Proposed Marina Stanley's Road Conception Bay South, NL

Environmental Registration

Prepared For: Adventure Bay Charters

Date: March 26, 2008

Project Reference No.: 2007.0096

Prepared By:

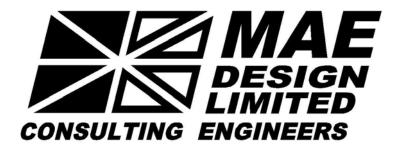


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Mae Design Limited - Project No. 2007.0096

1.0 <u>NAME OF UNDERTAKING</u>

Stanley's Road Recreational Small Boat Marina

2.0 **PROPONENT**

(i)	Name of Applicant:	Adventure Bay Charters Inc.			
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3.0 <u>THE UNDERTAKING</u>

The proposed project is for the construction of a one hundred and one (101) berth recreational small boat marina. The project will include the construction of a marginal wharf, finger pier wharfs, boat lift, a slipway, boat storage space, vehicle parking, municipal and utility services, an accessory building and a fueling station. To facilitate this construction, dredging and harbour infilling is proposed.

4.0 DESCRIPTION OF THE UNDERTAKING

4.1 <u>Geographical Location:</u>

The proposed project site is located at the North-East extremity of Long Pond Harbour, in Conception Bay South, NL. Figure 4.1 illustrates the location of the marina and the harbour on a 1:5,000 scale topographical drawing and Figure 4.2 illustrates a preliminary concept plan.

The waters and harbour bed of Long Pond Harbour are currently regulated by Transport Canada. There are other water lot tenants and recreational and commercial operations within the Harbour.

4.2 <u>Physical Features</u>

The proposed project will take in an area of 2.15 ha. The main feature will be floating docks which will provide berth space for 101 vessels. Accessory features to support these vessels will include a marginal wharf, finger piers, a boat lift, a slipway, a fueling station, boat storage space, vehicle parking, a service building and municipal services. There is an existing dock to the North of the property that has berth space for 9 vessels.

4.3 <u>Construction</u>

Project design is underway with Phase 1 construction scheduled to commence in the Spring of 2008.

Phase 1 will consist of harbour dredging to provide adequate depth for vessel access to the marina, in filling, construction of site access and wharf construction (41/101 berths).

Phase 2 works will consist of construction of the wharf system (20/101 berths). It is anticipated that Phase 2 construction will begin in spring 2009.

Phase 3 works will consist of construction of the wharf system (20/101 berths). It is anticipated that Phase 3 construction will begin in spring 2010.

Phase 4 works will consist of construction of the wharf system (20/101 berths), boat lift, slipway, security fences, vehicle parking, on site storage, fuel dock station, site services and site building. It is anticipated that Phase 4 construction will begin in

spring 2011.

4.3.1 <u>Construction Details</u>

All undertakings must comply with the Navigable Waters Protection Act, the Environmental Protection Act (NL), including The Storage and Handling of Gasoline and Associated Products Regulations, the Water Resources Act (NL), the Canadian Soil Quality Guidelines, the Canadian Environmental Quality Guidelines and the Canada Shipping Act and Regulations. Construction must also be in accordance with the Government of Newfoundland and Labrador Municipal Water, Sewer and Road Specifications, latest edition and the Town of Conception Bay South Standard Specifications.

Unless otherwise noted, all construction will take place using typical heavy machinery as normally found on construction sites throughout Newfoundland and Labrador. All materials used during construction will be trucked to the site via Stanley's Road. Erosion control structures (temporary matting, geotextiles/filter fabric, etc.) will be used if necessary to prevent erosion and silty runoff during dredging and harbour infilling.

The following is a description of the proposed works. Additional details will be provided on final engineering drawings and specifications.

Dredging

Dredging will take place as shown on Figure 4.3 and will cover an area of approximately $10,000 \text{ m}^2$ with an average depth of 1.5 m. Prior to dredging, sediment samples will be taken at various locations in the harbour and analyzed to identify the quality of the dredge material. The results of this analysis will be submitted to the Provincial Government Services Centre for review.

Approval for dredging and disposal of dredging material will be obtained from the Provincial Department of Environment and Conservation and the Government Services Centre prior to start of work. These approvals will be based on the results of analysis of the dredge samples. All required permits will be obtained prior to start of excavation/fill activities.

