

KHUPKHAHPAY'AY

Vancouver, BC | Design Phase

Role of the firm: Structural Engineer of Record

Area: 65,000 ft² (6038 m²)

Budget: CA \$47.5 Million

Architect: GBL Architects

Client: M'akola Development / Vancouver

Native Housing Society

Sustainable Features: Passive House

This 9-storey social housing project for First Nations residents at 1766 Frances Street in Vancouver, BC will have amenities such as community gathering areas, an on-site sweat lodge, and a rooftop with areas for children to play and for residents to grow food. The mass timber building will be called Khupkhahpay'ay (Squamish for cedar tree) and will aim to achieve Passive House designation to align with Indigenous ideologies of respectfully using natural resources.

The 81-unit building will incorporate prefabricated cross-laminated timber floor and envelope panels, with a concrete core and parkade. The 96 ft tall wood structure is expected to be constructed in record time as the panels will be produced off-site and fit together relatively seamlessly. This innovative approach will reduce the project's environmental footprint and community impact during construction.

The façade is envisioned as a woven cedar basket that will incorporate Indigenous artwork. In addition to the basket-weave detail, there will be a number of commissioned Indigenous artworks in and outside the building to provide a sense of belonging and to honour and celebrate Indigenous culture.

