

St.John's Dockyard Facility Expansion (Project North)



Prepared for: Department of Environment, Conservation and Climate Change

Environmental Assessment Division

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Abbreviations

ACOA	Atlantic Canada Opportunities Agency
ANPF	Arctic and Northern Policy Framework
CBC	Canadian Broadcasting Corporation
CCG	Canadian Coast Guard
CEPA	Canadian Environmental Protection Act
CCME	Canadian Council of Ministers of the Environment
CSQG	Canadian Soil Quality Guidelines
CWS	Canada Wide Standards
DFO	Department of Fisheries and Oceans
DWT	Dead Weight Tonnage
EA	Environmental Assessment
ECCC	Environment and Climate Change Canada
EMP	Environmental Mitigation Plan
ESL	Ecological Screening Levels
EQS	Environmental Quality Standards
FEED	Front End Engineering and Design
IAAC	Impact Assessment Agency of Canada
ISP	Indigenous Services Canada
m	metre
m ³	cubic metre
MCTS	Marine Communication and Traffic Services
MHA	Member of the House of Assembly
MHWL	Mean High Water Line
MLWL	Mean Low Water Line

MP	Member of Parliament
NATO	North Atlantic Treaty Organization
NDE	Non-Destructive Testing
NORAD	North American Aerospace Defense Command
NWP	North West Passage
PEGNL	Professional Engineers and Geoscientists of Newfoundland and Labrador
PHC	Petroleum Hydrocarbon Concentrations
Q1	First Quarter of the year – January to March
Q2	Second Quarter of the year – April to June
Q3	Third Quarter of the year – July to September
Q4	Fourth Quarter of the year – October to December
RBCA	Risk Based Corrective Action
SJD	St.John’s Dockyard Limited
SJPA	St.John’s Port Authority
VHF	Very High Frequency

1.0 Introduction

This document is an Environmental Assessment Registration Document for the St. John's Dockyard Facility Expansion – Project North (herein after referred to as "the project" as proposed by St. John's Dockyard Limited (SJD).

This document has been prepared in accordance with the following guide: **Government of Newfoundland and Labrador – Environment and Climate Change – Environmental Assessment – A Guide to the Process** and direction from the Environmental Assessment Division.

The purpose of this document is to provide an overview of the project and the potential environmental, social and economic impacts, as well as the proposed mitigation measures, to ensure the project can be carried out in an environmentally acceptable and sustainable manner.

1.1 Project Summary

St. John's Dockyard Limited is a marine vessel repair and maintenance facility that has been in operation in its current location since the 1880's. The current facility consists of a 175m long Graving Dock (drydock) constructed in the 1920's and a 100m long Syncrolift (marine lift) constructed in the 1980's. With the ever-increasing size of marine vessels, St. John's Dockyard Limited is unable to dock vessels wider than 21m and drafts greater than 7m within its existing facilities.

The proposed project is to construct a new larger marine lift to replace the aging graving dock, while keeping the existing syncrolift in place to compliment the new larger marine lift. The new larger marine lift will have a capacity of approximately 140m in length, 29m in width, 10m in draft, and 28000 tonne displacement, with vessel berths on land for two marine vessels. This proposed project is critical to Canada's ongoing Arctic Sovereignty as well as the ever-increasing size of marine vessels.

Engineering and Design are currently ongoing with construction anticipated to start in late 2026 / early 2027 with completion in late 2028 or early 2029. Key activities during the construction phase will include: demolition of existing piers with replacement with a stronger steel piled / reinforced concrete deck, dredging of harbour sediment to obtain required drafts, installation of a new marine lift, in-filling of existing graving dock with new steel pile / reinforced concrete slab for a new vessel berth, and demolition of an aging fabrication shop with a new steel pile / reinforced concrete slab as an additional marine vessel berth.

This document will describe the existing facility, purpose / rationale for the project, project construction components, impacts to the environment and adjacent properties, mitigation measures, employment and social benefits, and government agency engagement.

1.2 Project Context

With the ever-increasing size of marine vessels, St. John's Dockyard Limited is unable to dock vessels wider than 21m and drafts greater than 7m with its existing facilities. These larger vessels come from the Offshore Oil and gas Industry, general cargo ships, bulk carries, passenger carries and ferries. This has become a common occurrence in the last 15 to 20 years that the SJD is unable to dock certain vessels for repairs or maintenance in the Atlantic Canada region due to width and draft.

In addition to these current larger marine vessels, tens of billions of dollars in new Federal marine vessels are planned for the Arctic as part of the ongoing National Shipbuilding Strategy and Arctic Sovereignty, which includes River Class Destroyers, Program Ice Breakers, Multi-Purpose/Polar Class Ice Breakers and Patrol Submarines. With this ongoing National Shipbuilding Strategy, other Canadian shipyards with this capacity will be fully tasked with the new build programs, leaving minimal capacity for repairs and maintenance. SJD envisions this as a source of future repair and maintenance contracts.

With pre-FEED engineering work completed, initial phases of the expansion of SJD are underway. Plans include a new marine lift system that will accommodate drydocking of the new Polar Class Icebreakers with a length of 140m, width of 29m, draft of 10m and 28000 tonne displacement. In addition to the increased capacity of the new marine lift, SJD is located within an ice-free harbour in closest proximity to the eastern Arctic. The proposed project vessel capacity and its strategic location for a repair and maintenance focused facility is critical to Canada's Arctic sovereignty and economic security.

The project will consist of a new larger capacity marine lift that will replace a century old graving dock, along with two vessel berthing areas on land to perform the essential repair and maintenance of the larger marine vessels. The existing smaller marine lift and berthing area will remain in place to compliment the larger marine lift and berthing.

1.3 Regulatory Context

SJD has engaged the following Federal, Provincial and Municipal Government Agencies for guidance / direction on any required permits, licenses, approvals and other forms of authorization required for the project:

Environment and Climate Change Canada (ECCC) – for dredging and disposal of dredged material at sea

St. John’s Port Authority (SJPA) - for dredging and disposal of dredge material, along with marine traffic affects in the construction area

Department of Fisheries and Oceans (DFO) – for any fish and fish habitat concerns

Transport Canada – for navigable waters issues and past Environmental Indemnity Agreement issues

Impact Assessment Agency of Canada – for any impact assessment requirements

Provincial Department of Environment, Conservation and Climate Change - Waste Management Division – for disposal of dredge material on land

Provincial Department of Environment, Conservation and Climate Change - Water Resources Management Division – for permits to alter a body of water

City of St. John’s – Development Division – for any commercial development applications required

In addition, all engineering will be performed by certified engineers as registered and regulated under the association for Professional Engineers and Geoscientist of Newfoundland and Labrador (PEGNL).

2.0 General Information

2.1 Name of Undertaking

St. John’s Dockyard Facility Expansion (Project North)

2.2 Proponent

Name of Corporate Body:

St. John’s Dockyard Limited

475 Water Street

St. John’s, NL

A1E 6B5

Chief Executive Officer:

Name: Wayne Ash

wash@newdock.nf.ca

Official Title: General Manager

Principal Contact Person for purposes of Environmental Assessment:

Name: Derrick Hong

dhong@newdock.nf.ca

Official Title: Facility Engineer

2.3 Description of the Existing Facilities

2.3.1 Geographical Location

The proposed site is located on the water lot currently under the St. John's Dockyard Limited boundaries in the West end of the St. John's Harbour as depicted in Figures 1 to 4 below.