Dredging of the marina basin will be performed first, using an excavator located onshore. Areas outside the marina basin will then be dredged using a

long-arm excavator located on the parking area. It is estimated that the excavator can reach a distance of about 21 m. If dredging is required beyond that distance, it will take place using an excavator on a barge.

Material recovered will be deposited onshore for later use as fill during construction of the marina. If the dredged material is unsuitable for fill it will be dumped into watertight trucks and disposed of at an approved land fill site.

Water & Sewer Servicing

The proponent will locate and connect to the existing watermain and sanitary sewer in Stanley's Road.

Onsite storm drainage will be provided by grading the site to direct storm runoff towards Long Pond Harbour.

Dry Boat Storage Area

The dry boat storage area will be approximately 705 m² (15 m x 47 m). If fill is required the site will be filled using dredge material, if suitable. Otherwise material will be trucked in from off site to be used as fill material. Any material obtained from offsite will be in accordance with Municipal and Provincial regulations. The finished surface will be treated with an asphalt surface.

Marina Parking Area

A paved parking area for eighty (80) vehicles will be located between the marina building and the boardwalk. The parking lot will be treated with an asphalt surface. The parking lot covers an area of approximately 6650 m^2 . The parking lot and marina will be accessible from Stanley's Road.

Marina Building

A building measuring approximately 72 m^2 (6 m x 12 m) will be constructed adjacent to the parking area. This will be a multi-purpose building with potential occupancies such as offices, bathroom and shower facilities, a laundry room and a gathering room. The building will be equipped with electrical, water and sanitary sewer services.

Boardwalk

The Boardwalk measuring approximately $2.44 \text{ m} \times 215 \text{ m}$ will be constructed from pressure treated timber cribbing filled with rocks and decked over. The

boardwalk will be approximately 1.8 m above the high water level. The subgrade will be prepared by removing unsuitable material and replacing with blasted rock. The boardwalk cribbing will be filled with 300 mm minus fill. Approximately 160 m of bumpering/fendering will be fastened to the cribbing along the side of the boardwalk.

A fuel dock measuring 4 m x 16 m will be constructed at one end of the boardwalk and will contain 2 - 7500 L double walled steel storage tanks complete with 2 electric pumps. The tanks will be used to store gasoline and diesel fuel for use by marina patrons. The tanks will be installed and operated in accordance with The Storage and Handling of Gasoline and Associated Products Regulations.

A marina slipway measuring approximately 13 m x 13.5 m will be constructed towards the South end of the boardwalk. The slipway will be constructed from a sloped reinforced concrete ramp with concrete side walls using the Tremie method. A travel lift will be installed during a future phase. The lift would be a steel structure having a capacity of not more than 100 tonnes.

If also demanded, a vacuum pump could be installed on the boardwalk to drain sanitary holding tanks of marina users. This unit would be connected to the municipal sanitary sewer.

Wharf Mainstems

The wharf mainstems measuring approximately 2.44 m x 47.2 m will be constructed from pressure treated timber cribbing fill with rocks and decked over. The wharf will be approximately 1.8 m above the high water level. The subgrade will be prepared by removing unsuitable material and replacing with blasted rock. The wharf cribbing will be filled with 300 mm minus fill. Approximately 80 m of bumpering/fendering will be fastened to the cribbing along the sides of the wharf.

Finger Piers

The finger piers measuring approximately 1.8 m x 6.0 m will be constructed from pressure treated timber cribbing fill with rocks and decked over. The piers will be approximately 1.8 m above the high water level. The subgrade will be prepared by removing unsuitable material and replacing with blasted rock. The piers cribbing will be filled with 300 mm minus fill.

Future

Future development will include three (3) additional wharf mainstems with finger piers that will house 20 berths each.

Security

Approximately 65 m of chain-link fencing, 2.4 m high with 0.3 m barbed wire will be installed along the North boundary of the marina. Access to the marina from Stanley's Road will be restricted to normal business hours by way of a locked gate. Access to the marina boardwalk will be restricted by way of a gate that is to be open during normal business hours and left unlocked at all times.

4.4 Operation

4.4.1 Operation

The development and operation of this project is a private venture. The project will provide additional berthing space and services for recreational boaters in the Conception Bay area. While the primary purpose of the proposed marina is for vessel storage, the building located next to the parking lot area will have space available for offices and club facilities. All marine traffic will be required to comply with the Canada Shipping Act and Regulations.

