

CENTRE FOR CHILDREN AND YOUTH LIVING WITH HEALTH COMPLEXITY

Project Vision



A new centre for children and youth living with health complexity is proposed for the health-care site at Slocan Street and 21st Avenue in East Vancouver. The development includes a 74-space daycare, located in a separate building and operated independently.

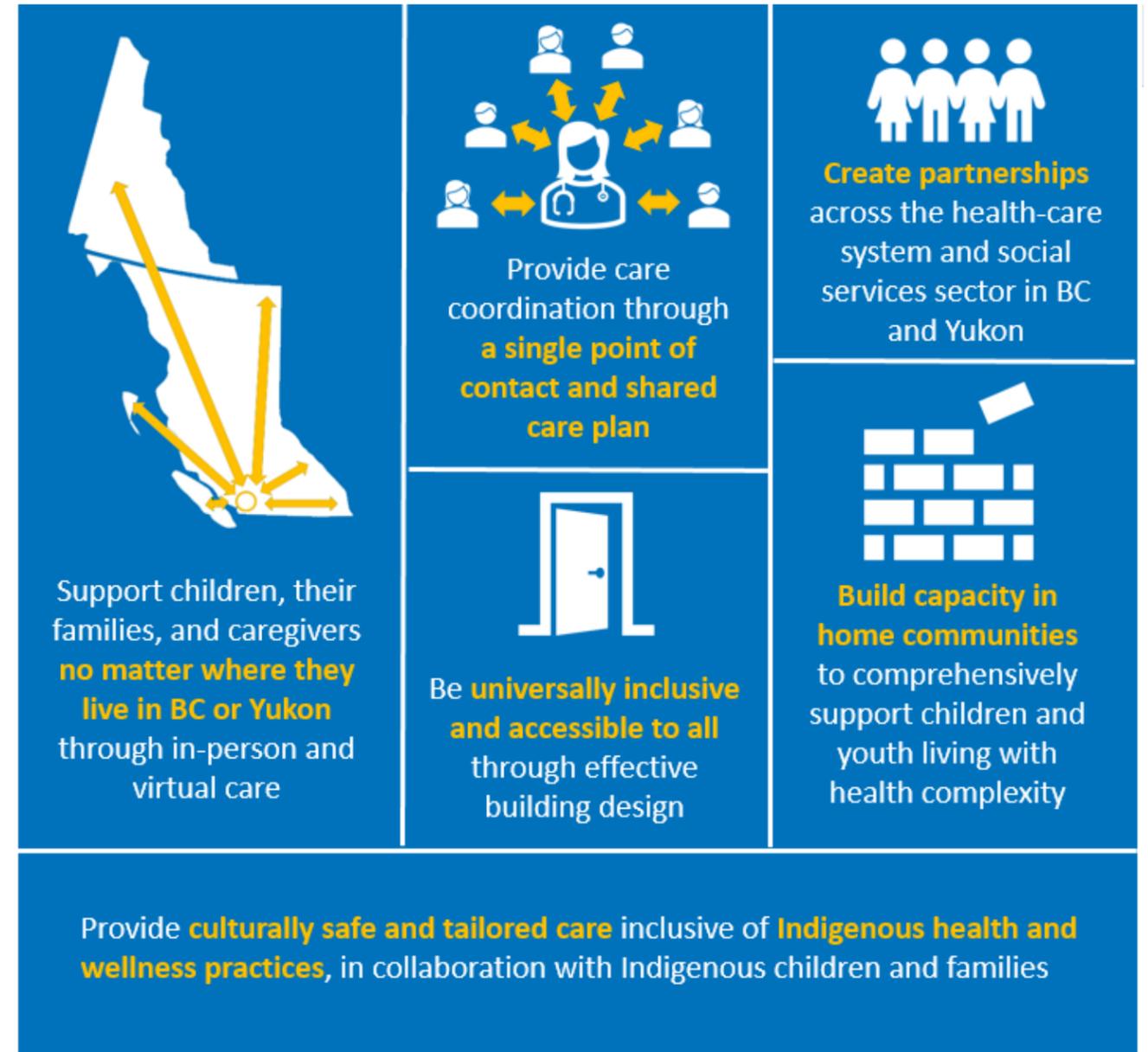
Context

In August 2020, the Sunny Hill Health Centre moved from the site to BC Children's Hospital on Oak Street. The Ministry of Health and BC Children's Hospital are looking to continue using the site for children's health-care services. The project site is located on the unceded, ancestral lands of the Coast Salish peoples including the **xʷməθkwəy̓əm** (Musqueam), **Skwxwú7mesh** (Squamish), and **sel̓ílwitulh** (Tsleil-Waututh) Nations.

First of its Kind in Canada

The new centre will be the first of its kind in Canada. Children and youth living with health complexity need a range of services and supports so they can be looked after in their own communities and avoid unnecessary hospital visits. This centre will be unique in how it coordinates services for each child and family as their needs change.

Project Goals



CENTRE FOR CHILDREN AND YOUTH LIVING WITH HEALTH COMPLEXITY

Patient Population and Services

Children and Youth Living with Health Complexity

Across BC, thousands of children require ongoing, specialized health-care supports. These children typically have four main characteristics.



Significant Family Need

Children with complex health-care needs are often dependent on medications and technologies. Their day-to-day care therefore requires their parent or caregiver to hold specialized knowledge and skills. The social determinants of health also impact family need.



Frequent Use of Health-care & Social Systems

These children often require multiple subspecialists and other health-care providers. They also access many services and supports outside of the health system (through schools, ministries, child development centres, not-for-profits or private agencies).



Functional Limitations

These children and youth experience difficulties performing daily activities and participating in typical childhood activities. Many of these children/youth need assistive technology and/or environmental adaptation.

