

## PLACE & HISTORY

### FOLLOWING THE SALMON RUN

The present day City of North Vancouver and the Skwxwú7mesh (Squamish) area is the traditional territory of the Coast Salish people of the Skwxwú7mesh Nation. Long before the school was built in 1913, the Coast Salish people used the area as a seasonal campground to fish the Capilano River while the salmon were running. Skwxwú7mesh translates to "Birthplace of the Winds."

### MORE THAN AN ELEMENTARY SCHOOL

The gym is large enough for kids of all ages to come and play. The school includes a Neighbourhood Learning Centre and a secondary school-sized gym that is designed to host a wide range of sports and community uses. The community gardens on the west side of the school provide an opportunity for kids and community members to share the experience of growing vegetables and flowers.

### SHADE AND LIGHT FROM TREES

The trees outside create shade in the summer and let the sun through in the winter. The deciduous trees planted at Queen Mary are perfect for shading the pavement and school in the hot summer months. When the trees lose their leaves in the winter, it allows the sun's heat to reach the building, providing light and warmth.

### 100 YEARS IN THE MAKING

The granite stone on the outside of the school is older than your grandma. Looking out over the Burrard Inlet, Queen Mary is a significant North Vancouver heritage building. Built in 1913 and renovated in 2013, the school has been completely upgraded on the inside while retaining its Edwardian Baroque façade.



Queen Mary  
Community School

  
North Vancouver  
School District  
the natural place to learn®

Green Building Tour





## Green Building Tour

### Welcome to the Queen Mary Community School

Renovated in 2013, Queen Mary features a number of design innovations that save energy and water, reflect the natural character and history of the area and reduce the impact the building has on the environment. These green features demonstrate the North Vancouver School District's commitment to being the "natural place to learn."

### Look for the Signs

Follow the icons on the map above and read about the green features that make the Queen Mary a caring environment where students are inspired to be active learners.

## We're Here

Queen Mary Community School  
230 Keith Road West  
North Vancouver, BC V7M 1L8  
604.903.3720

## SAVING WATER



### STORM WATER MANAGEMENT

**An underground storm water system helps prevent flooding in our local rivers.** During heavy rainfall, paved surfaces cause large amounts of water to flow into the city drainage system, which can cause flooding in our local rivers and can have negative impacts on fish populations. The school grounds feature a new underground storm water system that captures and holds excess water, letting it flow into the city drainage system at a much slower rate.



## CHANNELLING WATER DURING STORMS

**Twisting and turning, a gully provides a course for rainwater to flow through the school grounds.**

The landscaped gully outside the school made of rocks, soil and plants is called a 'bio-swale'. This vegetated area absorbs rainwater, reducing the amount of water that flows into fish-bearing streams during heavy rainfall. Bio-swales also reduce the amount of soil, gasoline, or salt particles that flow from the parking lot pavement into storm water drains.

## SAVING ENERGY



### THE POWER OF SHARING

The school is heated with energy from the Lonsdale Energy Corporation's Municipal energy system. Owned by the City of North Vancouver, this neighbourhood energy system generates heat in a series of mini-plants within the Lower Lonsdale area. One of these mini-plants is a geo-exchange system located under the North Vancouver School District's Educational Services Centre. The heat is distributed through an underground hot water piping system to Queen Mary and other buildings that are connected to the energy grid.

### QUIET VENTILATION

**Shhh! Can you hear the building breathe? It's quiet, so you can think.**

The building ventilation system circulates fresh air through the school. Cool air is blown in at floor level and rises as it collects heat produced by people, computers and appliances. This warmed air is then drawn out at the top of the room. In addition to being highly efficient, the low-speed air movement creates less distracting noise than higher speed air circulation systems. The ventilation system is also controlled by occupancy sensors, so that if the school is closed, the system will switch to an unoccupied setting.

### RECYCLING HEAT

**Just like we recycle plastics, glass and paper, we can also recycle heat in a building.** A piece of equipment in the ventilation system, called a heat pump, captures heat from the air inside the school, and uses it to heat fresh cool air as it enters the building. This process is called heat recovery. Not all heat for the building is provided using this process, but recycling heat to start warming new air as it enters the school saves money on the school's heating bills.

## BUILDING MATERIALS



### A ROOF MADE OF TIRES

**Next time you're outside, look up at the roof.** The tiles are made by a Canadian company that grinds up old tires to create a durable and waterproof roofing material. Recycling old tires into new materials is one way to help reduce the number of tires that are thrown into the landfill.

### REDUCING CONSTRUCTION WASTE

**During construction almost all waste was recycled.** Construction waste is one of the largest contributors to our local landfills. During the renovation of Queen Mary school, a large percentage of the waste was recycled and made into new construction materials. The materials that were recycled included wood, steel and concrete waste.



## CELEBRATING HERITAGE

**Students from many years ago also looked out these windows.** Many heritage elements of the original school were integrated in the new design: the wood frame windows and doors were restored and reinstalled, the wood and steel trusses were preserved and the outer façade of the school retains its original brick and stone character.

### BUILDING STRONG

**Like bones in a human body, steel beams make this building strong and flexible.** As a part of the seismic upgrades to the building, the granite, stone and brick exterior walls from the original school were reinforced with concrete and steel beams. The structural components on the inside of the school, including the columns, trusses and beams, were also reinforced and upgraded. These changes make the school safer and stronger in the event of an earthquake.





# Queen Mary Community School



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