

1DOOR4CARE: CHEO INTEGRATED TREATMENT CENTRE URBAN DESIGN BRIEF

ISSUED FOR SITE PLAN CONTROL

SMYTH, 401 • OTTAWA ON

August 23, 2024

 **EllisDon**  MontgomerySisam

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1 PROJECT DESCRIPTION

Bringing seven separate treatment locations under one roof, 1Door4Care will stand as a landmark in the community and on the CHEO campus. The building design embodies the visions, values, and goals of the project to deliver care in an inclusive, safe, and comfortable environment. Integrated technology, advanced building systems, and evidence-based design decisions all come together to create a resilient, cutting-edge facility that will serve the people of eastern Ontario for decades to come.

The proposed 1D4C building will be considered an integrated transmural care model, where the building and service link to CHEO will become the interface between primary and secondary care. This link is intended to create consistent, comprehensive, and coordinated service delivery. Both spaces would be fully accessible to clients, staff, and medical staff without the redundancy of cost and operations. Spaces in the building are envisioned to be accessible, culturally safe, multi-use, efficient, versatile, sustainable, welcoming, intuitive, innovative, safe, personalized, and fun. There is a strong commitment by the organization to include community multi-use space to foster learning opportunities, community spaces, and accessible recreational experiences.

The CHEO 1Door4Care Redevelopment Project will provide the consolidation of seven (7) leased sites into one integrated location on CHEO's main hospital campus. The project will consist of three components:

- A new main building approximately 230,000sq.ft
- A connecting tunnel link to the existing CHEO building approx. 4000sq.ft (SEPARATE PERMIT)
- A parking structure with 1050 parking spaces (SEPARATE SPC)

The 1Door4Care: CHEO Integrated Treatment Centre Project scope of services includes:

- Development and Rehabilitation
- CHEO School & Pre-School
- Autism Program (Neurodevelopmental Health)
- Outpatient Mental Health

- Integrated Home & Community Care
- Youth Protection & Advocacy
- Centre for Healthy Active Living
- Knowledge Institute (formerly Ontario Centre of Excellence for Child and Youth Mental Health)
- Champlain Maternal Newborn Regional Program
- Research and Education Spaces
- Family, Community and Recreational Spaces

SITE DATA		
ZONING		
MIN. LOT WIDTH		NO MINIMUM
MIN. LOT AREA		NO MINIMUM
MAX. BUILDING HEIGHT		
WITHIN 12m OF R1, R2 OR R3 ZONE		15m
OTHER CASES		NO MAXIMUM
MIN. FRONT YARD SETBACK		46m [EXCEPTION 370]
MIN. REAR YARD SETBACK		7.5m
MIN. CORNER YARD SETBACK		7.5m
MIN. INTERIOR SIDE YARD SETBACK		7.5m
COVERAGE TABLE		
	m2	%
SCOPE OF WORK EXTENTS	36,682	100.0%
PHASE 1A	16,331	44.5%
PHASE 1B	20,351	55.5%
PARKING AREA	3,765	10.3%
PHASE 1A	2,095	5.7%
PHASE 1B	1,670	4.6%
BUILDING AREA	9,827	26.8%
PHASE 1A	4,916	13.4%
PHASE 1B	4,911	13.4%
SOFT LANDSCAPE AREA	10,955	29.9%
HARD LANDSCAPE AREA	12,135	33.1%
PROPOSED GROSS FLOOR AREA		
	m2	m2
	GFA	GCA
LEVEL 1	5,324	5,324
LEVEL 2	3,918	3,773
LEVEL 3	3,553	3,206
LEVEL 4	2,706	2,620
LEVEL 5	2,364	2,276
LEVEL 6	2,014	1,927
PENTHOUSE	1,786	1,719
LEVEL 1 TUNNEL TO CHEO	328	328
TOTAL	21,993	21,172
* GCA = GFA reduced by shafts and elevators		
BUILDING AREA BY OCCUPANCY		
	m2	
GROUP A2 (SCHOOL)	1,534	
GROUP A2 (NON-SCHOOL)	2,116	
GROUP D	14,120	
GROUP F3	3,932	
BUILDING HEIGHT		
	m	m
	GEODETC	HEIGHT
TOP OF PENTHOUSE ROOF	114.80	34.70
TOP OF PENTHOUSE LEVEL PARAPET	106.35	26.25
LEVEL 2	84.60	4.50
LEVEL 1	80.10	0.00

2 SITE CONTEXT AND ANALYSIS

The overall CHEO property occupies an approximate area of 13.9 hectares. Since 1974, CHEO has occupied a portion of the property, near the centre of the lot. Based on aerial photography, prior uses appear to be agricultural in nature. Additional wings to the hospital were constructed in 2005 and 2009. CHEO shares a campus with the Ottawa General Hospital and the University of Ottawa's Roger Guindon Hall, both located at 451 Smyth Road to the east. The site where the 1Door4Care building is proposed is located on an existing surface parking lot within the overall property.

