

**FISHERIES AND OCEANS CANADA**  
**CANADIAN ENVIRONMENTAL ASSESSMENT ACT (CEAA) 2012**  
**PROJECT EFFECTS DETERMINATION REPORT**  
**Service Area Extension, Val-Comeau Small Craft Harbour**

<b>GENERAL INFORMATION</b>	
(for guidance see page 12 of "The Canadian Environmental Assessment Act, 2012 - Project Effects Determination Process for SCH Projects" document)	
<b>1. Project Title:</b>	Service Area Extension, Val-Comeau Small Craft Harbour
<b>2 Proponent:</b>	Fisheries and Oceans Canada - Small Craft Harbours (DFO-SCH)
<b>3. Other Contacts:</b>	<b>4. Role of each contact:</b>
<ul style="list-style-type: none"> <li>a) Public Services and Procurement Canada – Chyann Kirby, Environmental Services</li> <li>b) Fisheries and Oceans Canada – Fisheries Protection Program – George Brown, Senior Fisheries Protection Biologist</li> <li>c) Transport Canada – Navigation Protection Program (NPP) and Environmental Affairs and Aboriginal Consultation Unit (TCEA)</li> </ul>	<ul style="list-style-type: none"> <li>a) OGD consultant</li> <li>b) Regulatory Authority</li> <li>c) Regulatory Authority</li> </ul>
<b>5. Source of Project Information if project is a referral:</b> Jean Girouard – Project Manager (PSPC)	
<b>6. Project Review Start Date:</b> 2017-08-01	<b>7. PATH No.:</b>
<b>8. DFO-FPP File No:</b> TBD	<b>9. Other Relevant File Numbers:</b>
	PSPC File #: R.081898.001 TC NPP #: TBD      TC NEATS #: TBD Provincial/Territorial File #: TBD
<b>BACKGROUND</b>	
(for guidance see page 12 of "The Canadian Environmental Assessment Act, 2012 - Project Effects Determination Process for SCH Projects" document)	
<b>10. Background about Proposed Development (including a description of the proposed development):</b>	
<p>The proposed project will take place at Val-Comeau DFO-SCH, an active Small Craft Harbour facility servicing the commercial fishery.</p> <p>The proposed project consists of the extension of wharf/service area. Activities associated with the proposed project include the creation of a service area along structure 301 to the west of the harbour to accommodate additional parking. This area will be created using material that has been excavated to construct a marginal wharf on the east side of the harbour and is currently stockpiled at the harbour. No material from the harbour basin will be used as part of this project. This marginal wharf construction has been assessed as a separate project. Activities include relocating a portion of the armour stone that makes up structure 301 and infilling of the area. The proposed service area will measure approximately 120 m in length with a width of 20 m for an overall footprint of 2,400 square meters (m<sup>2</sup>). The work will require work below the high water mark. The approximate coordinates of the project area are: 47°27'53" N and 64°53'00" W.</p> <p>Val-Comeau DFO-SCH is considered a core fishing harbour and continues to be a valuable resource for the commercial fishery, therefore abandonment and displacement of the fishing fleet of approximately 48 home port fishing vessels was not considered to be a viable socio-economic alternative. The harbour is currently updating and expanding some of its existing infrastructures, whose activities are being assessed under a separate assessment.</p> <p>This PED report is being conducted to fulfill the requirements under Section 67 of the <i>Canadian Environmental Assessment Act, 2012</i>.</p>	

## PROJECT REVIEW

(for guidance see page 13 to 17 of "The Canadian Environmental Assessment Act, 2012 - Project Effects Determination Process for SCH Projects" document)

### 11. DFO's rationale for the project review:

Project is on federal land  and;

- DFO is the proponent.
- DFO to issue *Fisheries Act* Authorization or *Species at Risk Act* Permit.
- DFO to provide financial assistance to another party to enable the project to proceed.
- DFO to issue licence or lease federal land to enable the project to proceed.

12. a) **Fisheries Act Section(s) (if applicable):** Paragraphs 35(1) and 35(2)(b)

b) **Species at Risk Act Section(s) (if applicable):** N/A

13. **Primary Authority:** DFO-SCH

### 14. Primary Authority's rationale for involvement:

- Primary Authority is the proponent.
- Primary Authority to provide financial assistance to enable the project to proceed.
- Primary Authority to provide a licence or an interest in land.
- Primary Authority to issue a regulatory permit, approval or authorization.

### 15. Other Authorities involved in review:

- a. DFO-Fisheries Protection Program (FPP)
- b. Transport Canada, Navigation Protection Program (NPP) and Environmental Affairs and Aboriginal Consultation Unit (TCEA)
- c. New Brunswick Department of Environment and Local Government (NBDELG)

### 16. Each Authority's rationale for involvement:

- a. Approval Requirement: The project was referred to the DFO-Fisheries Protection Program (FPP) and is currently under review. The proponent will comply with all/any of the conditions of the FPP letter/approval.
- b. Approval Requirement: A *Navigation Protection Act* (NPA) approval is required for this project. The proponent will comply with all/any conditions of the NPA approval.
- c. Approval Requirement: The project is being registered as an Environmental Impact Assessment (EIA) pursuant to the EIA Regulation (87-83) of the New Brunswick *Clean Environment Act*.

### 17. Other Contacts and Responses (Government Agencies, Aboriginal Consultation, Public Consultation, Other Organizations, Harbour Authority, etc.):

- a. Mr. Rejean Comeau – Harbour Authority Representative for Val-Comeau DFO-SCH
- b. Mr. Georges Moore – DFO Area Aboriginal Coordinator

#### **Aboriginal Consultation**

PSPC, on behalf of DFO-SCH, carried out an Aboriginal Assessment at Val-Comeau in accordance with DFO-SCH's Preliminary Duty to Consult Assessment Guide. This Guide is intended to provide basic information to DFO-SCH in the Maritimes and Gulf Regions and to assist its Program Managers in making informed, prudent decisions that take into account statutory and other legal obligations, as well as policy objectives, related to Aboriginal and treaty rights. The Supreme Court of Canada has held that the Crown has a duty to consult and, where appropriate, accommodate when the Crown contemplates conduct that might adversely impact potential or established Aboriginal or treaty rights. While there may be other reasons to undertake consultations (e.g., good governance, policy-based, etc.), three

elements are required for a legal duty to consult to arise:

1. There is contemplated or proposed Crown conduct.
2. The Crown has knowledge of potential or established Aboriginal or treaty rights.
3. The potential or established Aboriginal or treaty rights may be adversely impacted by the Crown.

According to the DFO Area Aboriginal Program Coordinator (Georges Moore) and the Harbour Authority, there are five Aboriginal commercial fishers operating from the Harbour, however the harbour is not known to be used for Aboriginal traditional, food or ceremonial fisheries. In light of the extension of harbour infrastructure outside of existing boundaries and the presence of Aboriginal fishers, consultation will be undertaken.

## **18. Scope of Project (details of the project subject to review):**

### **Project Description**

The proposed project includes the extension of the wharf/service area to the west of the harbour to accommodate additional parking. The existing shoreline protection used in structure 301 will be relocated to the edge of the new area which will be infilled using material that has been excavated to construct a marginal wharf on the east side of the harbour. This marginal wharf construction has been assessed as a separate project. The proposed extension to the wharf/service area will measure approximately 120 m in length with a width of 20 m for an overall footprint of 2,400 square meters (m<sup>2</sup>) (Figures 3-4 in Appendix A). Equipment used during construction will be stationed on land or the existing wharf where practicable. There is also the potential for the use of floating equipment. All waste materials will be disposed of in accordance to provincial regulations.

### **Operation / Maintenance**

The Environmental Management System (EMS) with an integrated Environmental Management Plan (EMP) for the Harbour Authority of Val-Comeau covers operational aspects of environmental management and is the mitigation measure for the environmentally responsible aspects of harbour operation (fuelling, waste disposal, activities on the property and water). The proposed project will not affect continued operations at the Val-Comeau DFO-SCH.

### **Decommissioning**

This facility is not presently planned to be decommissioned. At the time of decommissioning, DFO-SCH will develop a site specific re-use or reclamation plan that is appropriate for the applicable environmental legislation and Fisheries and Oceans Canada policies.

### **Scheduling**

The proposed construction activities are expected to begin in Autumn 2017 and be completed by March 31, 2018, depending on approvals and funding.

