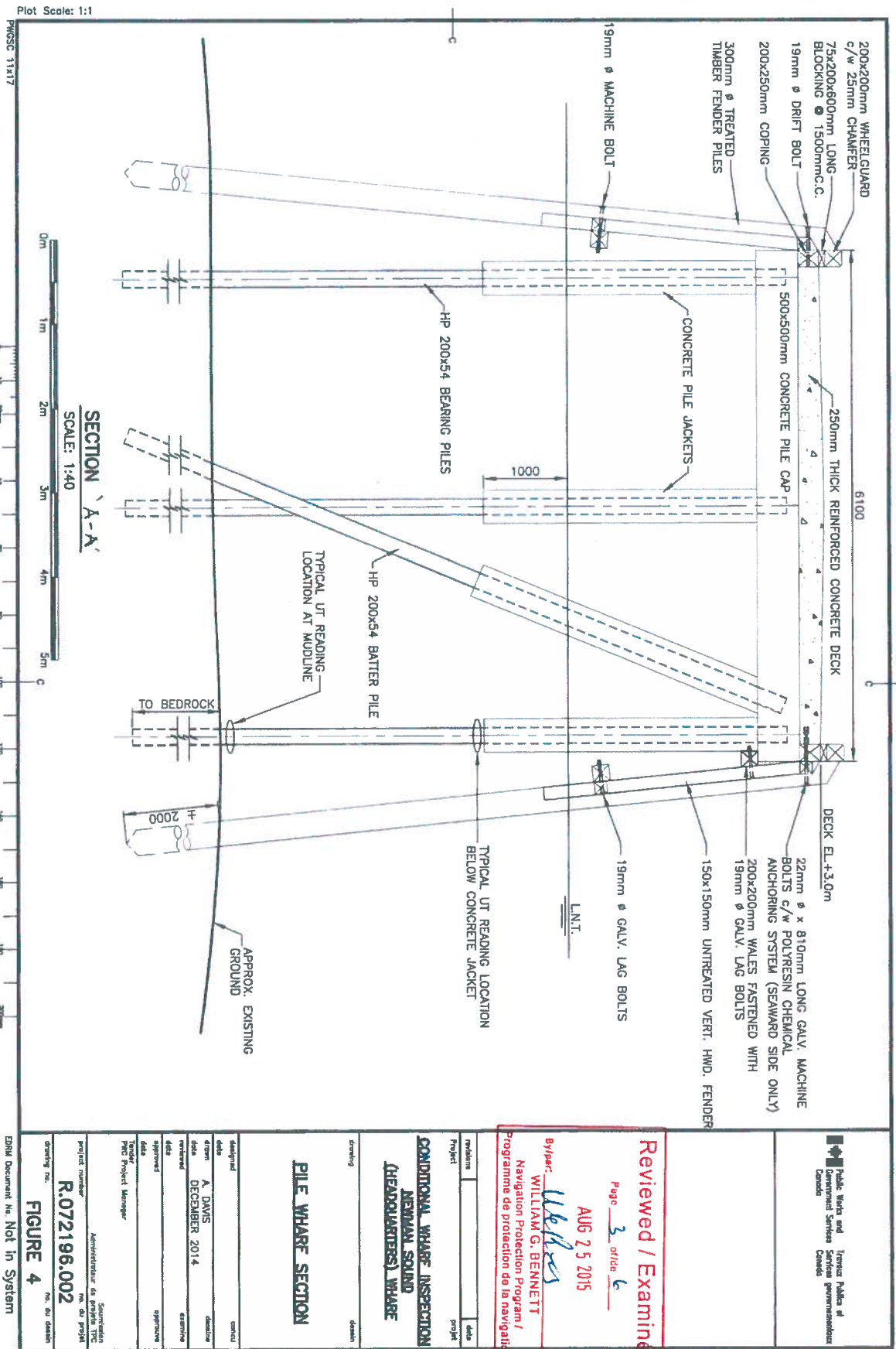
Cc: Mark McNeil PWGSC Corner Brook NL
CHS
CCG-LOS



<p>Reviewed / Examiné</p> <p>Page <u>1</u> of <u>1</u></p> <p>AUG 25 2015</p> <p>By/par: <u>William G. Bennett</u></p> <p>Navigation Protection Program / Programme de protection de la navigation</p>



<p>Public Works and Government Services Travaux Publics et Services gouvernementaux Canada</p>		<p>Reviewed / Examiné Page 2 of 6 AUG 25 2015 By: <i>William G. Bennett</i> WILLIAM G. BENNETT Navigation Protection Program / Programme de protection de la navigation</p>	
<p>NEWMAN SOUND HEADQUARTERS WHARF RECONSTRUCTION</p>		<p>DEMOLITION PLAN</p>	
<p>Project: NEWMAN SOUND HEADQUARTERS WHARF RECONSTRUCTION</p>	<p>Drawn: A. DAVIS</p>	<p>Checked: DECEMBER 2014</p>	<p>Approved: DECEMBER 2014</p>
<p>Project number: R.072196.002</p>	<p>Administrateur de projet: TRC</p>	<p>Project manager: TRC</p>	<p>Project manager: TRC</p>



Public Works and Government Services
Travaux Publics et Services gouvernementaux
Canada

Reviewed / Examine
Page 3 of 6
AUG 25 2015

By: WILLIAM G. BENNETT
Navigation Protection Program /
Programme de protection de la navigation

CONDITIONAL WHARF INSPECTION
NEWMAN SOUND
(HEADQUARTERS) WHARF

PILE WHARF SECTION

designed	date	control
drawn	date	drawn
checked	date	checked
approved	date	approved
data	date	data
PGC Project Manager		
Administrateur de projets TPC		
project number	no. du projet	
R.072196.002		
drawing no.	no. du dessin	
FIGURE 4		