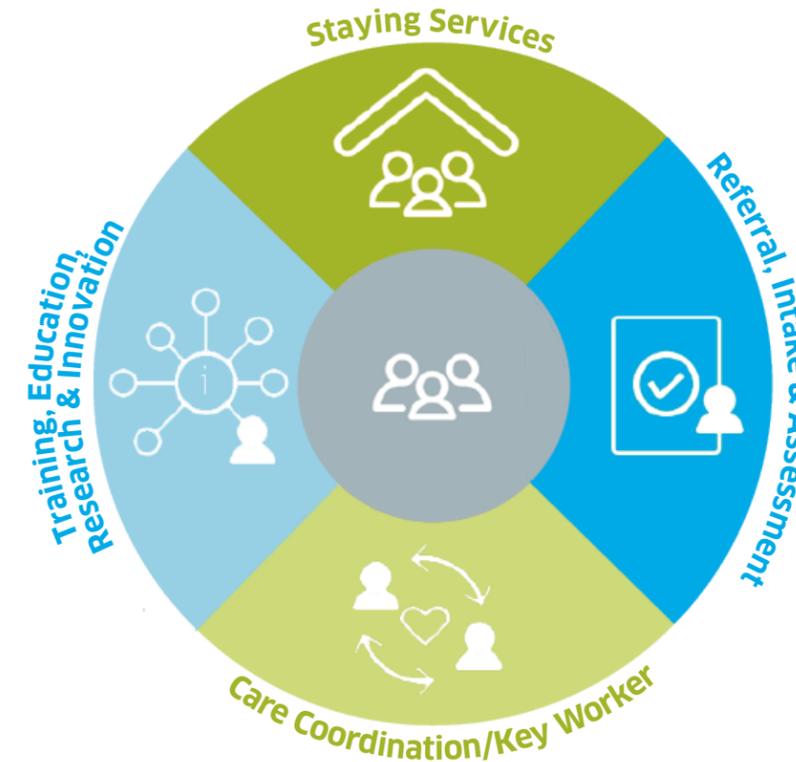


Chronic & Behavioural Conditions

This may be a condition that a child was born with or the result of a traumatic or sudden event. Many conditions are rare, can be hard to diagnose, and can include additional complications such as seizures, loss of sight or hearing, developmental delays, or mental health challenges.

Proposed Services

The model of care proposed for the site has four key service areas provided in person and virtually:



Referral, Intake & Assessment

The referral, intake, and assessment service will work with families and caregivers to determine the level of support and resources for each child.

Care Coordination/ Key Worker

A single contact for the family/caregiver will coordinate care through a shared care plan.

Training, Education, Research & Innovation

The centre will offer teaching and training for families/caregivers and community care providers. Research that is patient-centred will focus on new methods to improve care, quality of life, and wellbeing.

Staying Services

On-site suites will allow children and families to stay in a home-like environment while they learn new care techniques, adjust to new equipment, and go from hospital to home.

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Site History

There have been health-care services at this location for one hundred years. The new centre will continue that tradition.



The buildings were next used to treat children who had been exposed to TB. When the doors opened in November 1931, there were 25 beds, a school, a playroom, a library, and gardens.

The Vancouver Preventorium for Children with Tuberculosis (TB)

1930s



In 1958, a new wing with 70 more beds was built. The new wing was opened by Princess Margaret, and for a short time, the site was called the Princess Margaret Children's Village in her honour.

Princess Margaret Children's Village

1950s



The 1970s saw a range of new services at Sunny Hill including developmental and medical assessments for outpatients.

Expanding Services

1970s



As Sunny Hill celebrated its 60th anniversary in 1991, it underwent more changes. The focus on long-term care shifted to short-term assessment and diagnosis. This allowed Sunny Hill to increase outpatient and outreach services. Sunny Hill staff began traveling to communities throughout BC, so that kids from all over the province could have specialized care. In 1997, Sunny Hill became part of BC Children's Hospital. This led to the development of more services for kids in BC.

Outreach across BC

1990s-2010s

1912

Isolation Hospital in Hastings Townsite

The City of Vancouver purchased the site in 1911 for an isolation hospital. The hospital opened in November 1912 and was used to care for people with smallpox. It was made up of three main buildings: an administrative building and two wings on either side, one for men and one for women. It ran until the late 1920s when smallpox was brought under control with vaccination.



1940s

Battling Tuberculosis and Polio

Kids from across BC, including many First Nations communities, came to the Preventorium for expert care.



1960s

A Decade Of Change

With the success of antibiotics in treating TB, preventoriums were no longer needed. In 1961, the site was renamed Sunny Hill Hospital for Children. It focused on caring for kids with cerebral palsy, disabilities, and children requiring extensive rehabilitation.



1980s

Significant Renovations

In 1981, Sunny Hill was renovated to include a north wing, an indoor pool, a gymnasium, and Hartman House - a group home for children with severe disabilities. After the group home closed, the Hartman House building was used in many different ways. It housed the BC Autism Assessment Network (BCAAN), where a team provided assessment and diagnosis for BC families.



2020s

A New Era Begins

In August 2020, Sunny Hill moved into a newly-renovated, state-of-the-art facility at BC Children's Hospital on Oak Street. Its name changed to Sunny Hill Health Centre at BC Children's Hospital. This move provides a huge opportunity to reimagine the health-care services for the site, and to continue the site's long history of caring for children.



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Facility Design Principles

A unique facility is required to meet the needs of the children and youth and their families/caregivers who will use the new centre. The design will be based on a number of key principles, which were developed collaboratively with project partners and reflect the services that the centre will offer.



Adaptability

- Create physical space that is agnostic of diagnosis, flexible to anticipate future changes and judicious in utilizing the site area.
- Design to allow for modifications based on changes in clinical practice, equipment and technology.



A Home-like Space for Wellness and Learning

- Create a home-like, non-institutional environment that empowers children, youth and their families with choice and control.
- Create an environment that supports trauma-informed practice.
- Create space that is physically and spiritually inclusive for all, including BIPOC (Black, Indigenous, People of Colour) patients and families; is welcoming and culturally safe for Indigenous people and all nations.



