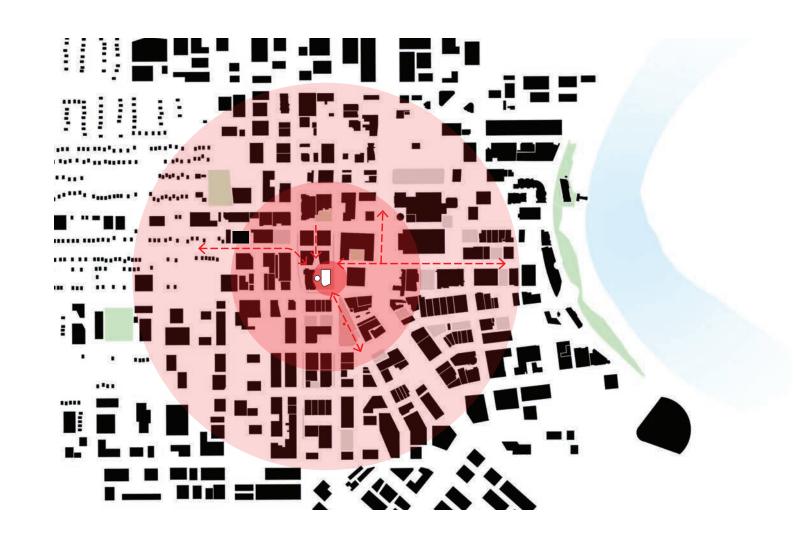
The Hearth at the exchange

Remember... "time, culture, and history are a continuum."



"The Hearth at the Exchange" is a dynamic ground designed to kindle the dramatic and vital transformation of the Exchange District. This ground focuses inwardly to support the new mixed-use community and radiates outwardly to encompass the existing surrounding neighborhoods and the larger city. The Hearth connects the city's heart: City Hall, Market Square, Red River College and the future Market Lands Community.

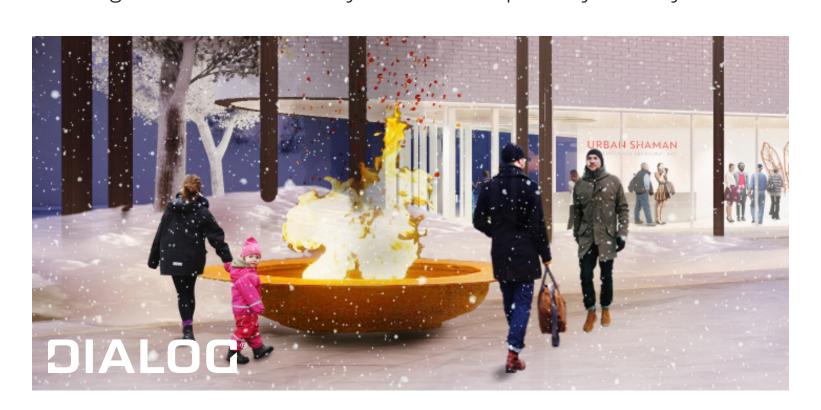
This ground is based on both memories and aspirations. It is a ground of reconciliation, regeneration and creativity. It is a framework for generating future memories, as well as weaving together historic layers of the Exchange District's urban fabric and the site itself. It brings greenspace and urban agriculture into the Exchange District.

Like the dynamic Prairie sky, the circular Hearth induces a sense of movement. The ground with its paving patterns, including recycled Tyndall stone (from the public safety building), its grasses and undulating benches sets up a clockwise flow connecting City Hall with the Hall of Creativity and the Hearth Residences. The Market Hall is the beacon of this gathering space. Its scale and character also reinstate the Market's historic dialogue with City Hall across Kings street.