ENRML Document No. Not in System

Reviewed / Examiné

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AUG 2 5 2015

By: William G. Bennett

Navigation Protection Program /
Programme de protection de la navigation

CONDITIONAL WHARF INSPECTION
NEWMAN SOUND
(HEADQUARTERS) WHARF

CONCRETE SLIPWAY
END SECTION

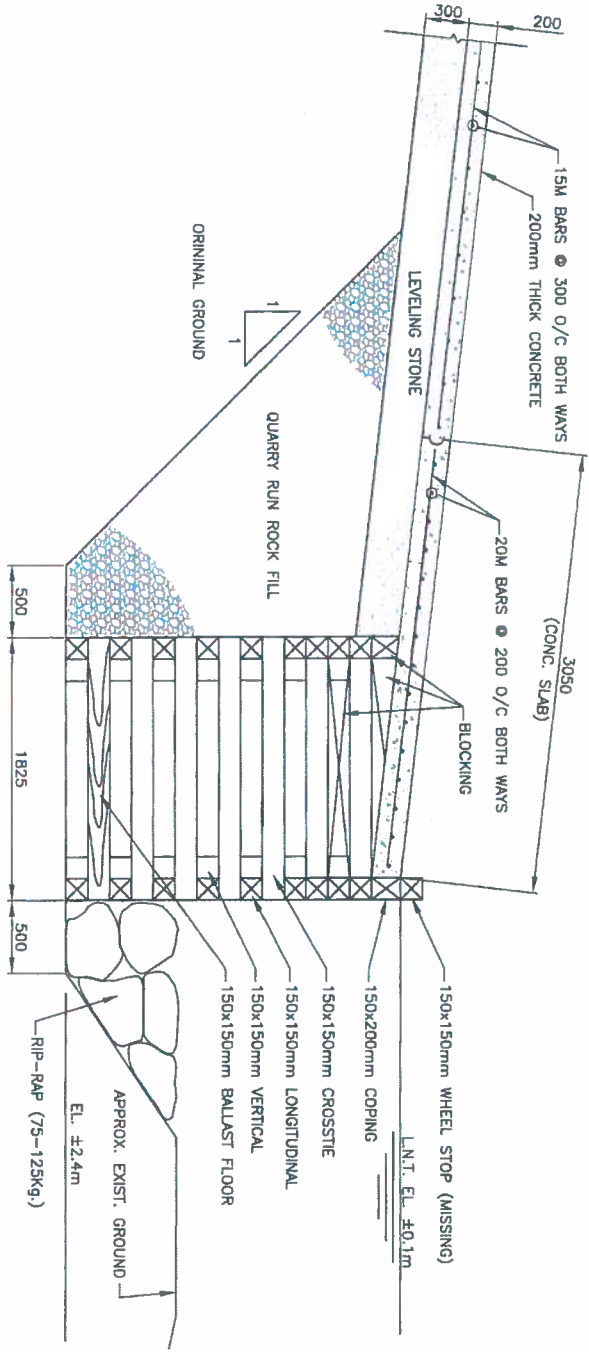
designed	drawn	checked
A. DAVIS	A. DAVIS	
date	date	date
DECEMBER 2014		
revised	approved	approved
date	date	date
Project Manager	Project Manager	Project Manager
Administrative de projet	Administrative de projet	Administrative de projet
R.072196.002	R.072196.002	R.072196.002
drawing no.	drawing no.	drawing no.

FIGURE 5

EDM Document Not in System

Plot Scale: 1:1

Section B-B



Plot Scale: 1:1

Reviewed / Examiné

Page 5 of 6

AUG 25 2015

Ed/par: WCB
WILLIAM G. BENNETT

**Navigation Protection Program /
Programme de protection de la navigation**

CONDITIONAL WHARE INSPECTION
NEWMAN SOUND
(HEADQUARTERS) WHARE

drawing domain

REFUELING WHARF SECTION

designed
 derlin
 CERN

drawn	A. DAVIS	COLLECTED
date	DECEMBER 2014	

date	signature
approved	

docId
 Tender
 PMC Project Manager

Source: [Administrateur de projets TPC](#)

project number no. du projet
R.072196.002

FIGURE 6

EDRM Document No. Not in System

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AUG 25 2015
By: William G. Bennett
WILLIAM G. BENNETT
Navigation Protection Program /
Programme de protection de la navigation

**CONDITIONAL WHARF INSPECTION
NEWMAN SOUND
(HEADQUARTERS) WHARF**

BOARDWALK SECTION

designed date	drawn date	checked date	approved date	approved date	approved date
	A. DAVIS				
	DECEMBER 2014				
project number R.072196.002	Administrateur de projets TPC no. du projet	Superviseur no. du projet	Ingénieur no. du projet	Ingénieur no. du projet	Ingénieur no. du projet
drawing no. FIGURE 7					

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Plot Scale: 1:1

PWGSC 11/17

0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390 400 410 420 430 440 450 460 470 480 490 500 510 520 530 540 550 560 570 580 590 600 610 620 630 640 650 660 670 680 690 700 710 720 730 740 750 760 770 780 790 800 810 820 830 840 850 860 870 880 890 900 910 920 930 940 950 960 970 980 990 1000

Section D-D

APPROX. EXISTING GROUND

BALLAST FLOOR

L.N.T.

NO BALLAST

125mm ϕ ROUND NATIVE TIMBER CRIEWORK

75x125mm VERTICAL FENDERS @ 160mm O/C

150x200mm CROSSSTIE

3-200x200mm SUPPORT BEAMS

DECK EL. \pm 1.8m

50x150x600mm WHEELGUARD BLOCKING @ 2500mm O/C

100x150mm WHEELGUARD

2440

75mm THICK DECKING

WASHOUT

UPLANDS

DEPARTMENT OF TRANSPORT

NAVIGABLE WATERS PROTECTION ACT

Order Amending the Minor Works and Waters (Navigable Waters Protection Act) Order

The Minister of Transport, pursuant to subsection 13(1) ([see footnote g](#)) of the *Navigable Waters Protection Act* ([see footnote h](#)), makes the annexed *Order Amending the Minor Works and Waters (Navigable Waters Protection Act) Order*.

Ottawa, March 31, 2014

LISA RAITT
Minister of Transport

ORDER AMENDING THE MINOR WORKS AND WATERS (NAVIGABLE WATERS PROTECTION ACT) ORDER

AMENDMENTS

1. (1) The definitions “berm” and “high-water mark” in section 1 of the *Minor Works and Waters (Navigable Waters Protection Act) Order* ([see footnote 9](#)) are repealed.