Environmental Stewardship

- Design to achieve a minimum of LEED Gold and explore opportunities to reduce the carbon footprint of the building.
- Assess and incorporate climate risk and vulnerability mitigation measures.
- Explore the use of mass timber and wood technologies in building design.
- Apply LEAN design principles to maximize operational efficiencies and flows, and minimize construction waste.



Community Connection

- Acknowledge the scale and character of the surrounding neighbourhood and adjacent natural landscape.
- Allow opportunities for neighbours to engage with the facility and grounds, fostering a sense of community and pride in the facility and its mission.
- Minimize traffic impact, including noise from trucks.



Virtually Connected to all of BC and Yukon

- Design for virtual connectivity throughout the building to extend the impact of care at the Slocan site to all of BC and Yukon and anticipate innovations in future care delivery.
- Emphasize connectivity and collaboration throughout the building using technology and space design.



Integration of Landscape and Nature

- Incorporate and design a range of spaces that visually and/or physically connect to landscape, supporting the patient's and their family's well-being and connection to nature.
- Use wooden / natural materials where feasible.
- Embrace a seven-generation perspective in the design of the site.



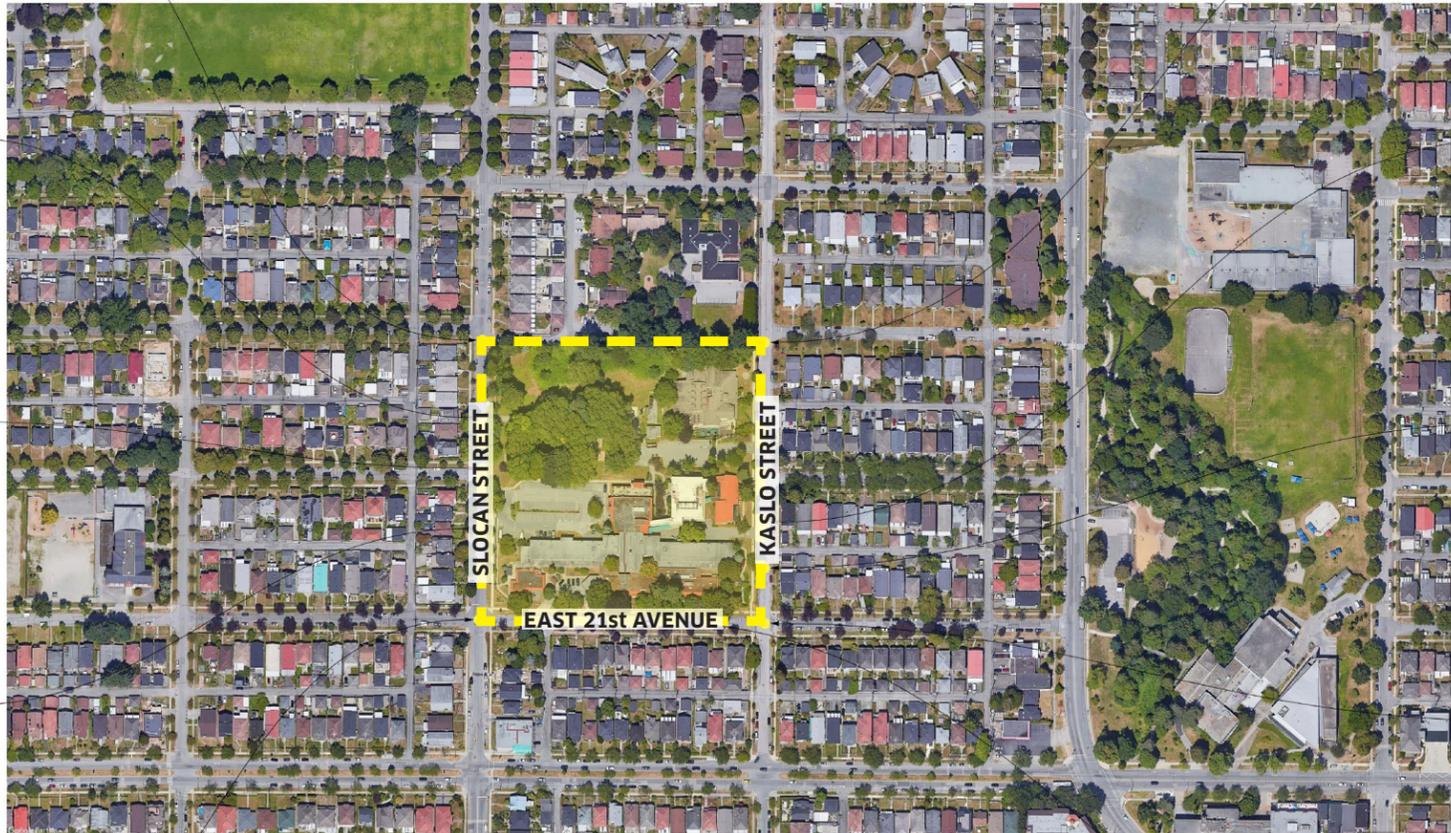
Emphasize Calm and Comfort

- Create an environment that promotes calm and considers the needs of children and youth with sensory processing differences.
- Design for inclusion and integration of purposeful art throughout the building and site to create a calm, comforting, engaging and healing environment to meet the needs of the patient population and families being served.

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Site Context

The project site is on the unceded, ancestral lands of the Coast Salish peoples including the *x̣ẉməθkẉəỵəm* (Musqueam), *Skwxẉú7mesh* (Squamish), and *sel̓íl̓wítulh* (Tseil-Waututh) Nations. It is in the residential neighbourhood of Renfrew-Collingwood, surrounded by single-family homes and tree-lined streets. Located on a slope, the site offers impressive views of the North Shore mountains.



