

SCHEDULE A

CERTIFIED PROJECT DESCRIPTION

**FOR THE
CEDAR LNG PROJECT**

(PROJECT)

ENVIRONMENTAL ASSESSMENT CERTIFICATE #E23-01

INTERPRETATION

In this Certified Project Description, terms that are capitalized but not defined have the same meaning as those terms defined elsewhere in this Certificate, including in the Table of Conditions.

This Certified Project Description describes the Project authorized by this Certificate but does not obligate the Holder to construct or operate any aspect of the Project unless otherwise stated.

ACRONYMS AND ABBREVIATIONS

B.C.	British Columbia
Certificate	Environmental Assessment Certificate
EAO	Environmental Assessment Office
FLNG	Floating Liquefied Natural Gas
km	Kilometres
LNG	Liquefied Natural Gas
m ³	Cubic Metres
Project	Cedar LNG Project

1. Project Description and Location

- 1.1 The Cedar LNG Project (Project) is a liquefied natural gas (LNG) export facility with a capacity to liquefy up to and including 400 million standard cubic feet per day (11.33 million cubic metres per day) of natural gas to produce LNG for export.
- 1.2 The Project is located within the District of Kitimat, British Columbia (B.C.), approximately 10 kilometres (km) southwest of the Kitimat town centre (Figure 1).
- 1.3 The Project components consist of:
 - a) The Facility Area (which contains the floating liquefied natural gas (FLNG) facility, the marine terminal and supporting infrastructure), is up to 88 hectares in area and located within District Lot 99, a portion of the adjacent water lot (Lot A District Lot 5469) and an area of submerged Crown land (Figure 2);
 - b) A transmission line within the Transmission Line Corridor, from BC Hydro's Minette Substation to the Facility Area as shown in Figure 2 and described below in sections 3.4 and 3.5; and
 - c) Shipping of LNG along the Marine Shipping Route from the FLNG facility to the Triple Island Pilot Boarding Station, as shown in Figure 3.

2. Construction and Decommissioning Project Components and Activities

Construction Activities Incidental to the Project

- 2.1 Temporary work areas within the Facility Area, Transmission Line Corridor or on private property that are required only for Construction include:
 - a) Laydown areas and temporary workspaces;
 - b) Borrow pits; and
 - c) Disposal areas for overburden, excess rock and topsoil.
- 2.2 Construction, refurbishment or use of warehouse and office buildings on private property within the District of Kitimat.

Construction and Decommissioning Activities

- 2.3 Construction activities with a workforce, including contractors, of up to 500 persons at one time including:
 - a) Site preparation and construction of the marine terminal and supporting infrastructure identified in sections 3.2 and 3.3;
 - b) Connection, start-up and commissioning of the FLNG facility, constructed outside Canada and then transported to the marine terminal, identified in section 3.1;
 - c) Site preparation, clearing of the right-of-way, installation of the transmission line and access roads identified in sections 3.4, 3.5 and 3.6; and
 - d) Shipping of construction materials, including the FLNG facility.

- 2.4 Decommissioning activities with a workforce, including contractors, of up to 150 persons at one time including:
- a) Removal of the FLNG facility;
 - b) Removal of infrastructure and facilities, where they will not serve a future use;
 - c) Restoration activities; and
 - d) Shipping of materials, for either re-use elsewhere or scrapping or recycling at a dedicated facility, including the FLNG facility.

3. Operations Project Components and Activities

FLNG Facility

- 3.1 The FLNG facility, located within the Marine Terminal Area (Figure 2), which is within the Facility Area, is a permanently moored floating natural gas liquefaction facility including:
- a) Natural gas receiving and treatment units;
 - b) Natural gas liquefaction train(s) powered by electricity;
 - c) Air cooling systems;
 - d) Flare system;
 - e) LNG storage tanks with a total storage capacity of up to and including 250,000 m³;
 - f) Storage vessels for products including: natural gas liquids removed from the inlet gas, refrigerants for the liquefaction trains, fuel for the backup generators, process waste streams for offsite disposal, and other products to be used for operation and maintenance of the FLNG facility;
 - g) LNG offloading arms;
 - h) LNG carrier berthing systems;
 - i) Marine water intakes for ballast water, fire water, desalinization, and other ancillary purposes;
 - j) Wastewater collection and treatment systems for stormwater and domestic wastewater;
 - k) Marine outfalls for discharge of effluents and stormwater;
 - l) Control room;
 - m) Staff facilities;
 - n) Emergency shutdown system;
 - o) Emergency backup power generation system;
 - p) Bilge system;
 - q) Ballast water system;
 - r) Cofferdam heating system;

- s) Natural gas connection to onshore infrastructure;
- t) Electrical transformers; and
- u) Electrical utilities interface connection to onshore infrastructure.