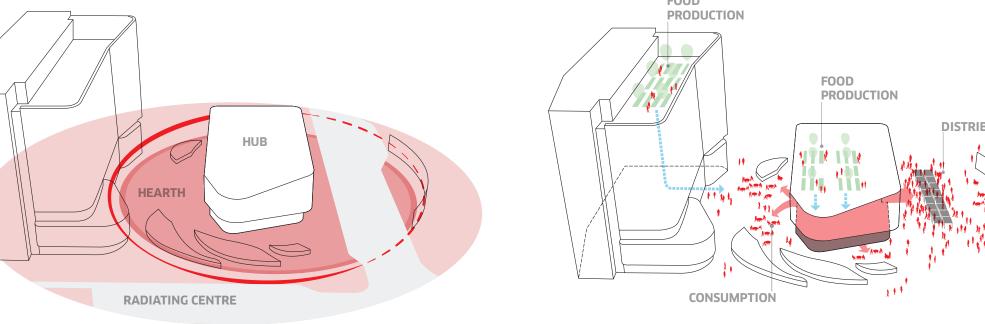
The Hearth design supports a wide range of both programmed and spontaneous seasonal uses. It is envisioned to be programmed to compliment events on stage at Old Market Square. The Hearth is a site of wide variety of public art. Artists will be included in the final design and layout of both the Hall of Creativity and the Hearth itself. A series of posts loosely surround the site to provide for both lighting and art installations. The Hearth will attract events from both the surrounding community, and the city at large. The site and King Street are also envisioned as a part of ManyFest.

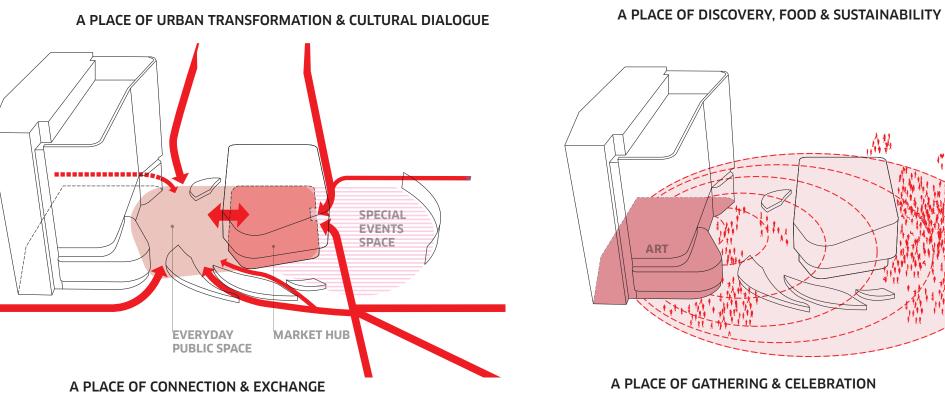
It beckons both Winnipeggers and visitors to explore, enjoy and pass through its doors.

This ground will be a truly remarkable place: your city's Hearth.