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Existing Conditions

Existing Buildings



The site has a number of existing buildings: the Children's Hearing and Speech Centre of BC on the northeast portion of the site, the Annex and Hartman Buildings on the east portion of the site which will remain on site, and the former Sunny Hill Health Centre building on the south portion of the site, which will be demolished to accommodate the new centre for children and youth living with health complexity.

Tree Canopy



The site has an extensive grove of mature trees in the north-west quadrant, and an impressive tree canopy, consisting of a variety of species within the perimeter of the site. The majority of trees will be maintained and protected during demolition and construction.

Topography



The site's topography is a distinguishing feature which has been incorporated as a positive element into the design. There is approximately 10 meters of slope dropping from the south side to the north.

Primary Street Frontage



The site is bounded by 21st Avenue on the south side, Slocan Street on the west side, and Kaslo Street on the east side, enabling different types of presence and access points from each frontage.

Sidewalks



Existing pedestrian routes were taken into consideration to effectively knit the new centre into the existing residential neighbourhood.

Existing Vehicle Access



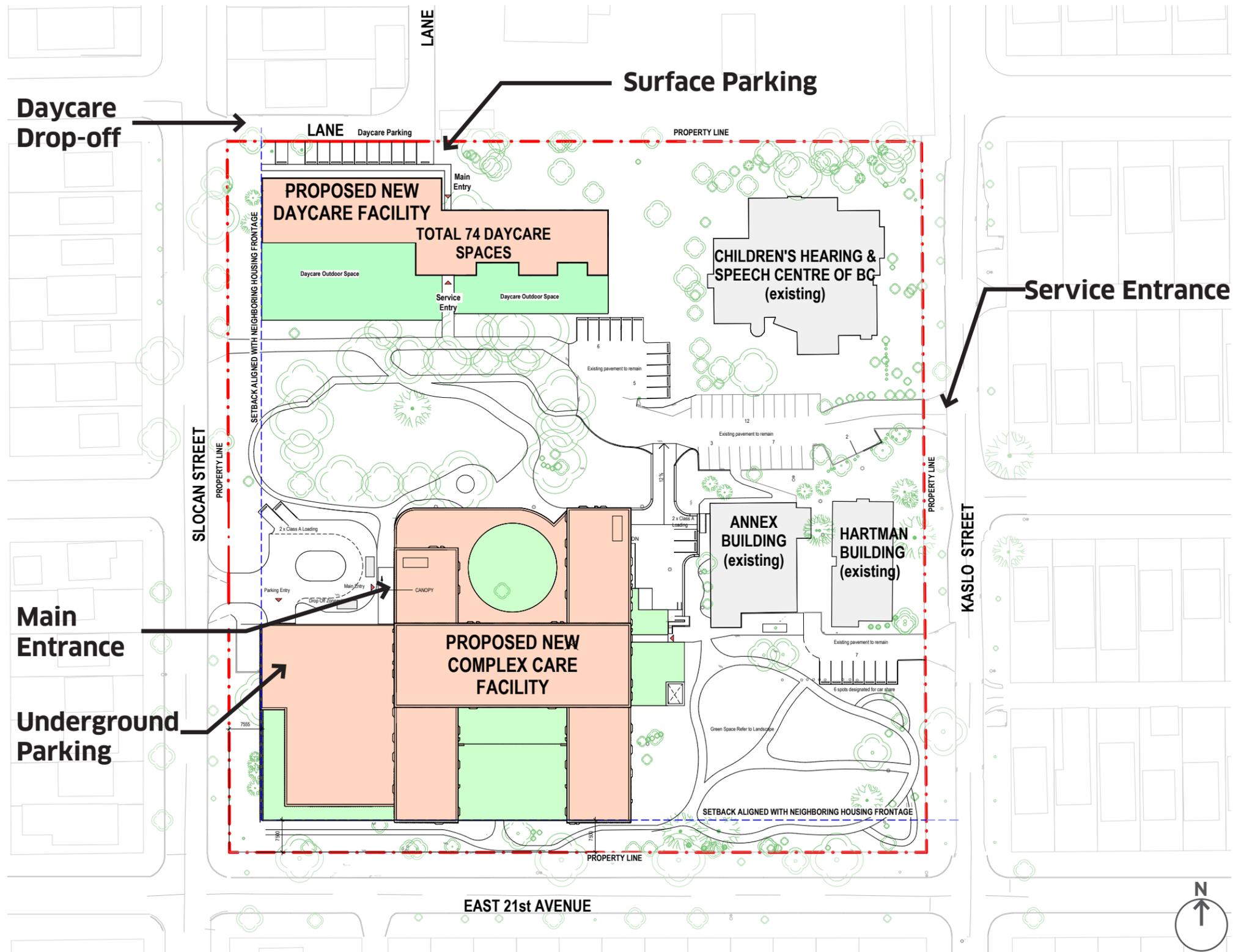
The main entry to the centre will be retained and access will be from Slocan Street. The service entry with major truck and courier deliveries will be organized from Kaslo Street.



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Site Plan of Proposed New Complex Care Facility & New Daycare

The proposed development includes the construction of a new centre for children and youth living with health complexity. It also includes a daycare facility in a separate building in the north-west corner of the site. The existing Sunny Hill Health Centre building will be demolished to make way for the new centre. The existing Hartman and Annex buildings will remain on site and will be used as additional office space for BC Children's Hospital staff. The Children's Hearing and Speech Centre of BC, an independent organization, will continue to operate from its existing location on the site.