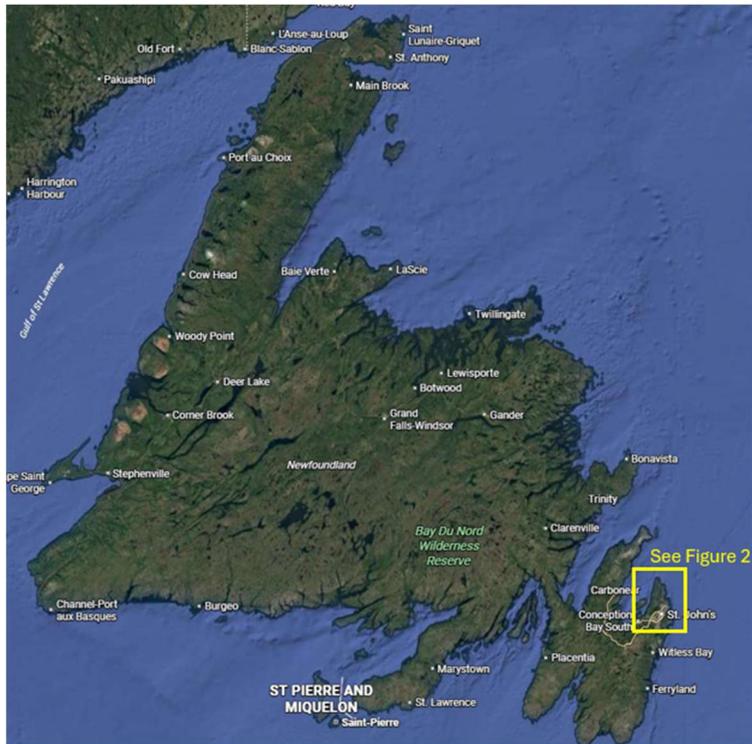


Figure 1 - Geographic Location – Region of Undertaking

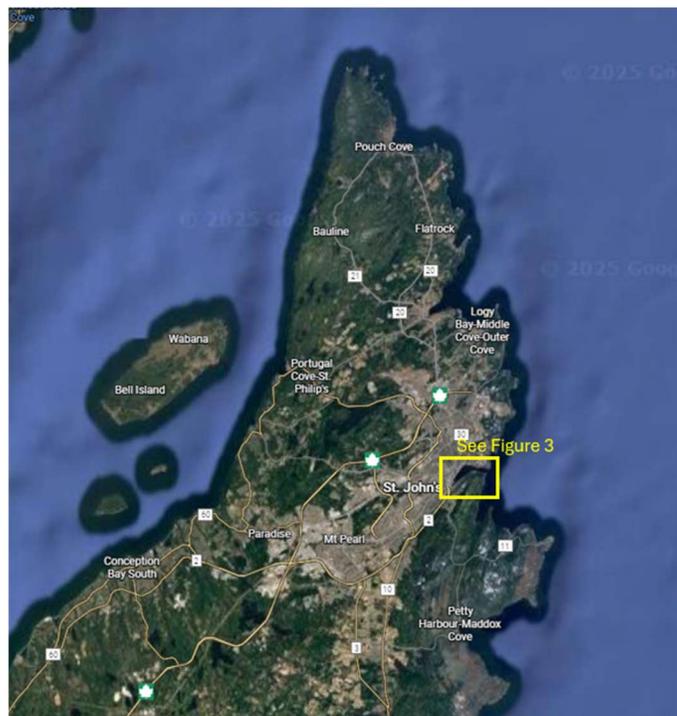


Figure 2 – Geographic Location – St. John's Harbour

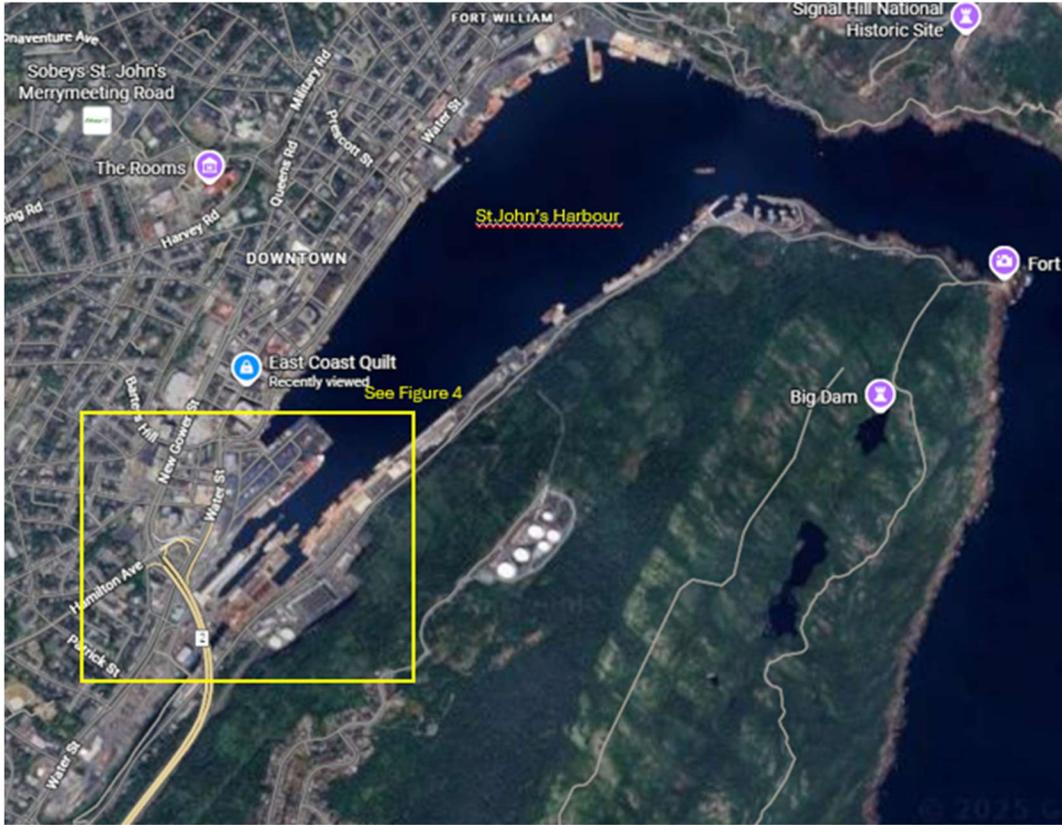


Figure 3 - Geographic Location – West end of St.John's Harbour



Figure 4 – Geographic Location – St. John's Dockyard Limited property boundary and surrounding landmarks

St. John's Dockyard Limited lands consists of approximately 16 acres as per legal land survey conducted on November 5, 1999 (See Figure 5). Under Municipal Compliance Information it is classified under Land Use Zone as Industrial General, and Municipal Land Use District as Industrial.

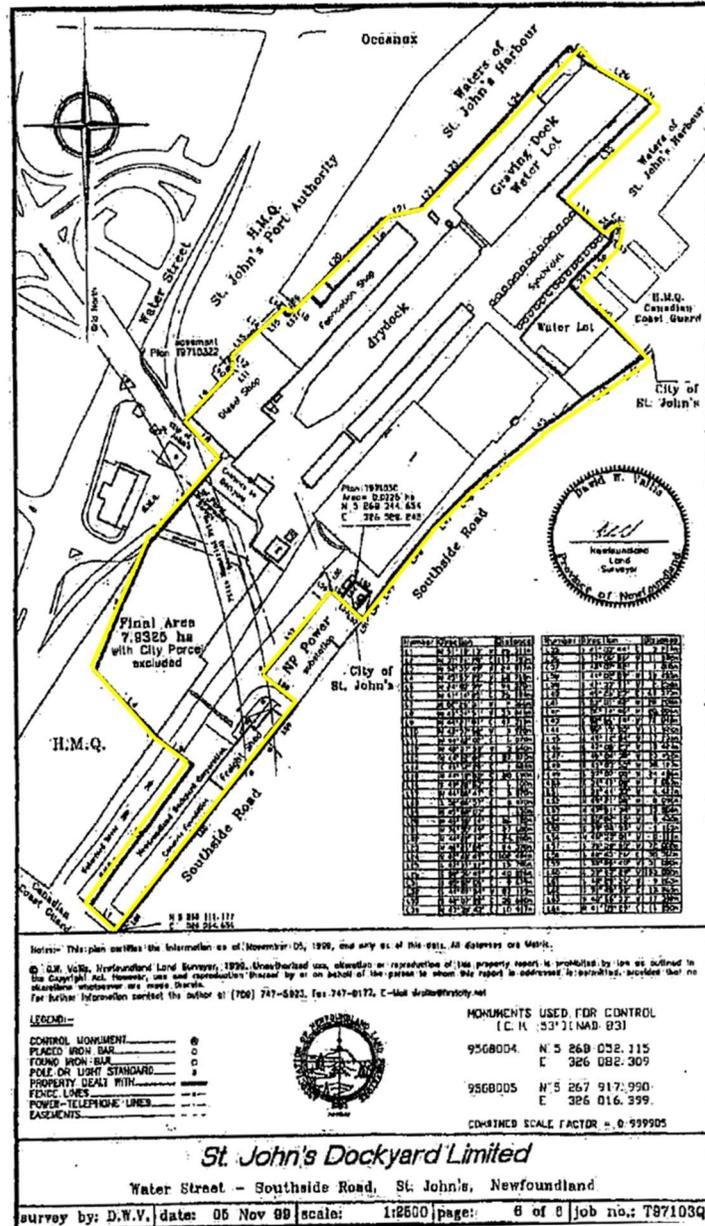


Figure 5 – Land Survey

2.3.2 Physical Features of Existing Facility

The project represents a modernization within an existing, industrialized marine vessel repair and maintenance facility and does not extend beyond current operational boundaries.

The existing physical features are illustrated in Figure 6 and consist of the following main features:

- 175m long Graving Dock constructed in the late 1920's
- 100m long Syncrolift (Marine Lift) constructed in the 1980's
- Syncrolift Transfer Table and Repair Berths constructed in the 1980's
- Piers 34, 35, 36 and 37
- Hi-Bay, Upper Shop and Lower Shops on the north side of the property
- Main Office and South Shops on the south side of the property
- Additional backlands and Hi-bay (not shown in this photo) on the west side of the property



Figure 6 – St. John's Dockyard Limited – Existing Physical Features and Property Boundary

As depicted in Figures 4 and 6, St. John's Dockyard Limited is bordered by the following:

- St. John's Harbour to the East
- Canadian Coast Guard facility to the East
- Southside Road to the South
- Riverhead Wastewater Treatment Facility to the South
- Harvey's Auto Carriers to the West
- Residential homes to the West
- Water Street to the North
- Oceanex to the North
- Pitts Memorial Drive Overpass crosses over the property on the west side
- Waterford River that cuts under the marine vessel berths

The main gate / entrance to the SJD facility is located adjacent to the Hi-bay and under the Pitts Memorial Drive Overpass as seen in Figure 6. Two secondary gates are located on the Southside Road and are locked at all times.

As depicted in Figure 6, the Graving Dock can accommodate larger vessels upto 150m in length, a maximum width of 21m, and draft of 7m. The Syncrolift is meant for smaller vessels with maximum length of 87m, maximum width of 20m and maximum weight of 3400 tonne. Depending on vessel sizes the Graving dock usually takes one vessel at a time as depicted in Figure 6, while the syncrolift can berth 3 to 6 vessels on the repair berths depending on length. Figure 6 depicts 3 vessels in the repair berths.

The St.John's Dockyard Limited is a ship repair and maintenance facility, which involves the following main activities once the vessel is placed in the graving dock or repair berths:

- Surface Prep and Painting
- Steel / Welding work
- Pipefitting work
- Internal Tank Cleaning
- Industrial Mechanical Work to tail shafts, propellers, engines
- Electrical Work

The impacts to the environment for the above stated activities are minimized as follows:

- Waste Steel – Recycled though Newco Metals
- Waste Oils – removed and disposed of through Pardy's Waste Management
- General Garbage – disposed of through GFL Environmental Incorporated
- Minor oil spills – cleaned up or contained immediately with oil absorbent material or boom

2.3.3 Physical and Biological Environment

The physical environment in the area is limited to an industrial site, surrounded by other industrial sites and roadways, with two marine environments being the St.John's Harbour and Waterford River.

The physical environments only known terrestrial mammals to habitat the facility are typical rodents. Terrestrial plant growth is limited to minimal weeds / grasses and small trees along the banks of the Waterford River. For the area of the proposed project both the terrestrial mammals and plant growth are non-existent.

The marine environment is depicted in Figure 6, with the Waterford River travelling under the syncrolift repair berths and transfer table and then exits into the St.John's Harbour. The

marine environment of the Waterford River contains a population of brown trout. The St. John's Harbour is known to not contain any species at risk. A Benthic Survey in the area of the proposed project will be conducted prior to any work starting and the results passed on to the Department of Fisheries and Oceans for analysis, direction and mitigation measures.

3.0 Project Description

3.1 Purpose, Rationale, Need for Undertaking

With the ever-increasing size of marine vessels, St. John's Dockyard Limited is unable to dock vessels wider than 21m and drafts greater than 7m with its existing facilities. These larger vessels come from the Offshore Oil and gas Industry, general cargo ships, bulk carriers, passenger carries and ferries. This has become a common occurrence in the last 15 to 20 years that the SJD is unable to dock certain vessels for repairs or maintenance in the Atlantic Canada region due to width and draft. The result has been the loss of these potential repair and maintenance contracts.

In addition to these current larger marine vessels, tens of billions of dollars in new Federal marine vessels are planned for the Arctic as part of the ongoing National Shipbuilding Strategy and Arctic Sovereignty, which includes River Class Destroyers, Program Ice Breakers, Multi-Purpose/Polar Class Ice Breakers and Patrol Submarines. With this ongoing National Shipbuilding Strategy, other Canadian shipyards with this capacity will be fully tasked with the new build programs, leaving minimal capacity for repairs and maintenance. SJD envisions this as a source of future repair and maintenance contracts.

Figure 7 below is an artist concept of the new Polar Icebreaker at approximately 140m in length, 29m in width, draft of 10m and displacement of 28,000 tonnes. The new Polar Icebreaker will be one of the largest vessels to be docked in the new proposed project.



Figure 7 – Artist Concept of New Polar Icebreaker

3.2 Strategic Assessment

In the last decade, the Canadian Arctic has seen an increased focus for military, resources and transport.

