

## ATTACHMENT 1 TO ANNEX A

### CONSTRUCTION AND MAINTENANCE SPECIFICATIONS

#### 1. General notes

Unless otherwise specified, the Contractor must:

- a) Where other materials must be installed to build or improve the structures, drive all support posts into the ground to a depth of at least 1 m (imperial system: approx. 3') and solidify them by freezing the base with water and wet snow;
- b) Coordinate snow blowing in the areas identified for sliding structures and 3D sculptures with the support of the operators of the machinery owned by the coproducer;
- c) Ensure that all sliding structures are built so as to discourage the public from climbing on dangerous parts (the slide's outer walls);
- d) Flatten the top of the structures and/or slides as much as possible (elimination of bumps and balls) to increase safety and esthetics;
- e) Build the sliding corridors wide enough so that the snow-grooming machine or other machinery can access them for maintenance. Minimum width: 3 m (imperial system: approx. 9');
- f) Build every sliding corridor with protective snow edges/low walls so that users are safe when moving about;
- g) Maintain all access ramps and slide exit areas so that users are as safe as possible when moving about;
- h) Where necessary, help the PCH Technical Authority to flatten and/or remove snow from vehicular traffic and/or programming areas or paths. These areas must be free of excess snow and scraped to reduce the chance of skidding or slipping. At least 15 cm (imperial system: approx. 6") must remain on the ground.
- i) Use machinery to remove snow from the surface of the area for the shelter tent, which measures 18 m x 27 m (imperial system: approx. 60' x 90').

#### 2. Description of structures and sculptures

The locations and dimensions are set out below for reference purposes in order to assess the work to be performed. The exact location of the slides within the park may change and their dimension may vary based on the annual theme, the quantity of snow and/or weather conditions.

##### 2.1 Sliding structures

The site usually features an average of 15 sliding corridors distributed across three (3) to four (4) structures. The final number of structures will be confirmed in the fall of each year.

##### 2.1.1 General specifications for all sliding structures

The PCH Technical Authority will establish the specifications based on the design of the sliding structure. Every sliding structure is independent, but must respect the following requirements:

- Sliding corridors:
    1. Must be the width of the snow-grooming machine
  - Outer walls
    - The outer walls may vary depending on the size and height and whether they feature an engraved sculpture.
      1. Maximum height: none
      2. Minimum height: 2 m (imperial system: approx. 6') in height at the base of the structure
      3. Maximum width: 4 m (imperial system: approx. 12') thick
      4. Minimum width: 2 m (imperial system: approx. 6') thick
- Inner wall:
  - The inner low walls protect users on both sides of the sliding corridors. These specifications must be from the launch platform all the way to the stop wall:
    1. Maximum height: 1.21 m (imperial system: approx. 4')

2. Minimum height: 0.6 m (imperial system: approx. 2')
  3. Total width: 0.6 m (imperial system: approx. 2') thick
- Slowdown plateau:
    1. Must be the same width as the sliding structure
    2. Must be flat and at least 20 m long (imperial system: approx. 65')
    3. Must have an abrupt end and back to prevent tube from flying over
    4. Must have inner low walls and low walls at the end to keep sliders safe. It is critical to slowing down the sliding tube.
  - Stop wall (at end of slide):
    1. Minimum height: 1 m (imperial system: approx. 3')
    2. Must be square, not sloped
    3. Must be designed so that the PCH Technical Authority can place a rectangular safety mat
  - Exit:
    1. Must be on both sides of the structure base
    2. Must be the width of the snow-grooming machine

### **2.1.2 Chinook - main slide, 120 m x 40 m (imperial system: approx. 400' x 130')**

- This slide is the largest structure to be built.
- It is the main slide in the central area of the park and is usually the longest (use of natural slope).
- The slide consists of six (6) sliding corridors and an access ramp to reach the launch platform.
- It consists of a very steep start to pick up speed with a plateau of at least 30 m (imperial system: approx. 100'), followed by a slowdown ramp.