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Site Statistics

TOTAL SITE AREA (in m²):	27,142.77
EXISTING FSR	
Existing Buildings Total Floor area (in m ²):	10,625.10
Total Current FSR:	0.39
PROPOSED FSR	
Existing Buildings to remain on site (in m ²):	3,469.83
Subtotal Area of New Complex Care Facility (in m ²):	10,578.51
Area of New Daycare (in m ²):	1,107.88 (Excluded from FSR)
Total Proposed Floor Area; Existing + New (in m ²):	14,048.34
Total Proposed FSR:	0.52
SITE COVERAGE	
Proposed Site Coverage (%):	28%
BUILDING HEIGHT	
Proposed Height of New Complex Care Facility (measured from proposed building datum 59.75m):	19.25m (63' 2"), 3 storeys+mechanical penthouse
No height exclusions required per City of Vancouver Zoning and Development By-law Section 10.18	
Proposed Height New Daycare (measured from proposed building datum 52.15m):	4.25m (14'0"), 1 storey

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Transportation

Main access from Slocan Street

The main entrance to the centre will be from Slocan Street. A wide drop-off area will accommodate families arriving in larger vehicles carrying mobility devices such as wheelchairs.

Separate entrances for loading, deliveries, and daycare

The new centre design separates the various traffic streams. Service vehicles will use the Kaslo Street entrance, while patients and families will use the main entrance off Slocan Street. The daycare pick-up and drop-off will be from the lane in the north-west corner of the site.

Parking moved underground

There will be an underground parking lot at the new centre for patients, families, staff, and visitors. The lot includes an increase in the number of accessible stalls to serve the needs of patients and families. Some surface parking will also be retained on the Kaslo side of the site.

Cycling and transit options

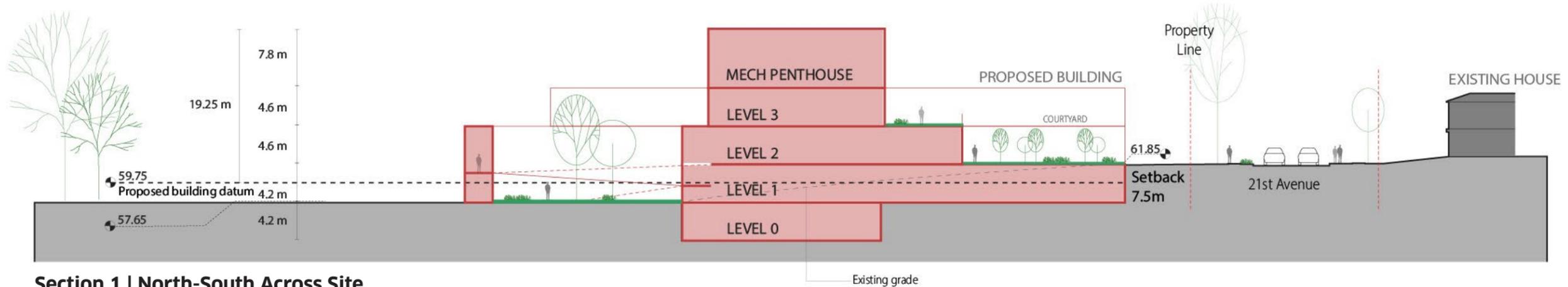
Excellent transit and cycling networks in the area will make it possible for staff and visitors to choose sustainable transportation options. The site is close to Renfrew and Nanaimo Skytrain stations, and serviced by multiple bus routes. The Slocan Street bikeway connects to the protected Central Valley Greenway, which provides cycling facilities to downtown. Eighteen bicycle spaces are proposed for the new centre, as well as bike storage facilities and showers.

PARKING	
By-Law:	130 spaces
Proposed:	133 spaces (physical), 140 spaces (equivalent)
LOADING	
By-Law:	Class B: 5 spaces Class C: 2 spaces
Proposed:	Class A: 4 spaces Class B: 2 spaces
BICYCLE SPACES	
By-Law:	Class A: 10 spaces Class B: 18 spaces
Proposed:	Class A: 22 spaces Class B: 18 spaces