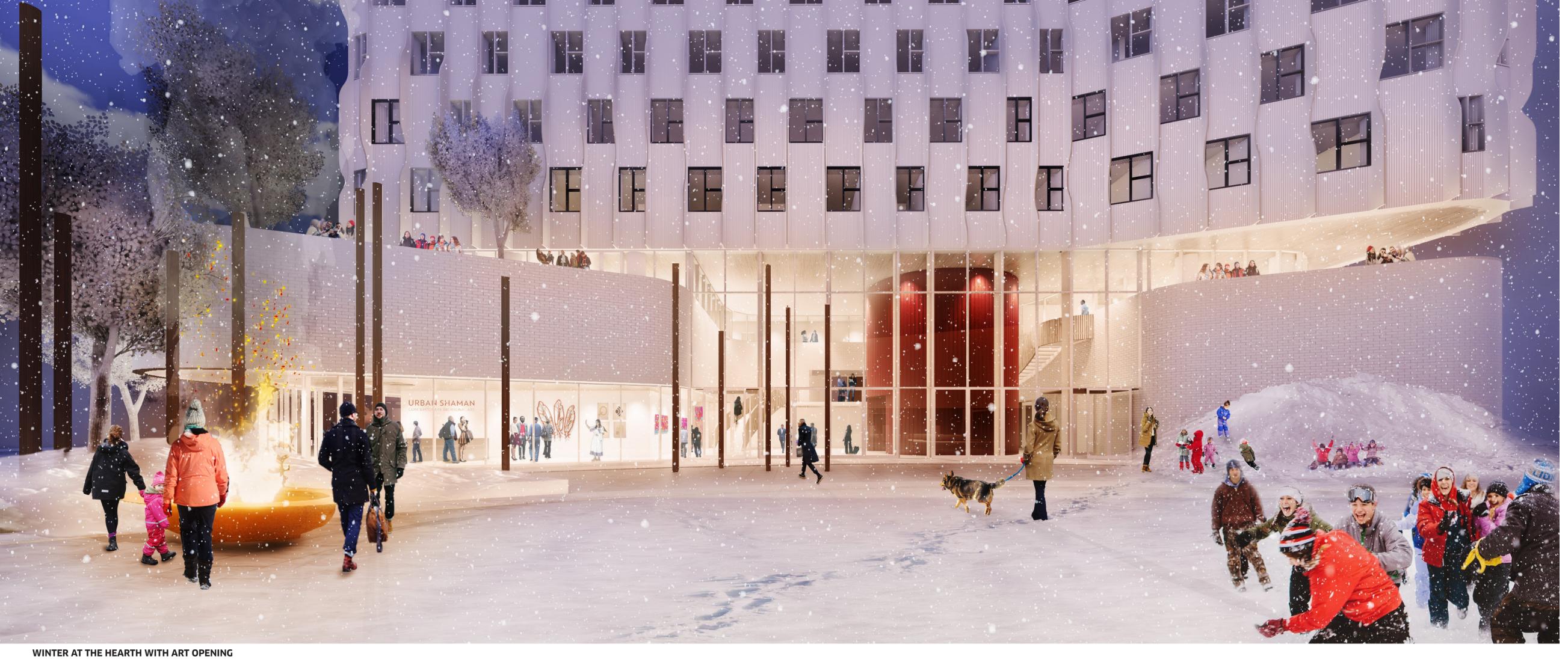








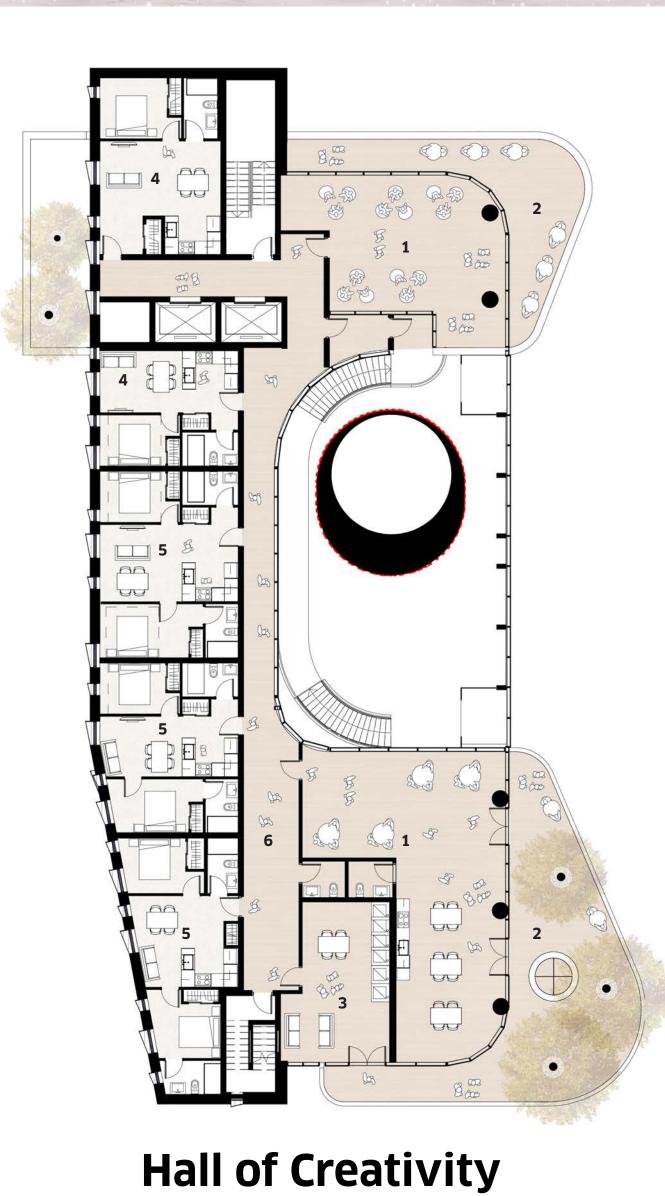
















1 corridor

- 4 1 bedroom
- **5** 2 bedroom
- **6** studio

TYPICAL RESIDENTIAL

SECTION **Hearth Residences**

Market Hall

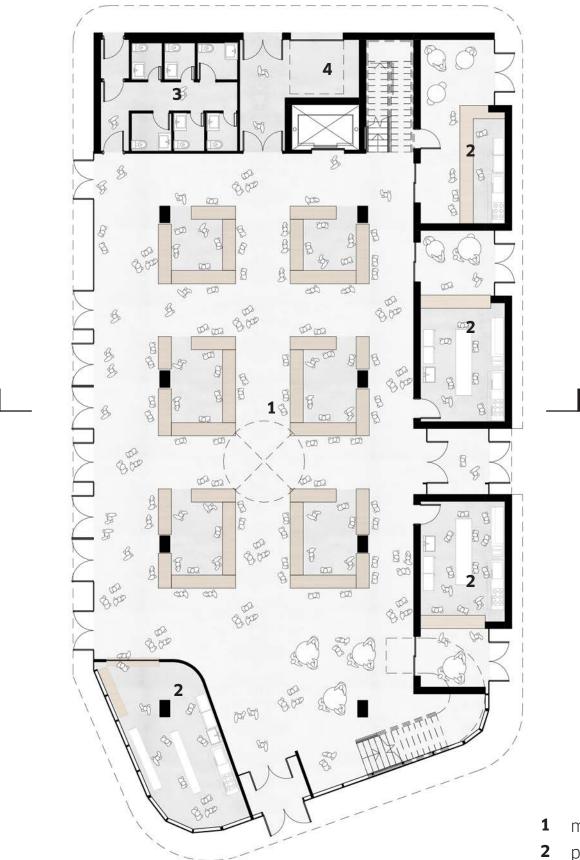
The highly translucent and light-filled timber Market Hall is designed to combine both permanent food and beverage vendors with a full array of temporary and seasonal uses ranging from fresh food markets, to banquet nights and recreational activities. Constructed with a combination of clear glass, translucent glass and brick, the Market Hall becomes a beacon of light in the Exchange District at night.

The operational idea of the Market is based on our current experience with the St. Lawrence Market in Toronto and the operations of the Halifax Market. The permanent food and beverage stalls largely front King Street and William Street to allow all day access and animation of the Hearth. They are also accessible from within the Market itself during market hours.