Canada launched the co-developed Arctic and Northern Policy Framework (ANPF) in 2019, which sets out a common vision of the Arctic and the North, in which the peoples there are thriving, strong and secure.

The Arctic is a strategically important region for the defense of North America and the North Atlantic Treaty Organization's (NATO's) northern and western flanks. The safety, security and defense of the Canadian Arctic comprise a fundamental priority for the Government of Canada and are critical to the collective defense of North America. The Arctic regions of North America are protected by the armed forces of Canada and the United States, individually and bilaterally, and through NORAD, which is binational.

The Canadian Arctic provides three main routes for marine shipping: one to the port of Churchill and other communities in Hudson Bay via Hudson Strait; a second to the Beaufort Sea via Bering Strait or the Mackenzie River; and a third through the Arctic Archipelago via the Northwest Passage. The Northwest Passage extends from Baffin Bay through Lancaster Sound to the Beaufort Sea via a number of alternative routes.

Winter shipping is tremendously more difficult than summer shipping. The ice is stronger and consolidated from shore to shore without the cracks that make it easier for a ship to pass through. Despite the challenges remaining and no expectation for an ice-free Arctic in winter, the summer shipping season in Arctic Canada could be extended due to the processes of climate change. A longer summer shipping season is expected to encourage shipping through the port of Churchill in Hudson Bay, and in the Beaufort Sea longer summer shipping seasons will increase the appeal of offshore hydrocarbon development as well as transport of oil and gas through the Bering Strait.

Use of the Northwest Passage as a supply and service route to and from Asia is a big part of the future Arctic plan. The primary benefits of shipping through the Northwest Passage (NWP) are significant cost and time savings due to shorter routes between Asia and North America, potentially reducing fuel consumption, lowering emissions (especially with slower speeds), and avoiding congestion/fees at the Panama Canal.

New business opportunities, connected not only to the Arctic's oil and gas resources but also the iron ore, diamonds, gold and fisheries, encourage investors from key business sectors to improve technology in order to develop better and more sufficient infrastructure in the northern hemisphere.

As seen in Figure 8, St. John's Dockyard Limited is strategically located in the ice-free port of St. John's Harbour and at the doorstep to the Canadian Arctic. With the construction of

the new proposed project, SJD will in a position to repair and maintain larger ice breakers to keep the arctic passage open and cargo ships prior to entering the arctic.



Figure 8 – St. John's Dockyard and the North West Passage

3.3 Summary of Engagement

St. John's Dockyard Limited is committed to advancing the project with a focus on a sustainable development framework which aims to reduce harm to the environment, benefit the local community, respect people's rights and adhere to openness and transparency.

3.3.1 Government Agency Engagement

SJD has engaged with various Government agencies in the initial stages of the project for guidance / direction on any required permits, licenses, approvals and other forms of

authorization required for the project. The following Government Agencies that have been contacted:

Environment and Climate Change Canada (ECCC) – for dredging and disposal of dredged material at sea

St. John’s Port Authority (SJPA) - for dredging and disposal of dredge material, along with marine traffic affects in the construction area

Department of Fisheries and Oceans (DFO) – for any fish and fish habitat concerns

Transport Canada – for navigable waters issues

Impact Assessment Agency of Canada – for any impact assessment requirements

Provincial Department of Environment, Conservation and Climate Change - Waste Management Division – for disposal of dredge material on land

Provincial Department of Environment, Conservation and Climate Change - Water Resources Management Division – for permits to alter a body of water

City of St. John’s – Development Division – for any commercial development applications required

3.3.2 Public Notification

SJD has notified the public and local community through a number of public notifications:

September 26, 2025 – SJD hosted a Celebration Event at its facility celebrating the first year of new ownership and announcement of the proposed expansion to its facilities. In attendance were employees of SJD, City of St. John’s representatives, Provincial Government representatives, Federal Government representatives and numerous other local suppliers / business representatives.

January 4, 2026 – CBC published an article on its webpage from an interview with one of the owners titled “Newdock eyes \$300M expansion in wake of geopolitical shakeup - Proposal includes new ship lift system, modernized facilities”.

3.3.3 Indigenous Engagement

St. John’s Dockyard Limited is currently owned by three Indigenous groups: Membertou First Nation, Qalipu First Nation, and Miawpukek First Nation, including Horizon Naval

Engineering, with internal engagement / consultation conducted with no development / construction or operation concerns identified.

3.4 Project Alternatives

When considering the proposed project, it was imperative to explore alternatives to ensure the optimum path forward was chosen that aligns with environmental, economic, technical viability and operation compatibility. The four alternatives were:

- **Do Nothing Approach.** This approach would leave SJD at its current capability and capacity. Although this would have the least environmental and financial implications, it would not provide a future for the larger marine vessels currently in existence in Atlantic Canada. Secondly with the century old Graving Dock, its life span was nearing its end.

- **Construct New Graving Dock.** A local Engineering firm was contracted to conduct a preliminary engineering study on the costs to build a new modern graving dock in the same area as the current. This approach would require significant engineering to incorporate a wider graving dock that is already confined. Along with modern construction techniques the costs became far more than anticipated. Operations would be severely impacted during construction and future capacity limited to dock only one vessel. Environmental issues were large amounts of old concrete to dispose of.

- **New Bardex Marine Lift.** A number of meetings were held with Bardex, an international company specializing in marine lifts. The Bardex system utilized chain, hydraulic hoists and a different engineered table. Environmental issues would mainly be in the dredging and disposal of dredge materials. Operations during construction would be impacted for approximately a year and with future capacity increased with additional repair berths.

- **New Pearlson Shiplift.** A number of meetings were also held with Pearlson Shiplift, an international company specializing in marine lifts. Pearlson's approach was wire cables, electric motors and a different engineered table. Environmental issues would mainly be in the dredging and disposal of dredge materials. Operations during construction would be impacted for approximately a year and with future capacity increased with additional repair berths.

In summary, it was decided to go with the Pearlson Shiplift due to:

- The familiarity with the company and its system since SJD existing marine lift is a Pearlson design and operation
- Better cost saving
- Corporate stability

3.5 Project Components and Activities

With pre-FEED engineering work completed, the design and engineering phases of the expansion of SJD are underway. A schedule of activities can be found in Section 3.6.1 and Figure 12.

Plans include a new marine lift system that will accommodate drydocking of the new Polar Class Icebreakers with a length of 140m, width of 29m, draft of 10m, and 28,000 tonne displacement.

The project will consist of a new larger capacity marine lift that will replace the century old graving dock, along with two vessel berthing areas on land to perform the essential repair and maintenance of the larger marine vessels. The existing smaller marine lift and berthing area will remain in place to compliment the larger marine lift and berthing.

3.5.1 Project Area and Main Components

The proposed project will be confined to the existing east side of SJD property and associated water lot. No expansion or encroachment beyond the current operational footprint is proposed. The size of the proposed undertaking is approximately 319m in length x 64m in width as depicted in the red dashed lines in Figure 9 below.

3.5.2 Project Components

The proposed project as depicted in Figure 9 can be broken down into 3 main components:

1. New Larger Marine Lift – Which will involve removing existing timber / concrete piers and dredging. Subsequently followed by installation of new concrete and steel pile piers and new larger marine lift between the piers
2. New Vessel Berthing Area – This will involve installation of a new cofferdam, new steel piles, blasted rock fill and a new reinforced concrete slab
3. New Additional Vessel Berthing Area – This will involve demolition of lower shop, installation of steel piles and reinforced concrete slab

The existing Marine Lift, Transfer Table and Repair Berths will not be affected and will remain in place.

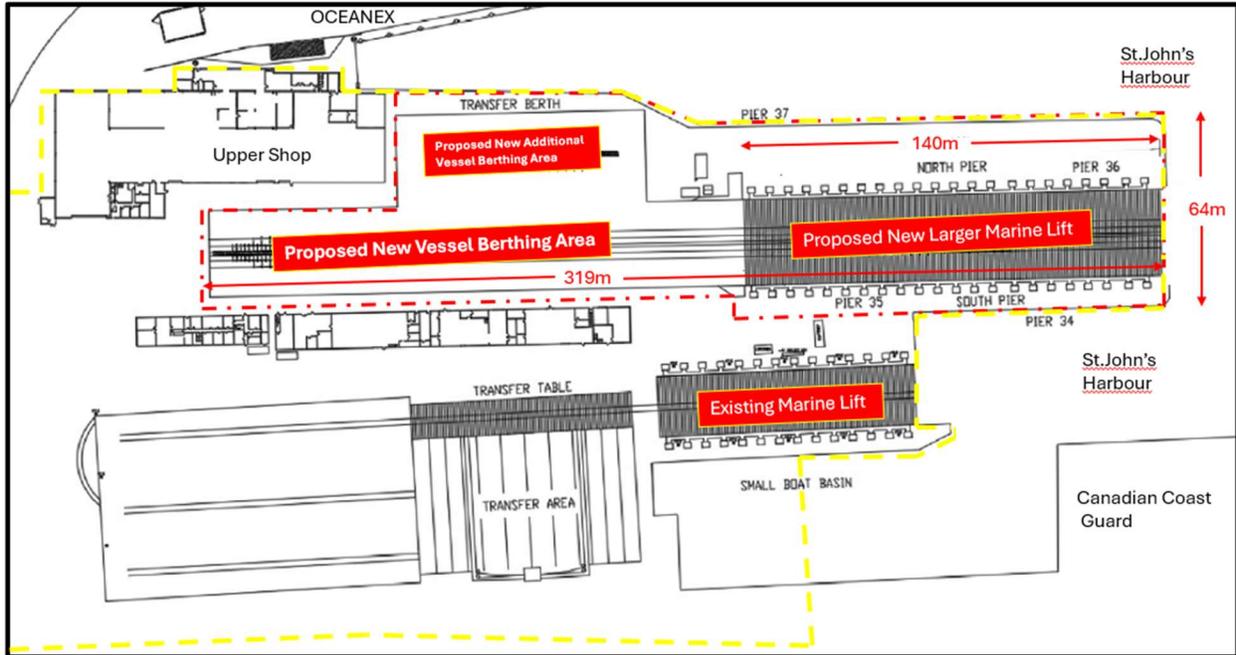


Figure 9 – Area of Proposed New Larger Marine Lift and Vessel Berthing Areas

The proposed undertaking will result in a larger capacity to our existing ship repair operations with the main activities remaining the same.

3.6 Project Construction

Below in Figure 10 is the current layout of St. John's Dockyard, while Figure 11 is an artist depiction of the new larger marine lift along with a new berthing area.