The site is surrounded by the following uses:

North

To the north of the site are environmentally protected areas and a linear parkland corridor. Further north is Riverview Alternative School and the Riverview neighbourhood, a low-density residential neighbourhood.

East

East of the site are the City of Ottawa General Hospital and University of Ottawa medical campus. Further east is Franco-Cité Catholic Secondary School, Vincent Massey Public School, the Perley & Rideau Veteran's Health Centre and the Elmvale-Canterbury low-density residential neighbourhood.

South

South of the site is the low-density residential neighbourhood known as Billings Bridge-Alta Vista. Lynda Lane Park is a large sports-oriented open space immediately south of the property.

West

Immediately west of the site is a Department of National Defense (DND) campus. Further west is a woodlot, on the other side of which are numerous institutional and office uses front onto Alta Vista Drive.

For further information on site context and zoning, please refer to the submitted Planning Report.

3 DESIGN RESEARCH

3a. Project Theme and Inspiration

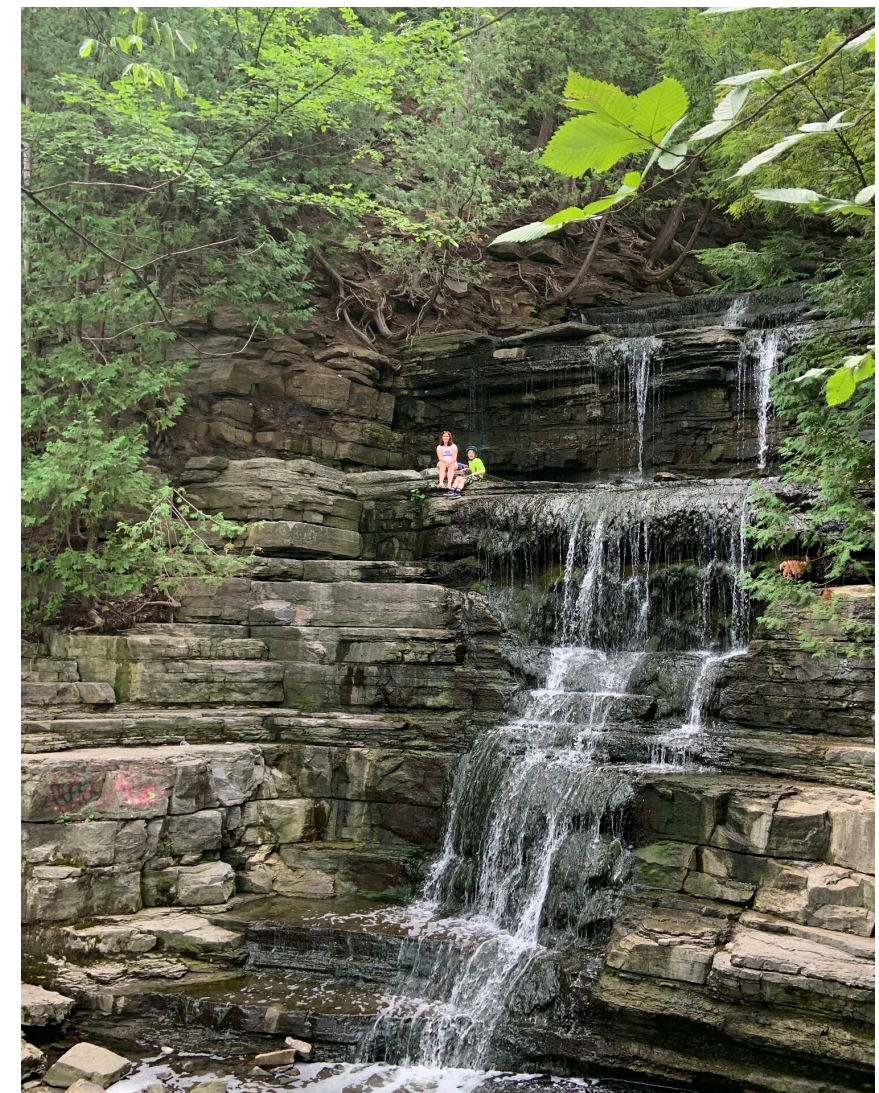
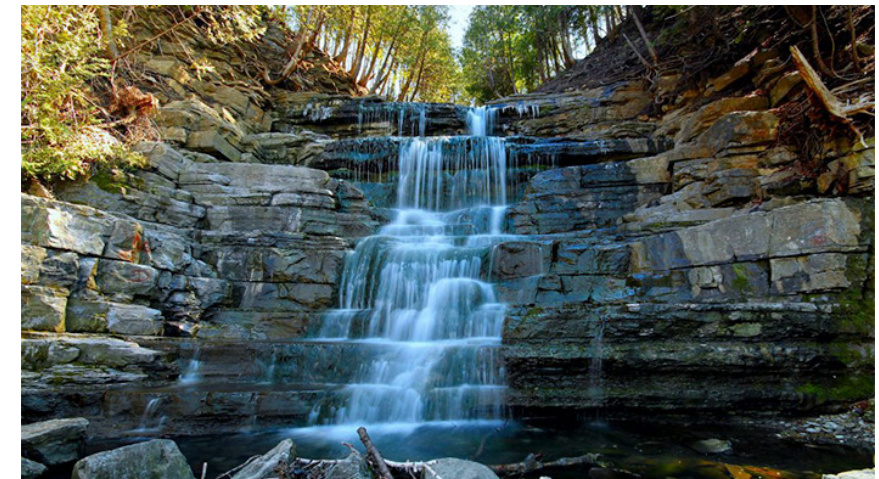
Inspired in nature which ties all cultures and humanity's innate need to connect to nature and other living things...