## **19. Location of Project:**

Val-Comeau DFO-SCH (Harbour Code 2649) is located along the eastern coast of New Brunswick, approximately 10 km south of Tracadie near the mouth of the Big Tracadie River, and approximately 3.5 km south of the Ferguson Gully outlet to the Gulf of St. Lawrence (refer to Figures 1 and 2 in Appendix A). The approximate coordinates of the project area are Latitude 47°27'53" N and Longitude 64°53'00" W.

## **20. Environment Description:**

### **Physical Environment**

The Val-Comeau DFO-SCH is located near the mouth of the Big Tracadie River and within a short distance of the Ferguson Gully outlet to the Gulf of St. Lawrence along the eastern shore of New Brunswick (refer to Figures 1 and 2 in Appendix A).

This Val-Comeau DFO-SCH facility is located within the Atlantic maritime ecozone, inside the maritime lowlands ecoregion which covers a large, triangular-shaped plain extending from south-central New Brunswick to the Gulf of St. Lawrence, including the Northumberland coastline of Nova Scotia (Ecological Stratification Working Group, 1995). This ecoregion, also known as the Eastern Lowlands Ecoregion, is characterised by its low relief which range between 150 m and sea level. Along the southern Northumberland coast, several major rivers, including the Richibucto and Kougibouguac, move languidly eastward, typically merging into lagoons, tidal estuaries or salt marshes before reaching the Northumberland Strait (Zelazny, 2007).

The Eastern Lowlands Ecoregion lies at the intersection of two rain shadow areas. Most moisture from the prevailing westerly winds is intercepted by the Highlands Ecoregion to the west, whereas precipitation from southwesterly storms coming across the Bay of Fundy is intercepted by higher elevations of the Fundy Coast and Central Uplands ecoregions (Zelazny, 2007). Canadian Climate Normals (1981-2010) for nearby Miramichi weather station (47°00'34.090" N and 65°28'04.040" W) indicate that the area receives an average of 1,072.4 mm of precipitation annually and experiences measurable precipitation (> 0.2 mm) 161.7 days per year. Extreme precipitation events of up to 93.0 mm have been recorded. The temperatures range from an extreme minimum of -35.0°C to an extreme maximum of 37.8°C with an annual daily mean temperature of 4.9°C (Environment Canada, 2017a).

Surficial geology maps identify the surrounding land area as being comprised primarily of marine sediments from the late Wisconsinan and/or early Holocene which consist mainly of sand, silt, gravel, and clay; deposited in shallow marine water, locally deep, which submerged coastal areas and sections of many valleys during and following Late Wisconsinan deglaciation (Pronk and Allard, 2003). Blanket soil is generally expected to be 0.5 to 3 m thick. Bedrock in the area of the site consists of Early Jurassic (Caraquet Dyke) (NBDNR, 2008). The property is covered in low growth vegetation, concrete, and asphalt.

A marine sediment sampling program (MSSP) indicated that the sediment within the harbour basin was predominantly sand with lesser amounts of silt and clay and small amounts of gravel (Englobe, 2017; Appendix B). The MSSP also included chemical analysis of sediment in the harbour basin which indicate the guideline exceedances for many parameters, however it is important to note that material from the harbour basin will not be used as part of this Project. As presented below, the MSSP was also accompanied by an underwater benthic habitat survey which indicated that the sediment composition where the new service area will be extended is dominated by sand and silt. Work on such benthic composition, for example when placing the rock toe, may resuspend sediments in the water column and increase local turbidity. The range of the tide varies between a minimum of ± 2 ft. to a maximum of ± 10 ft., with a minimum water column depth of approximately 4 ft. during low tide.

### **Biological Environment**

The Val-Comeau DFO-SCH is located inside the Caraquet Ecodistrict of the Eastern Lowlands Ecoregion, which is a crescent of land averaging 10 km wide that rims the Acadian Peninsula coastline. It begins at the mouth of the Nepisiguit River, curves around Miscou Island, and ends at the mouth of the Miramichi River (Zelazny, 2007). Human activities along this Ecodistrict have resulted in a dominant forest of intolerant hardwood species: red maple, trembling aspen, and grey birch. Traces of sugar maple, yellow birch, and beech occur only along the inland perimeter (Zelazny, 2007). This Ecodistrict provides habitat for moose, black bear, white-tailed deer, red fox, snowshoe hare, porcupine, fisher, coyote, beaver, ruffed grouse, bobcat, marten, raccoon, and muskrat (Ecological Stratification Working Group, 1995).

The main faunal interest is provided by the extensive range of coastal and marine habitats, including sandy beaches, dune systems, salt marshes, mud flats, and islands. Offshore, nutrient-rich waters provide food for migratory birds. Val-Comeau is located a short distance (< 2 km) from the Point-à-Bouveau Important Bird Area (IBA Canada, 2017). This barrier beach has two swift flowing channels to the north and south. Low-lying sand dune systems are broken by several major breaches with extensive wash-overs. The 1 km<sup>2</sup> salt marsh Île au Cheval is also included in this site. Pointe-à-Bouveau supports a significant population of the globally vulnerable (nationally endangered) Piping Plover. During the 1996 International Piping Plover census, a total of 14 birds was recorded, which represented about 3.3 % of the Atlantic Canada Piping Plover population. For the 11-year period, between 1987 to 1997, an average of 13.4 adult Piping Plovers was found at this site. In addition to Piping Plovers, hundreds of staging waterfowl and shorebirds are found at Pointe-à-Bouveau. During the fall migration, several hundred Canada Geese and thousands of shorebirds, such as Ruddy Turnstones, White-rumped Sandpipers, Semipalmated Sandpipers and others are recorded. Point-à-Bouveau also supports a large concentration of foraging Osprey during the summer (IBA Canada, 2017).

The waters of the Gulf of St. Lawrence surrounding Val-Comeau Harbour support several species of fish (Legault, 1998) including Atlantic herring (*Clupea harengus*), Atlantic mackerel (*Scomber scombrus*), Atlantic cod (*Gadus morhua*), Atlantic hake (*Merluccius merluccius*), winter flounder (*Pseudopleuronectes americanus*), rainbow smelt (*Osmerus mordax*), spiny dogfish (*Squalus acanthias*), alewife (*Alosa pseudoharengus*) and striped bass (*Morone saxatilis*). In the vicinity of the harbour, there are also a number of crustaceans and molluscs including Atlantic lobster (*Homarus americanus*), soft-shell clam (*Mya arenaria*), blue mussel (*Mytilus edulis*), American oyster (*Crassostrea virginica*), and quahog (*Mercenaria mercenaria*). The Harbour Authority has also confirmed that the area surrounding Val-Comeau harbour supports the following fish species: American eel (*Anguilla rostrata*), and rock crab (*Cancer irroratus*). Several of the fish species identified are anadromous including alewife, and striped bass. These fish migrate past the project site into the river in the spring. The American eel is catadromous and will exit the river in the fall.

The Val-Comeau DFO-SCH is surrounded by a series of Provincially Significant wetlands, the closest being located less than 150 m to the east. Given the project footprint, these wetlands will be avoided and no wetlands are anticipated to be affected by project activities.

An underwater benthic habitat survey was conducted in summer 2017 (Englobe, 2017; Appendix B). Dense beds of dead mollusc shells were identified during the survey. These beds were primarily composed of blue mussel (*Mytilus edulis*), horse mussel (*Modiolus modiolus*), moon snail (*Lunatia heros*), and periwinkles (*Littorina* sp.), with common barnacle present on both living and dead shells. Other invertebrates identified during the survey were rock crabs (*Cancer irroratus*) and a benthic shrimp (*Crangon* sp.). The Val-Comeau site does not support areas of encrusting, filamentous or leafy macrophytes. The dominant flora is eelgrass (*Zostera marina*). The northern section where the new service area will be extended will cover approximately 1000 m<sup>2</sup> of dense eelgrass beds. There were no rare or endangered species identified during the survey (Englobe, 2017).