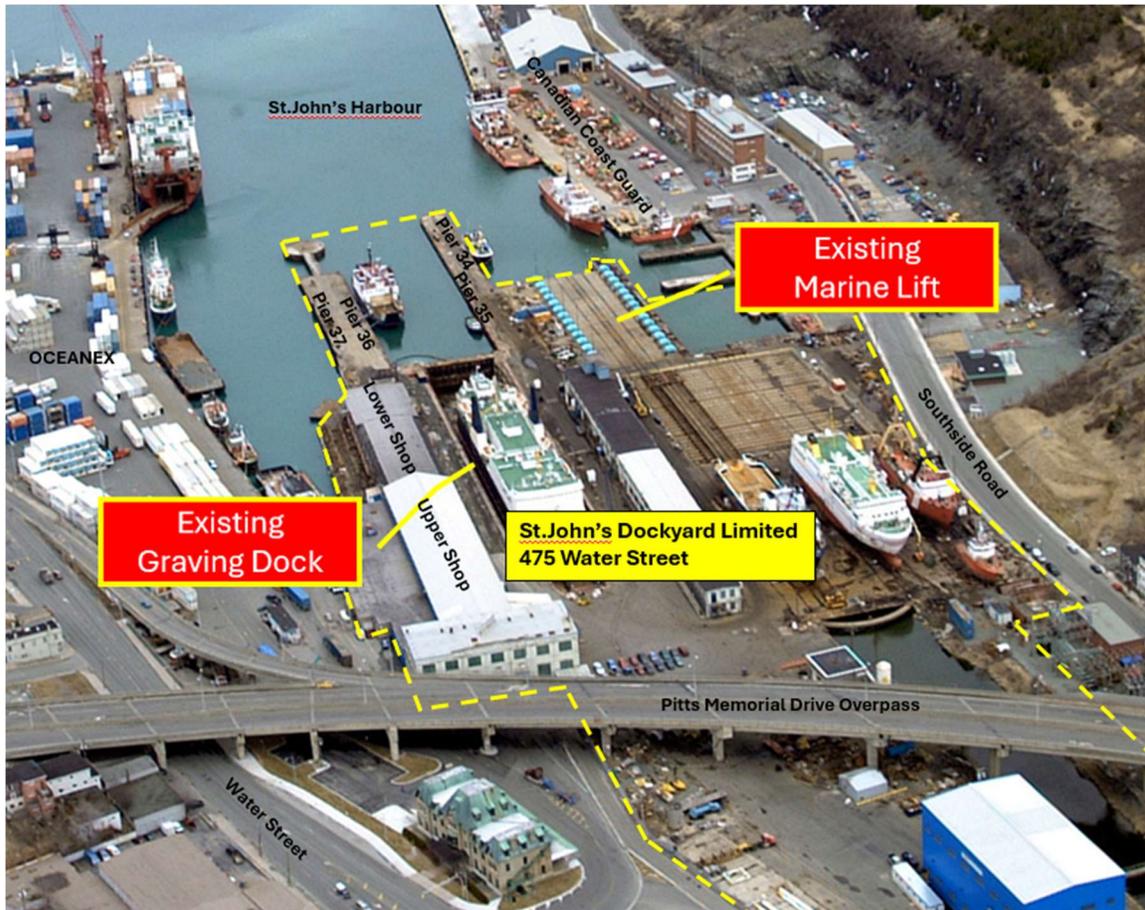


Figure 10 – Current Layout of St. John's Dockyard Limited and Property Boundary

The existing timber and concrete Piers 34, 35, 36 and 37 will be removed / demolished, with a new reinforced concrete pier on steel piles being installed in its place. As depicted in Figure 11, the proposed new marine lift will be situated between the 2 newly constructed Piers (pier 34/35 and pier 36/37) within the water lot owned by St. John's Dockyard Limited.

In addition, the new marine lift will require additional water depth for the platform to be lowered, therefore dredging of harbour sediment will be required.

Once the new Piers are constructed, the marine lift platform will be built off-site at an existing steel fabrication facility and transported to the site and installed between the new Piers. The new marine lift is basically a typical new pier / wharf construction with a steel platform suspended in between.

The new berthing area will occur on land and will consist of new steel pile supports, new concrete deck and blasted rock fill. The new berthing area will be over the existing graving dock and lower shop as depicted in Figures 9 and 11.

It is anticipated that materials and suppliers for the project will be 89% Canadian content.

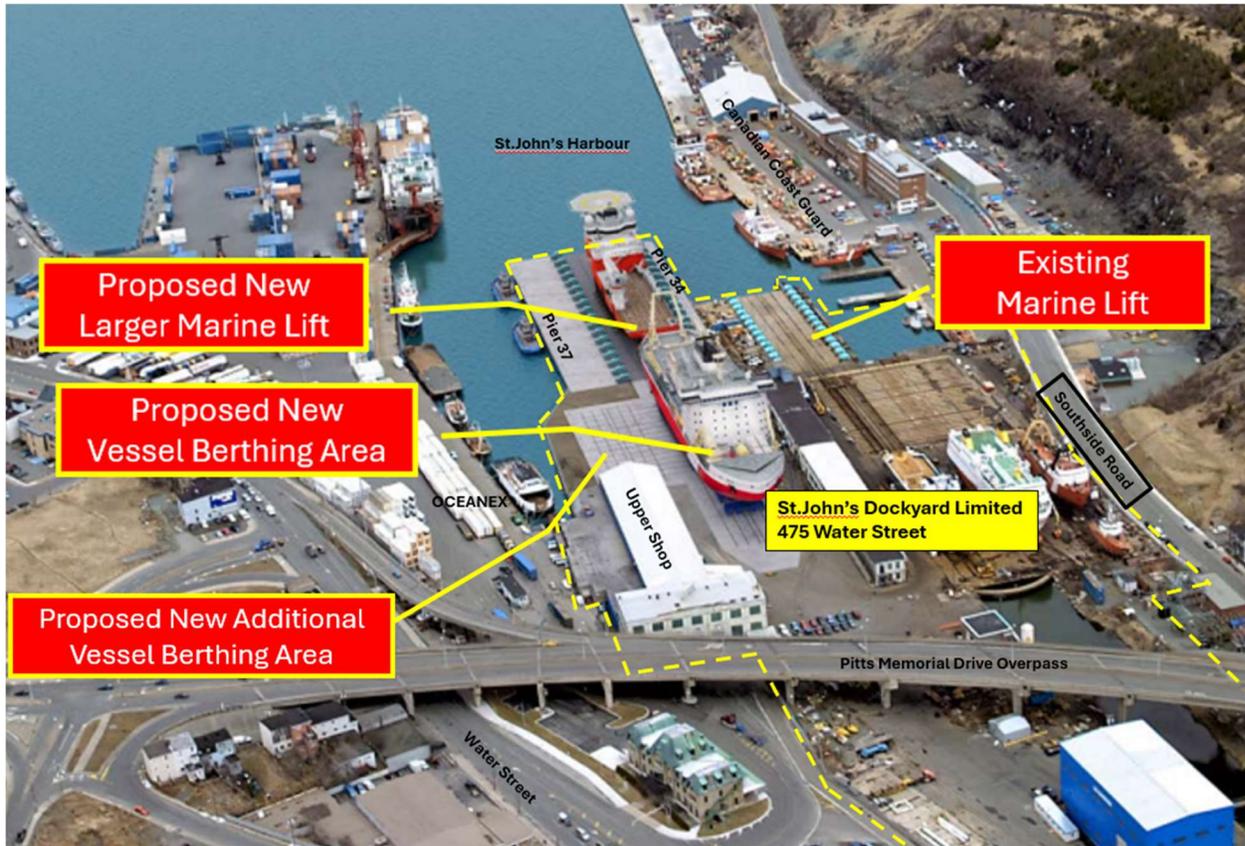


Figure 11 – Artist Depiction of Proposed New Larger Marine Lift and Property Boundaries

Additional details of the proposed new Marine Lift will be described in the following sections.

As indicated in the previous section, the proposed project as depicted in Figure 9 and 11, can be broken down into 3 main components:

- a. New Larger Marine Lift
- b. New Vessel Berthing
- c. New Additional Vessel Berthing Area

A description of the construction activities for these 3 main components will be broken down into their own individual section going forward.

3.6.1 Project Schedule

An anticipated schedule of activities is summarized in Figure 12 with Figure 13 illustrating the Areas of Proposed Work.

Task Name	2025				2026				2027				2028				2029			
	Q1	Q2	Q3	Q4																
Engineering																				
Sampling / Testing of Sediment																				
Demolition of Piers and Lower Shop																				
Dredging and Disposal																				
Drive Piles for New Piers																				
Concrete Deck for Piers																				
Install Piles and Infill in Graving Dock																				
New Concrete Slab over Graving Dock																				
Install New Marine Lift and Hoists																				
New Addition to Control Tower																				
Misc Utilities																				
Final Testing and Certification																				

Legend:
 Q1 - January to March
 Q2 - April to June
 Q3 - July to September
 Q4 - October to December

Figure 12 – Anticipated Schedule of Activities

The earliest and latest dates when project construction could commence (assuming all approvals are in place) is Q4 2026 as can be seen in Figure 13 – Anticipated Schedule of Activities. The reasons for the selection of these dates are to streamline the interaction between engineering and construction, as well as the anticipation of the arrival of the new Canadian Coast Guard Polar Icebreakers.

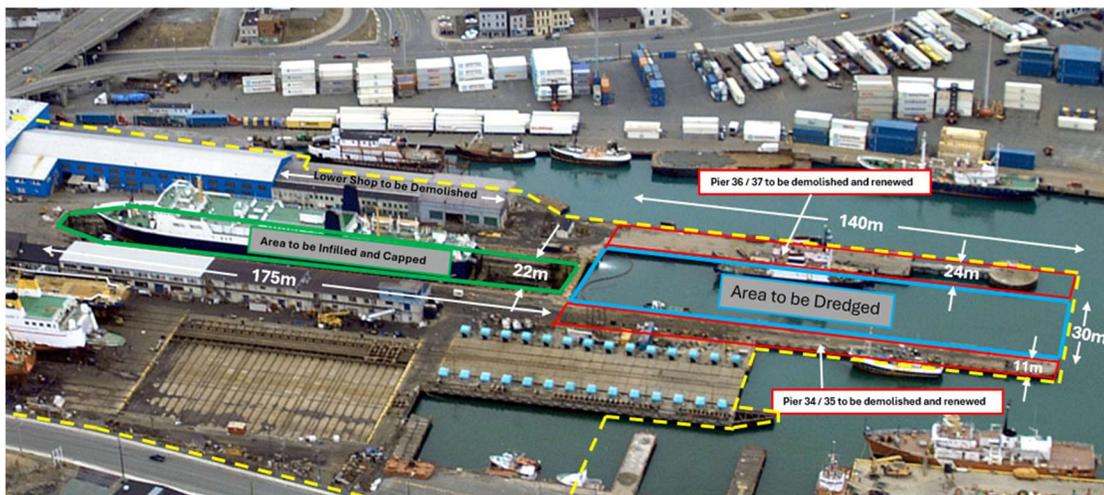


Figure 13 – Areas of Proposed Work

3.6.2 New Larger Marine Lift

The construction of the new larger marine lift can be further broken down into 4 components: demolition of existing piers, dredging of the area, construction of new piers, and installation of new hoists and platform.