The market stalls are envisioned as a combination of mobile stalls on castors and day tables to allow for a wide variety of vendors and products. Key to the success of the market will be careful scheduling of a program of events. Loading is provided directly from King Street and Market Lane.

This highly flexible and adaptable timber Hall is also a beacon of sustainability, built on the recycled basement and foundations of the Public Safety Building. This basement provides for the building's servicing, cooling, water retention, storage and future Market Lands' Central District Energy plant. In effect, it doubles the size of the Market.

The Market Hall food producing roof gardens provide for urban agriculture, market produce and potentially urban bee keeping while the greenhouses allow for the cultivation of native indigenous plants. These programs could potentially allow for partnership with Red River College and the sale of produce in the market. This roof is also available for revenue generating social events.



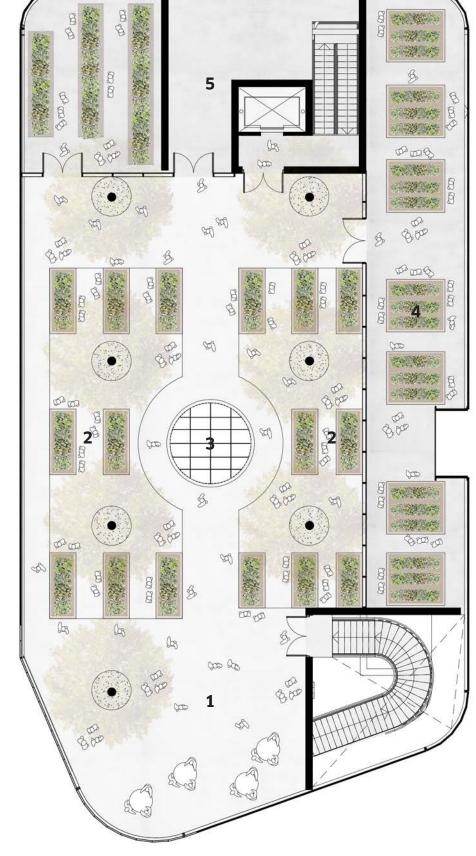




4 loading

- **1** event space
- 2 urban agriculture
- **3** skylight **4** greenhouse
- **5** tool storage