### **Species at Risk (Aquatic and Terrestrial)**

A search of the Atlantic Canada Conservation Data Centre database was conducted (ACCDC, 2017). The ACCDC provided a list of nationally and/or provincially rare/unique species (i.e. plants and animals) within a 5 km buffer zone (standard ACCDC procedures) of the site of the proposed work. All species were cross-referenced with Schedule 1 of the Species at Risk Act (SARA). Species at risk or of concern are listed below:

- The **Piping Plover** (*melodus* subspecies - *Charadrius melodus melodus*) was identified in the ACCDC search. The last Committee on the Status of Endangered Wildlife (COSEWIC) assessment in May 2001 designated both sub-species (*C.m. melodus* and *C.m. circumcinctus*) of the Piping Plover as endangered. The Piping Plover is a North American bird that breeds along the Atlantic Coast from Newfoundland to South Carolina and from Saskatchewan, Manitoba, and Ontario south into the central United States. It winters along the Atlantic Coast, from South Carolina to Florida, and in the Caribbean (Cuba, Bahamas). In Canada, the *melodus* subspecies breeds on the Iles-de-la-Madeleine of Quebec, and in New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland. Piping Plovers nest above the normal high-water mark on exposed sandy or gravelly beaches. On the Atlantic Coast they often nest in association with small cobble and other small beach debris on ocean beaches, sand spits, or barrier beaches. They also forage for food on these beaches. The most important limiting factor for Piping Plovers of the *melodus* subspecies is the loss of habitat, mostly caused by human use of beaches, and the consequent human disturbance around nesting sites (Environment Canada, 2012 and 2017b). Piping Plovers may also use non-traditional habitats for nesting, such as parking lots, dredge spoils, or sites with steep embankments. These sites may be less significant than typical habitat because some key feature of the habitat is often missing (e.g., access to feeding areas for chicks). In many cases, these sites will not be formally identified as critical habitat under the Species at Risk Act, although the general prohibitions under the Species at Risk Act protect the birds and their residences from destruction and harassment (Environment Canada, 2012). Val-Comeau DFO-SCH is located near sensitive environmental areas (see below for more details) that provides critical nesting habitat for the Piping Plovers. It is therefore possible to encounter a Piping Plover in the vicinity of the work site. However the probability is low as the project footprint is limited and considering that the work construction is scheduled during winter when piping plovers have already migrated south. In the event a Piping Plover is found nesting during any construction activities, the general prohibitions under the Species at Risk Act will apply in order to protect the birds and their residences from destruction and harassment. All project activities will be conducted in accordance with the Migratory Birds Convention Act, which outlines that no migratory bird nests or eggs will be moved or obstructed during the construction or operational phase of the project.
- The **Red Knot Rufa spp.** (*Calidris canutus rufa*) is listed on Schedule 1 of SARA and COSEWIC as Endangered. Red Knots of the subspecies rufa breed in the central Canadian Arctic and winter in Tierra del Fuego at the southern tip of South America. Red Knots use different habitats during the breeding, wintering, and migration seasons. Nesting sites are usually located in dry, south-facing locations, near wetlands or lakes, where the young are led after hatching. Red Knots generally feed in damp or barren areas that can be as far as 10 km from the nest. Migratory stopovers and wintering grounds are vast coastal zones swept by tides twice a day, usually sandflats but sometimes mudflats. In these areas, the birds feed on molluscs, crustaceans, and other invertebrates. The species also frequents peat-rich banks, salt marshes, brackish lagoons, mangrove areas, and mussel beds (Environment Canada, 2017b). Taking into consideration the nature of the work and, the spatial and temporal extent of project activities which will occur when this species should have already migrated south to its wintering ground, interaction of the project with this species or its preferred habitat is not anticipated. In the event a Red Knot is found during any construction activities, the general prohibitions under the Species at Risk Act will apply in order to protect the birds and their residences from destruction and harassment.
- The **Olive-sided Flycatcher** (*Contopus cooperi*) is listed on Schedule 1 of SARA and COSEWIC as Threatened. It breeds in scattered locations through most of forested Canada. It is most often associated with open areas containing tall live trees or snags for perching. In winter, it is found mainly in Panama and the Andes Mountains, from Venezuela to Peru and Bolivia. Threats to the Olive-sided Flycatcher are unclear but

they are most likely related to habitat loss and alteration (Environment Canada, 2017b). Taking into consideration the nature of the work and, the spatial and temporal extent of project activities which will occur when this species has already migrated south to its wintering ground, interaction of the project with this species or its preferred habitat is not anticipated.

- The **Barrow's Goldeneye** (eastern population) (*Bucephala islandica*) is a medium sized diving duck listed on Schedule 1 of SARA and COSEWIC as Special concern. The limits of the range of the eastern population of Barrow's Goldeneye are still unknown. Data indicate that it breeds only in Canada with the only confirmed breeding records are from Quebec. Small numbers of this population winter in the Maritime Provinces and along the northern Atlantic coastline in the United States. In Quebec, the eastern population inhabits the Balsam Fir-White Birch forest regions of the province. More specifically, birds appear to be restricted to small, high elevation lakes north of the St. Lawrence Estuary and Gulf. Barrow's Goldeneye prefers alkaline to freshwater lakes during the breeding season. They have a particular preference for lakes that do not contain any fish. During the non-breeding season, the species spends time in the coastal waters of the St. Lawrence Estuary and Gulf. In eastern Canada, there has been a significant reduction in the amount of suitable breeding habitat due to logging and fish introduction. There has also been a reduction in the quality of wintering habitat along the St. Lawrence corridor, stemming from contamination of the river's sediments. Taking into consideration the nature of the work and, the spatial and temporal extent of project activities, Barrow's Goldeneye may be encountered in the area of work, especially during ice free period in late autumn and early spring. In the event a Barrow's Goldeneye is found during any construction activities, the general prohibitions under the Species at Risk Act will apply in order to protect the birds and their residences from destruction and harassment.
- The **Harlequin Duck** (eastern population) is listed on Schedule 1 of SARA and COSEWIC as Special concern. This small subarctic sea duck spend most of the year in coastal marine environments, but they move inland each spring to breed along fast-flowing turbulent rivers. During the winter, the Harlequin Duck are often associated with offshore islands, headlands, and rocky coastline where the surf breaks against rocks and ice buildup is minimal. These ducks feed close to rocky shorelines or rock skerries. The primary cause of the decline of the Harlequin Duck is not clearly known, however, over-hunting could be an important cause. Although hunting of this population of Harlequin Ducks has not been permitted in recent years, the birds remain extremely vulnerable to hunters because of their tameness, their tendency to feed close to shore, and the resemblance of the female and immatures to ducks of other species which may be legally hunted. In addition, the contamination, destruction, and alteration of their habitat are considered important factors for the decline of the eastern population of the Harlequin Duck. Taking into consideration the nature of the work and, the spatial and temporal extent of project activities, Harlequin Duck may be encountered in the area of work, especially during ice free period in late autumn and early spring. In the event a Harlequin Duck is found during any construction activities, the general prohibitions under the Species at Risk Act will apply in order to protect the birds and their residences from destruction and harassment.
- The **Gulf of St. Lawrence Aster** is listed on Schedule 1 of SARA and COSEWIC as Threatened. This fleshy annual plant is limited to the Gulf of St. Lawrence region and is found only in Quebec, New Brunswick and Prince Edward Island. All known Gulf of St. Lawrence Aster populations occur in coastal habitats such as beaches, lagoons, dunes, dune slacks and dry stretches of salt marshes. This annual grows in moist, mostly sandy soil where flooding only occurs during extremely high tides and storms. It grows in slightly sloped, open terrain near sea level in areas where the dunes provide a fair degree of shelter from the wind. Competition with other species plays a major role in the dynamics of Gulf of St. Lawrence Aster populations. The reduction of available light due to an increase in plant cover is among the main factors that influence its growth. In addition, natural disturbances caused by waves, ice and storms play a major role in habitat maintenance. In particular, fluctuations in high-tide levels can flood populations and storms can bury them completely in sand, causing their disappearance. In addition, disturbances caused by man, such as the construction of cottages and backfilling operations, completely destroy this species' habitat. Taking into consideration the spatial extent of project activities in a sub-tidal environment not suitable for this plant, and nature of the work, interaction by the species with the project is therefore not anticipated.

Species identified as sensitive by the Committee on the Status of Endangered Wildlife in Canada but not appearing on Schedule 1 of SARA noted in the ACCDC search include the bank swallow (*Riparia riparia*), barn swallow (*Hirundo rustica*) and transverse lady beetle (*Coccinella transversoguttata richardsoni*). No aquatic species at risk were identified.