Marine Terminal

- 3.2 The marine terminal is located within the Marine Terminal Area and includes all infrastructure needed for mooring the FLNG facility and project-related vessels including:
- a) A mooring system for connecting the FLNG facility to shore;
 - b) Connections to the land-based natural gas supply pipeline, power supply and other utilities; and
 - c) A small craft jetty for mooring tugs and other project-related vessels.

Supporting Infrastructure

- 3.3 The supporting infrastructure components are located in the Facility Area and include the following:
- a) Support buildings including warehouse(s), electrical substation, security building, and flammable liquids storage shelter;
 - b) Access roads to provide access to project components;
 - c) Parking areas adjacent to the main buildings and in the vicinity of the marine terminal;
 - d) Onsite utilities including power distribution lines between the substation and onsite facilities, stormwater conveyance systems, water storage tanks, wastewater storage tanks, and an interconnection to the natural gas supply pipeline; and
 - e) Fencing for safety and security.

Transmission Line

- 3.4 Electricity is supplied to the Project by an up to 8.5 km long, up to 287 kilovolt, power transmission line between BC Hydro's Minette Substation and the substation within the Facility Area.
- 3.5 The transmission line right-of-way is up to 45 metres wide, except in the case of danger tree removal, and is within the Transmission Line Corridor (within one of the two options for the northern end of the transmission line), as shown in Figure 2.
- 3.6 Roads to provide access from Alcan Way, the Bish Creek Forest Service Road and private roads to and along the transmission line right-of-way.

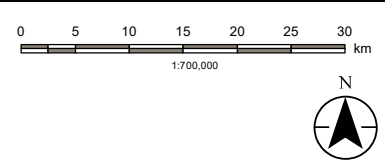
Operations Activities

- 3.7 Facility operations with a full-time equivalent FLNG facility workforce not to exceed 100 persons. Up to 100 additional maintenance contractors may also be on site at a time on a temporary basis. Operations activities include:
- a) Receipt of natural gas from the feed gas pipeline;
 - b) Treatment and dehydration of the inlet natural gas;