(2) The definitions “petit quai” and “plan d’eau navigable cartographié” in section 1 of the French version of the Order are repealed.

(3) The definition “charted navigable waters” in section 1 of the English version of the Order is replaced by the following:

“charted navigable water”
« *eaux navigables cartographiées* »

“charted navigable water” means navigable waters for which navigation charts are produced by the Canadian Hydrographic Service or the National Oceanic and Atmospheric Administration.

(4) The marginal note to the definition “dock” in section 1 of the English version of the Order is amended by replacing “*petit quai*” with “*quai*”.

(5) Section 1 of the Order is amended by adding the following in alphabetical order:

“ice breaker”
« *brise-glace* »

“ice breaker” means a vessel that is specially constructed or modified for the purpose of navigating through ice.

“pipeline”
« *pipeline* »

"pipeline" includes a conduit that contains wires or pipes.

(6) Section 1 of the French version of the Order is amended by adding the following in alphabetical order:

« eaux navigables cartographiées »

"*charted navigable water*"

« eaux navigables cartographiées » Eaux navigables pour lesquelles des cartes de navigation sont produites par le Service hydrographique du Canada ou la National Oceanic and Atmospheric Administration.

« quai »

"*dock*"

« quai » S'entend notamment d'un môle ou d'une jetée.

2. The heading before section 2 and sections 2 to 14 of the Order are replaced by the following:

TERMS AND CONDITIONS

Imposed under paragraph 13(1)(b) of Act

2. Subsections 3(4) to (8), 4(3) to (6), 5(3) to (7), 6(3) to (9), 7(3) to (11), 8(3) to (11), 9(3) to (5), 11(4) to (8), 12(3) to (8) and 13(4) and (5) are terms and conditions imposed under paragraph 13(1)(b) of the Act.

CLASSES OF WORKS

EROSION-PROTECTION WORKS

Definitions

3. (1) The following definitions apply in this section.

"erosion-protection works"

« *ouvrages de protection contre l'érosion* »

"erosion-protection works" means shoreline-stabilization, riprap or bank-protection works.

"groyne" or "spur"

« *épi* » ou « *éperon* »

"groyne" or "spur" means a structure built out from the bank of a navigable water in a direction transverse to the current in order to prevent erosion of the bank.

"riprap"

« *enrochement* »

“riprap” means a layer of stones or rocks placed irregularly on a slope or a bank of a navigable water in order to protect the slope or bank against scouring or erosion.

“shoreline-stabilization”
« *stabilisation des rives* »

“shoreline-stabilization” means stones, rocks, concrete, logs or other common building materials, or living plants, placed in order to protect the shores of a navigable water from erosion.

Class established

(2) Erosion-protection works are established as a class of works for the purposes of subsection 5.1(1) of the Act if

- (a) the works are integrated with and parallel to the existing or natural shoreline or bank;
- (b) the base of the works is 5 m or less from the high-water mark;
- (c) the vertical to horizontal slope of the works from the navigable water is greater than 33%;
- (d) the works are not associated with an existing or proposed structure, including a bridge, boom, dam or road, across the navigable water; and
- (e) the works do not include groynes, spurs or other devices to deflect the current.

Temporary works — class established

(3) Temporary works that are required for the construction or placement of works of the class established by subsection (2) are established as a class of works for the purposes of subsection 5.1(1) of the Act unless the temporary works

- (a) are in, on, over, under, through or across a navigation channel; or
- (b) cross more than halfway from one side of the navigable water to the other side.

During construction or placement

(4) During the construction or placement of works of the class established by subsection (2) or (3), the owner of the works must ensure

- (a) that vessels can navigate safely through or around the work site or, if navigation is interrupted by any activity related to the construction or placement, that suitable means, such as a portage, exist to allow vessels to resume navigation on the other side of the work site; and
- (b) in the case of a river, a stream, a creek or similar navigable water that, when measured from the ordinary high-water mark on one side of the navigable water to the ordinary high-water mark on the other side, is of a width set out in column 1 of the table **to this subsection, signs stating “Construction Ahead” and “Travaux de construction” that are legible from at least 50 m are in place, upstream and downstream from the work site, at the minimum distance set out in column 2.**

TABLE

Item	Column 1	Column 2
	Width of Navigable Water	Minimum Distance

1.	Less than 10 m	25 m
2.	10 m or more but less than 20 m	50 m
3.	20 m or more but less than 50 m	100 m
4.	50 m or more	200 m

During construction or placement of temporary works

(5) During the construction or placement of works of the class established by subsection (3), the owner of the works must ensure that

- (a) if the works are on or over a navigable water, the works are marked, from dusk to dawn and during periods of restricted visibility, with yellow flashing lights that are
 - (i) located on the end of the works that is farthest from the nearest bank or shore, if the works are not more than 3 m in length,
 - (ii) located on each end of the works, if the works are more than 3 m in length but not more than 20 m in length,
 - (iii) located on each end of the works and at any other location on the works so that the lights are spaced not more than 20 m apart, if the works are more than 20 m in length but not more than 30 m in length, or
 - (iv) located on each end of the works and at any other location on the works so that the lights are spaced not more than 30 m apart, if the works are more than 30 m in length; and
- (b) if the works are in or through a navigable water, the works are marked with cautionary buoys that are lighted from dusk to dawn and during periods of restricted visibility and are
 - (i) located at the end of the works that is farthest from the nearest bank or shore, if the works are not more than 3 m in length,
 - (ii) located at each end of the works, if the works are more than 3 m in length but not more than 20 m in length,
 - (iii) located at each end of the works and at any other location alongside the works so that the buoys are spaced not more than 20 m apart, if the works are more than 20 m in length but not more than 30 m in length, or
 - (iv) located at each end of the works and at any other location alongside the works so that the buoys are spaced not more than 30 m apart, if the works are more than 30 m in length.

Removal of temporary works

(6) The owner of works of the class established by subsection (3) must ensure that they are completely removed on completion of the construction or placement of the works for which they were required.

Restoration of contours

(7) The owner of works of the class established by subsection (2) must, if the contours of the bed of the navigable water were disturbed by either of the following, ensure that the contours are restored to their natural state on completion of the construction or placement of the works:

- (a) the placement or construction of the works or of works of the class established by subsection (3); or
- (b) the removal of works of the class established by subsection (3).