Although not listed in the ACCDC search, the following species are highly mobile and may occur near the project site:

- Populations of **Atlantic salmon** (*Salmo salar*) inhabit rivers as well as smaller brooks in New Brunswick. Individuals would be found seasonally in the lower river sections and coastal zone both as smolts migrating to feed in the sea, and as adults returning to rivers to spawn. The salmon of this area are part of the Gaspé-

Southern Gulf of St. Lawrence unit which is listed as of special concern by COSEWIC. The species has no status as yet under the SARA. Taking into consideration the nature of the work and, the spatial and temporal extent of project activities which will occur when this species has already migrated to its wintering ground, interaction of the project with this species or its preferred habitat is not anticipated.

- The **striped bass** (*Morone saxatilis*) is listed as endangered in Atlantic Canada. Note that this listing is by COSEWIC, the recommending body for additions to the SARA. At present, the species has not been listed under SARA. The striped bass is highly mobile in spring, summer, and autumn. Canadian striped bass overwinter in deep freshwater lakes in Atlantic Canada. They are voracious predators and can grow to over 20 kilograms in weight. They have specific spawning habitats, requiring very long estuaries in which the eggs and larvae, suspended in the turbulence and currents, can drift slowly from fresh through brackish to saline waters. Young-of-the-year and yearling bass inhabit deeper waters in estuaries and bays. Post yearling bass range in schools along the coast. Their early diet is chiefly invertebrates, but they switch to fish as they grow, following prey species into bays and estuaries. Larger striped bass can be highly migratory and move hundreds of kilometers in a season. In relation to the project under consideration, striped bass is unlikely to turn up near the project site.
- The **American eel** (*Anguilla rostrata*) is classed as a catadromous fish, which means that on attaining sexual maturity, adult eels migrate downstream to the sea where ultimately they spawn. Spawning migration occurs between August and December, with downstream movement is most active at night, during the first several hours after sunset. Peak migration activity usually occurs during September and October. Yellow eels (sexually immature adult stage) may also be found migrating seaward in the autumn but they are believed to be moving to overwintering sites within the river or estuary. Yellow eels are generally active at night, retiring to burrows in muddy bottoms or to other cover during daylight. Temperature influences the degree of seasonal activity and eels become noticeably less active when the water temperature drops below 11°C in autumn. During winter, eels hibernate in the bottom mud. Eels are voracious carnivores and consume a variety of fishes and invertebrates such as insects, crayfish, snails and worms (DFO, 2014).

### **Sensitive Environmental Areas**

A search of the ACCDC database yielded the following sensitive environmental areas in the vicinity of the Val-Comeau DFO-SCH:

- **Val-Comeau Provincial Park** is located on a dune approximately 1 km north-east of the work-site. This park is bordered on the west by the Great Tracadie River and on the east by the Gulf of St. Lawrence. It includes a campground and a beach.
- **Le Breton Nature Conservancy of Canada** (NCC) which sandy beaches provide critical nesting habitat for the nationally endangered Piping Plovers.

There are no listed wildlife species or critical habitats (including wetlands) that will likely be affected by the project activities as there is no critical or limiting habitat at the proposed work site other than those already discussed above.

### **Human Environment**

The Val-Comeau DFO-SCH is located in Gloucester County, New Brunswick. The Harbour is directly accessible from the Rue du Quai which provides access to the harbour from Chemin du Parc de Val Comeau.

First documentation indicating the development of a wharf at Val-Comeau dates back to 1956. Presently, this active commercial fishing harbour is comprised of breakwater, two timber cribwork wharves, a wharf approach, a boat haul-out, two marginal wharves, a dredge spoils containment cell/service area, harbour authority building, ice house, as well as several storage gear/bait sheds. There is one fish processing plant located at the harbour and operates a lobster holding tank (Figure 3 in Appendix A). Water intake for this tank is not localised near the project area but this processing plant uses discharge pipes that are localized where the new service area will be extended. However, DFO-SCH has been told by the fish plant owner that any pipes in the way of construction can be removed/decommissioned during project activities as they are not active and have not been in use for some time.

The Harbour Authority, through a lease agreement with DFO-SCH, manages the property and its facilities. The Val-Comeau DFO-SCH serves commercial and recreational users, and the harbour is currently homeport of approximately 48 full-time commercial fishing vessels and 20 recreational vessels. Commercial fisheries at this harbour include:

- Lobster (from May 1 to June 30)
- Herring (April)
- Halibut (July)

- Rock crab (from August to September)
- Snow crab (boats unload catch at Shippagan harbour)
- Scallop (from early July to August 15)
- Mackerel (In May for bait then from July to September)

Based on the Harbour Authority there is one small aquaculture site located close to the harbour. This site is used primarily for mussels and oysters but also use boxnets for eels, gaspereau, and smelt. This site (MS-0804) was confirmed as located approximately 350 m east of the harbour by the Marine Aquaculture Site Mapping Program (published online by the New Brunswick Department of Agriculture, Aquaculture and Fisheries (NBDAAF, 2015)).

A Phase I-II Environmental Site Assessment (ESA) noted the presence of private water wells on the property. The ESA noted that the water was potable but the harbour is not located in a well field protected area (JWL, 2005).

According to the Val-Comeau Harbour Authority and DFO Aboriginal Program Area Coordinator, there are five Aboriginal fishers operating from the Harbour. This harbour is not known to be used for Aboriginal food, social, and ceremonial purposes, and there is no communal commercial fishing known to be occurring from the harbour (R. Comeau, pers. comm., 2017; G. Moore, pers. comm., 2017). Due to the temporal scope of the project (i.e., work is to be undertaken outside of fishing seasons), disruption or disturbances to Aboriginal fishers is not anticipated.

The land in the immediate vicinity of the Harbour has been developed to serve the general fishing industry and by some residential properties. The nearest full-time residential properties are located ~ 250 m to the harbour on Rue du Quai. The Val-Comeau Provincial Park is also located at the northern tip of the peninsula, approximately 800 m northeast of the harbour.

Lands adjacent to the coastlines in the Maritimes tend to have high archaeological potential given their historic importance and proximity to transportation routes and fishing resources. The shoreline around and including Val-Comeau is considered high potential for heritage and archaeological resources. There is one Precontact site located on the shoreline of Big Tracadie River approximately 500 m southwest of the SCH (CiDf-1c) and another approximately 750 m northeast of the SCH (CiDf-1b) (New Brunswick Department of Tourism, Heritage and Culture, 2013).

## 21. Scope of Effects Considered (Section 5(1) and 5(2)):

**Table 1: Potential Project / Environment Interactions Matrix**

Project Phase / Physical Work/Activity	As per Section 5(1)			Section 5(1c)			Section 5(2)			Due Diligence							
	Fish (Fisheries Act)	Aquatic Species (SARA)	Birds (MBCA)	Health and Socio Economic	Physical and Cultural Heritage	Land use	HAPA* Significance	Health and Socio Economic	Physical and Cultural Heritage	HAPA* Significance	Water (ground, surface, drainage, etc.)	Wetlands	Terrestrial / Aquatic Species	Fish	Birds	Soil	Air Quality
<b>Construction of breakwater extensions and jetty</b>																	
Transportation of material and equipment	-	-	P	P	-	-	-	P	-	-	-	-	-	-	P	-	P
Placement of rock	P	-	P	P	P	-	P	P	P	-	-	-	P	P	P	-	P
Infilling for service area	P	-	P	P	P	-	P	P	P	-	-	-	P	P	P	-	P
<b>Operation/Maintenance</b>	-	-	-	P	P	-	-	P	P	-	-	-	-	-	-	-	-



**Decommissioning / Abandonment**

-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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*\*structure, site or thing that is of historical, archaeological, paleontological or architectural significance*

P = possible interaction

"-" = no interaction

**Evaluation of Environmental Effects**

The Valued Ecological Components (VECs) selected in Table 1 are addressed in Sections 22 and 23 of the PED. The physical works/activities and required mitigation measures are detailed. The assessment is based on:

- Information provided by the proponent;
- a review of project related activities;
- an appraisal of the environmental setting, and identification of resources at risk;
- the identification of potential impacts within the temporal and spatial bounds; and
- personal knowledge and professional judgment of the assessor.

The significance of project related impacts was determined in consideration of their frequency, the duration and geographical extent of the effects, magnitude relative to natural or background levels, and whether the effects are reversible or are positive or negative in nature. These criteria are described in Table 2 and used in Section 23.

