

December 2023 Newsletter Spotlight.

Contributed and designed by Nadji Architects

CONCEPTUAL CLARITY

The 3,775 square foot Deline daycare building is designed for the care of 25 children that are 2 to 5 years old. This building is the first of its kind to be built in Deline, a remote subarctic Dene community in the Northwest Territories with a population 550.

The design concept for the daycare was inspired by the Arctic fish found in Great Bear Lake near Deline which means "where the water flows." This tribute to the Dene people and their respect for fish as an important food source also recognizes its economic value for the Deline Dene through ecocultural tourism and recreational fishing.

This design was created to honour Deline culture by creating a modern barrier-free accessible daycare facility with detailed focus on a space where physical, social, emotional and intellectual well-being contribute to the building of a strong cultural identity within the children.

LANDSCAPE

The seamless integration of the landscape and daycare building is a further key design feature. The Deline daycare building celebrates the natural beauty of its surroundings, creating a more cohesive relationship between the children's inside and outside space. This was done by easy indoor-outdoor access and with the design of the outdoor playground.

COMPATIBILITY WITH THE SITE

The Deline community chose the daycare location in a vast open area close to the community's school, offices and recreational facilities. The location is convenient for both teachers and parents near these central community buildings.

DETAILING

- The Deline daycare building emphasizes simple yet high-quality wood frame construction. The roof structure consists of TJI joist supporting the skylight.
- Exterior cladding was used to resemble fish scales.
- Triodetic foundation was used as it is an excellent system for permafrost conditions. Compared to the piling system, Triodetic is economical with respect to the cost of the material, labour and winter road conditions in northern communities.

INNOVATION AND UNIQUENESS

The building is unique and original. Every detail of the design has been well thought-out:

- The blue skirting represents the water under the floating fish.
- The circular wall dome glazing is used to create the eye of the fish. Outdoor panoramic scenery can be seen through the eye, creating indoor-outdoor cohesion.
- The skylight allows both natural light and northern lights into the indoor play area.
- Space, especially created for children, is inviting them to learn and explore.
- The inventive use of colour and texture delights the eye and captures the imaginative spirit of play in building.

SUSTAINABLE DESIGN

The renewable clean energy system, fully automated, highly efficient Wood Pellet Boiler is used for central heating and hot water. An oil-operated boiler is used as an auxiliary heating system. The shed in the form of fish scales is designed to accommodate the pellet boiler. LED Lighting is used for the interior. The building is energy efficient with R-40 for wall and floor assembly and minimum R-60 for the roof assembly; windows are triple pane with the low "E" argon gas.

This design is a clear representation of the ways architecture affects and is affected by the environment and by culture in an NWT Dene community and is an example of continuing to advance toward reconciliation with Indigenous communities.