Parks Operations

Neighbourhood Outdoor Rink Program

Procedures
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NEIGHBOURHOOD OUTDOOR RINK PROGRAM

If your neighbourhood has a group interested in participating in the Neighbourhood Outdoor Ice Rinks Program this year, please complete and return the attached form as soon as possible. Please note that neighbourhoods are strongly encouraged to recruit a minimum of 5 adults to assist in maintaining the rink.

Send or drop off to the Town of Drayton Valley Civic Centre, 5120 - 52nd Street, Drayton Valley, AB, T7A 1A1 or fax to 780-542-5753.

NEIGHBOURHOOD GROUP WILL:
- Include a contact person who will receive the instructions and be the contact for the group.
- Maintain the rink as needed including cleaning and flooding of the surface.
- Complete a monthly maintenance log sheet and submit to the Public Works Department.

PUBLIC WORKS STAFF WILL:
- Be available to provide technical advice on setting up/maintaining rink sites.
- Do monthly rink inspections.

Instructions for rink board set-up are attached.
Please follow instructions carefully to ensure proper, safe installation.

Please Note:
- Neighbourhood outdoor rinks are encouraged to promote a healthy lifestyle and to offer an accessible alternative to formal programs and ice schedules offered in our major recreation complex.
- Due to the nature of their design and, in some instances, their location, neighbourhood outdoor rinks cater to “skating only” activities.
- Neighbourhood groups wishing to establish an outdoor rink where playing hockey is permissible are requested to approach the Town of Drayton Valley to ensure that the design of the outdoor rink and its location will be conducive to this activity.
- The Town of Drayton Valley thanks you for your time and effort in making this program a success. Contact us at 780-514-2200 if you need more information or have concerns. We look forward to working with you.
Neighbourhood Outdoor Rink Program

We, the undersigned, understand that our Neighbourhood Outdoor Rink Group is responsible for the following:

**A. INSTALLATION AND TAKE DOWN OF RINK BOARDS, IF UTILIZED**
   Once the ground thaws:
   - Rink Boards will be removed and appropriately stored
   - Public Works will be advised when the outdoor rink has been decommissioned for the season.

**B. MAINTENANCE OF THE ICE SURFACE**
   - Snow clearing
     - should take place as often as needed
   - Flooding
     - as needed to establish and maintain a good ice surface

**C. MONITORING USERS OF THE RINK and reporting any serious problems, including:**
   - Safety Concerns
   - Vandalism
   - Other situations involving use or abuse of the facility

Report issues to Public Works 780-514-2200

**Rink Location:**

<table>
<thead>
<tr>
<th>Name (Please Print)</th>
<th>Email Address &amp; Mailing Address</th>
<th>Day Time &amp; Cell Phone Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
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<tr>
<td>This person is the RINK CONTACT FOR THE GROUP AND WILL RECEIVE INSTALLATION INSTRUCTIONS</td>
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<td>2.</td>
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<td>5.</td>
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Please return this form to:
Town of Drayton Valley Community Services Department
5120 - 52nd Street, Box 6837, Drayton Valley, AB T7A 1A1
Phone: 780-514-2200
Email: community@draytonvalley.ca
Rink Installation Instructions:

If a neighbourhood group is proposing the use of rink boards, the following is a recommended process of installation.

- Lay out 2 x 10 planks end to end in a rectangular shape.
- The boards should be at least 2 meters from any hazard (standpipe, light poles, trees and playground benches).
- Note: there should be one board opening for snow clearing equipment.
- Use 2 rigid straps towards both ends of the boards. These straps are to be on the outside of the rink once the boards are standing.
- Join the boards together with plywood joiner boards using 2” nails, ensuring that the nails pose no hazard.
- Stand the boards up.
- Slip a 22” steel pin through the first straps on the outside of the rink and pound it into the ground until the top of the pin is level or below the top of the boards.
- Make sure the boards are in a straight line and pound in additional pins.
- Join the next line of boards at the corner with 3” nails (see diagram) to create a 90 degree corner.
- Repeat above stages until all boards are standing and square.
- Make sure there are no nails or pins sticking out that could catch on anything.
- Build a snow ramp along the opening and soak it with water to form an ice ramp.
- Bank snow around the outside of the boards to pack it down and water it to seal the bottom of the boards to prevent leaks.

See Diagram on next page

Making Snow Boards:

- Find the centre point of rink site.
- Mark out the edges of the rink site.
- Make sure the site is level and square.
- Start moving the snow to the outer edges using the extra snow to make snow banks as your boards for the rink.
- Freeze the snow banks with water by spraying them lightly.
- This will create solid walls.
- You are now ready to start making ice.
RINK BOARD INSTALLATION INSTRUCTIONS

Steel Pin (do not allow to stick up higher than board top)

2x10"

Use 1 ¼ inch roofing tack to secure clamps

¾" Plywood Joiner Boards

2" Nails (hold best in below configuration)

Large 3" spikes to hold board ends

SAFETY ALERT

For the Safety of All Users

Ensure that rink boards are installed as shown – do not allow any nails on pins to stick out beyond boards.

Ice Surface

Leave opening for access with snow blowers

Bank & Pack snow at entrance and around boards and freeze in.

min 6"
How to Lay the First Sheet of Ice

- Level the snow and pack with shovel, snowshoes, scrapers, etc. This can be done by “back dragging” or patting the surface. As the ground is not always flat where rinks are erected, take the time now to level out the surface, even if it means carrying snow to level it off.

- Now you are ready for water.

- Pick a time when it is the coldest, late evening or early morning as opposed to mid-afternoon.

- Be prepared to spend considerable time at this stage.

- Use a 1.5” diameter hose equipped with a nozzle capable of producing a fairly fine spray.