**Table 2: Assessment Criteria for Determination of Significance**

<b>Magnitude</b>	Magnitude, in general terms, may vary among issues, but is a factor that accounts for size, intensity, concentration, importance, volume and social or monetary value. It is rated as compared with background conditions, protective standards or normal variability.	
	Small	Relative to natural or background levels
	Moderate	Relative to natural or background levels
	Large	Relative to natural or background levels
<b>Reversibility</b>	Reversible	Effects can be reversed
	Irreversible	Effects are permanent
<b>Geographic Extent</b>	Immediate	Confined to project site
	Local	Effects beyond immediate project site but not regional in scale
	Regional	Effects on a wide scale
<b>Duration</b>	Short-term	Between 0 and 6 months in duration
	Medium-term	Between 6 months and 2 years
	Long-term	Beyond 2 years
<b>Frequency</b>	Once	Occurs only once
	Intermittent	Occurs occasionally at irregular intervals
	Continuous	Occurs on a regular basis and regular intervals

## **Methodology**

The environmental effects evaluation methodology used in this report focuses the evaluation on those environmental components of greatest concern. The VECs most likely to be affected by the project as described are indicated in Table 1. VECs were selected based on ecological importance to the existing environment (above), the relative sensitivity of environmental components to project influences and their relative social, cultural or economic importance. The potential impacts resulting from these interactions are described below.

This environmental effects evaluation considers the full range of project/environment interactions and the environmental factors that could be affected by the project as defined above and the significance of related impacts with mitigation.

## **22. Environmental Effects of Project:**

Potential Project/Environment Interactions and their effects are outlined below. The effects are described for each project phase.

### **Extension of service area**

- Potential increased suspended solid/sediment and turbidity adjacent to the project site may affect marine water quality in the vicinity of the project.
- Potential for construction related debris to enter the marine environment and affect marine water quality.
- Potential accidental release of toxic materials entering the marine environment affecting marine water quality.
- Potential loss of fish habitat resulting from the increase in wharf infrastructure footprint.
- Potential reduction in air quality due to equipment/vehicle emissions.
- Potential project related elevated noise levels may cause a disruption to nesting or migration of birds/bird habitat.
- Potential to enhance populations of predators in the harbour area for the duration of all project phases resulting in a disturbance to migratory birds.
- Potential project related elevated noise levels may cause a disruption to adjacent land-owners.
- Potential disturbance to fish in the immediate project area.
- Potential loss of fish habitat in the project footprint.
- Potential discovery and disturbance or loss of heritage/archaeological resources.
- Interference with vessel movement in the vicinity within the harbour.
- Interference with commercial and recreational use of the harbour.
- Safety hazards to workers during construction.

### **Operation/Maintenance:**

- Potential safety hazards to workers during operation/maintenance.

### **Decommissioning / Abandonment:**

- Safety hazards to workers during decommissioning/abandonment.

### **Navigation Consideration:**

- Environmental effects of the project on navigation are taken into consideration as part of the Project Effects Determination (PED) only when the effects are indirect, i.e. resulting from a change in the environment affecting navigation. Direct effects on navigation are not considered in the PED, but any measures necessary to mitigate direct effects will be included as terms and conditions associated with work approved or permitted pursuant to the *Navigation Protection Act*.

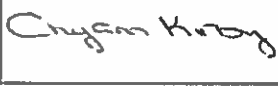

## 23. Mitigation Measures for Project (including Habitat Offsetting, if applicable)


**Table 3: Potential Project/Environment Interactions and Recommended Mitigation Measures**

Construction of breakwaters' extensions	
Effect	Recommended Mitigation Measures
<p>Potential increased suspended solid/sediment and turbidity adjacent to the project site may affect marine water quality.</p> <p><i>(Small, reversible, immediate, short-term, intermittent)</i></p>	<ul style="list-style-type: none"> <li>Weather conditions are to be assessed on a daily basis to determine the potential risk of weather on the project. Work is to be scheduled to avoid periods of heavy precipitation and to prevent erosion and release of sediment and/or sediment-laden water during the construction phase.</li> <li>Activities must be completed in such a way as to minimize the amount of fines and organic debris that may enter nearby aquatic environments.</li> <li>Use site isolation measures (e.g. silt boom or silt curtain) for containing suspended sediment where/when possible.</li> <li>All exposed soils must be stabilized as soon as possible in order to control sediment runoff during and after construction.</li> <li>Visual monitoring of the turbidity will be required on a daily basis in the vicinity of the project to ensure that the turbidity is limited. If excessive change occurs in the turbidity that differs from the existing conditions of the surrounding water body (i.e., distinct color difference) as a result of the project activities, the work must stop immediately to determine if further mitigation measures are required.</li> </ul>
<p>Potential for construction related debris to enter the marine environment and affect marine water quality.</p> <p><i>(Small, reversible, immediate, short-term, continuous)</i></p>	<ul style="list-style-type: none"> <li>Any construction debris/material that enters the marine environment will be removed immediately. Waste materials are not to be buried onsite. Demolition debris and waste materials will be disposed of in accordance with Provincial Waste Management Regulations.</li> <li>No construction or infill material may be obtained from any coastal feature, namely a beach, dune, or coastal wetland.</li> </ul>
<p>Potential accidental release of toxic materials entering the marine environment affecting marine water quality.</p> <p><i>(Small, reversible, immediate, short-term, continuous)</i></p>	<ul style="list-style-type: none"> <li>Machinery must be checked for leakage of lubricants and fuel. Onsite crews must have emergency spill clean-up equipment, adequate for the activity involved, onsite. Spill equipment will include, as a minimum, at least one 250L (i.e., 55 gallon) overpack spill kit containing items to prevent a spill from spreading; absorbent booms, pillows, and mats; rubber gloves; and plastic disposal bags. All spills or leaks must be promptly contained, cleaned up, and reported to the 24-hour Environmental Emergencies Report System (1-800-565-1633).</li> <li>Any equipment that has been in the marine environment will be cleaned of any sediments, plants or animals and washed with freshwater and/or sprayed with undiluted vinegar prior to being mobilized to the project site.</li> <li>Marine equipment may be inspected by PWGSC or DFO to ensure invasive species are not introduced to the marine environment.</li> <li>Where practicable, machinery shall be operated from a platform or on land above the high-water mark, in a manner that minimizes disturbance to the banks and bed of the waterbody.</li> <li>Refueling operations will take place at least 30 m from any watercourse and harbour and the refueling will take place on a prepared impermeable surface with a collection system.</li> </ul>
<p>Potential reduction in air quality due to equipment/vehicle emissions.</p> <p><i>(Small, reversible, immediate, short-term, continuous)</i></p>	<ul style="list-style-type: none"> <li>Construction activities must be carried out during times acceptable to local authorities and smaller, less disturbing equipment will be used where possible.</li> <li>Dust suppression by the application of water must be employed when required. The project authority shall determine locations where water is to be applied, the amount of water to be applied, and the times at which it shall be applied. Waste oil must not to be used for dust control under any circumstances.</li> </ul>
<p>Potential project related elevated noise levels may cause a disruption to nesting or migration of birds/bird habitat.</p> <p><i>(Small, reversible, immediate, short-term, continuous)</i></p>	<ul style="list-style-type: none"> <li>All work is to be conducted in accordance with the Migratory Birds Convention Act, which outlines that no migratory bird nests or eggs will be moved or obstructed during the construction or operational phase of the project.</li> <li>If works is to be conducted during times of migratory bird nesting season, a pre-construction nest survey will be conducted in the vicinity of the project. If active nests are identified the area will be buffered and activities in the immediate area will be minimized until nesting is complete and chicks have naturally migrated from the area.</li> <li>Construction activities must be carried out during times acceptable to local authorities and smaller, less disturbing equipment will be used where possible.</li> <li>All machinery must be well muffled at all times. Contractors should avoid any sharp or loud noises (e.g., not blow horns or whistles) and should maintain constant noise levels. If necessary, trucks may be</li> </ul>