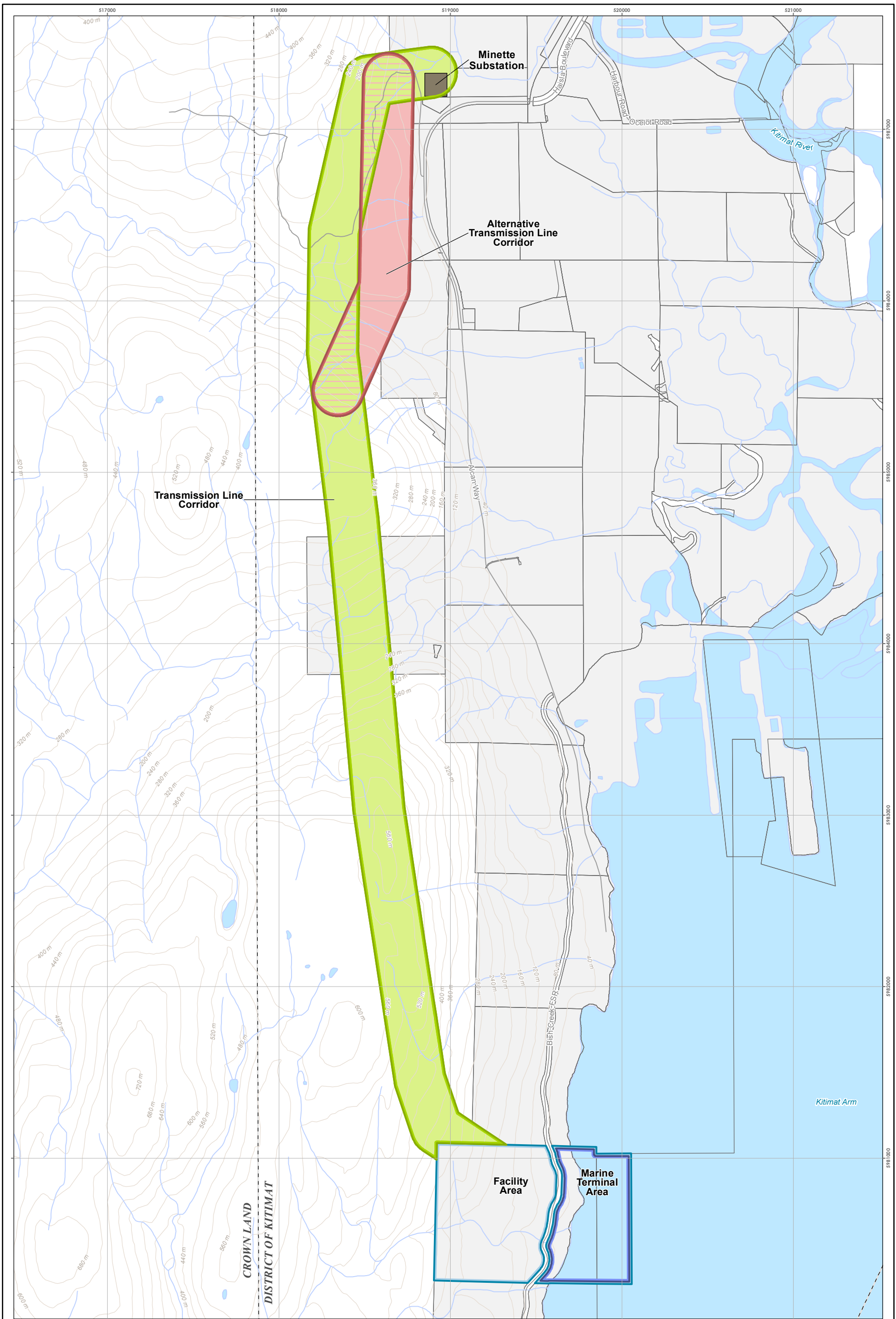
- c) Incineration of acid gas (carbon dioxide and hydrogen sulphide) that is removed from the gas;
 - d) Storage of natural gas liquids removed from the gas;
 - e) Combustion of the natural gas liquids for process heat;
 - f) Liquefaction of natural gas and storage of the LNG;
 - g) Berthing and loading of up to 50 LNG carrier loads per year with tug assistance;
 - h) Water collection, treatment and use;
 - i) Wastewater, stormwater, and process water treatment and disposal;
 - j) Waste disposal and recycling;
 - k) Transportation of products required for operation and maintenance;
 - l) Vegetation maintenance along the transmission line, access roads, and in the Facility Area; and
 - m) Maintenance of the Project components.
- 3.8 Transport of LNG by LNG carriers, accompanied by one or more escort tugs, within the Marine Shipping Route between the FLNG facility and the B.C. Coast Pilot boarding station near Triple Islands, as shown on Figure 3, unless a deviation is required for safety or operational requirements, as determined by the LNG carrier captain or a B.C. Coast Pilot.



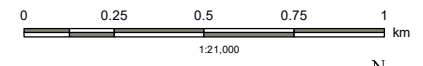
- International Boundary
- Road
- Watercourse
- Waterbody
- Treaty Lands
- Park or Protected Area
- Marine Park or Protected Area
- Project Location
- Marine Shipping Route (Approximate Location)