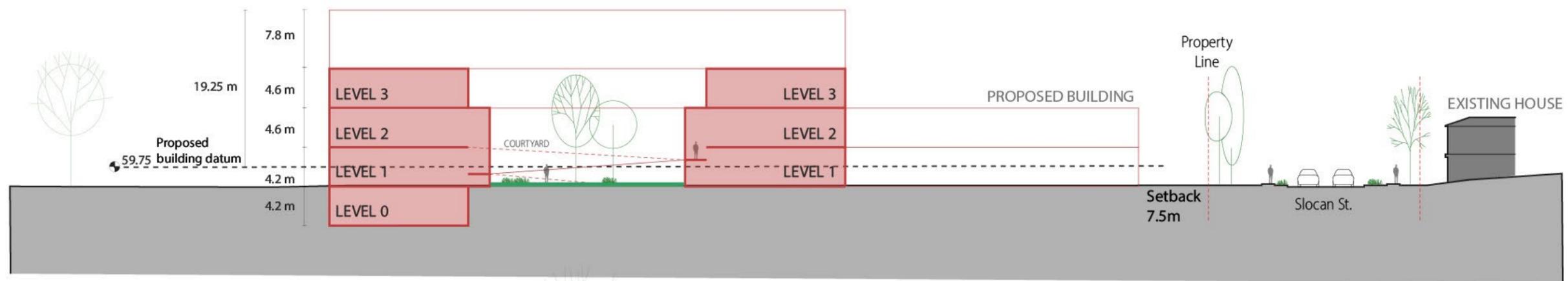


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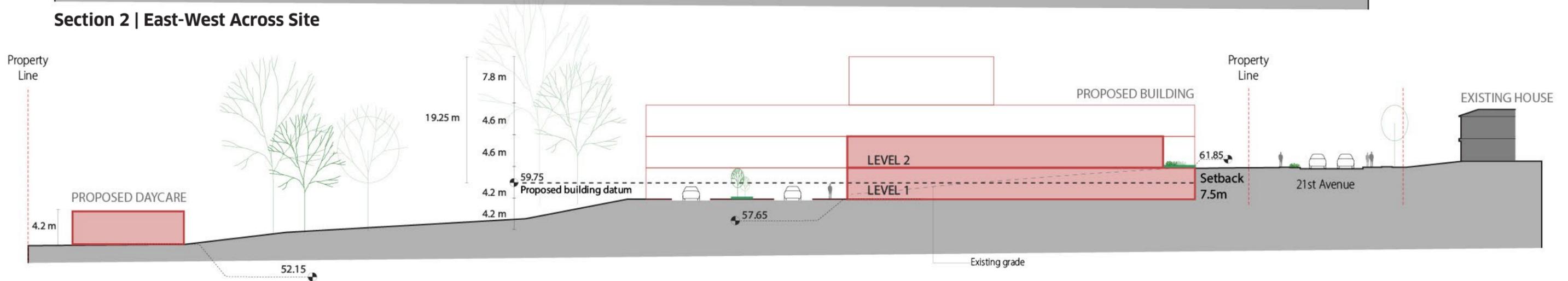
Site Sections