	<p>required to avoid the use of “hammer” braking along specific sections of the route, while radio communication should replace whistle blasts and horns.</p> <ul style="list-style-type: none"> <li>• Lights are to be shielded and aimed downwards and in the opposite direction of bird nesting habitats.</li> <li>• Project staff and/or contractors shall not access beaches, sand spits, dunes, mud flats, or sand flats during any stage of the project.</li> <li>• Concentrations of seabirds, waterfowl, or shorebirds must not be approached when accessing the project site by water, or when ferrying supplies.</li> </ul>
<p>Potential to enhance populations of predators in the harbour area resulting in a disturbance to migratory birds.</p> <p><i>(Small, reversible, immediate, short-term, continuous)</i></p>	<ul style="list-style-type: none"> <li>• Contractors must ensure that food scraps and garbage are not left at the work site.</li> </ul>
<p>Potential project related elevated noise levels may cause a disruption to local residents.</p> <p><i>(Small, reversible, immediate, short-term, continuous)</i></p>	<ul style="list-style-type: none"> <li>• Construction activities must be carried out during times acceptable to local authorities and smaller, less disturbing equipment will be used where possible.</li> <li>• All machinery must be well muffled at all times. Contractors should avoid any sharp or loud noises (e.g., not blow horns or whistles) and should maintain constant noise levels. If necessary, trucks may be required to avoid the use of “hammer” braking along specific sections of the route, while radio communication should replace whistle blasts and horns.</li> </ul>
<p>Potential disturbance to fish in the immediate project area.</p> <p><i>(Small, reversible, immediate, short-term, continuous)</i></p>	<ul style="list-style-type: none"> <li>• Ensure that all in-water activities, or associated in-water structures, do not interfere with fish passage, constrict the channel width, or reduce flows.</li> <li>• Where possible, install site isolation measures (e.g., silt boom or silt curtain) for containing suspended sediment where in-water work is required (e.g., excavation, dredging).</li> <li>• Measures for containing and stabilizing waste material (e.g., dredging spoils, construction waste and materials, commercial logging waste, uprooted or cut aquatic plants, accumulated debris) above the high water mark of nearby waterbodies to prevent re-entry.</li> </ul>
<p>Potential loss of fish habitat in the project footprint.</p> <p><i>(Moderate, irreversible, immediate, long-term, once)</i></p>	<ul style="list-style-type: none"> <li>• A Request for Review will be submitted to DFO-FPP. The project will incorporate adhere to mitigation measures proposed by DFO-FPP in a letter of Advice. If a Paragraph 35(2)(b) <i>Fisheries Act</i> Authorization is deemed required, measures proposed by DFO-SCH and accepted by DFO-FPP to offset serious harm to fish will be adhered to.</li> <li>• Ensure all work stops if unexpected fish spawning (e.g., herring and capelin etc.) is found in the area.</li> <li>• Minimize duration of in-water work.</li> <li>• To minimize the possibility of fish habitat contamination, all construction equipment that is to be immersed into a waterbody, or that may come into contact with these waters during the work must be cleaned and washed to ensure it is free of any plant growth and aquatic invasive species. Equipment includes vessels, barges, cranes, excavators, transport trucks, pumps, pipelines, and any tools or various apparatus used previously in a waterbody. Cleaning and washing of equipment is to be performed immediately upon their arrival at the site and before use in or over the waterbody.</li> <li>• If replacement rock reinforcement/armouring is required to stabilize eroding or exposed areas, ensure that appropriately-sized, clean rock is used; and that rock is installed at a similar slope to maintain a uniform bank/shoreline and natural stream/shoreline alignment.</li> <li>• Place rocks on the bed of the waterbody, rather than dropping or dumping, to limit any further encroachments and re-suspension of sediment.</li> </ul>
<p>Potential discovery and disturbance or loss of heritage/archaeological resources.</p> <p><i>(Small, irreversible, immediate, short-term, once)</i></p>	<ul style="list-style-type: none"> <li>• All construction personnel will be responsible for reporting any unusual materials unearthed during construction activities to the Construction Supervisor.</li> <li>• In those situations where the find is believed to be an archaeological resource, the Construction Supervisor will immediately stop work in the vicinity of the find and notify his/her immediate supervisor and the PWGSC Project Manager.</li> <li>• Work in the area will be stopped immediately and an archaeological curator at the New Brunswick Department of Tourism, Culture and Heritage – Provincial Archaeological Services will be contacted at 506-453-2738.</li> <li>• Work can only resume in the vicinity of the find when authorized by the PWGSC Project Manager and Construction Supervisor, after approval has been granted by the New Brunswick Department of Tourism, Culture and Heritage.</li> <li>• In the event of the discovery of human remains or evidence of burials, the excavation work will immediately cease and nearest law enforcement agency will be contacted immediately by the PWGSC Project Manager and/or the Construction Supervisor.</li> </ul>

<p>Interference with vessel movement in the vicinity within the harbour.</p> <p><i>(Small, reversible, immediate, short-term, intermittent)</i></p>	<ul style="list-style-type: none"> <li>• The Harbour Authority will coordinate all construction activities within the harbour for the duration of the project so as to avoid unnecessary interference with harbour users and ensure adequate access. Any and all stipulations of federal, provincial, or municipal authorities or their officers must be strictly followed.</li> <li>• Construction material and debris shall not be permitted to become waterborne.</li> <li>• Any tools, equipment, vehicles, temporary structures or parts thereof used or maintained for the purpose of building or placing a work in navigable water shall not be permitted to remain in place after the completion of the project.</li> <li>• Vessels shall be permitted safe access through the worksite at all times, and shall be assisted as necessary.</li> <li>• All materials and equipment used in construction must be marked in accordance with the Collision Regulations of the Canada Shipping Act 2001, when located on the waterway.</li> <li>• Advise the Canadian Coast Guard, Marine Communication and Traffic Services (MCTS) at (902) 564-7751 or toll free at 1-800-686-8676 sufficiently in advance of commencement of work or when deploying or removing site markings in order to allow for appropriate Notices to Shipping/Mariners action.</li> </ul>
<p>Interference with commercial and recreational use of the harbour.</p> <p><i>(Small, reversible, immediate, short-term, intermittent)</i></p>	<ul style="list-style-type: none"> <li>• The Harbour Authority will coordinate all construction activities within the harbour for the duration of the project so as to avoid unnecessary interference with harbour users and ensure adequate access. Any and all stipulations of federal, provincial, or municipal authorities or their officers must be strictly followed.</li> <li>• Construction material and debris shall not be permitted to become waterborne.</li> <li>• Any tools, equipment, vehicles, temporary structures or parts thereof used or maintained for the purpose of building or placing a work in navigable water shall not be permitted to remain in place after the completion of the project.</li> <li>• Vessels shall be permitted safe access through the worksite at all times, and shall be assisted as necessary.</li> <li>• All materials and equipment used in construction must be marked in accordance with the Collision Regulations of the Canada Shipping Act 2001, when located on the waterway.</li> <li>• Advise the Canadian Coast Guard, Marine Communication and Traffic Services (MCTS) at (902) 564-7751 or toll free at 1-800-686-8676 sufficiently in advance of commencement of work or when deploying or removing site markings in order to allow for appropriate Notices to Shipping/Mariners action.</li> </ul>
<p>Worker health and safety</p> <p><i>(Medium-term, other criteria not applicable)</i></p>	<ul style="list-style-type: none"> <li>• Site access must be restricted to authorized workers only.</li> <li>• Workers in contact with hazardous materials must be provided with and use appropriate personal protective equipment.</li> <li>• Proper safety procedures must be followed for the duration of the project as per applicable municipal, provincial and federal regulations.</li> <li>• Employees will be trained in health and safety protocols (e.g., safe work practices, emergency response).</li> </ul>
<b>Operation/Maintenance</b>	
<p>Worker health and safety</p> <p><i>(Long-term, other criteria not applicable)</i></p>	<ul style="list-style-type: none"> <li>• Proper safety procedures must be followed for the duration of the project as per applicable municipal, provincial, and federal regulations.</li> <li>• Employees will be trained in health and safety protocols (e.g., safe work practices, emergency response).</li> <li>• Site access must be restricted to construction personnel and authorized visitors.</li> <li>• All personnel involved with activities must be adequately trained and utilize appropriate personal protective equipment.</li> </ul>
<p><b>24. Description of any Significant Adverse Environmental Effects of the project (after applying mitigation):</b></p> <p>Although the potential exists for short-term environmental effects during construction as well as operation/maintenance, with the implementation of recommended mitigation measures, no significant adverse environmental effects are anticipated.</p>	
<p><b>25. Other Monitoring and Compliance Requirements (e.g. Fisheries Act or Species at Risk Act requirements):</b></p> <p>To be determined.</p>	