ROOF LEVEL





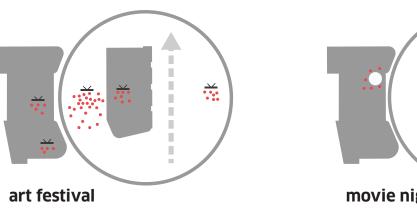
MARKET HALL INTERIOR

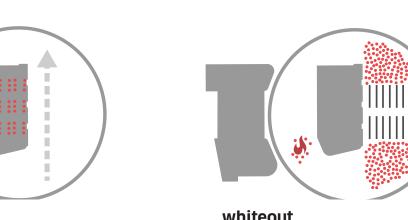


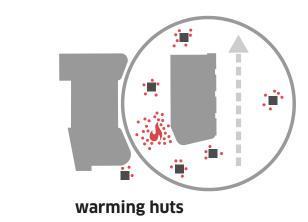


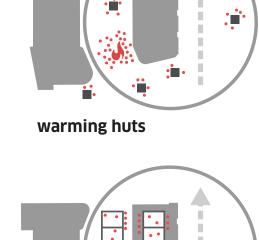
banquet

MARKET ROOFTOP - URBAN AGRICULTURE

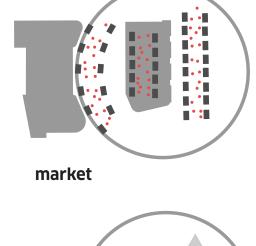




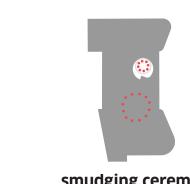




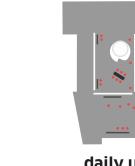
sports



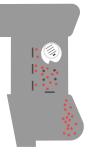
MARKET HALL EXTERIOR







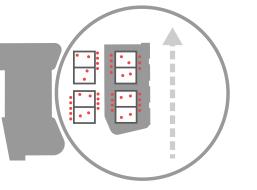
HALL OF CREATIVITY PROGRAMMING OPTIONS



art talk











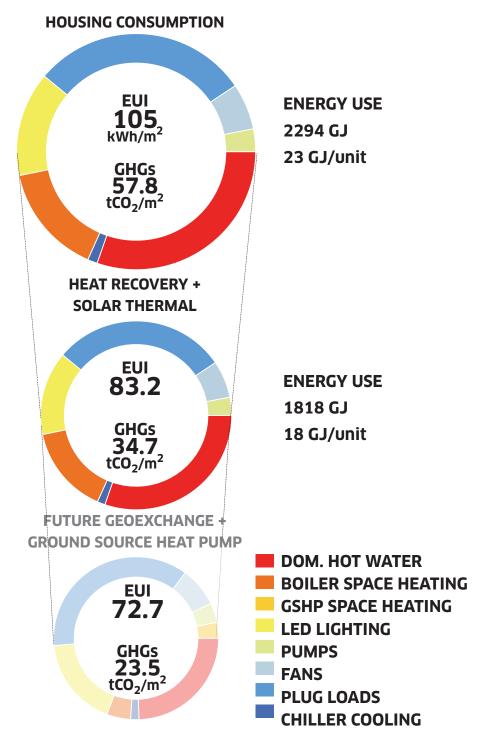
art and maker festival





Recovering resources is the first step toward sutainability. This includes reusing the existing Public Safety Building piles, capturing water on-site, composting, central heat recovery of cooling, and a Passive House standard envelope for housing.

Passive house standards provide a low baseline consumption. Additional heat recovery and solar thermal can further reduce the energy use. A geoexchange sytem in the future phase could be connected to the central plant to reduce GHG emissions.



A **central energy plant** is located in the basement of the markethall. Centralizing the heating and cooling provides opportunity to recover heat from the various mixed-uses. Radiant heating and cooling is used to reduce supply temperatures and increase the amount of recoverable heat to an estimated 20%. The large central plant can also use rooftop solar thermal panels, delivering heat across the site and to future phases.