Works in disrepair

(8) If works of the class established by subsection (2) become a danger to navigation because of disrepair, the owner of the works must immediately repair the works so that they are no longer a danger to navigation.

DOCKS AND BOATHOUSES

Class established

4. (1) Docks and boathouses are established as a class of works for the purposes of subsection 5.1(1) of the Act if

- (a) the works are not within 5 m of the adjoining property lines at the ordinary high water mark;
- (b) the works are not within 10 m of a dock, boathouse or other structure that is in, on, over, through or across the navigable water and that is not owned by the owner of the works;
- (c) in the case of a charted navigable water, the works are not within 30 m of a navigation channel;
- (d) the works do not extend further in, on or over the navigable water than any other structure within 100 m of the works;
- (e) the works do not, when measured from the ordinary high-water mark, extend horizontally more than 30 m into, onto, over, through or across the navigable water;
- (f) the works do not cross more than halfway from one side of the navigable water to the other side;
- (g) the works are not associated with any other proposed works that are not of a class established by this Order; and
- (h) the works are not used for float planes or other aircraft equipped with floats.

Temporary works — class established

(2) Temporary works that are required for the construction or placement of works of the class established by subsection (1) are established as a class of works for the purposes of subsection 5.1(1) of the Act unless the temporary works

- (a) are in, on, over, under, through or across a navigation channel; or
- (b) cross more than halfway from one side of the navigable water to the other side.

During construction or placement

(3) During the construction or placement of works of the class established by subsection (1) or (2), the owner of the works must ensure

- (a) that vessels can navigate safely through or around the work site or, if navigation is interrupted by any activity related to the construction or placement, that suitable means, such as a portage, exist to allow vessels to resume navigation on the other side of the work site;
- (b) if the works are on or over a navigable water, that the works are marked, from dusk to dawn and during periods of restricted visibility, with yellow flashing lights that are
 - (i) located on the end of the works that is farthest from the nearest bank or shore, if the works are not more than 3 m in length,

- (ii) located on each end of the works, if the works are more than 3 m in length but not more than 20 m in length,
 - (iii) located on each end of the works and at any other location on the works so that the lights are spaced not more than 20 m apart, if the works are more than 20 m in length but not more than 30 m in length, or
 - (iv) located on each end of the works and at any other location on the works so that the lights are spaced not more than 30 m apart, if the works are more than 30 m in length; and
- (c) if the works are in or through a navigable water, the works are marked with cautionary buoys that are lighted from dusk to dawn and during periods of restricted visibility and are
 - (i) located at the end of the works that is farthest from the nearest bank or shore, if the works are not more than 3 m in length,
 - (ii) located at each end of the works, if the works are more than 3 m in length but not more than 20 m in length,
 - (iii) located at each end of the works and at any other location alongside the works so that the buoys are spaced not more than 20 m apart, if the works are more than 20 m in length but not more than 30 m in length, or
 - (iv) located at each end of the works and at any other location alongside the works so that the buoys are spaced not more than 30 m apart, if the works are more than 30 m in length.

Removal of temporary works

(4) The owner of works of the class established by subsection (2) must ensure that they are completely removed on completion of the construction or placement of the works for which they were required.

Restoration of contours

(5) The owner of works of the class established by subsection (1) must, if the contours of the bed of the navigable water were disturbed by either of the following, ensure that the contours are restored to their natural state on completion of the construction or placement of the works:

- (a) the placement or construction of the works or of works of the class established by subsection (2); or
- (b) the removal of works of the class established by subsection (2).

Works in disrepair

(6) If works of the class established by subsection (1) become a danger to navigation because of disrepair, the owner of the works must immediately

- (a) repair the works so that they are no longer a danger to navigation; or
- (b) remove the works.

BOAT RAMPS, SLIPWAYS AND LAUNCH RAMPS

Class established

5. (1) Boat ramps, slipways and launch ramps that are not marine railways are established as a class of works for the purposes of subsection 5.1(1) of the Act if

- (a) the works are not within 5 m of the adjoining property lines at the ordinary high-water mark; and
- (b) the works are not associated with any other proposed works that are not of a class established by this Order.

Temporary works — class established

(2) Temporary works that are required for the construction or placement of works of the class established by subsection (1) are established as a class of works for the purposes of subsection 5.1(1) of the Act unless the temporary works

- (a) are in, on, over, under, through or across a navigation channel; or
- (b) cross more than halfway from one side of the navigable water to the other side.

During construction or placement

(3) During the construction or placement of works of the class established by subsection (1) or (2), the owner of the works must ensure that vessels can navigate safely through or around the work site or, if navigation is interrupted by any activity related to the construction or placement, that suitable means, such as a portage, exist to allow vessels to resume navigation on the other side of the work site.

During construction or placement of temporary works

(4) During the construction or placement of works of the class established by subsection (2), the owner of the works must ensure that

- (a) if the works are on or over a navigable water, the works are marked, from dusk to dawn and during periods of restricted visibility, with yellow flashing lights that are
 - (i) located on the end of the works that is farthest from the nearest bank or shore, if the works are not more than 3 m in length,
 - (ii) located on each end of the works, if the works are more than 3 m in length but not more than 20 m in length,
 - (iii) located on each end of the works and at any other location on the works so that the lights are spaced not more than 20 m apart, if the works are more than 20 m in length but not more than 30 m in length, or
 - (iv) located on each end of the works and at any other location on the works so that the lights are spaced not more than 30 m apart, if the works are more than 30 m in length; and
- (b) if the works are in or through a navigable water, the works are marked with cautionary buoys that are lighted from dusk to dawn and during periods of restricted visibility and are
 - (i) located at the end of the works that is farthest from the nearest bank or shore, if the works are not more than 3 m in length,
 - (ii) located at each end of the works, if the works are more than 3 m in length but not more than 20 m in length,
 - (iii) located at each end of the works and at any other location alongside the works so that the buoys are spaced not more than 20 m apart, if the works are more than 20 m in length but not more than 30 m in length, or
 - (iv) located at each end of the works and at any other location alongside the works so that the buoys are spaced not more than 30 m apart, if the works are more than 30 m in length.