<b>CONCLUSION</b>			
<small>(for guidance see page 18 of "The Canadian Environmental Assessment Act, 2012 - Project Effects Determination Process for SCH Projects" document)</small>			
<b>26. Conclusion on Significance of Adverse Environmental Effects:</b>			
The Federal Authorities have evaluated the project in accordance with Section 67 of the <i>Canadian Environmental Assessment Act, 2012 (CEAA, 2012)</i> and have determined that the project is not likely to cause significant adverse environmental effects with the implementation of recommended mitigation measures. DFO-SCH may proceed with the project as proposed.			
<b>27. Prepared by:</b>	Chyann Kirby		
<b>28. Title:</b>	Senior Environmental Specialist, PSPC		
<b>29. Signature</b>		<b>30. Date:</b>	Sept. 12 / 17
<b>31. Approved by:</b> Raymond Losier			
<b>32. Title:</b> Senior Project Engineer, DFO-SCH			
<b>33. Signature</b>		<b>34. Date:</b>	2017/9/14

<b>DECISION</b>			
<small>(for guidance see page 18 of "The Canadian Environmental Assessment Act, 2012 - Project Effects Determination Process for SCH Projects" document)</small>			
<b>35. Decision Taken</b>			
<input checked="" type="checkbox"/> The project is not likely to cause significant adverse environmental effects, and DFO may exercise its power, duty or function. <input type="checkbox"/> The project is likely to cause significant adverse environmental effects, and DFO has decided not to exercise its power, duty or function. <input type="checkbox"/> The project is likely to cause significant adverse environmental effects, and DFO will ask the Governor in Council to determine if the significant adverse environmental effects are justified in the circumstances.			
<b>36. Approved by:</b>	Raymond Losier		
<b>37. Title:</b>	Senior Project Engineer, DFO-SCH		
<b>38. Signature</b>		<b>39. Date:</b>	2017/9/14

40. Fisheries and Oceans Canada – Fisheries Protection Program			
<b>Project Title:</b>			
<b>DFO File No.:</b>			
<b>Fisheries Act Review Decision:</b>	The DFO has reviewed the Project Effects Determination Report (Canadian Environmental Assessment Act (CEAA) 2012) and, in considering the implementation of mitigation measures that are included as a requirement in the DFO Section 35(2) Fisheries Act Authorization, DFO concludes the project is not likely to cause significant adverse environmental effects and, as such, DFO may exercise any power or perform any duty or function that would permit the project to be carried out in whole or in part.		
<b>Recommended by:</b>			
<b>Title:</b>			
<b>Signature:</b>		<b>Date:</b>	
<b>Mailing Address:</b>			
<b>Tel:</b>		<b>Fax:</b>	
<b>Email:</b>			
<b>Approved by:</b>			
<b>Title:</b>			
<b>Signature:</b>		<b>Date:</b>	

41. Transport Canada			
<b>Project Title:</b>			
<b>TC File No.:</b>			
<b>NPP File No.:</b>			
<b>EED Decision:</b>	<input type="checkbox"/> Taking into account the implementation of any mitigation measures that Transport Canada considers appropriate, the project <b>is not likely</b> to cause significant adverse environmental effects and, as such, Transport Canada may exercise any power or perform any duty or function that would permit the project to be carried out in whole or in part.  <input type="checkbox"/> Taking into account the implementation of any mitigation measures that Transport Canada considers appropriate, the project <b>is likely</b> to cause significant adverse environmental effects that cannot be justified. As such, Transport Canada shall not exercise any power or perform any duty or function conferred on it by or under any Act of Parliament that would permit the project to be carried out in whole or in part, at this point in time.  The project shall be referred to the Governor in Council to decide if those adverse environmental effects are justified under the circumstances pursuant to subsection 69(3) CEAA, 2012.		
<b>Recommended by:</b>			
<b>Title:</b>			
<b>Signature:</b>		<b>Date:</b>	
<b>Mailing Address:</b>			
<b>Tel:</b>		<b>Fax:</b>	
<b>Email:</b>			
<b>Approved by:</b>			
<b>Title:</b>			
<b>Signature:</b>		<b>Date:</b>	



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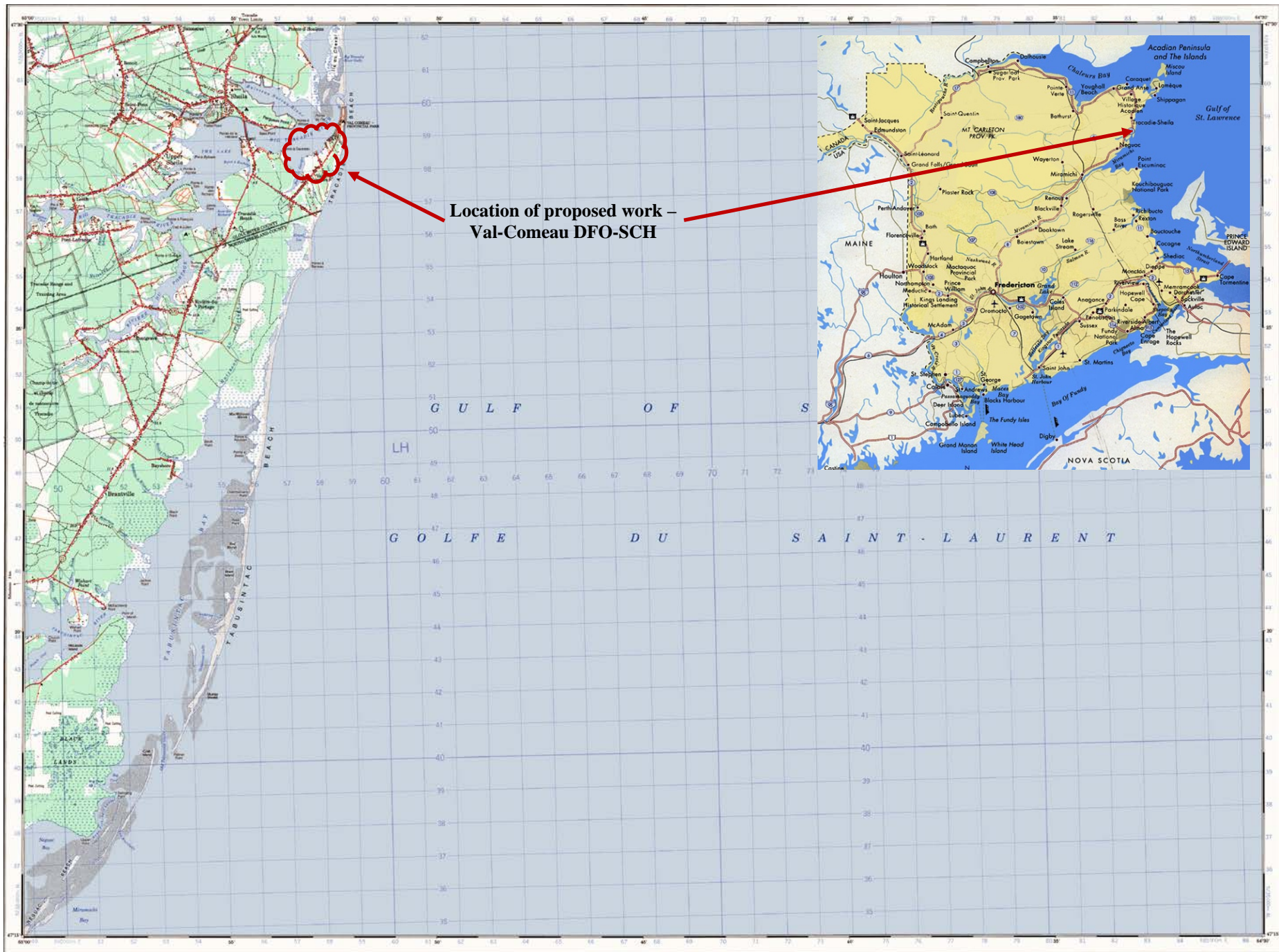
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# **APPENDIX A**