3.6.2.1 Demolition of Existing Piers

The first activity associated with the New Larger Marine Lift will require the demolition of the Piers as depicted in Figure 13. Both Piers are of timber and concrete / steel pile construction, which do not have the structural capacity for the New Larger Marine lift. Both Piers are approximately 140m in length and 24m and 11m in width.

These timber, concrete and steel piles will be removed by a combination of land based heavy equipment (excavators and cranes) and heavy equipment on floating barges. All debris will be removed and disposed of at designated landfills, with steel piles being recycled.

Navigation impacts in the St. John's Harbour will be minimal as the project is in the west end of the harbour away from the majority of marine traffic. However, the CCG-MCTS Centre (St. John's Traffic) shall be notified of any use of barges or other marine vessels during this activity to facilitate the smooth flow of commercial marine traffic in the harbour. MCTS can be contacted via; Marine Radio: (VHF Channel 11 or Channel 16), and/or Telephone: (709) 227-2181

This work is anticipated to occur in Late 2026 to Mid 2027.

Environmental issues for this activity will be heavy equipment working near or on the water (barge). Mitigation for this activity will be as follows:

- Develop and implement an Environmental Mitigation Plan that will include the items below
- Ensure all heavy equipment is cleaned before arriving at the project site to ensure equipment and machinery are clean and free of aquatic invasive species or deleterious substances
- Re-Fueling of heavy equipment will be done in a manner to prevent fuel from entering the water. Fuel will be stored in such a way as to prevent any deleterious substances from entering the water
- Ensure all heavy equipment is in good working order with all hydraulic and fuel lines inspected prior to use

- Spill kits (including oil boom) situated on land and on the barge in case of leak / spill

3.6.2.2 Dredging of the Area

Dredging between the piers will occur shortly after the demolition of the Piers starts, starting approximately in early 2027 until the fall of 2027. The dredge area is approximately 140m in length, 60m in width and 10m in depth, and will occur within St. John's Dockyard property boundary.

Dredging will occur to a depth of -18m below the low water level, which will be to the top of the underlying bedrock. The estimated volume of sediment will be approximately 100,000m³ depending on the side slope configuration with another 20,000m³ in rock pending Geotech results.

The sediment in this area of the harbour is typically 2m to 3m of harbour organic sediment, with an underlying layer of gravel and sand till, until bedrock is reached.

Prior to any dredging an Application for Permit to Alter a Body of Water will be submitted to the **Provincial Department of Environment, Conservation and Climate Change - Water Resources Management Division**.

The sediment will be sampled prior to any dredging to determine physical characteristics as well as physiochemical composition. The guidelines to be followed for sampling and disposal include the following:

- *CEPA Disposal at Sea Regulations*
- *Canadian Council of Ministers of the Environment (CCME) Soil Quality Guidelines for the protection of Human and Environmental Health for all land uses*
- *CCME Canada Wide Standards (CWS) for Petroleum Hydrocarbon concentrations (PHCs) for all land uses.*
- *Atlantic Risk-Based Corrective Action (RBCA) Version 4 Tier I Risk Based Screening Levels (RBSLs) and Ecological Screening Levels (ESLs) for PHCs;*
- *Atlantic RBCA Tier 1 Human Health and Ecological Environmental Quality Standards (EQSs).*

Dredging will be done from both land and on barge with dredging excavators. Disposal of Dredged material will be either:

- Disposal at Sea, or
- Disposal on Land

For disposal at sea, dump scow barges will be utilized to relocate the dredge material to the disposal site. For disposal on land, dump trucks will be utilized that are equipped with sealed boxes.

Navigation impacts in the St. John's Harbour will be minimal as the project is in the west end of the harbour away from the majority of marine traffic. However, the CCG-MCTS Centre (St. John's Traffic) shall be notified of any use of barges or other marine vessels during this activity to facilitate the smooth flow of commercial marine traffic in the harbour. MCTS can be contacted via; Marine Radio: (VHF Channel 11 or Channel 16), and/or Telephone: (709) 227-2181

Disposal at Sea will **require Environment and Climate Change Canada (ECCC)** to review sampling results to determine if suitable for disposal at sea as per their guidance document "Characterization of Dredged Material for Open Water Disposal" and "Appendix C: Guidance for Disposal Site Selection".

The **St. John's Port Authority (SJPA)** will also be involved in any disposal at sea, specifically within St. John's harbour, but contingent on the results of physiochemical analysis.

If the sediment is deemed not appropriate for disposal at sea by ECCC and SJPA, the sediment will be disposed of on land. Any decision to dispose on land will go through the **Provincial Department of Environment, Conservation and Climate Change, Waste Management Division**, specifically their Guidance Document "Protocol for the Management of Excavated Soils, Concrete Rubble and Dredged Materials".

The physiochemical sample results will determine the level of soil treatment prior to any land disposal.

In addition to physiochemical analysis of the sediment, the dredged area and possible disposal area at sea will have a Benthic Survey conducted as per **Department of Fisheries and Oceans (DFO)** requirements. The Benthic Survey will determine fish and fish habitat of the area, which will be part of DFO's Request for Review process for Authorization to proceed with proposed work.

Discussions with DFO Senior Biologists for Marine Projects, Fish and Fish Habitat Protection Program, and with their experience with similar projects within St. John's Harbour have indicated that mitigations to protect the fish environment will have to be in place with possible offsetting measures performed in the nearby marine environment.

Prior to any approvals or authorizations from DFO, the mitigation measures we will have in place area are as follows:

- Develop and implement an Environmental Mitigation Plan that will include the items below
- Ensure all heavy equipment is cleaned before arriving at the project site to ensure equipment and machinery are clean and free of aquatic invasive species or deleterious substances
- Re-Fueling of heavy equipment will be done in a manner to prevent fuel from entering the water. Fuel will be stored in such a way as to prevent any deleterious substances from entering the water
- Ensure all heavy equipment is in good working order with all hydraulic and fuel lines inspected prior to use
- Spill kits (including oil boom) situated on land and on the barge in case of leak / spill
- The work area will be visually monitored for turbidity. Should a significant change in water quality be observed outside of the dredge location, water quality testing and/or additional mitigation measures such as the use of an “environmental bucket” or silt curtain will be implemented
- To prevent spillage of dredged material onto roadways, dredge material will be dewatered as much as practicable prior to transport by dump truck. Sawdust or similar material may be utilized against tailgates to prevent any leakage. Freeboard will be maintained above the dredge material in the dump truck to also prevent spillage. Truck routed will be monitored for any spilled material.

3.6.2.3 Construction of New Piers

Once demolition of piers and dredging is complete, the construction of 2 new piers will begin. The construction of 2 new Piers will consist of steel piles driven to bedrock to ensure a structurally sound foundation. The steel piles will be driven using typical cranes equipped with pile driving hammers. It is anticipated that 600 to 1000 steel piles will be required but final numbers will be determined once engineering is complete. The steel piles will come pre-coated with their paint coating already applied off site.

Upon completion of pile driving, a new reinforced concrete deck will be formed and poured on top of the piles. See Figure 14 for a typical section of the new piers with steel piles and concrete deck. It is anticipated that the piles and concrete will start mid 2027 and be completed in early 2028.

To aid in reducing the amount of dredging required and to help maintain the slope of the dredged area, additional steel sheet pile wall may be incorporated on the outer perimeter of the concrete deck. This sheet pile wall will be installed with the same crane and pile driving equipment as the steel piles.

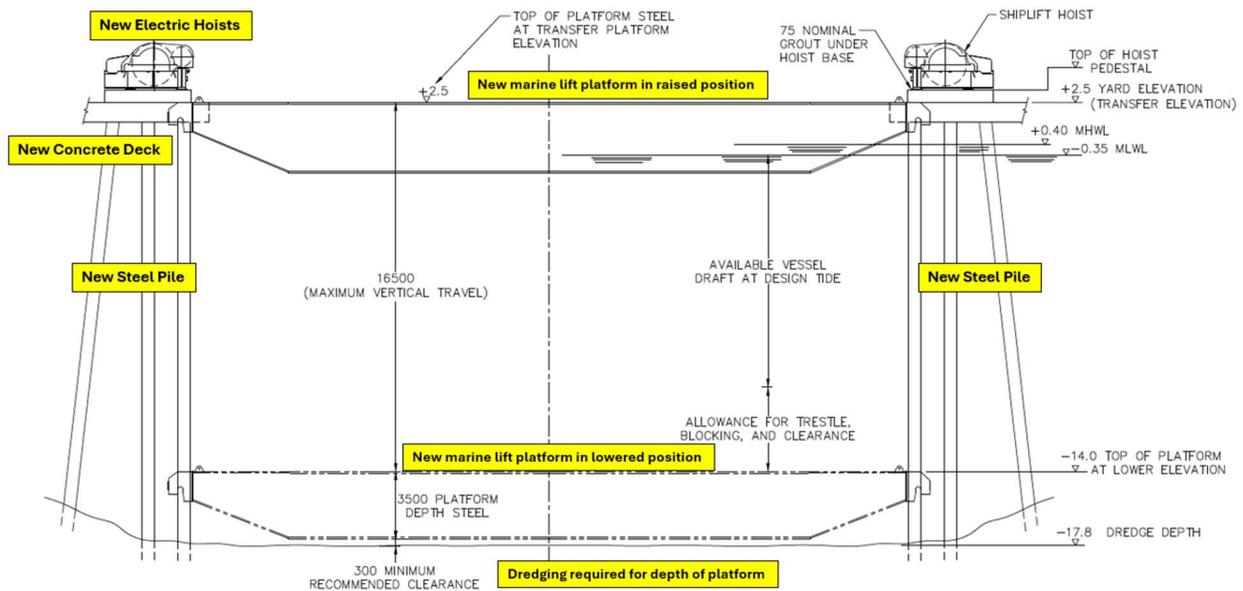


Figure 14 – Typical Section of New Pier

The steel piles and reinforced concrete top is similar construction to numerous Piers and wharves constructed within the St. John's Harbour and across the world.

Navigation impacts in the St. John's Harbour will be minimal as the project is in the west end of the harbour, away from the majority of marine traffic. However, the CCG-MCTS Centre (St. John's Traffic) shall be notified of any use of barges or other marine vessels during this activity to facilitate the smooth flow of commercial marine traffic in the harbour. MCTS can be contacted via; Marine Radio: (VHF Channel 11 or Channel 16), and/or Telephone: (709) 227-2181

Environmental issues for this activity will be once again heavy equipment working near or on the water (barge), along with the pouring of concrete. Mitigation for this activity will be as follows:

- Develop and implement an Environmental Mitigation Plan that will include the items below
- Ensure all heavy equipment is cleaned before arriving at the project site to ensure equipment and machinery are clean and free of aquatic invasive species or deleterious substances

- Re-Fueling of heavy equipment will be done in a manner to prevent fuel from entering the water. Fuel will be stored in such a way as to prevent any deleterious substances from entering the water
- Ensure all heavy equipment is in good working order with all hydraulic and fuel lines inspected prior to use
- Spill kits (including oil boom) situated on land and on the barge in case of leak / spill
- Concrete forms inspected for possible leaks prior to pouring of concrete

3.6.2.4 Installation of New Hoists and Platform

Once the new concrete piers are complete, new electric hoists will be installed onto the concrete piers in their designated locations. This will occur in mid 2028. Previously prefabricated steel platform beams, built off-site, will be transported and connected to the electric hoists by the engineered steel cables. There will be 72 total electric hoists installed, 36 per side. Spanning across the new pier, 36 main platform beams will be installed between the electric hoists. Figure 16 illustrates a typical prefabricated beam being installed between piers. A significant number of smaller steel beams will be installed between the main platform beams to form the new marine lift platform. The total size of the platform is approximately 140m long and 30m wide.

