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# 1 NORTH ISLAND

# 1.01 Definitions

In these Local Area Specifications, capitalized terms will have the corresponding meanings as set out in Article 1 of this Agreement and Section 1 of this Schedule 1 ("Specifications"), and as set forth below:

"Invasive Plants" means any invasive alien plant species that has the potential to pose undesirable or detrimental impacts on humans, animals or ecosystems.

"Movable Bridge" means a Bridge of any type having one or more spans capable of being raised, turned, lifted or slid from its normal vehicular and/or pedestrian service location to provide for the passage of vessels. The movements of the Superstructure may be produced either manually or by engine power.

"Salt Containment Infrastructure" means a storage facility, including all of its components that is used for the storage and loading/unloading of salt for winter maintenance operations including, but not limited to the salt shed, fabric/steel roofing, pit floor, evapotranspiration liner, containment pad, and skirt.

"Wildlife Exclusion System" means a device including all its components (including, but not limited to fences, gates, passageways and related hardware) located within the Right-of-way designed to restrict wildlife from accessing the Highway, including but not limited to fencing, one-way gates and jump outs, Ungulate Guards, human and vehicle access gates and Overpasses and Underpasses.

# 1.02 Dock Maintenance – Courtney 17<sup>th</sup> Street Dock

### 1.02.1 **Outcome**

To provide for the safe and efficient functioning of the dock.

### 1.02.2 Routine Maintenance Services

PM1.02.2-1 Maintain or repair the dock and ramp as follows:

Performance Criteria		Response
a)	Non-functioning dock and ramp	immediately
b)	Lubricate hinges and dock wheels	annually
c)	Damaged or deteriorated dock and ramp structure deck systems	24 h
d)	Other damaged or deteriorated dock and ramp structure components	10 d
e)	Remove or place dock and ramp as directed by the Province	5 d
f)	Damaged or deteriorated timber or steel Pilings	6 m

PM1.02.2-2 Remove within 4 hours, the dock and ramp from the water and embankments due to extreme high water conditions or flooding or high Debris quantities and return the dock and ramp to service, as directed by the Province.

PM1.02.2-3 Replace within 6 months, the dock and ramp that are damaged or deteriorated beyond repair.

PM1.02.2-4 Remove Accumulations on the dock and ramp surfaces in accordance with PM1.07.2-1 (a) and (h) of the General Specification of this Schedule 1 ("Specifications").

PM1.02.2-5 Remove Winter Accumulations on the dock and ramp surfaces in accordance with PM3.03.2-2 (c) of the General Specification of this Schedule 1 ("Specifications").

PM1.02.2-6 Remove litter and graffiti on the dock and ramp surface in accordance with General Specification 4.03 of this Schedule 1 ("Specifications").

# **Specific Requirements:**

a) Respond to dock and ramp maintenance in accordance with the following General Specifications of this Schedule 1 ("Specifications"), always subject to PM1.02.2-1:

Performance Criteria		General Specifications Schedule 1 ("Specifications")	
		Section	Specification Reference
a)	Damaged or deteriorated dock and ramp structure deck systems or other damaged or deteriorated dock and ramp structure components.	6.01 6.07 6.12	Bridge Deck Maintenance Structure Minor Coating Bridge Railing Maintenance
b)	Damaged or deteriorated timber or steel Pilings	6.10	Bridge Piling Maintenance

b) Maintain the dock and ramp in accordance with the response for a Class 2B Highway.

# Notes:

1) The specific requirements (a) includes possible Quantified Maintenance Services.

### 1.02.3 Materials and/or Procedures

Refer to Subsection 1.6 of this Schedule 1 ("Specifications").

Additional materials and/or procedures requirements are as follows:

a) Use materials in accordance with the same type and quality on the existing infrastructure.

# 1.02.4 Routine Maintenance Service Cap

\$50,000 – for each occurrence, the cost to replace the dock and ramp.

# 1.03 Highway Crossing Infrastructure

### **1.03.1 Outcome**

To provide safe passage of pedestrians and animals underneath or beside a Highway.

### 1.03.2 Routine Maintenance Services

PM1.03.2-1	Respond immediately to restrict all access to Highway Crossing
	Infrastructure, as directed by the Province.

PM1.03.2-2 Repair or replace immediately, as directed by the Province, any damaged or deteriorated Highway Crossing Infrastructure that has been structurally compromised, as determined by the Province.

PM1.03.2-3 Repair or replace within 3 months, any damaged or deteriorated Highway Crossing Infrastructure that has not been structurally compromised, as determined by the Province.

PM1.03.2-4 Remove Debris immediately from the surfaces of floors, pedestrian paths or stairways.

PM1.03.2-5 Remove Accumulations, surface contaminants and chemicals by June 30 of each calendar year from all surfaces.