Figures



**Figure 1:** Topographic map indicating proposed project site, Val-Comeau DFO-SCH, Gloucester County, New Brunswick





**Figure 2:** Oblique aerial photo of Val-Comeau DFO-SCH, Gloucester County, New Brunswick



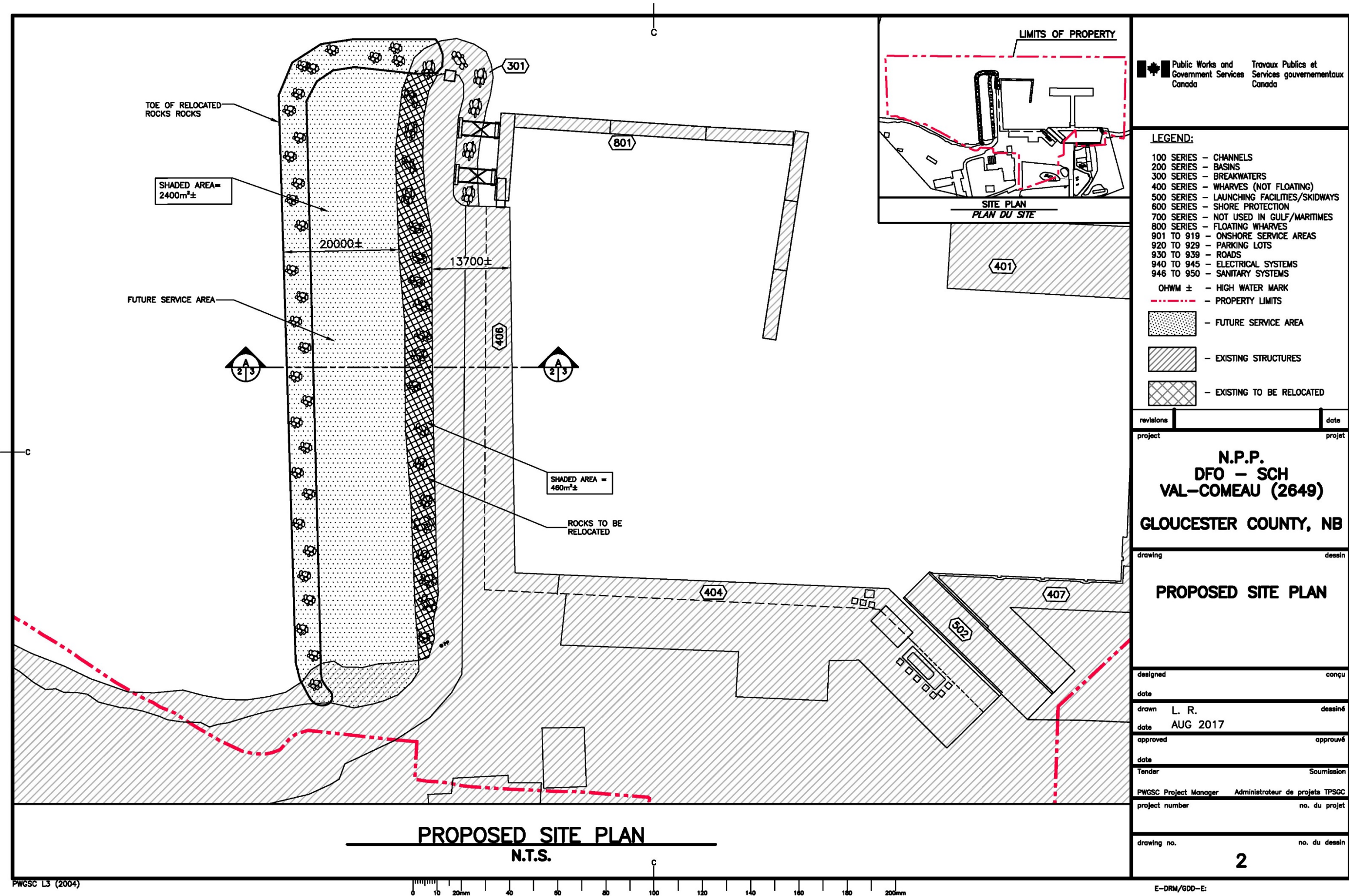
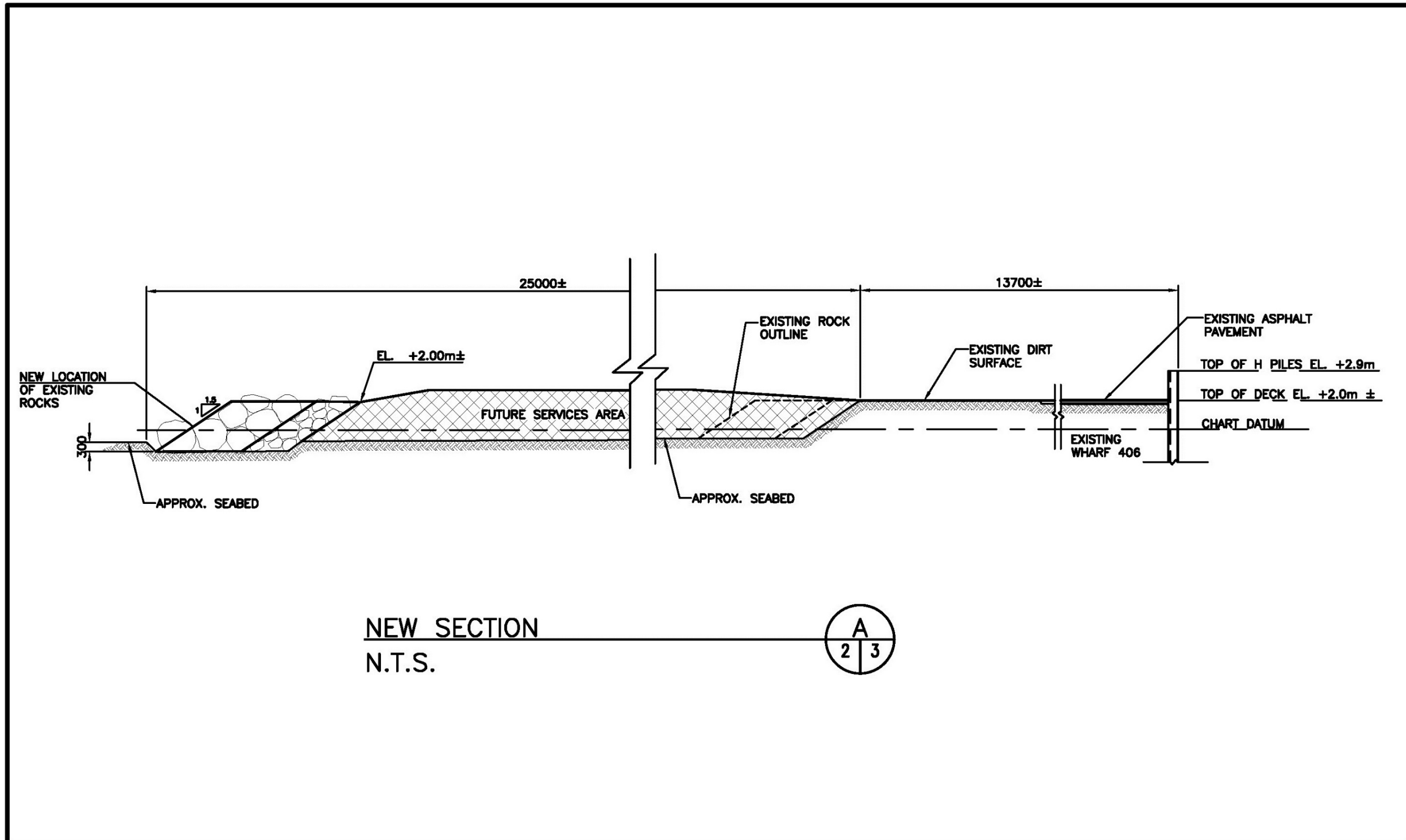


Figure 3: Site plan showing proposed service area construction activities at Val-Comeau DFO-SCH, Gloucester County, New Brunswick



	Public Works and Government Services Canada Travaux publics et Services gouvernementaux Canada	project <b>N.P.P.          DFO – SCH          VAL-COMEAU (2649)</b> <b>GLOUCESTER COUNTY, NB</b>	Drawing title <b>SECTION A          FUTURE SERVICE AREA</b>	designed conçu date
	Tender Soumission	PWGSC Project Manager Administrateur de projets TPSGC	project number no. du projet	drawing no. <b>3</b>

PWGSC L1 (2004)

E-DRM/GDD-E:

Figure 4: Cross-section of the proposed service area extension at Val-Comeau DFO-SCH, Gloucester County, New Brunswick

# **APPENDIX B**

Marine Sediment Sampling Program and  
Underwater Benthic Habitat Survey Report