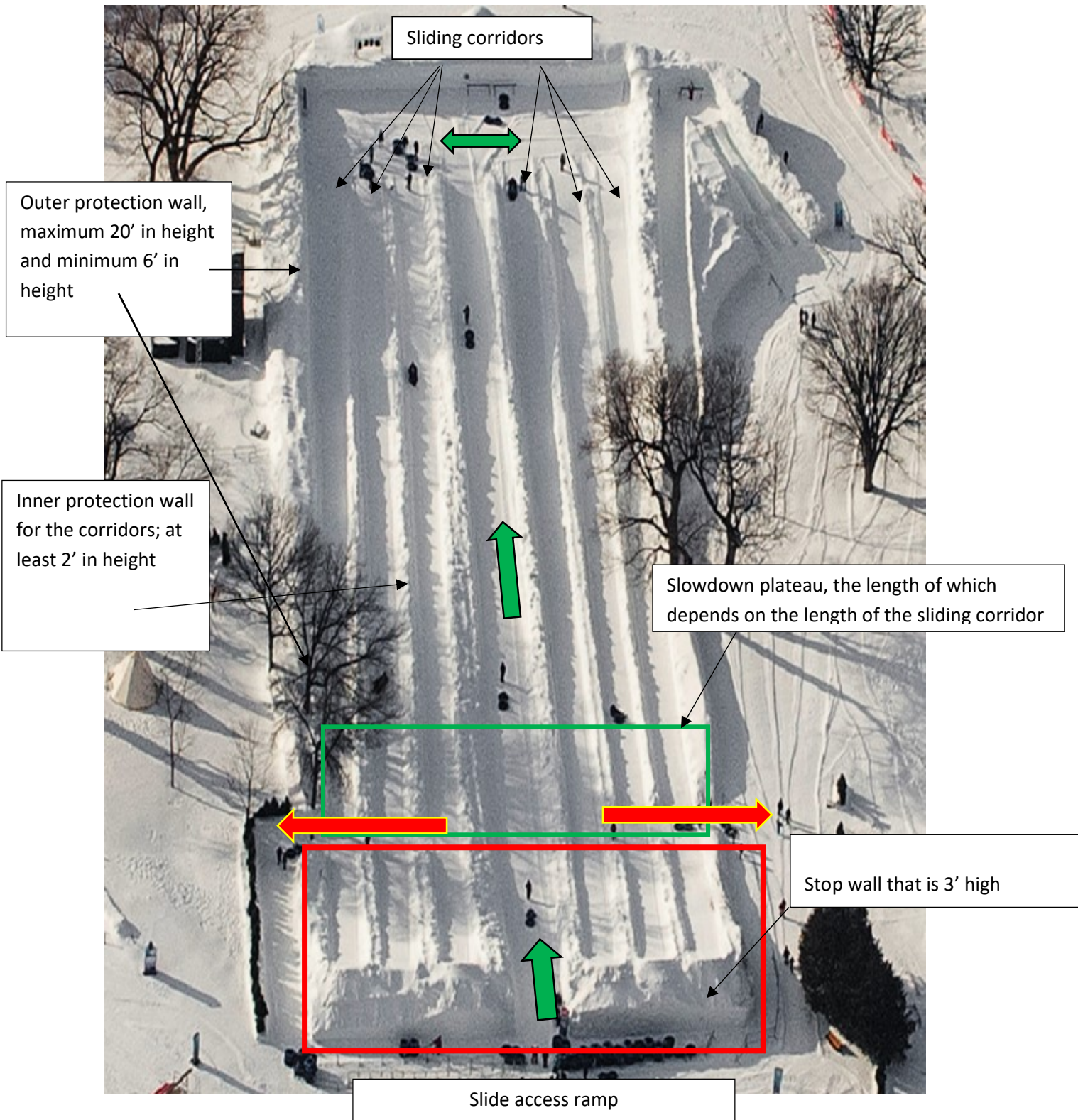
### **2.1.3 Iceberg Slide, 80 m x 30 m (imperial system: approx. 260' x 100')**