The installation of the steel platform beams will require cranes and barges to position the beams in place, and subsequent minor welding or bolting together since they were prefabricated off-site. The electric hoists will also come prefabricated and will only need to be lifted in place with crane or forklift and subsequently bolted to the concrete foundation / pedestal. Figure 15 depicts the electric hoists mounted to the concrete foundations / pedestals, with Figure 16 illustrating the steel platform beams suspended between electric hoists and the Piers.



Figure 15 – Illustration of New Electric Hoist



Figure 16 – Illustration of Prefabricated Beam

Navigation impacts in the St. John's Harbour will be minimal as the project is in the west end of the harbour, away from the majority of marine traffic. However, the CCG-MCTS

Centre (St. John's Traffic) shall be notified of any use of barges or other marine vessels during this activity to facilitate the smooth flow of commercial marine traffic in the harbour. MCTS can be contacted via; Marine Radio: (VHF Channel 11 or Channel 16), and/or Telephone: (709) 227-2181

Environmental issues for this activity are once again heavy equipment working near or on the water (barge), along with the welding of beams. Mitigation for this activity will be as follows:

- Develop and implement an Environmental Mitigation Plan that will include the items below
- Ensure all heavy equipment is cleaned before arriving at the project site to ensure equipment and machinery are clean and free of aquatic invasive species
- Ensure all heavy equipment is in good working order with all hydraulic and fuel lines inspected prior to use
- Spill kits (including oil boom) situated on land and on the barge in case of leak / spill
- Used welding rod stubs will be collected in receptacles for proper disposal in a land fill

3.6.3 New Vessel Berth

To convert the existing Graving Dock into a new vessel berthing area a number of activities will occur in 2027 to the fall of 2028 specifically: removal of existing graving dock gate and installation new cofferdam, installation of steel piles and blasted rock, and installation of new reinforced concrete slab.

3.6.3.1 Removal of Existing Graving Dock Gate and Installation of New Cofferdam

The existing Graving Dock gate will be removed and cut into pieces for proper metal recycling. The amount of steel in the graving dock gate to recycle is approximately 400 tonne. In its place a permanent new sheet pile wall cofferdam will be designed and installed to keep blasted rock infill in place. Figure 17 below illustrates the existing graving dock gate.

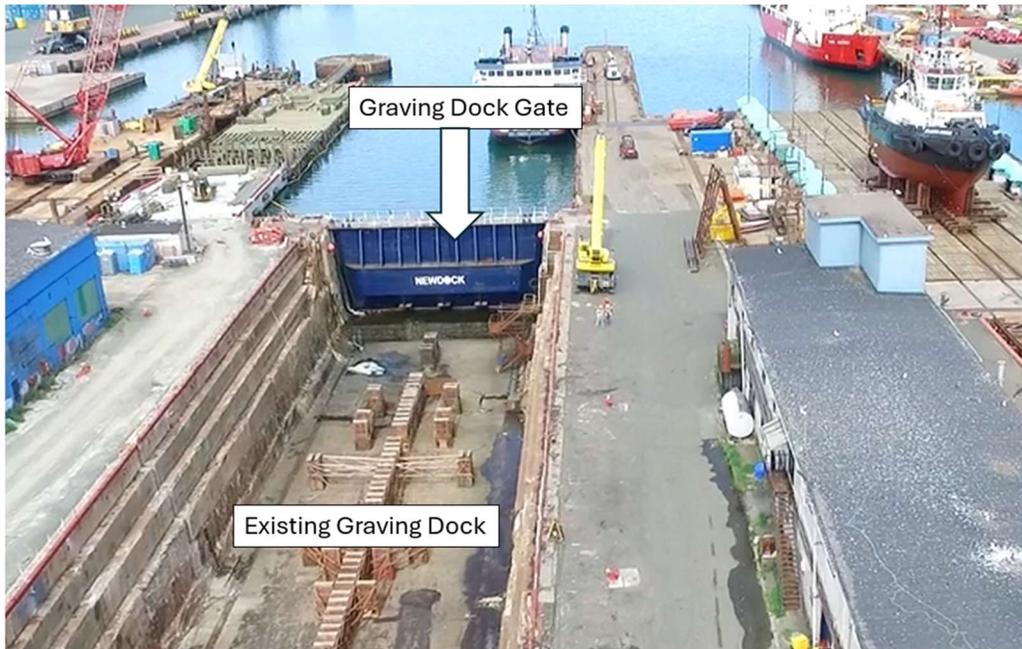


Figure 17 – Graving Dock and Gate

3.6.3.2 Installation of New Steel Pile and Blasted Rock

Once the new cofferdam is in place, approximately 500 steel piles will be driven through the base slab of the existing graving dock till bedrock is reached. These steel piles will once again be pre-coated / painted off site prior to any installation. The steel piles will be the main support for the new reinforced concrete berth area and will cover the entire area of the existing graving dock (175m long x 22m wide). Figure 18 is an illustration of the piles driven through the existing base slab of the graving dock.

Once steel piles are in place, the remainder of the existing graving dock will be infilled with blasted rock. Approximately 30,000m³ of blasted rock will be trucked into the site and placed with heavy equipment. Subject to physiochemical analysis and review by the appropriate regulatory authorities, dredge material may be used to fill the graving dock, specifically the lower layers of the dredge prism which are expected to contain loose / blasted rock.

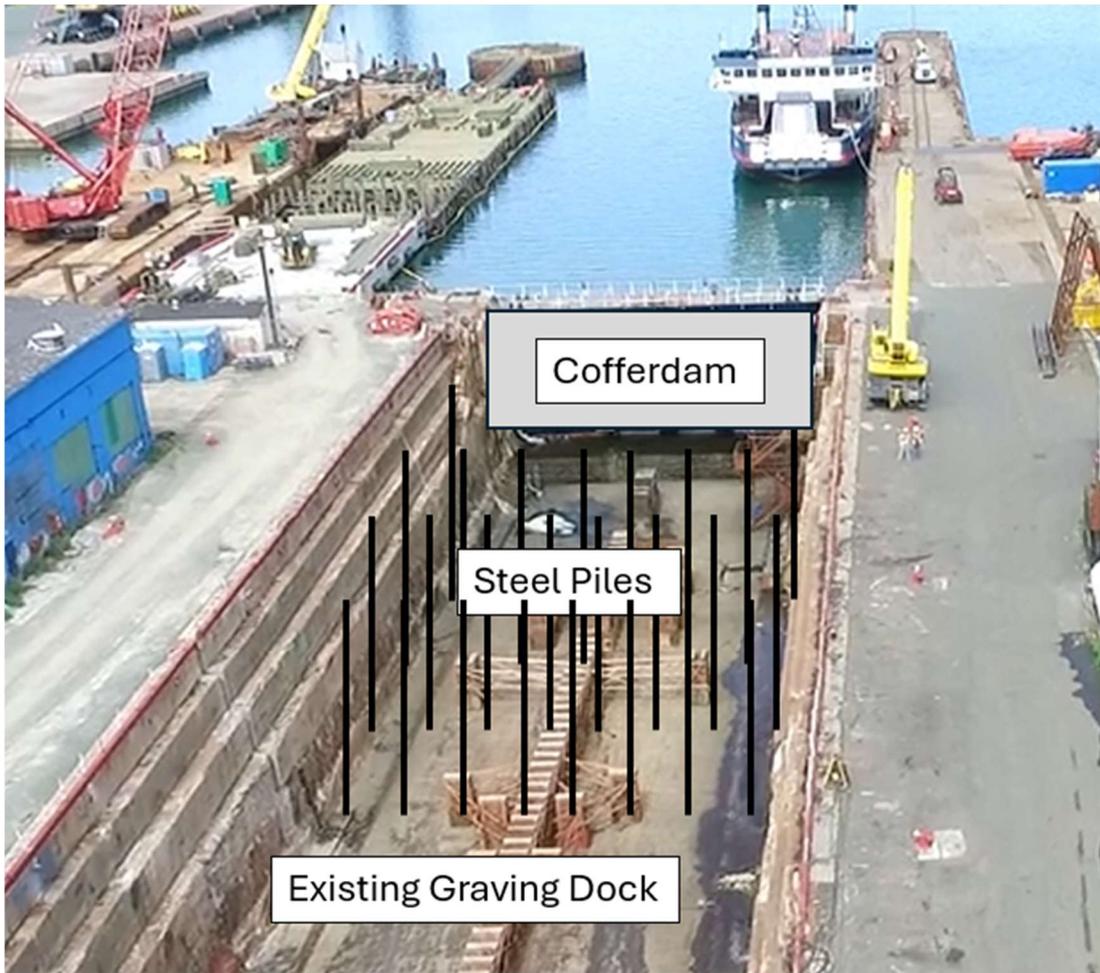


Figure 18 – Illustration of new steel piles in graving dock

3.6.3.3 Installation of Reinforced Concrete Slab

Once the cofferdam is in place, all steel piles driven and blasted rock in place, a reinforced concrete slab will be poured to form the new vessel berth to handle the larger vessels. The vessel berth is in essence a parking area for the marine vessel during repairs / maintenance and will be designed and constructed to meet the heaviest loads anticipated.

3.6.3.4 Environmental Issues – New Vessel Berth Area

Environmental issues for the activities associated with the New Vessel Berth Area will once again be heavy equipment working near or on the water (barge), along with the pouring of concrete. Mitigation for these activities will be as follows:

- Develop and implement an Environmental Mitigation Plan that will include the items below
- Ensure all heavy equipment is cleaned before arriving at the project site to ensure equipment and machinery are clean and free of aquatic invasive species or deleterious substances
- Re-Fueling of heavy equipment will be done in a manner to prevent fuel from entering the water. Fuel will be stored in such a way as to prevent any deleterious substances from entering the water
- Ensure all heavy equipment is in good working order with all hydraulic and fuel lines inspected prior to use
- Spill kits (including oil boom) situated on land and on the barge in case of leak / spill
- Concrete forms inspected for possible leaks prior to pouring of concrete
- Any dust from the placement of blasted rock will be monitored. If deemed necessary, SJD has numerous sources of water that can be applied through 2” diameter water hoses to reduce dust

3.6.4 New Additional Vessel Berthing Area

To be able to dock additional vessels, more vessel berths are required. The existing Syncrolift Marine lift has three vessel berths as previously seen in Figures 9, 10 and 11. The proposed new larger marine lift will be equipped with two vessel berths, one as described previously over the existing graving dock and a second vessel berth to the north where the lower shop currently exists. This was previously shown in Figure 9 and 11 and will be further discussed and illustrated in Figure 19.