PM1.03.2-6 Remove Debris within 1 month that impedes the passage of animals in animal accessed Highway Crossing Infrastructure.

#### 1.03.3 Quantified Maintenance Services

PM1.03.3-1 Repair within 24 hours damaged or deteriorated surfaces on underpass floors, pedestrian paths or stairways.

PM1.03.3-2 Repair within 6 months other damaged or deteriorated surfaces.

### **Specific Requirements:**

a) Maintain Highway Crossing Infrastructure within Rest Areas in accordance with the response of the adjacent Highway Classification.

### 1.01.4 Materials and/or Procedures

Refer to Subsection 1.6 of this Schedule 1 ("Specifications").

Additional material and/or procedures requirements are as follows:

a) Use materials in accordance with the same type and quality on the existing Highway Crossing Infrastructure.

# 1.03.4 Routine Maintenance Services Cap

\$50,000 – for each occurrence, the cost to repair or replace Highway Crossing Infrastructure.

# 1.03.5 Warranty

Refer to Section 3 of this Schedule 1 ("Specifications").

# 1.04 Invasive Plants Management

### 1.04.1 Outcome

To minimize the introduction and spread of Invasive Plants on Highways and Gravel Pits.

#### 1.04.2 Routine Maintenance Services

PM1.04.2-1 Meet annually, with the agency conducting Invasive Plant management for the Province, during development of the Quantified Maintenance Services to coordinate planned activities.

PM1.04.2-2 Inspect all Gravel Pits and material sources annually to ensure they are free of Invasive Plants.

PM1.04.2-3 Report Invasive Plant conditions to the agency conducting Invasive Plant management for the Province, as follows:

Per	formance Criteria	Response
a)	Prior to the disturbance of knotweed species that restricts Sight Distance or creates a condition that is unsafe or has the potential to become unsafe	immediately
b)	Any Invasive Plant infestations on Highways and Gravel Pits	2 d

### Notes:

1) Only the exposed, active areas of the Gravel Pits are to be considered.

### 1.04.3 Quantified Maintenance Services

PM1.04.3-1 Seed specific areas of exposed soils exceeding 1 metre up the Shoulder sideslope and the backslope due to ditch maintenance.

### Notes:

 The Standard Specifications for Highway Construction describes the revegetation requirements including, but not limited to blending, seed analysis and application timing.

### 1.04.4 Materials and/or Procedures

Refer to Subsection 1.6 of this Schedule 1 ("Specifications").

Additional materials and/or procedures requirements are as follows:

a) Comply with the Best Practices for Managing Invasive Plants on Roadsides;

- b) Incorporate Invasive Plant management when planning and performing Quantified Maintenance Services;
- c) Seed side-cast ditch materials;
- d) Seek approval from the Province if disturbance of knotweed species is required;
- e) The Contractor may submit a plan for approval by the Province for the use of herbicides, as a control measure for knotweed or other Invasive Plants;
- f) Herbicides are to be applied by a certified pesticide applicator;
- g) Do not use gravel materials contaminated with Invasive Plants, unless a rectification process is submitted and approved by the Province; and
- h) Report Invasive Plants to the agency conducting Invasive Plant management for the Province online or using the Province's smartphone application or the provincial toll-free service.

# 1.04.5 Warranty

Refer to Section 3 of this Schedule 1 ("Specifications").

# 1.05 Maintenance Exceptions

# 1.05.1 Outcome

To facilitate safe and efficient service delivery on #690 Western Mine Road.

# 1.05.2 Routine Maintenance Services

PM1.05.2-1

Maintain the Western Mine Road in accordance with the General Specifications except for General Specifications 3.01, 3.02, 3.03 and 3.04 of this Schedule 1 ("Specifications").

# 1.05.3 Materials and/or Procedures

Refer to Subsection 1.6 of this Schedule 1 ("Specifications").

# 1.06 Movable Bridge Operation and Maintenance – Courtney River Bridge at 17th Street

### 1.06.1 Outcome

To provide safe navigable waterways for marine traffic and ensure safe and reliable service to Highway Users.

# 1.06.2 Routine Maintenance Services

PM1.06.2-1 Report any malfunctions immediately to the Province.

PM1.06.2-2 Open the Movable Bridge at the time scheduled by the Comox Valley Harbour Authority, direct movement of the vessels until they are clear of the Movable Bridge, and then immediately close the Movable Bridge.

PM1.06.2-3 Operate and maintain the Movable Bridge in accordance with the Operating and Maintenance Manuals for the Courtenay River Bridge at 17<sup>th</sup> Street.

PM1.06.2-4 Maintain, repair or replace immediately any damaged or deteriorated steel or mechanical components.

PM1.06.2-5 Maintain and lubricate annually, all moving parts and contact faces at deck joints.

### 1.06.3 Materials and/or Procedures

Refer to Subsection 1.6 of this Schedule 1 ("Specifications").