Removal of temporary works

(5) The owner of works of the class established by subsection (2) must ensure that they are completely removed on completion of the construction or placement of the works for which they were required.

Restoration of contours

(6) The owner of works of the class established by subsection (1) must, if the contours of the bed of the navigable water were disturbed by either of the following, ensure that the contours are restored to their natural state on completion of the construction or placement of the works:

- (a) the placement or construction of the works or of works of the class established by subsection (2); or
- (b) the removal of works of the class established by subsection (2).

Works in disrepair

(7) If works of the class established by subsection (1) become a danger to navigation because of disrepair, the owner of the works must immediately

- (a) repair the works so that they are no longer a danger to navigation; or
- (b) remove the works.

AERIAL CABLES — POWER AND TELECOMMUNICATION

Class established

6. (1) Aerial cables that are over or across a navigable water and that are only for power or telecommunication purposes, and the associated structures and equipment, are established as a class of works for the purposes of subsection 5.1(1) of the Act if

- (a) the width of the navigable water at the site of the crossing is less than 30 m when measured from the ordinary high-water mark on one side of the navigable water to the ordinary high-water mark on the other side;
- (b) the works are not over or across a lake or tidal waters;
- (c) the works are not over or across a canal that is accessible to the public;
- (d) the works do not include towers or poles within the area between the ordinary high-water marks on each side of the navigable water; and
- (e) the works meet the requirements of section 5.3.3.2 of *Overhead Systems*, CAN/CSAC22.3 No. 1-10, as amended from time to time.

Temporary works — class established

(2) Temporary works that are required for the construction or placement of works of the class established by subsection (1) are established as a class of works for the purposes of subsection 5.1(1) of the Act unless the temporary works are in, on, under, through or across a navigation channel.

Prior notification of Canadian Coast Guard

(3) If works of the class established by subsection (2) are in a charted navigable water, the owner of the works must, at least 48 hours before the construction or placement of the works

starts, in writing notify a Canadian Coast Guard Marine Communications and Traffic Services Centre of the day on which construction or placement of the works is expected to start.

During construction or placement

(4) During the construction or placement of works of the class established by subsection (1) or (2), the owner of the works must ensure

- (a) that vessels can navigate safely through or around the work site or, if navigation is interrupted by any activity related to the construction or placement, that suitable means, such as a portage, exist to allow vessels to resume navigation on the other side of the work site;
- (b) in the case of a river, a stream, a creek or similar navigable water, that signs stating **"Construction Ahead"** and **"Travaux de construction"** that are legible from at least 50 m are in place 50 m upstream and downstream from the work site; and
- (c) that any cables that are in, on, over, under, through or across the navigable water are not left unattended or unsupervised unless they meet the requirements referred to in paragraph (1)(e) or are lying on the bed of the water.

Removal of temporary works

(5) The owner of works of the class established by subsection (2) must ensure that they are completely removed on completion of the construction or placement of the works for which they were required.

Notification of Canadian Coast Guard on removal

(6) If works of the class established by subsection (2) are in a charted navigable water, on removal of the works the owner of the works must, in writing, notify a Canadian Coast Guard Marine Communications and Traffic Services Centre that the works have been removed.

Notification of Canadian Hydrographic Service on completion

(7) If works of the class established by subsection (1) are over or across a charted navigable water, on completion of the construction or placement of the works the owner of the works must, in writing, notify the Canadian Hydrographic Service that the works have been constructed or placed.

Maintenance

(8) The owner of works of the class established by subsection (1) must ensure that the works continue to meet the requirements referred to in paragraph (1)(e).

Works in disrepair

(9) If works of the class established by subsection (1) become a danger to navigation because of disrepair, the owner of the works must immediately

- (a) repair the works so that they are no longer a danger to navigation; or
- (b) remove the works.

Effective date of amendments

(10) An amendment to one language version of section 5.3.3.2 of *Overhead Systems*, CAN/CSA-C22.3 No. 1-10, is not incorporated until the corresponding amendment is made to the other language version.

SUBMARINE CABLES — POWER AND TELECOMMUNICATION

Class established

7. (1) Submarine cables that are only for power or telecommunication purposes are established as a class of works for the purposes of subsection 5.1(1) of the Act if

- (a) the works lie on or under the bed of the navigable water;
- (b) the works do not extend vertically above the bed of the navigable water more than
 - (i) in the case of a navigable water of less than 15 m in depth, when measured from the ordinary high-water mark, 5% of the depth of the water when measured from the ordinary high-water mark, or
 - (ii) in any other case, 1 m;
- (c) the works are not across the entrance to any port, including any marina;
- (d) the works are not in a dredged channel or area with maintained depth; and
- (e) the works are not in an area that is identified as an anchorage area on a Canadian Hydrographic Service or National Oceanic and Atmospheric Administration chart.

Temporary works — class established

(2) Temporary works that are required for the construction or placement of works of the class established by subsection (1) are established as a class of works for the purposes of subsection 5.1(1) of the Act unless the temporary works are in, on, over, under, through or across a navigation channel.

Prior notification of Canadian Coast Guard

(3) If works of the class established by subsection (2) are in a charted navigable water, the owner of the works must, at least 48 hours before the construction or placement of the works starts, in writing notify a Canadian Coast Guard Marine Communications and Traffic Services Centre of the day on which construction or placement of the works is expected to start.

During construction or placement

(4) During the construction or placement of works of the class established by subsection (1) or (2), the owner of the works must ensure that vessels can navigate safely through the work site or, if navigation is interrupted by any activity related to the construction or placement, that suitable means, such as a portage, exist to allow vessels to resume navigation on the other side of the work site.

During construction or placement of temporary works

(5) During the construction or placement of works of the class established by subsection (2), the owner of the works must ensure, that if the works are in or through a navigable water, the works are marked with cautionary buoys that are lighted from dusk to dawn and during periods of restricted visibility and are

- (a) located at the end of the works that is farthest from the nearest bank or shore, if the works are not more than 3 m in length;

- (b) located at each end of the works, if the works are more than 3 m in length but not more than 20 m in length;
- (c) located at each end of the works and at any other location alongside the works so that the buoys are spaced not more than 20 m apart, if the works are more than 20 m in length but not more than 30 m in length; or
- (d) located at each end of the works and at any other location alongside the works so that the buoys are spaced not more than 30 m apart, if the works are more than 30 m in length.