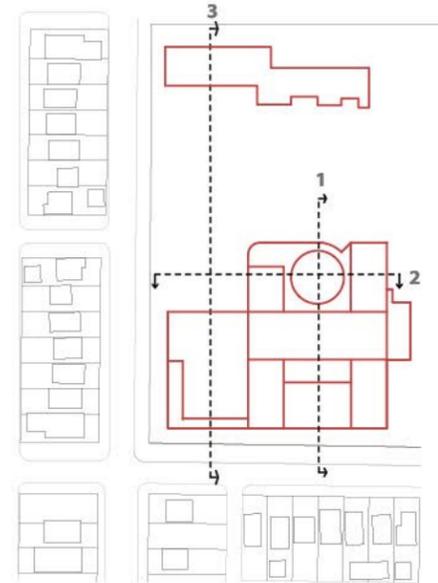
Section 1 | North-South Across Site



Section 2 | East-West Across Site



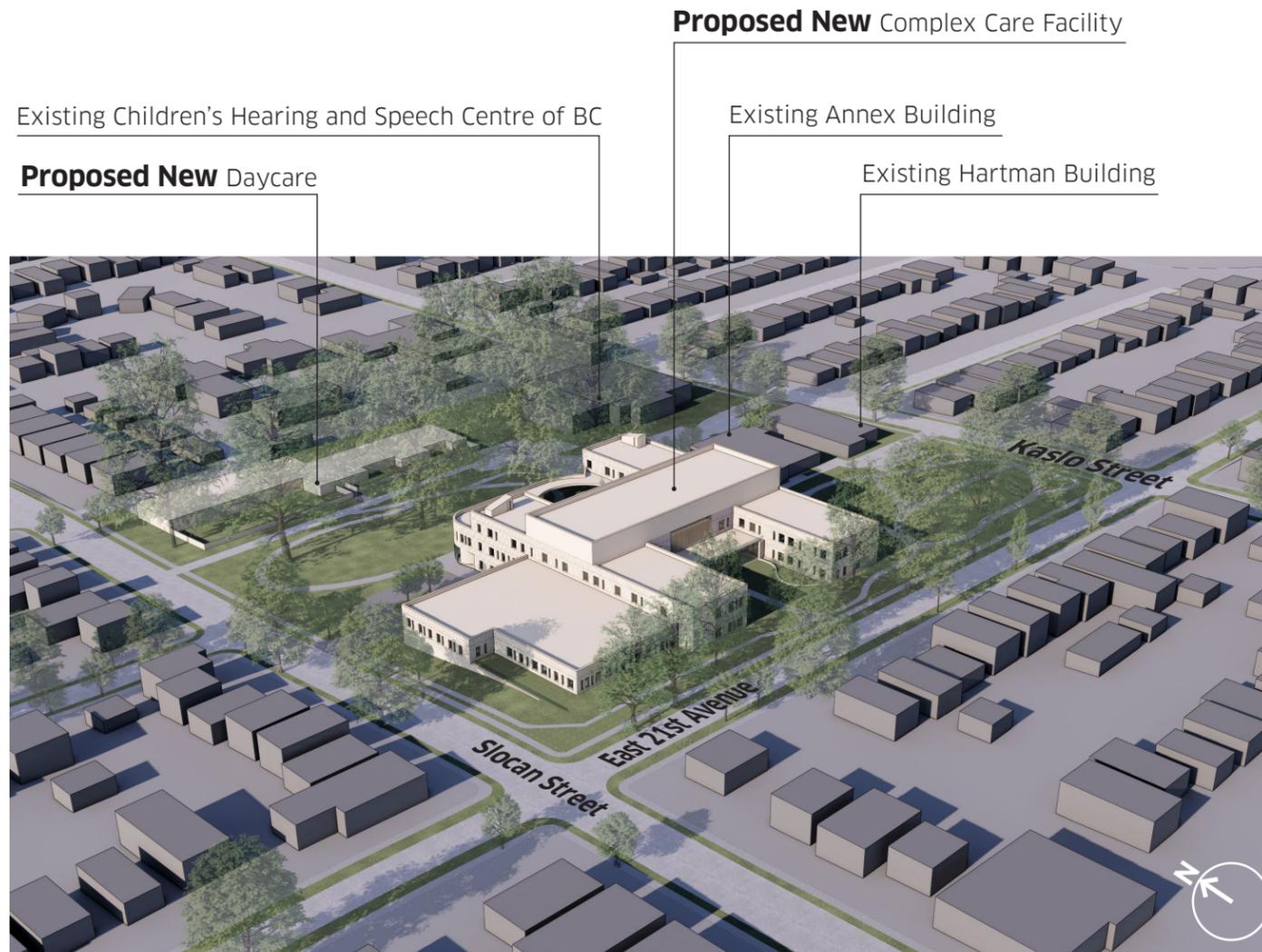
Section 3 | North-South Across Site



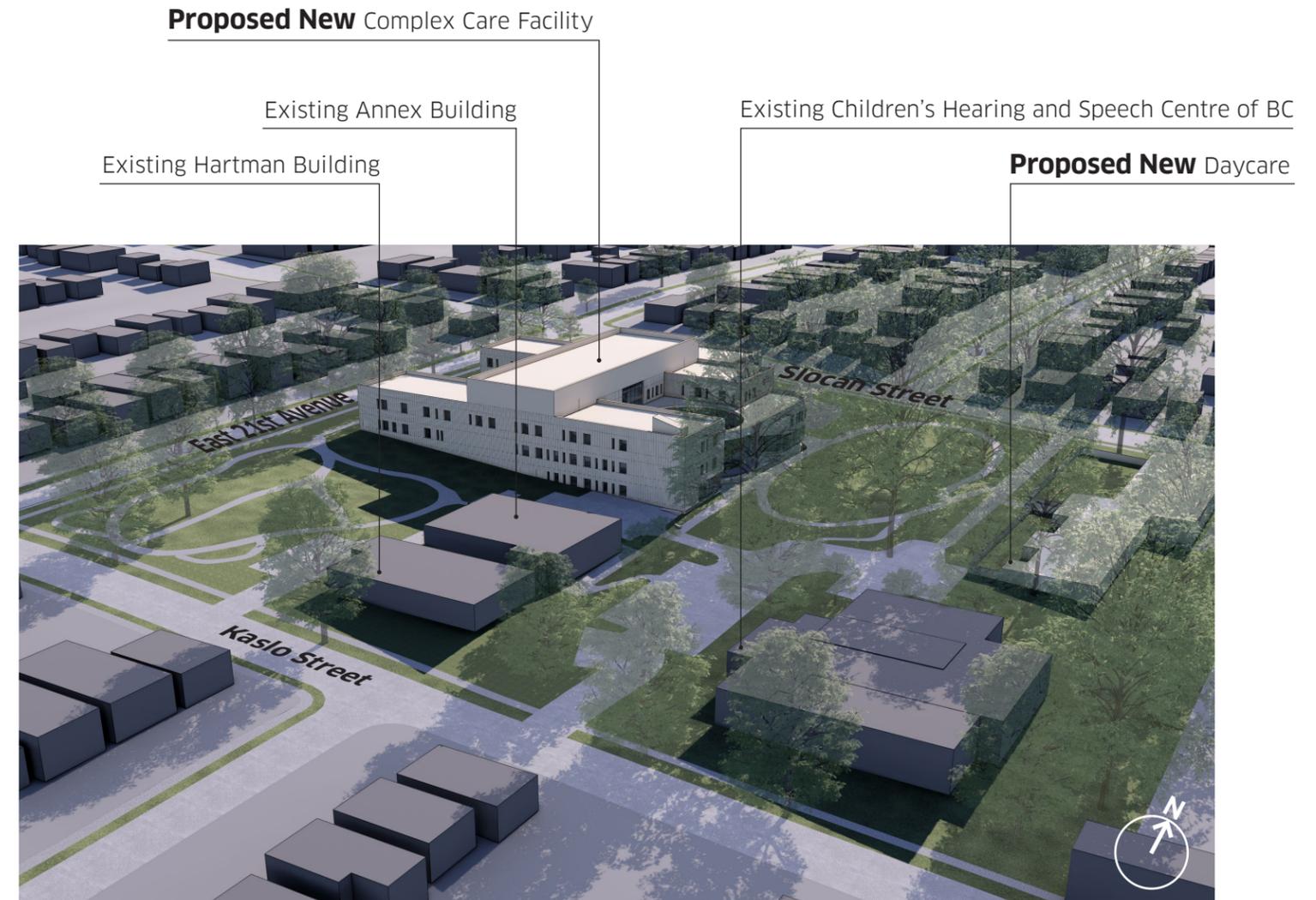
Key Diagram

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3D Views



Bird's-Eye View | South-West Corner



Bird's-Eye View | North-West Corner

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Building Massing Views

The images below are conceptual in nature and represent relative scale and configuration only. The final building design may differ from these images.



View from 21st Avenue Looking East



View from 21st Avenue Looking West



View from Slokan Street Looking South



View from North-East Corner

CENTRE FOR CHILDREN AND YOUTH LIVING WITH HEALTH COMPLEXITY

Shadow Studies

Summer Solstice



10:00 AM



12:00 PM



2:00 PM



4:00 PM

Equinox



10:00 AM



12:00 PM



2:00 PM



4:00 PM



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Sustainability

Sustainable Design Measures

The project incorporates a holistic set of sustainable design measures. These include green mobility and transportation opportunities, water efficiency, energy efficiency, carbon emissions reductions, healthy and sustainable building materials, waste reduction, and a focus on indoor environmental quality.

LEED Gold for the New Centre

The design of the new centre aims to achieve at minimum LEED Gold certification, and is assessing options to further reduce energy use and greenhouse gas emissions.

Landscape Design

The landscape design and site planning will also promote sustainability and wellness. Low-water plantings and an efficient irrigation system will significantly reduce potable water needs for irrigation. Minimizing dark hardscape such as at-grade parking, along with a cool roof will support heat island reduction.

Mass Timber

A hybrid mass timber construction is proposed for the new centre, with all below-grade structural elements constructed using non-combustible cast concrete, and all structural elements above the floor of level 2 constructed with encapsulated mass timber. Mass timber is a low-carbon building solution that employs engineered wood products typically made of large, solid wood panels, columns, or beams.

Passive House Standard for the Daycare

The daycare will be designed to the Passive House Standard. In a Passive House building, maximum energy efficiency is achieved through the combination of a well-insulated and tightly sealed building envelope and a high-efficiency heat recovery ventilation system.