Additional materials and/or procedures are as follows:

- a) Post contact telephone numbers for the Contractor and the Province at the marine approaches to the Movable Bridge at locations approved by the Province;
- b) Operate in accordance with the applicable Coast Guard approvals under the provisions of the Navigation Protection Act;
- c) Ensure operators of the Movable Bridge are qualified to operate Very High Frequency (VHF) radio to direct the movement of vessels; and
- d) Coordinate maintenance work that impacts electrical components with the Province's electrical contractor.

### 1.06.4 Routine Maintenance Service Cap

\$50,000 – per occurrence, the cost for the Contractor to maintain, repair or replace steel or mechanical components of the Movable Bridge.

# 1.07 Pavement Surface Reflectors

# 1.07.1 Outcome

To facilitate the safe and orderly movement of traffic.

# 1.07.2 Routine Maintenance Services

There are no Routine Maintenance Services.

# 1.07.3 Quantified Maintenance Services

PM1.07.3-1 Replace pavement surface reflectors by August 31<sup>st</sup> of each calendar year that are missing or are no longer effective.

PM1.07.3-2 Install non-recessed pavement surface reflectors within 1 month at new locations.

# 1.07.4 Materials and/or Procedures

Refer to Subsection 1.6 of this Schedule 1 ("Specifications").

### 1.08 Salt Containment Infrastructure Maintenance

### 1.08.1 Outcome

To provide for the safe handling and storage of salt and Winter Abrasives on provincial land and monitor, maintain, repair and replace provincially owned Salt Containment Infrastructure.

### 1.08.2 Routine Maintenance Services

PM1.08.2-1	Off-load salt onto an evapotranspiration liner or containment pad	
	available and/or store immediately within the salt shed.	

PM1.08.2-2 Retrieve and return to the salt shed immediately, any salt spillage over the top of skirt that lines the inside of the salt shed.

PM1.08.2-3 Remove immediately, any salt or salt contaminated material on the pit floor to a depth of 40 centimetres for use with Winter Abrasives when processing.

PM1.08.2-4 Notify the Province immediately of any damage to the containment pond, including but not limited to the liner, berm or fencing.

PM1.08.2-5 Temporarily repair damaged or deteriorated salt shed components immediately, that permits water infiltration.

PM1.08.2-6 Permanently repair within 8 weeks, any temporarily repaired steel/fabric salt shed components that permits water infiltration.

PM1.08.2-7 Permanently repair within 2 weeks, any temporarily repaired wooden salt shed components that permits water infiltration.

PM1.08.2-8 Inspect and document the condition of Salt Containment Infrastructure as follows:

Per	formance Criteria	Response
a)	Evapotranspiration water/brine levels	daily or more often when required
b)	Water in the containment pond to prevent over-flowing	daily or more often when required
c)	Steel/fabric salt sheds including, but not limited to, the steel structural components including base plates, wire cross-bracing, fabric roof, fabric lashing, winches and vents, lock-blocks and protective skirt	bi-annually in the spring and fall or in accordance with the manufacturer's specifications and recommendations, whichever is more frequent
d)	Wooden salt shed including but not limited to structural condition and weatherproof exterior	annually
e)	Salt shed apron and containment pad surfaces	annually
f)	Evapotranspiration liner surface absorption	daily or more often when required

# PM1.08.2-9 Maintain the superstructure of steel/fabric salt sheds as follows:

Per	formance Criteria	Response
a)	Remove grime and encrusted salt off the salt shed's steel interior	annually
b)	Lubricate winches	annually
c)	Re-tension-web and fabric roof lashing	annually
d)	Re-tighten fastening bolts	annually
e)	Remove surface rust	annually

# PM1.08.2-10 Repair or replace Salt Containment Infrastructure as follows:

Performance Criteria		Response
a)	Damaged or deteriorated containment pond components, including but not limited to the liner, berm or fencing	immediately
b)	Loss of absorption for a compact surface where water is ponding on the evapotranspiration liner	immediately
c)	Saturation or overflow of evapotranspiration water/brine	when required
d)	Damaged or deteriorated wooden salt shed components	within 2 weeks of the bi-annual inspection or as noted in PM1.01.2-8
e)	Damaged or deteriorated steel/fabric salt shed components	within 8 weeks of the bi-annual inspection or as noted in PM 1.01.2-8 if salt and/or Winter Abrasive with salt is present or prior to when the salt and/or Winter Abrasive with salt is scheduled to be stored
f)	Cracked, chipped edges, pot holes, settling/ponding, or base failure of surfaces	General Specifications 1.01, 1.06 and 1.10 of this Schedule 1 ("Specifications") for a Class 4 Highway

# PM1.08.2-11

Replace annually, the top 10 centimetres of salt contaminated material on the evapotranspiration surface with free draining material and use the removed salt contaminated material for Winter Abrasives processing.