Removal of temporary works

(6) The owner of works of the class established by subsection (2) must ensure that they are completely removed on completion of the construction or placement of the works for which they were required.

Notification of Canadian Hydrographic Service on completion

(7) If works of the class established by subsection (1) are over or across a charted navigable water, on completion of the construction or placement of the works the owner of the works must, in writing, notify the Canadian Hydrographic Service that the works have been constructed or placed.

Notification of Canadian Coast Guard on removal

(8) If works of the class established by subsection (2) are in a charted navigable water, on removal of the works the owner of the works must, in writing, notify a Canadian Coast Guard Marine Communications and Traffic Services Centre that the works have been removed.

Restoration of contours

(9) The owner of works of the class established by subsection (1) must, if the contours of the bed of the navigable water were disturbed by either of the following, ensure that the contours are restored to their natural state on completion of the construction or placement of the works:

- (a) the placement or construction of the works or of works of the class established by subsection (2), or
- (b) the removal of works of the class established by subsection (2).

Re-laying works

(10) Subject to subsection (11), if works of the class established by subsection (1) no longer lie on or under the bed of the navigable water, the owner of the works must, as soon as feasible,

- (a) re-lay the works so that they lie on or under the bed; or
- (b) remove the works.

Dangers to navigation

(11) The owner must immediately take the action referred to in subsection (10) if the works become a danger to navigation because they no longer lie on or under the bed of the navigable water.

PIPELINES BURIED UNDER THE BED OF NAVIGABLE WATER

Class established

8. (1) Pipelines that are buried under the bed of a navigable water and that are built or placed using a trenched method are established as a class of works for the purposes of subsection 5.1(1) of the Act if

- (a) the width of the navigable water at the site of the crossing is less than 50 m when measured from the ordinary high-water mark on one side of the navigable water to the ordinary high-water mark on the other side; and
- (b) the construction or placement of the works is completed within two weeks after the day on which construction or placement of the works started.

Temporary works — class established

(2) Temporary works that are required for the construction or placement of works of the class established by subsection (1) are established as a class of works for the purposes of subsection 5.1(1) of the Act unless the temporary works include or consist of cables that do not lie on the bed of the navigable water.

Prior notification of Canadian Coast Guard

(3) If works of the class established by subsection (2) are in a charted navigable water, the owner of the works must, at least 48 hours before the construction or placement of the works starts, in writing notify a Canadian Coast Guard Marine Communications and Traffic Services Centre of the day on which construction or placement of the works is expected to start.

During construction or placement

(4) During the construction or placement of works of the class established by subsection (1) or (2), the owner of the works must ensure

- (a) that vessels can navigate safely through or around the work site or, if navigation is interrupted by any activity related to the construction or placement, that suitable means, such as a portage, exist to allow vessels to resume navigation on the other side of the work site; and
- (b) if the works are under a river, a stream, a creek or similar navigable water that, when measured from the ordinary high-water mark on one side of the navigable water to the ordinary high-water mark on the other side, is of a width set out in column 1 of the table **to this subsection, that signs stating "Construction Ahead" and "Travaux de construction"** that are legible from at least 50 m are in place, upstream and downstream from the work site, at the minimum distance set out in column 2.

TABLE

Column 1		Column 2
Item		
Width of Navigable Water		Minimum Distance
1.	Less than 10 m	25 m
2.	10 m or more but less than 20 m	50 m
3.	20 m or more but less than 50 m	100 m

During construction or placement of temporary works

(5) During the construction or placement of works of the class established by subsection (2), the owner of the works must ensure that

- (a) if the works are on, over or across a navigable water, the works are marked, from dusk to dawn and during periods of restricted visibility, with yellow flashing lights that are
 - (i) located on the end of the works that is farthest from the nearest bank or shore, if the works are not more than 3 m in length,
 - (ii) located on each end of the works, if the works are more than 3 m in length but not more than 20 m in length,
 - (iii) located on each end of the works and at any other location on the works so that the lights are spaced not more than 20 m apart, if the works are more than 20 m in length but not more than 30 m in length, or
 - (iv) located on each end of the works and at any other location on the works so that the lights are spaced not more than 30 m apart, if the works are more than 30 m in length; and
- (b) if the works are in or through a navigable water, the works are marked with cautionary buoys that are lighted from dusk to dawn and during periods of restricted visibility and are
 - (i) located at the end of the works that is farthest from the nearest bank or shore, if the works are not more than 3 m in length,
 - (ii) located at each end of the works, if the works are more than 3 m in length but not more than 20 m in length,
 - (iii) located at each end of the works and at any other location alongside the works so that the buoys are spaced not more than 20 m apart, if the works are more than 20 m in length but not more than 30 m in length, or
 - (iv) located at each end of the works and at any other location alongside the works so that the buoys are spaced not more than 30 m apart, if the works are more than 30 m in length.

Removal of temporary works

(6) The owner of works of the class established by subsection (2) must ensure that they are completely removed on completion of the construction or placement of the works for which they were required.

Notification of Canadian Hydrographic Service on completion

(7) If works of the class established by subsection (1) are under the bed of a charted navigable water, on completion of the construction or placement of the works the owner of the works must, in writing, notify the Canadian Hydrographic Service that the works have been constructed or placed.

Notification of Canadian Coast Guard on removal

(8) If works of the class established by subsection (2) are in a charted navigable water, on removal of the works the owner of the works must, in writing, notify a Canadian Coast Guard Marine Communications and Traffic Services Centre that the works have been removed.

Restoration of contours

(9) The owner of works of the class established by subsection (1) must, if the contours of the bed of the navigable water were disturbed by either of the following, ensure that the contours are restored to their natural state on completion of the construction or placement of the works:

- (a) the placement or construction of the works or of works of the class established by subsection (2); or
- (b) the removal of works of the class established by subsection (2).

Re-laying works

(10) Subject to subsection (11), if works of the class established by subsection (1) no longer lie on or under the bed of the navigable water, the owner of the works must, as soon as feasible,

- (a) re-lay the works so that they lie on or under the bed; or
- (b) remove the works.