The construction of the New Additional Vessel Berthing Area will consist of the following activities: demolition of lower shop and pump house, installation of new steel piles, and installation of new reinforced concrete slab.

3.6.4.1 Demolition of Lower Shop and Pump House

The existing lower shop is of steel and timber construction, with a concrete floor. Demolition is scheduled for early 2027 and to coincide with the demolition of the piers as described in previous sections. Excavation of some soil may be required if the soil characteristics are not suitable for the Geotech engineers. Additional sampling of soil will be conducted to determine suitability for land disposal.

Within this area the existing pumphouse is situated as can be seen in Figure 19. The pumphouse contains diesel and electric pumps, that will be removed during the demolition of the lower shop. Once all pump equipment is removed, the pumphouse will be filled with blasted rock.

3.6.4.2 Installation of New Steel Piles and Reinforced Concrete Slab

Once the lower shop and concrete floor, and the pumphouse are removed and any new blasted rock placed, approximately 250 additional steel piles will be driven into the ground to bedrock to provide structural support to the new reinforced concrete slab. The steel piles and reinforced concrete slab is scheduled for 2028.

Dimension of the new additional vessel berth will be approximately 120m in length and 23m in width.

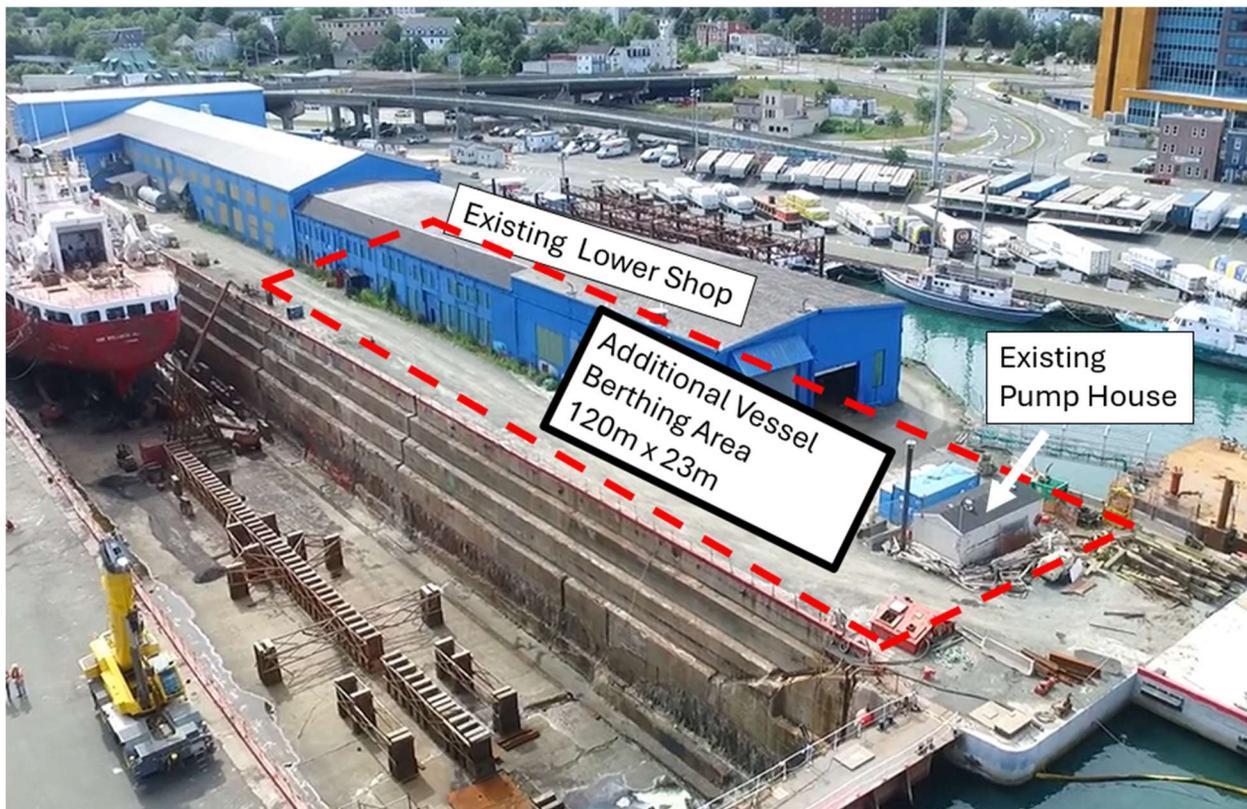


Figure 19 – New Additional Vessel Berthing Area

3.6.4.3 Future Additional Berth

In addition to the second berth to the north, a third berth to the south is also being considered with final decision based on schedule and costs. This would require the South

Shops / Lunchrooms to be demolished. The Main office and Control Tower will not be touched. Located on the lower level there are a number of small shops, while the upper level contains client offices, a locker room and the main lunchroom. Figure 20 illustrates the South Shops / Lunchroom that is being proposed for demolition.



Figure 20 – Future Additional Berth – South Shop / Lunchrooms to be demolished

This additional third berth would not only provide increased capacity to dock more vessels but would provide more options for docking and berthing a vessel from either the new larger lift or from the existing smaller lift. Figure 21 depicts an Artist Concept of the Future Additional Berth.

The same methodology would be required as the second berth construction, in that after demolition of the building, steel piles will be driven into the ground with a subsequent reinforced concrete slab constructed. The size will be similar to berth 2 at 120m long x 23m wide.



Figure 21 – Future Additional Berth – Artist Concept

3.6.4.4 Environmental Issues – New Additional Vessel Berthing Area

Environmental issues for both the second and third berthing area will once again be heavy equipment working near or on the water (barge), along with the pouring of concrete and demolition of buildings. Mitigation for this activity will be as follows:

- Develop and implement an Environmental Mitigation Plan that will include the items below
- Ensure all heavy equipment is cleaned before arriving at the project site to ensure equipment and machinery are clean and free of aquatic invasive species or deleterious substances
- Re-Fueling of heavy equipment will be done in a manner to prevent fuel from entering the water. Fuel will be stored in such a way as to prevent any deleterious substances from entering the water
- Ensure all heavy equipment is in good working order with all hydraulic and fuel lines inspected prior to use
- Spill kits (including oil boom) situated on land and on the barge in case of leak / spill
- Concrete forms inspected for possible leaks prior to pouring of concrete
- Asbestos pipe insulation removed by certified asbestos abatement contractors in the shops and pump house

3.7 Impacts on Adjacent Properties

Where St.John's Dockyard Limited is an industrialized site for the last 140 years, the type of construction activities as previously described should pose minor impacts to the two main commercial properties adjacent: Oceanex and the Canadian Coast Guard.

The main impact to these adjacent properties would be minor marine traffic during demolition of the piers, installation of piles, dredging and installation of new marine lift. There will be regular communication with the Marine Traffic center of St.John's Harbour, the St.John's Port Authority and Oceanex.

During dredging the work area will be visually monitored for turbidity. Should a significant change in water quality be observed outside of the dredge location, water quality testing and/or additional mitigation measures such as the use of an "environmental bucket" or silt curtain will be implemented in the St.John's Harbour.

Residential areas located on the western side of the property may be affected by noise from pile driving operations. The closest residential home is approximately 140m from the closest pile driven area. The City of St.John's Noise By-Law 1405, states that "*3. No person shall emit or cause or permit the emission of sound resulting from an act listed herein, and which sound is clearly audible at a Point of Reception: (5) The operation of any equipment in connection with construction between 11:00pm and 7:00am daily in, or within 100 metres of, a Residential Zone*". SJD will abide by the Noise By-Law at all times and will also look into ways to reduce the noise outputs of the pile driving equipment such as a noise dampening cap over the pile drive equipment and use of hard wood at the hammer to deaden sounds.

Noise from vehicular traffic is anticipated to be similar to existing, as SJD and its neighbour Oceanex have regular large vehicles entering and exiting. Additional vehicular traffic to and from the site will be spread over several years and will consist of additional traffic for: disposal of demolished piers and buildings, construction of concrete piers and slabs, disposal of dredged material and import of blasted rock for fill. St.John's Dockyard Limited will work closely with the **City of St.John's, Department of Planning, Engineering and Regulatory Services**, to ensure any road traffic and noise associated with such traffic is managed. A **Planning / Development Application** will be submitted to ensure the project is properly reviewed by the City of St.John's.

4.0 Operation

The operation of the existing facility as previously described involves the following main activities at SJD for ship repair and maintenance:

- Surface Prep and Painting
- Steel / Welding work
- Pipefitting work
- Internal Tank Cleaning
- Industrial Mechanical Work to tail shafts, propellers, engines
- Electrical Work

Emissions in the existing facility are limited to mobile equipment such as cranes, forklifts and manlifts. The operation of the new larger marine lift is expected to have no new sources of emissions compared to existing operations.

Discharges to the environment are none as they are collected and disposed of through designated waste disposal contractors, such as:

- Waste Steel – collected and stored in steel dumpster, disposed / recycled through Newco Metals when dumpsters are filled
- Waste Oils – collected and stored in drums, totes, and disposed of through Pardy's Waste Management on a weekly basis
- General Garbage – collected and stored in garbage dumpsters, and disposed of through GFL Environmental Incorporated once or twice a week
- Minor oil spills – cleaned up or contained immediately with oil absorbent material or boom disposed of through Pardy's Waste Management

As illustrated in Figure 22, waste steel, waste oils and garbage are temporarily stored in an area on the west end of the SJD property that allows access for waste disposal trucks to remove collection dumpsters or pumper trucks to pump waste oil. As indicated previously, waste oil is disposed of on a weekly basis, general garbage once or twice a week, and steel waste once dumpster is filled.



Figure 22 – Waste Storage and Dumpster Area

As indicated previously, waste oils are collected and disposed of through Pardy's Waste Management who are registered collectors, processors and recyclers of waste oil under the Atlantic Used Oil Management Association.

With additional vessels with the new larger marine lift, St. John's Dockyard Limited will continue to handle and dispose of waste material in the same manner. SJD has contacted Pardy's Waste Management, NEWCO Metals and GFL Environmental Incorporated, in which they have all verified no issues with increased capacity with a larger operation.

SJD has an existing Environmental Management Procedure which outlines the processes and procedures established to ensure risks to the environment are minimized, and includes:

- Responsibilities
- Description of Environmental Hazards
- Environmental Protection Processes for storage tanks, re-fueling, general garbage disposal, waste oil disposal, scrap steel disposal, etc.
- Spill Response for small spills and large spills
- Spill response procedure including numbers to call

The Environmental Management Procedure currently in place at the SJD facility, including waste management / disposal and spill response, will continue to apply.