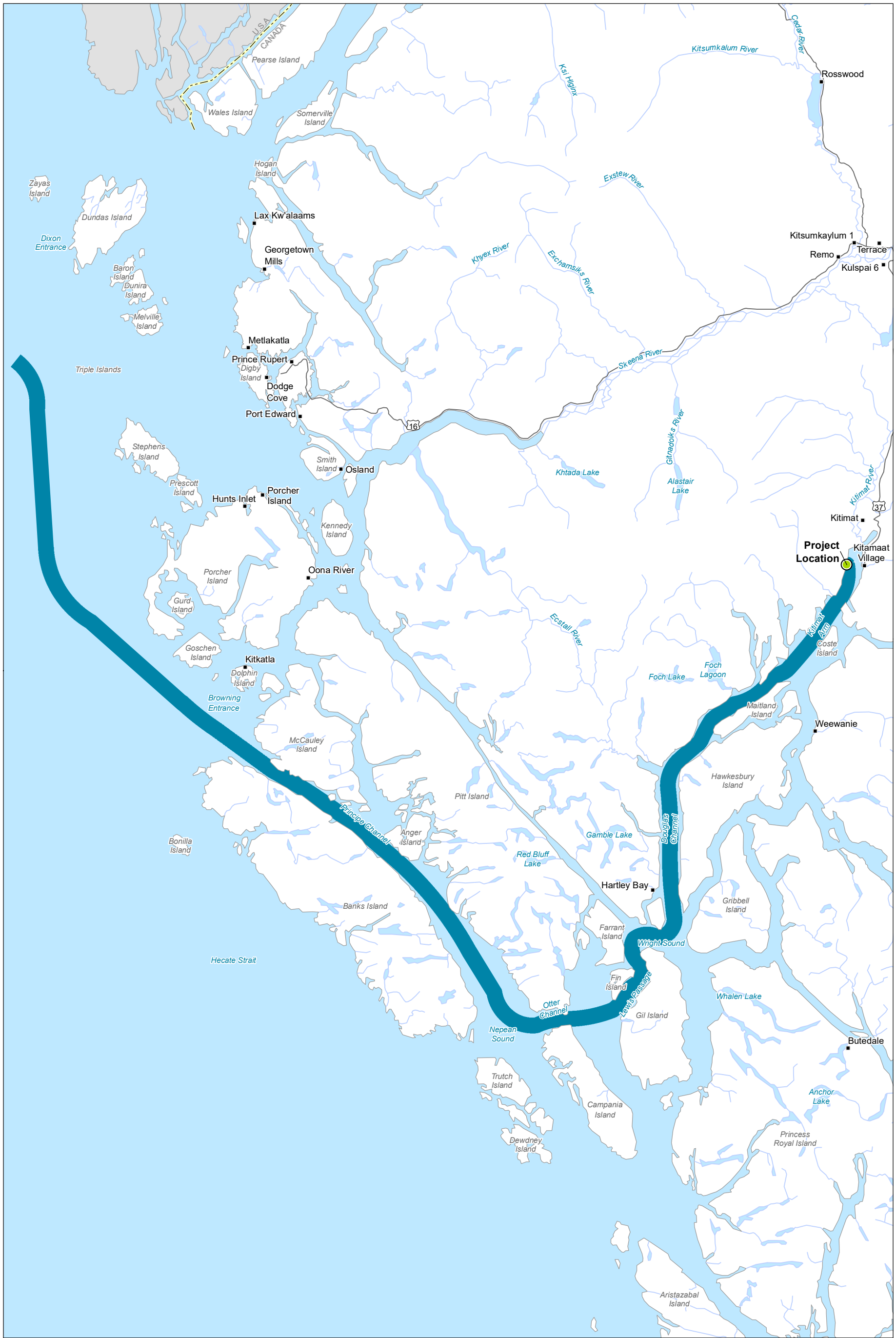
Cedar LNG Project
Figure 1: Project Overview Map



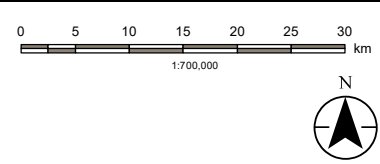
- Road
- Topographic Contour (40m)
- Waterbody
- Cadastral (Legal Lot) Boundary
- District of Kitimat Municipal Boundary
- Minette Substation
- Transmission Line Corridor
- Alternative Transmission Line Corridor
- Facility Area
- Marine Terminal Area



Cedar LNG Project
Figure 2: Facility Area, Marine Terminal Area,
and Transmission Line Corridor



- International Boundary
- Road
- Watercourse
- Waterbody
- Project Location
- Marine Shipping Route



Cedar LNG Project
Figure 3: Marine Shipping Route