Dangers to navigation

(11) The owner must immediately take the action referred to in subsection (10) if the works become a danger to navigation because they no longer lie on or under the bed of the navigable water.

PIPELINES AND POWER OR COMMUNICATION CABLES ATTACHED TO EXISTING WORKS

Class established

9. (1) Pipelines and cables that are attached to an existing work that was approved under the Act or is referred to in subsection 4(1) or (2) or section 8 of the Act, are established as a class of works for the purposes of subsection 5.1(1) of the Act if the works do not increase the interference with navigation caused by the existing work.

Temporary works — class established

(2) Temporary works that are required for the construction or placement of works of the class established by subsection (1) are established as a class of works for the purposes of subsection 5.1(1) of the Act unless the temporary works are in, on, under, through or across a navigation channel.

During construction or placement

(3) During the construction or placement of works of the class established by subsection (1) or (2), the owner of the works must ensure

- (a) that vessels can navigate safely through or around the work site or, if navigation is interrupted by any activity related to the construction or placement, that suitable means, such as a portage, exist to allow vessels to resume navigation on the other side of the work site;
- (b) if the works are on, over or across a navigable water, that the works are marked, from dusk to dawn and during periods of restricted visibility, with yellow flashing lights that are
 - (i) located on the end of the works that is farthest from the nearest bank or shore, if the works are not more than 3 m in length,

- (ii) located on each end of the works, if the works are more than 3 m in length but not more than 20 m in length,
 - (iii) located on each end of the works and at any other location on the works so that the lights are spaced not more than 20 m apart, if the works are more than 20 m in length but not more than 30 m in length, or
 - (iv) located on each end of the works and at any other location on the works so that the lights are spaced not more than 30 m apart, if the works are more than 30 m in length; and
- (c) in the case of a river, a stream, a creek or similar navigable water, that signs stating **"Construction Ahead"** and **"Travaux de construction"** that are legible from at least 50 m are in place 50 m upstream and downstream from the work site.

Removal of temporary works

(4) The owner of works of the class established by subsection (2) must ensure that they are completely removed on completion of the construction or placement of the works for which they were required.

Works in disrepair

(5) If works of the class established by subsection (1) become a danger to navigation because of disrepair, the owner of the works must immediately

- (a) repair the works so that they are no longer a danger to navigation; or
- (b) remove the works.

WORKS WITHIN A BOOMED-OFF AREA UPSTREAM OR DOWNSTREAM OF AN EXISTING WORK FOR WATER CONTROL

Class established

10. Works within a boomed-off area upstream or downstream of an existing work for water control are established as a class of works for the purposes of subsection 5.1(1) of the Act if

- (a) the existing work for water control was approved under the Act or is referred to in subsection 4(1) or (2) of the Act;
- (b) the boom was approved under the Act or is referred to in subsection 4(1) or (2) of the Act;
- (c) the works do not adversely affect the efficacy of the boom;
- (d) the works do not alter the level or flow of the navigable water;
- (e) the works are not related to rebuilding or alterations to the boom or the existing work for water control; and
- (f) the owner of the works is also the owner of the boom or the existing work for water control.

OUTFALLS AND WATER INTAKES

Definitions

11. (1) The following definitions apply in this section.

“crib”

« *encoffrement* »

“crib” means pieces of timber affixed together to form bays or cells that are filled with stones or concrete.

“headpond”

« *bassin d’amont* »

“headpond” means a reservoir of water created by the construction of a dam or weir.

“outfall”

« *émissaire* »

“outfall” does not include a diffuser-type outfall.

“weir”

« *déversoir* »

“weir” means a low dam or barrier that raises the level or diverts the flow of a navigable water.

Class established

(2) Outfalls and water intakes are established as a class of works for the purposes of subsection 5.1(1) of the Act if

- (a) the works do not include a crib or other outfall or intake structure, such as a fish screen, an anchor, a collar or a weight, that extends vertically above the bed of the navigable water more than
 - (i) in the case of a navigable water of less than 15 m in depth when measured from the ordinary high-water mark, 5% of the depth of the water when measured from the ordinary high-water mark, or
 - (ii) in any other case, 1 m;
- (b) the works do not alter the level or flow of the navigable water;
- (c) in the case of a charted navigable water, the works are not within 30 m of a navigation channel; and
- (d) the works are not associated with a dam, weir or headpond, including a proposed dam, weir or headpond.

Temporary works

(3) Temporary works that are required for the construction or placement of works of the class established by subsection (2) are established as a class of works for the purposes of subsection 5.1(1) of the Act unless the temporary works are in, on, over, under, through or across a navigation channel.

During construction or placement

(4) During the construction or placement of works of the class established by subsection (2) or (3), the owner of the works must ensure

- (a) that vessels can navigate safely through or around the work site or, if navigation is interrupted by any activity related to the construction or placement, that suitable means,

such as a portage, exist to allow vessels to resume navigation on the other side of the work site; and

- (b) that no floating pipes are left unattended or unsupervised.

Removal of temporary works

(5) The owner of works of the class established by subsection (3) must ensure that they are completely removed on completion of the construction or placement of the works for which they were required.

Restoration of contours

(6) The owner of works of the class established by subsection (2) must, if the contours of the bed of the navigable water were disturbed by either of the following, ensure that the contours are restored to their natural state on completion of the construction or placement of the works:

- (a) the placement or construction of the works or of works of the class established by subsection (3); or
- (b) the removal of works of the class established by subsection (3).

Re-laying piping

(7) Subject to subsection (8), if the piping of works of the class established by subsection (2) no longer lies on the bed of the navigable water, the owner of the works must, as soon as feasible,

- (a) re-lay the piping so that it lies on the bed; or
- (b) remove the works.

Dangers to navigation

(8) The owner must immediately take the action referred to in subsection (7) if the piping becomes a danger to navigation because it no longer lies on the bed of the navigable water.