The new marine lift will be a permanent component of St. John's Dockyard Limited facility for ongoing ship repair and maintenance for the next 50+ years.

5.0 Employment and Social Benefits

The SJD currently employs approximately 150 to 200 employees which consists of a number of visible minorities and women in both staff and the skilled trades. In addition, SJD supports the local supplier community with approximately \$7 Million annually and additional approximate \$12 Million annually for other Canadian suppliers for services required for its annual operation.

The proposed expansion to its current facilities will have a positive effect to employment both locally and in Canada, as well as to the supplier communities. Employment will be broken down into the Construction Phase and Operation Phase in the following sections.

5.1 Employment – Construction Phase

The preliminary estimate of the number of temporary employees anticipated during the construction phase can be seen in Figure 23 below:

Construction Phase - Anticipated Number of Employees NOC 2021 Version 1.0	Number		2025				2026				2027				2028				2029				
	Min	Max	Q1	Q2	Q3	Q4																	
00015 – Senior managers - construction, transportation, production and utilities	2	4																					
70010 – Construction managers	2	4																					
20010 – Engineering managers	2	4																					
21300 – Civil engineers	4	6																					
22233 – Construction inspectors	5	10																					
75119 – Other trades helpers and labourers	15	20																					
72106 – Welders and related machine operators	30	40																					
72021 – Contractors and supervisors, heavy equipment operator crews	2	4																					
73400 – Heavy equipment operators	5	10																					
73100 – Concrete finishers	10	20																					
72105 – Ironworkers	20	30																					
72310 – Carpenters	5	10																					
Total	102	162																					

Figure 23 – Estimate of Type and Number of Employment during Construction Phase

The number of employees during the construction phase will be approximately 100 to 160, with the bulk of the work occurring 2027 and 2028. Work will occur all year round until the project is completed. These numbers will be for employees in the local construction industry such as concrete services, heavy equipment operators, carpenters, construction supervisors, etc.

Materials for the construction phase, such as steel piles, rebar, concrete, steel for new platform, electric components, etc will also be 89% or more from local and Canadian suppliers.

A more accurate number of employees required for the construction phase will be more apparent once the engineering and design phase are further along.

5.2 Employment – Operation Phase

After construction is complete and the new marine lift is in operation, SJD will be able to accommodate additional vessels annually. It is anticipated the new marine lift operations will require an additional workforce from 150 to 200 annually, as can be seen in Figure 24. These numbers will be 100% local employment as it is for the continued operation of the SJD. These additional numbers will be contingent on the type and duration of the vessel repairs required.

Operation Phase - Anticipated Number of New Employees NOC 2021 Version 1.0	Number	
	Min	Max
72106 – Welders and related machine operators	35	50
72301 – Steamfitters, pipefitters and sprinkler system installers	15	20
72201 – Industrial electricians	25	30
72400 – Construction millwrights and industrial mechanics	20	30
75119 – Other trades helpers and labourers	40	50
94213 – Industrial painters, coaters and metal finishing process operators	15	20
Total	150	200

Figure 24 – Estimate of Type and Number of New Employees during Operations

In addition, St. John's Dockyard limited will require additional services from outside local and Canadian suppliers and contractors to facilitate the repair and maintenance of any new larger vessels, such as pumper trucks, cranes, steel supply, pipe supply, electrical supply, NDE contractors, Naval Architect engineers, etc. With the operations roughly doubling with the new proposed marine lift, it is anticipated that upto \$7 Million could be infused into the local supplier community and upto \$12 million into other Canadian suppliers, for the services as previous identified.

SJD is committed to the practice of employment equity, and we encourage applications from qualified people, including those of Aboriginal ancestry, persons with disabilities and members of visible minority groups. At SJD, we value the background, experience and talents of each individual. We strive to create a workforce that reflects the diverse populations of our communities.

6.0 Project Related Documents

Project related documents generated to date are as follows:

- Basis of Design Report for Project North – Pre-Feed Study / Conceptual Design Package -Prepared by Pearlson Pearlson Group
- Sub-Bottom Profiler Marine Geotechnical Investigation Report – Prepared by Fracflow Consultants Inc
- Environmental Mitigation Plan (EMP) to be developed and submitted prior to commencement of construction to ensure all recommended controls (silt curtains, spill response, inspection protocols) are documented and implemented.

To date we have not produced any environmental reports. We have engaged Stantec Consultants to provide physiochemical sediment sample analysis for the disposal of the sediment, along with a Benthic survey to satisfy the requirements of the DFO. These samples and Benthic survey will be conducted in Q1 2026. Logan Drilling will also be conducting borehole samples at the same time for geotechnical data and well as support for physiochemical sampling.

7.0 Approval of The Undertaking

St. John's Dockyard Limited has engaged a number of Government Agencies for guidance / direction on any required permits, licenses, approvals and other forms of authorization required for the project.

7.1 Federal Government Agencies

Environment and Climate Change Canada (ECCC) – In discussion with ECCC the *Canadian Environmental Protection Act (CEPA) 1999*, specifically section 122 Disposal at Sea, was identified as possibly pertaining to the Project. The ECCC provided documents that SJD will have to adhere to for proper disposal at sea which included: *Characterization of Dredged Material for Open Water Disposal – Guidance for Atlantic Canada Region Disposal at Sea Permit Application – March 2024*, and *Appendix C – Guidance for Disposal Site Selection – November 2013*. As indicated in the previous sections, physiochemical samples will be taken in the dredged area and analyzed as per the list of chemicals / contaminants as listed in document: *Characterization of Dredged Material for Open Water*

Disposal – Guidance for Atlantic Canada Region Disposal at Sea Permit Application – March 2024. Approval for any disposal at sea will be through the ECCC.

St. John’s Port Authority (SJPA) – One of the options for disposal of the dredged material is to dispose at sea within St. John’s Harbour, contingent on dredged material physiochemical analysis, approval from ECCC, as well as approval from the SJPA.

In discussion with the SJPA, an existing disposal area is in a deep area of the St. John’s Harbour, but will require re-activation for any disposal at sea. SJD and the SJPA will be in discussion to have this disposal site re-activated if the dredged material is approved for disposal at sea by the ECCC and SJPA.

In addition, SJPA approval will be required for any work within St. John’s Harbour. Although the project is on SJD property and water lot, there will be a requirement for equipment to be near or over the property boundary to conduct the work. An *Authorization to Conduct an Activity* from the SJPA will be obtained where required.

Department of Fisheries and Oceans (DFO) – In discussion with DFO about the dredging and construction of the proposed new piers, SJD was informed that a *Request for Review* form would be required to determine if a *Fisheries Act* authorization is required. For a project in / near water the *Fisheries Act*, specifically *Sections 34 Fish and Fish Habitat Protection and Pollution Prevention* and *35 Harmful Alteration, Disruption or Destruction of Fish Habitat*, will be applicable.

As a part of the *Request for Review* submittal, DFO requires a detailed description of the biological and physical characteristics of the proposed project site. As indicated previously, SJD has engaged Stantec Consultants to perform a Benthic Survey of both the dredged area and the dredged disposal at sea area. A Benthic Survey Report will be submitted to DFO in the *Request for Review* process.

Transport Canada – Transport Canada is responsible for navigable waters issues, however the SJPA has jurisdiction of navigation issues within St. John’s Harbour.

Transport Canada and SJD have an Environmental Indemnity Agreement from 1997 during the transfer / sale of the property from Federal to private ownership. A number of land based environmental issues are being discussed with Transport Canada on remedial measures in the lower shop area.

Impact Assessment Agency of Canada (IAAC) – In discussion with the IAAC, the *Impact Assessment Act* would apply to projects listed in the *Physical Activities Regulations*. The *Physical Activities Regulations* under section 52 and 53 pertain to construction of a new marine terminal and expansion to existing marine terminal larger than 25,000 DWT. The

proposed project will not be capable of handling vessels with a 25,000 DWT, therefore the Impact Assessment Act does not apply.

The *Impact Assessment Act* specifically sections 81 to 91 that pertain to projects on Federal lands were reviewed and will apply to only dredging outside of SJD property boundaries. SJD will coordinate with the SJPA on all required public notifications and processes required as per Section 81 to 91 of the Impact Assessment Act for all dredging outside of the SJD property boundaries.

7.2 Provincial Government Agencies

Provincial Department of Environment, Conservation and Climate Change - Waste Management Division – In discussion with this division, the following guidance document would have to be followed: *Guidance Document – Protocol for the Management of Excavated Soils, Concrete Rubble and Dredged Materials GD-PPD-045.2*. This document would apply to concrete rubble from existing piers and lower shops and dredged material for land disposal. As per section 8.3 and 8.4 of this guidance document, the dredge material will require sampling and testing to determine if it meets *Canadian Soil Quality Guidelines* (CSQC) for commercial and industrial land use. The results of the testing of the dredged material may deem further treatment of soil prior to any land disposal.

Provincial Department of Environment, Conservation and Climate Change - Water Resources Management Division – In discussion with this division, the *Water Resources Act* specifically Section 48, reviews the requirements for *Application for Permit to Alter a Body of Water*. For the dredge area, SJD will require to apply for a *Permit to Alter a Body of Water* prior to any dredging. In addition, *Schedule H – Infilling, Dredging, Debris Removal* form will be submitted during the *Application for Permit to Alter a Body of Water*.

7.3 Municipal Agencies

City of St. John's – Development Division – In discussion with the City of St. John's Development Division the main item is the *Planning / Development Application* as SJD resides in the City of St. John's boundaries. Subsequent actions as discussed may include review of impacts to surrounding areas due to traffic and noise, and review of new buildings to ensure adherence to building and electrical codes.

8.0 Capital Cost and Funding

The estimated capital cost of the undertaking is approximately \$250 Million to \$300 million. Several small grants or loans of capital funds have been requested or approved from the following Government Agencies:

ACOA
ISP – Indigenous Services Canada
Province of Newfoundland and Labrador
Ulnooweg
Workforce Warriors

9.0 Closing

In closing, the St. John's Dockyard Limited has proposed a facility expansion project that has continuously engaged Federal, Provincial and Municipal Government Agencies as well as the Aboriginal ownership and the public to ensure the project will be carried out in an environmentally acceptable and sustainable manner.

The proposed project will provide increased capacity and capabilities to the existing SJD facility, provide Canada with a strategic location at the doorstep to the Arctic for military, resources and transportation initiatives, provide economic and social benefits through increases in local employment and the local supplier community during both the construction phase and future increased operations.

SJD believes that this document has provided an extensive overview of the project and the potential environmental, social and economic impacts, as well as the proposed mitigation measures, to ensure the project can be carried out in an environmentally acceptable and sustainable manner.

SJD understands that this EA review is a public process and invites the public to comment on the project.

A handwritten signature in black ink, appearing to read 'Wayne Ash', written over a horizontal line.

Wayne Ash – General Manager