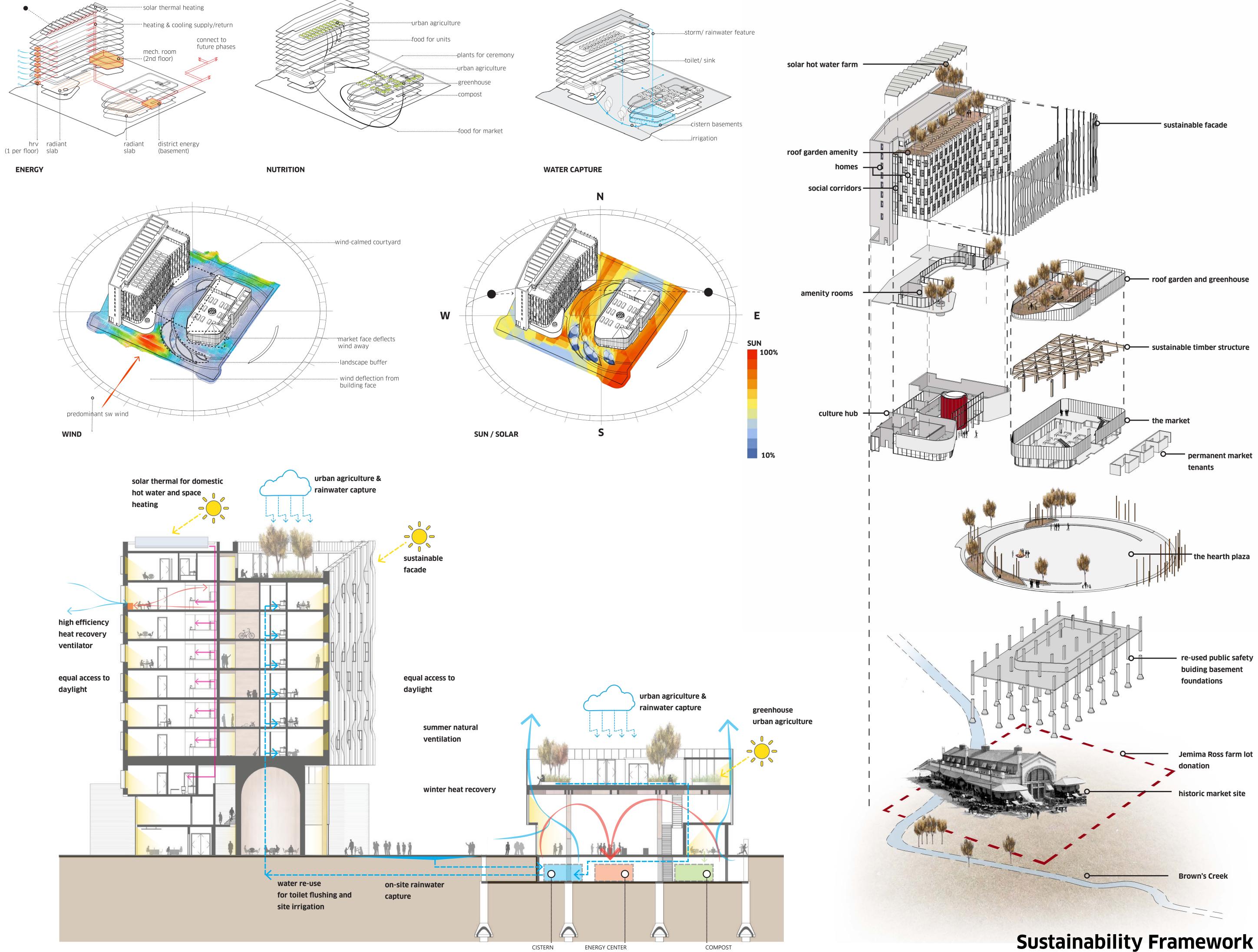
Nutrition is paramount to wellness. Rooftop urban agriculture provides healthy organic foods to residents and the market. Rooftop Greenhouses grow vegetables and ceremonial plants year-round.

Cisterns located in the basement provide rain water and storm water capture for toilet flushing and site irrigation.

Outdoor comfort is a challenge in windy Winnipeg winters, particularly next to high buildings that create downdrafts and funnels. Responding to Computational Fluid Dynamic (CFD) modeling of the south westerly wind, the market building and landscape were formed to buffer the winds and create a calm courtyard.

Equitable access to sun is important for healthy residents and successful public spaces. The building orientations provide daylighting to all residential units. The internal courtyard has locations to catch sun or shade at each hour of each season. The analysis shows the amount of potential sunlight in the public space over a year.

Diverse revenue streams and affordable event space are critical to economic sustainability and vibrant communities. In addition to the Public Market, the Creative Hall and Market Rooftop provide affordable temporary event space. Three micro-vendors and a café offer anchors of activity, opportunity for entrepreneurs and revenue for the site.



ENERGY CENTER

CISTERN

COMPOST

the hearth plaza