DREDGING

Class established

12. (1) Dredging is established as a class of works for the purposes of subsection 5.1(1) of the Act if

- (a) the works are done in order to maintain the width or depth of the navigable water;
- (b) all dredged materials are disposed of
 - (i) above the ordinary high-water mark, or
 - (ii) in water where the disposal is authorized by or under an Act of Parliament;
- (c) the works do not use any suction dredging that involves the use of floating or submerged pipes;
- (d) the works have no cables that cross on, over or through any portion of the navigable water; and
- (e) the works do not include blasting.

Temporary works — class established

(2) Temporary works that are required for the construction or placement of works of the class established by subsection (1) are established as a class of works for the purposes of subsection 5.1(1) of the Act unless the temporary works are in, on, over, under, through or across a navigation channel marked by the federal government, a provincial government or an agency of one of those governments.

Prior notification of Canadian Coast Guard

(3) If works of the class established by subsection (2) are in a charted navigable water, the owner of the works must, at least 48 hours before the construction or placement of the works starts, in writing notify a Canadian Coast Guard Marine Communications and Traffic Services Centre of the day on which construction or placement of the works is expected to start.

During construction or placement

(4) During the construction or placement of works of the class established by subsection (1) or (2), the owner of the works must ensure that vessels can navigate safely through or around the work site or, if navigation is interrupted by any activity related to the construction or placement, that suitable means, such as a portage, exist to allow vessels to resume navigation on the other side of the work site.

During construction or placement of temporary works

(5) During the construction or placement of works of the class established by subsection (2), the owner of the works must ensure that

- (a) if the works are on, over or across a navigable water, the works are marked, from dusk to dawn and during periods of restricted visibility, with yellow flashing lights that are
 - (i) located on the end of the works that is farthest from the nearest bank or shore, if the works are not more than 3 m in length,
 - (ii) located on each end of the works, if the works are more than 3 m in length but not more than 20 m in length,
 - (iii) located on each end of the works and at any other location on the works so that the lights are spaced not more than 20 m apart, if the works are more than 20 m in length but not more than 30 m in length, or
 - (iv) located on each end of the works and at any other location on the works so that the lights are spaced not more than 30 m apart, if the works are more than 30 m in length; and
- (b) if the works are in or through a navigable water, the works are marked with cautionary buoys that are lighted from dusk to dawn and during periods of restricted visibility and are
 - (i) located at the end of the works that is farthest from the nearest bank or shore, if the works are not more than 3 m in length,
 - (ii) located at each end of the works, if the works are more than 3 m in length but not more than 20 m in length,
 - (iii) located at each end of the works and at any other location alongside the works so that the buoys are spaced not more than 20 m apart, if the works are more than 20 m in length but not more than 30 m in length, or
 - (iv) located at each end of the works and at any other location alongside the works so that the buoys are spaced not more than 30 m apart, if the works are more than 30 m in length.

Removal of temporary works

(6) The owner of works of the class established by subsection (2) must ensure that they are completely removed on completion of the construction or placement of the works for which they were required.

Contouring

(7) The owner of works of the class established by subsection (1) must ensure that the bed of the navigable water is, on completion of the construction or placement of the works, contoured to prevent hazards to navigation.

Notification of Canadian Coast Guard on completion

(8) If works of the class established by subsection (1) or (2) are in a charted navigable water, on completion of the construction or placement of the works the owner of the works must, in writing, notify a Canadian Coast Guard Marine Communications and Traffic Services Centre that the works have been completed.

MOORING SYSTEMS

Definitions

13. (1) The following definitions apply in this section.

“length”

« *longueur* »

“length” means, in respect of a vessel, the distance between the fore and aft extremities of the vessel.

“mooring system”

« *système d’amarrage* »

“mooring system” means a system that is used to secure a vessel and that consists of an anchor that is set in or on the bed of a navigable water, a single anchor line, a single buoy and a mooring line to attach to a vessel.

“swing area”

« *aire d’évitage* »

“swing area” means the diameter of a circle created by the swinging of a vessel moored to a mooring system.

Class established

(2) Mooring systems are established as a class of works for the purposes of subsection 5.1(1) of the Act if

- (a) the swing area of the works is not
 - (i) within 20 m of a work, other than a pipeline or an aerial or submarine cable, that is not owned by the owner of the works,
 - (ii) within 20 m of the swing area of another work of the class established by this subsection, or
 - (iii) within 50 m of a marina, public launch-ramp or navigation channel;

- (b) the works are not associated with an existing or proposed marina;
- (c) the width of the navigable water is more than 100 m when measured from the ordinary high-water mark on one side of the water to the ordinary high-water mark on the other side; and
- (d) the buoy has the following characteristics:
 - (i) the name, address and telephone number of the owner of the works is displayed on it in a conspicuous location and in a legible manner,
 - (ii) the part of the buoy that shows above the surface of the water is at least 15.25 cm wide and at least 30.5 cm high,
 - (iii) the top third of the buoy is orange and the rest of it is white, and
 - (iv) the buoy displays, on opposite sides, the capital letters "PRIV", which are in black and are as large as is practicable for the size of the buoy.

Swing area

(3) For the purposes of subparagraphs (2)(a)(i) and (ii), the swing area of a vessel is considered to be the area set out in column 1 of the table to this subsection when the navigable water has the depth set out in column 2

- (a) at the higher high-water mean tidewater level, in the case of tidal waters; or
- (b) at the 10-year high-water level, in any other case.

TABLE

	Column 1	Column 2
Item	Swing Area	Depth of Navigable Water
1.	50 m	6 m or less
2.	70 m	More than 6 m but not more than 10 m
3.	80 m	More than 10 m but not more than 14 m
4.	100 m	More than 14 m

Buoys and anchors

(4) The owner of the works must

- (a) ensure that
 - (i) the buoy maintains the characteristics described in paragraph (2)(d) during the navigation season, and
 - (ii) the anchor remains in the position in which it was set in or on the bed of the navigable water; and
- (b) comply with any order made under section 5 of the *Private Buoy Regulations* in respect of the buoy.

Mooring of vessels and removal of works

(5) The owner of the works

- (a) must not moor, or permit the mooring of, a vessel that is more than 12 m in length to the works; and
- (b) must remove the works if

- (i) any part of the works is removed, or
- (ii) during any two-year period, no vessel has moored to the works.

COMING INTO FORCE

3. This Order comes into force on the day on which it is made.