### Notes:

- 1) The Province inspection H-form is to be used for inspections of steel/fabric salt sheds;
- 2) PM1.08.2-10 (f) includes possible Quantified Maintenance Services, and
- 3) Salt shed locations are provided in Appendix A of Schedule 13 ("Gravel Licence").

# 1.08.3 Materials and/or Procedures

Refer to Subsection 1.6 of this Schedule 1 ("Specifications").

Additional materials and/or procedures requirements are as follows:

- a) Load salt and/or Winter Abrasive containing salt on a containment pad or the evapotranspiration liner surface;
- b) Store salt and/or Winter Abrasive containing salt at a height below the top 30 centimetres of the skirt within a steel/fabric salt shed and ensure the top of the lock block wall remains free of salt accumulation:
- c) Park heavy equipment used for loading salt or Winter Abrasive containing salt, on the containment pad, evapotranspiration liner or within the salt shed;
- d) Prevent spillage onto the pit floor when transporting salt;
- e) Store Winter Abrasive containing salt under cover or on a containment pad or on an evapotranspiration liner, if supplied;
- f) Use a spill proof apron for salt hoppers to contain salt and facilitate retrieval;
- g) Store salt contaminated material for future use with Winter Abrasives on a containment pad or evapotranspiration liner or in a salt shed;
- h) Prevent salt contaminated materials from being tracked from the containment pad or evapotranspiration liner and use a containment pond for disposal, if one exists on site;
- Maintain an open catchment area adjacent to the salt shed exterior walls to accommodate unobstructed snow shedding off the structure;
- Remove snow from the roof of steel/fabric salt shed and adjust the roof tension after the snow accumulation has been removed in accordance with the manufacturer's specifications and recommendations;
- Reseal exposed surfaces following the removal of surface rust with zinc-rich primer/paint;
- Maintain and repair damaged or deteriorated salt shed components in accordance with the manufacturer's specifications and recommendations;
- m) Use engineered designs for all repairs, modifications or replacement to steel/fabric salt shed structural components including, but not limited to the fabric roof, prepared by a Professional Engineer, retained by the Contractor; and
- n) Securely lock gates and post signage to prevent unauthorized access to fenced containment ponds.

# 1.08.4 Routine Maintenance Services Cap

\$50,000 – for each occurrence, the cost to repair or replace a salt shed.

# 1.09 Wildlife Exclusion System Maintenance

### 1.09.1 Outcome

To provide a safe, fully functioning Wildlife Exclusion System.

### 1.09.2 Routine Maintenance Services

PM1.09.2-1 Temporarily repair any damaged or deteriorated Wildlife Exclusion Systems immediately to ensure they function as designed.

PM1.09.2-2 Notify the Province within 24 hours of any temporary repair to the Wildlife Exclusion System.

PM1.09.3-3 Remove Debris and other items immediately, which are not part of the Highway by intention that decreases the effective height of the Wildlife Exclusion System.

PM1.09.2-4 Remove Accumulations and other items, within 15 days which are not part of the Highway by intention, that are within 45 centimetres from the underside of the Ungulate Guard rails.

PM1.09.2-5 Repair within 15 days, damaged or deteriorated Ungulate Guards

PM1.09.2-6 Repair gaps that exceed 15 centimetres between fences and the ground surface.

PM1.09.2-7 Inspect and document by May 31<sup>st,</sup> of each calendar year, the condition of the Wildlife Exclusion Systems including, but not limited to the posts, base, braces, mesh, tension, staples and clamps, fence tie-ins, gates, tines and springs and locks and accessibility of passageways.

PM1.09.2-8 Remove deadfall on the fence by September 30<sup>th</sup> of each calendar year.

PM1.09.2-9 Commence removal of Winter Accumulations within 30 minutes upon being notified by the Province, to provide vehicle access to Wildlife Exclusion Systems.

# 1.09.3 Quantified Maintenance Services

PM1.09.3-1 Repair within 7 days any damaged or deteriorated one way gates, human and vehicle access gates, jump outs, mesh, posts and passageways.

PM1.09.3-2 Remove brush prior to inspections, within 3 metres of the fence that exceeds 10 centimetres in height.

PM1.09.3-3 Restore the original height of the Wildlife Exclusion System if the height of the fence is compromised.

# 1.09.4 Materials and/or Procedures

Refer to Subsection 1.6 of this Schedule 1 ("Specifications").

Additional materials and/or procedures requirements are as follows:

- a) Use materials in accordance with the same type and quality on the Wildlife Exclusion System;
- b) Deadfall waste is not to be piled higher than 60 centimetres in height and not located within 3 metres of the fence;
- c) The effective height of fencing is 2.44 metres; and
- d) The effective height of a jump out is 1.75 to 2 metres, measured from the corner of the jump out.