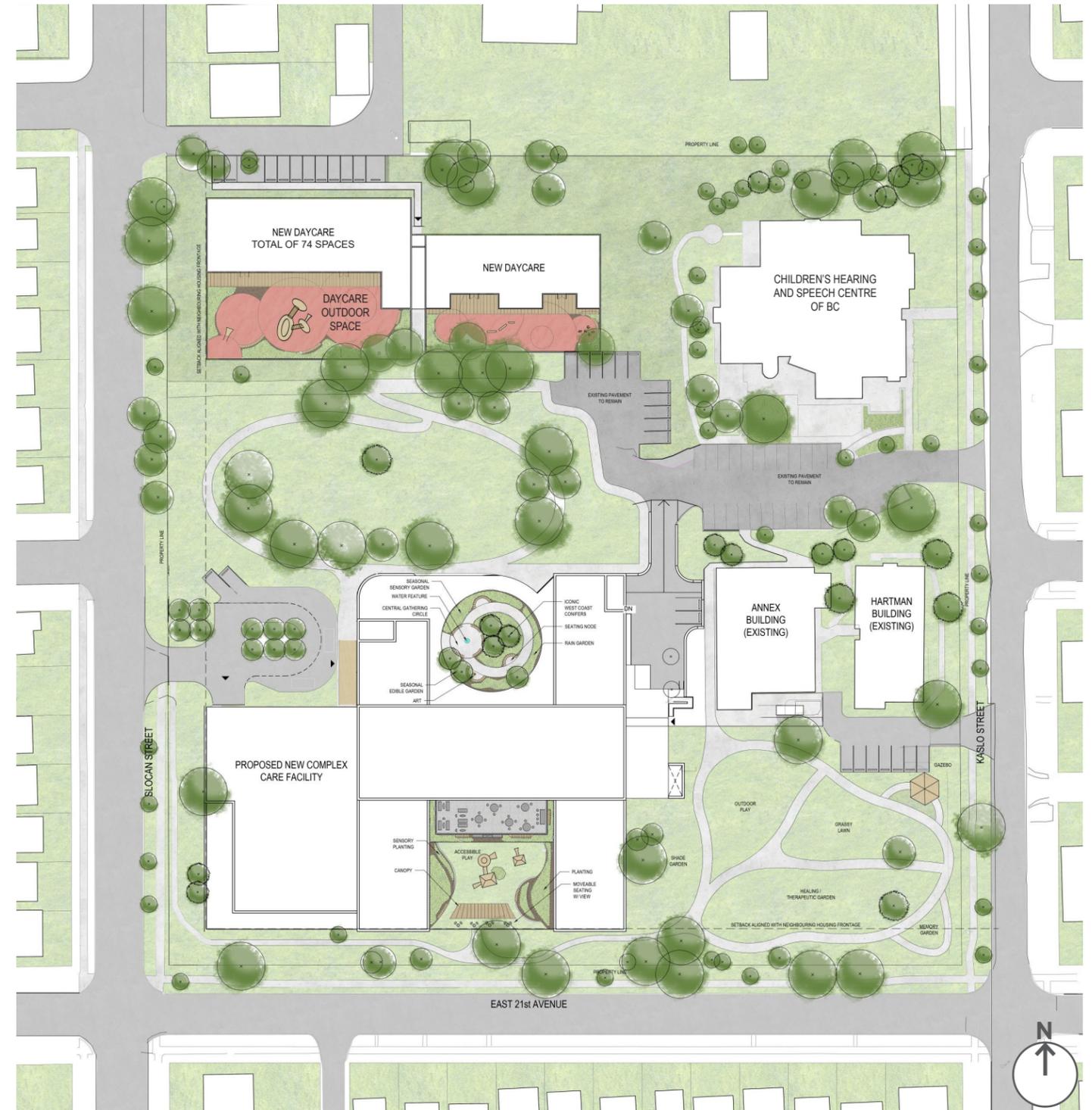


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Landscape Plan

The intent of the site design is family first; a space of hoping and healing for the children and families who visit. The design is:

- People-centric
- Evocative of a sense of whimsy
- Multi-sensory- sustainable and resilient
- Healing for body, mind, and spirit



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Project Highlights

Access to Green Space

The site design respects the mature grove of trees to the north of the proposed building, which is widely used and valued by local residents. The compact footprint of the proposed centre also opens up additional green space on the south-east corner of the site, at Kaslo Street and 21st Avenue.



Sustainable Food Systems

A number of possible food system components are being considered for the site, and will be chosen from this list:

- Edible landscaping: integrating herbs, fruits, and vegetables into the plants chosen for the site
- Community garden: publicly accessible raised garden beds
- Undercover outdoor dining spaces: covered eating areas for those rainy days
- Micro farmer's market: a small market operated by a third party
- Teaching kitchen: an after-hours cooking and teaching program for the community based at the centre's teaching kitchen.



Wellness Path and Healing Loop

The proposed landscape design includes two main pathways for patients, families, and the community: a wellness path and a healing loop. Path elements may include:

- A small pavilion for reflection and gathering
- Outdoor play areas
- Seating
- Accessible pathways that loop back to the main entrance



Daycare

A 74-space daycare will be built on the north-west corner of the site, and will be accessible to families in the community. The daycare will be operated by a third party, which will be selected through a formal Request for Proposal (RFP) process. The drop-off and pick-up will be through the laneway, and some parking will be included.



CENTRE FOR CHILDREN AND YOUTH LIVING WITH HEALTH COMPLEXITY

Project Team



IN PARTNERSHIP WITH:



Ministry of Health



The centre for children and youth living with health complexity is an initiative of BC Children's Hospital and the Provincial Health Services Authority (PHSA), in partnership with the Ministry of Health and the BC Children's Hospital Foundation.

The project team consists of staff from both BC Children's and PHSA, as well as consultants.

Dialog is the architectural partner supporting the rezoning process, and developed the schematic design.

For more information:

slocaninfo@phsa.ca

<http://www.bcchildrens.ca/about/slocan>