- This is the second largest slide to be built.
- It is located in the southern sector near the river and adjacent to the marina parking lot (use of natural slope).
- The slide consists of six (6) sliding corridors and two (2) ramps on either side to access the structure.
- It must have a slowdown plateau of at least 20 m (imperial system: approx. 65') as well as a slowdown slope.
- What sets this slide apart is the fact that it has a steep start with at least three (3) speed bumps for added fun.

### **2.1.4 Glacier Slide, 20 m x 25 m (imperial system: approx. 65' x 82')**

- This is third and final slide to be built.
- It is located in the north sector near the river and adjacent to the Maison Charron parking lot (use of natural slope).
- The slide consists of at least four (4) and a maximum of six (6) sliding corridors as well as two (2) access ramps on either side to reach the launch platform.
- It must have a slowdown plateau of at least 20 m (imperial system: approx. 65') and a low wall of at least 1 m (imperial system: approx. 3').
- The structure will feature a sinuous design that is curved and long.
- What sets this slide apart is that it has a steep start and curved corridors.

Below is an example of a structure and the specifications that apply to all tube-sliding structures:



### 3. Wood formwork for 3D sculptures

#### The Contractor must:

- Notify the PCH Technical Authority 24 hours in advance before picking up and/or returning the formwork and hardware to the NCC warehouse. A flatbed truck with a winch is strongly recommended for transportation purposes.
- Assemble three (3) formwork structures for a total of five (5) sculpture blocks and move each one within the site. Formwork dimensions:
  - 12' x 12' on the ground x 16' in height (or 3.65 m x 3.65 m x 4.87 m)
- Once the formwork structures are at the site, assign a team of at least four (4) people to assemble and mount the formwork structures.
- For assembly purposes, each of the sixteen (16) panels and four (4) 15 cm x 15 cm beams (imperial system: approx. 6" x 6") for the formwork are identified and must be assembled based on the instructions specific to each (see photo).
- Once the formwork is assembled, the Contractor and its team, jointly with the PCH Technical Authority, will position each one.
- The operators of the front-facing blowers belonging to the Winterlude coproducer will fill up the formwork with snow, with the help of the Contractor and the PCH Technical Authority. The back-hoe will be needed during this process to keep the formwork in place while the snow is being blown into it.
- The Contractor must remove the formwork after 24 hours and/or according to the weather forecast. Before removing the formwork, the Contractor must contact the PCH Technical Authority.
- Once all five (5) blocks of snow are made, the Contractor's team must dismantle all the parts of a given formwork structure and strap them together for delivery to the NCC warehouse.
- Gather all hardware and return it to NCC warehouse at the same time as the formwork is returned.
- Replace all damaged wood with new pieces of the same size and of equivalent or better quality.

#### NOTE:

1. Any damage to the panels and/or loss of hardware will be charged to the Contractor and must be replaced by materials of equivalent or better quality.
2. Any damage and/or loss must be replaced before the equipment is returned to the warehouse.

#### PCH must:

- Notify the NCC warehouse 24 hours before the pick-up and/or return of the formwork.
- Jointly with the Contractor, inspect the condition of the formwork before the month of November. This inspection is conducted at the NCC warehouse.
- Provide the formwork and hardware for its assembly. Not provide any other tool or equipment for assembly and dismantling.
- Mark the areas at the site where the formworks are to be placed.
- Check with the coproducer to validate the schedule for the snow-blowing machinery used to fill the formwork.

Formwork assembly:



Note: scaffolding, ladders and/or other equipment and tools are not provided by PCH and/or the coproducer.

Blowing of snow into formwork:



Removal of formwork:



Entire site, aerial photo of Jacques-Cartier Park, 2017 edition (example only):