- Turn the nozzle to a fine spray and systematically begin to sprinkle the packed snow.

- Don’t put too much water on the first pass, just enough to dampen the surface.

- Keep the hose moving. (Don’t ever stop or stand still.)

- After giving the complete area a preliminary sprinkle, stop.

- Return to your starting point. If it’s frozen, you are ready for another fine coat. If not, wait until the area is frozen.

- The snow has a tendency to crystallize and form “channels” if the snow is very light or if too much water is added at one time. If this occurs, fill the “channels” and sprinkle lightly with water.

- Continuous sprinkling with the fine coats of water will eventually give you a solid surface of ice that may be walked on. However, it will be rather rough and not suitable for skating.

- Determine if the first sheet of ice has stuck to the rink boards. If it hasn’t sprinkle lightly, adding snow as required, making sure that the water is applied to the side of the board as well as to the snow.

- After a solid crust has been obtained and bonding with the boards is firm, it is now time to flood.
Flooding:

- Flooding is done only when it is cold enough to freeze.
- Start at one end of the rink and apply an even spray across the width.
- Spray a strip 6’ - 6 ½” wide. Work progressively down the rink until the entire rink has been sprayed.
- The flooding pattern should allow you to apply water to the complete surface of the rink without overlapping or causing you to walk on freshly watered surface (this might cause slush to build up).
- Note: If slush builds up remove it immediately.
- After the first flood is frozen, continue adding floods until you have a 2” base of ice and the rink is somewhat flat and level.
- Water seeks its own level.
- Eventually if sufficient number of floods is applied, the rink will become flat, level and ready for skating.

Maintaining a Good Skating Surface:

- Flood as often as possible.
- The time that ice will freeze properly are numbered, so when it does turn cold . . . FLOOD, FLOOD, and FLOOD.
- Build up the sheet’s thickness so that on mild days the rink can withstand the sun without patches of earth showing through and chunks breaking off the surface.

CAUTION: Make certain that each flood is frozen solid prior to adding another.

- The ice surface must be scraped clean of all snow, ice chips, flakes and dirt before flooding.
- With a broom (use a good, stiff corn broom or stable broom) sweep around the boards removing snow that the scraper has left behind. This part of the ice is seldom skated on and every precaution must be taken to ensure that it does not build up into a ridge.
- By sweeping you are allowing the water to form a good bond with the boards. If you don’t sweep chances of a gap or space between your boards and the ice surface forming is greatly increased.
- “An Ounce of Prevention” . . . Ongoing repairs to cracks and chips in the ice surface are more desirable than attempting to repair damages to the ice surface through flooding alone.
Steps for Repairing a Crack, Chip or Hole:

- Sweep or clean the hole of all snow or ice chips.
- Mix a slush mixture of snow and water.
- Pack the slush in the hole.
- Level off the slush with a shovel.
- (Optional) Sprinkle with a light flood of water.
- Keep people from skating on the spot until frozen (see diagram)
- Water Run Off . . . Sometimes, due to the nature of the terrain on which the rink is built; the water is continually seeping through the snow, under the boards and “running off”. This occurs when there is a marked slope in the ground or where the boards do not sit flush to the earth.

Ensure rink boards are well sealed/frozen before applying large amounts of water.

- Shell Ice . . . During your flooding, whether on your initial sheet or ongoing throughout the winter, be aware of shell ice. Shell ice occurs when an air bubble is frozen into the surface. Shell ice is characterized by a white patch of thin brittle ice that is easily broken. When broken, the layer of ice underneath is exposed.

How do you Deal with Shell Ice?

- Break the surface.
- Remove the brittle ice completely.
- Pack solid with a mixture of snow and water.
- Level with shovel, trowel, etc. and remove excess slush.
- Avoid stepping or skating on this area until frozen solid (see diagram).
- Don’t allow the snow banks to become too high. Periodically lower them by pushing the snow, from the top, farther away from the surface. This will lessen the amount being dragged back onto the surface by participants as well as facilitate easier cleaning.
- During mild spells, boards sometimes come loose. Freeze them into place as soon as possible.
HOW TO REPAIR HOLES, CRACKS, OR SHELL ICE

1. Clean
2. Pack Slush
3. Level
4. Sprinkle

DANGER: THIN ICE

NO Skating
PEBBLING

1st layer

3rd-4th layer

final layer

flooding
FLOODING

1. Keep nozzle close to surface
2. Thin layers of water

Water Flow

Flooding Pattern
## TOWN OF DRAYTON VALLEY
### OUTDOOR SKATING RINKS MONTHLY LOG SHEET

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<th>Year</th>
<th>Month</th>
<th>Day</th>
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<th>Good (V)</th>
<th>Fair (V)</th>
<th>Poor (V)</th>
<th>Corrective Action Taken</th>
<th>Volunteer Name (Please Print Name)</th>
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<tbody>
<tr>
<td>Ice Surface</td>
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<tr>
<td>Rink Boards/Snow Banks</td>
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<td>Perimeter of Rink</td>
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<tr>
<td>Equipment</td>
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**NOTES:**

|           |           |           |           |                          |                                   |

**Number of Floods:**

|           |           |           |           |                          |                                   |
TOWN OF DRAYTON VALLEY

WHAT TO DO IN CASE OF ACCIDENT OR INCIDENT

Deal with medical emergencies immediately and call “911”.

If an emergency arises that affects the Town’s infrastructure, immediately call

8:30 am to 4:30 pm Monday to Friday       780-514-2200
After hours/Weekends/Statutory Holidays  780-514-2200 (Press 3 for Public Works Emergency)

Non-emergency issues please contact Public Works at 780-514-2240 or
Email: pwmanager@draytonvalley.ca