The proponent plans to operate an attractive, well-maintained facility. Routine repairs will be performed in a timely manner to ensure that the marina remains safe and aesthetically pleasing to both patrons and the general public. At this time it is anticipated that the facility will remain in operation indefinitely. The proponent plans to renew the water lot lease prior to the end of the lease period so that marina operations will not be affected. However, in the event that the lease is not renewed, the proponent will decommission the site in compliance with the provincial and federal Departments of Environment and Transport Canada.

4.4.2 Occupations

It is estimated that the construction phase will last for the duration of 4 spring seasons and will include the following occupations:

• 0711 Construction Manager/Project Manager – 1 position

- 2131 Civil Engineer 1 position
- 7241 Electrician 1 position
- 7251 Plumber 1 position
- 7271 Carpenters 2 positions
- 7421 Heavy Equipment Operators 2 positions
- 7611 Construction Trades Helpers & Labourers 4 positions

The operation of the small boat marina will last indefinitely and will include the following positions:

- 0721 Facility Operation & maintenance Manager 1 position
- 6484 Seasonal Workers 2 positions

4.5 <u>Potential Resource Conflict</u>

Listed below are project related activities that have potential to cause environmental issues, and the actions required to mitigate these effects.

- 4.5.1 <u>Navigation</u>
 - *Concern:* Project construction has the potential to reduce vessel navigation in the harbour.
 - *Mitigation:* Transport Canada has been contacted regarding the application of the Navigable Waters Protection Act. The proposed project is in an area of the harbour with minimal usage therefore minimal impact on vessel traffic is anticipated. Any conditions or stipulations set by the Canadian Coast Guard will be implemented and complied with by the proponent.

4.5.2 Benthic Habitat

- *Concern:* Dredging and infilling to facilitate the project construction will displace bottom substrate material.
- *Mitigation:* The project is in an area of the harbour with minimal benthic habitat. The harbour is currently utilized by vessels and the proposed project is for similar usage. The Department of Fisheries and Oceans has been contacted. Any conditions or stipulations set by the Department of Fisheries and Oceans

will be implemented and complied with by the proponent.

4.5.3 Marine Water Quality

- *Concern:* Dredging and infilling has the potential to conflict with the marine habitat by introducing suspended sediments into the water column. The mouth of Conway's Brook is located to the South of the proposed development which is frequented by sea run trout.
- *Mitigation:* A floating silt curtain will be deployed during dredging and infilling activities. It is anticipated that sedimentation will be short-term and should quickly dissipate.

Work activities will also be scheduled during a time of the year when any sedimentation will have minimal impact on the sea run trout. Scheduling of work will be coordinated with the Department of Fisheries and Oceans.

- *Concern:* There is potential for accidental spills of hydrocarbon productions from heavy equipment machinery.
- *Mitigation:* Machinery will be checked for leakage and must be in good working order. Refueling will be completed at least 30 metres from the water body. Basic petroleum spill clean-up materials will be on site. Any spill will be promptly contained, cleaned up and reported to the 24 hour environmental emergencies report system (1-800-563-2444).

4.5.4 <u>Health and Safety</u>

- *Concern:* Project activities may be a risk to workers and the general public.
- *Mitigation:* Workers will have adequate training for the type of work being performed and access to the work areas will be controlled and restricted to construction personnel.

4.5.5 Air Quality

- *Concern:* Construction activities may result in nuisance impacts due to noise and dust.
- *Mitigation:* Construction equipment will be properly maintained. Construction activities will take place at appropriate times. Appropriate noise and dust control methods will be employed where required.

4.5.6 <u>Aesthetics</u>

- *Concern:* There is potential for the local aesthetics to be impacted by the development.
- *Mitigation:* The development will be at a low enough elevation to not hinder views to the harbour. The development will upgrade the now vacant property to an attractive well maintained facility utilizing modern aesthetically pleasing materials. The planned chain-link security fence will be of new construction and will be maintained such that it will not affect harbour views.

5.0 APPROVAL OF THE UNDERTAKING

The following is a list of the anticipated permits, licenses and approvals required for this project:

	Authority	Permit/License/Approval Description					
(i)	Department of Fisheries and Oceans	Application for Works or Undertakings Affecting Fish Habitat					
(ii)	Transport Canada	Approval required under the Navigable Waters Protection Act					
(iii)	Department of Environment and Conservation	Application for Environmental Approval to Alter a Body of Water and Environmental Screening Assessment					
(iv)	Environment Canada	Environmental Assessment					
(v)	Department of Government Services	Waste (Dredge Material) Disposal Permit					
(vi)	Transport Canada	Water Lot Lease					
(vii)	Town of Conception Bay South	Development Permit					

6.0 <u>SCHEDULE</u>

Construction of this project is scheduled to commence in the spring of 2008. The project will be completed in several phases which will take place over several years.

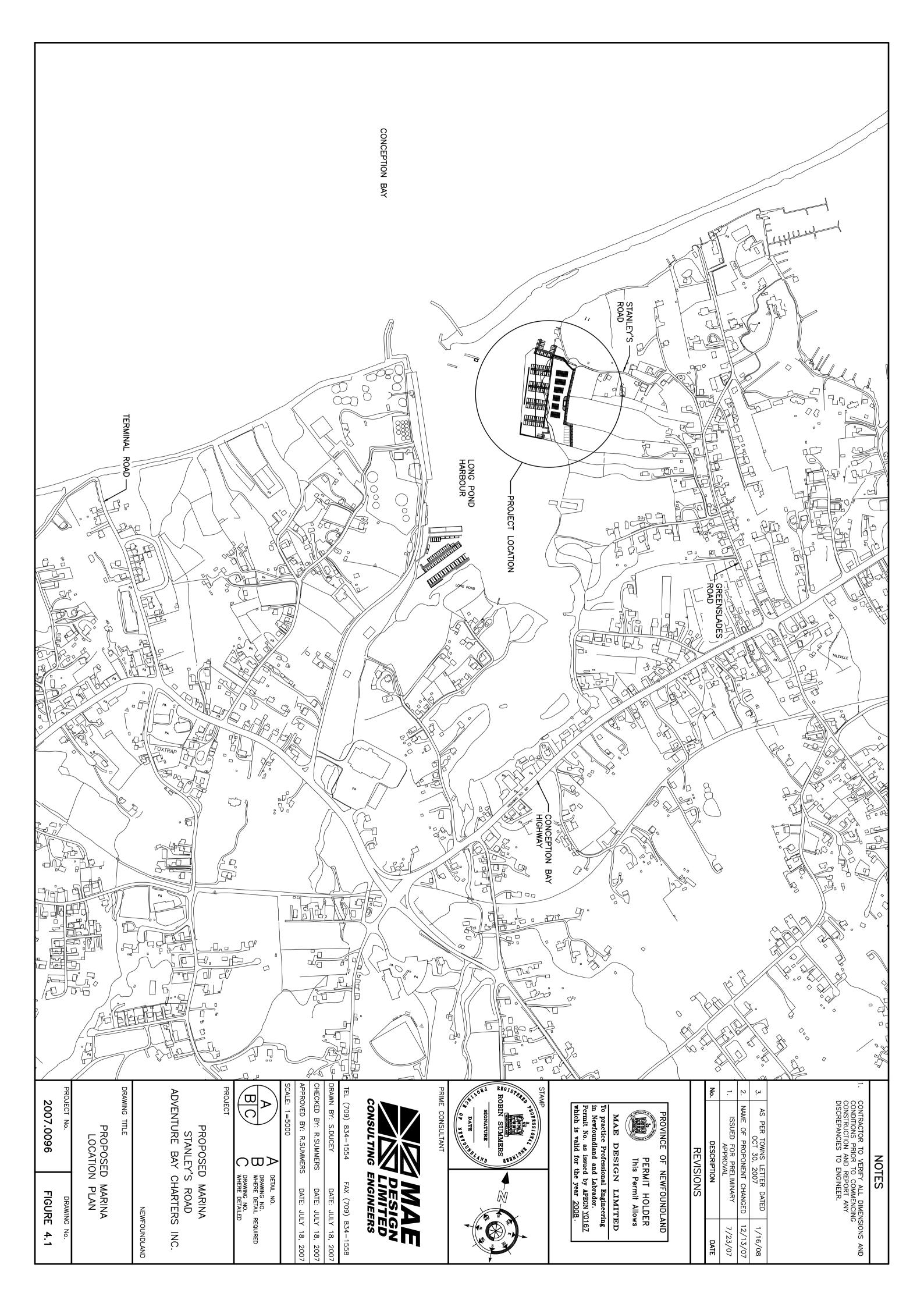
7.0 <u>FUNDING</u>

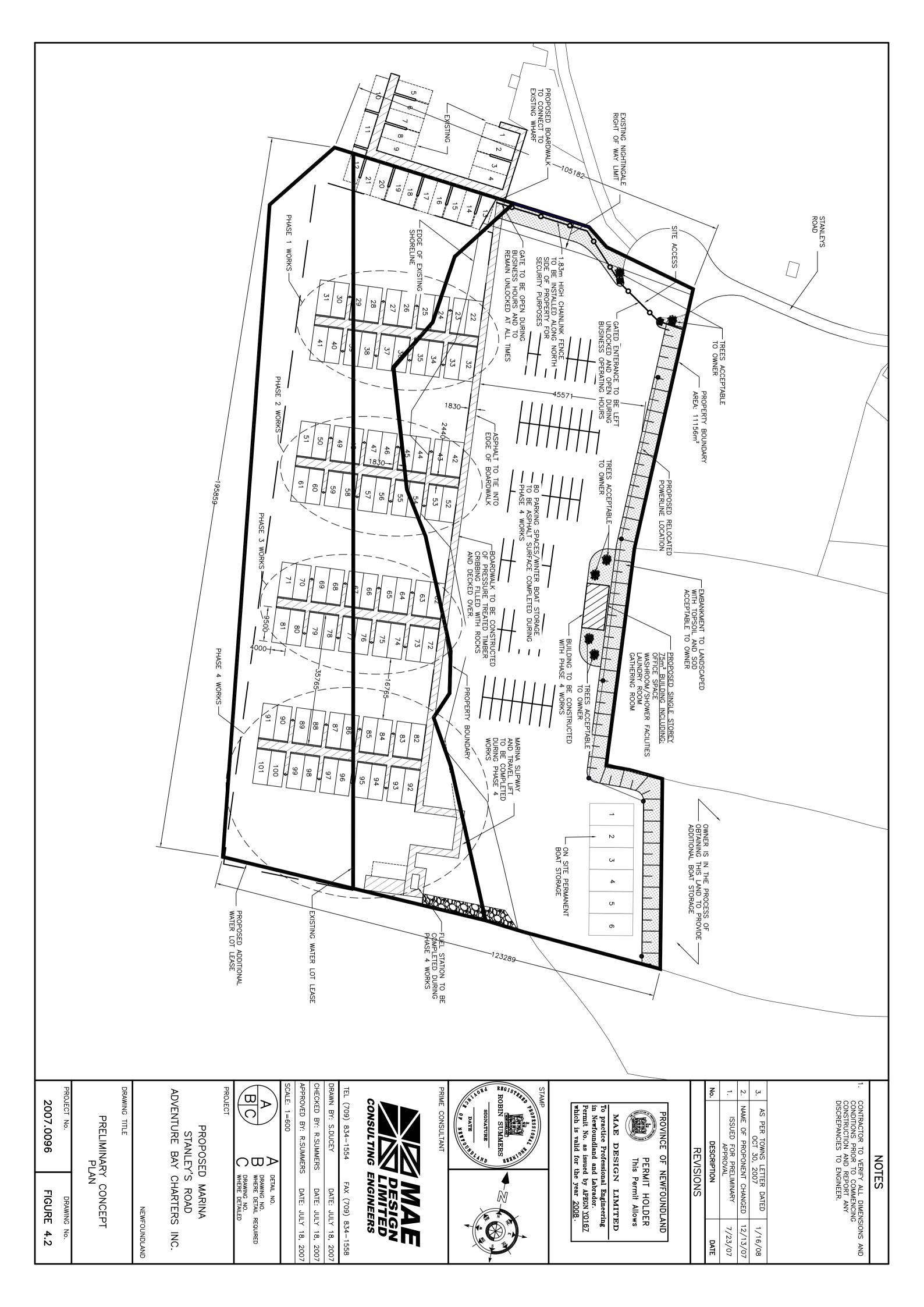
This project will be funded privately.

Mae Design Limited Steven Ducey, B.Eng. (Agent Representing Proponent) Date

APPENDIX A

Figure 4.1 – Proposed Marina Location Plan Figure 4.2 – Preliminary Concept Plan Figure 4.3 – Dredging Plan







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