Inspired in the profound spiritual connection to mother earth, that the more than 8,000 years of the Algonquins inhabiting the area represent; and more specifically, inspired by the many beautiful local waterfalls and the geology of the region that the waterfalls reveal...

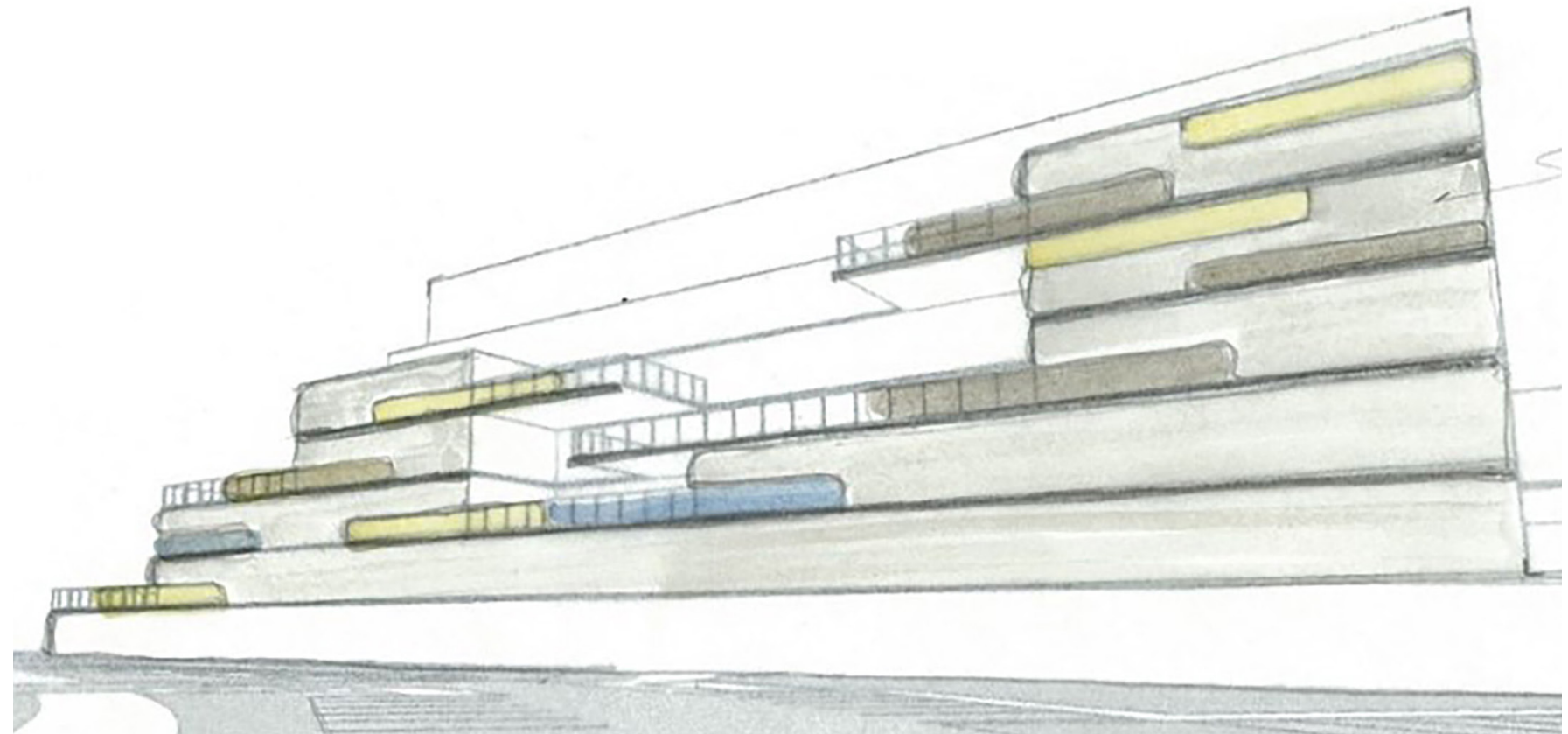
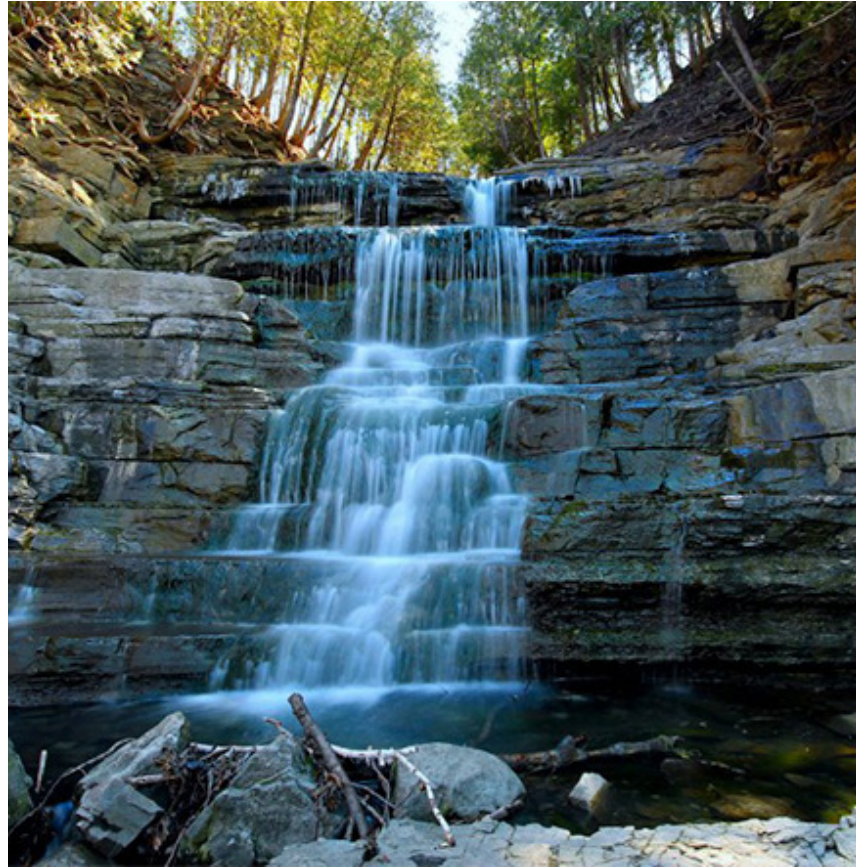
Also inspired by the soft, persistent and patient action of the water, capable over time to erode the rock which is analog to the patient and caring work of the 1Door4Care clinicians with their clients...



Gatineau Caves

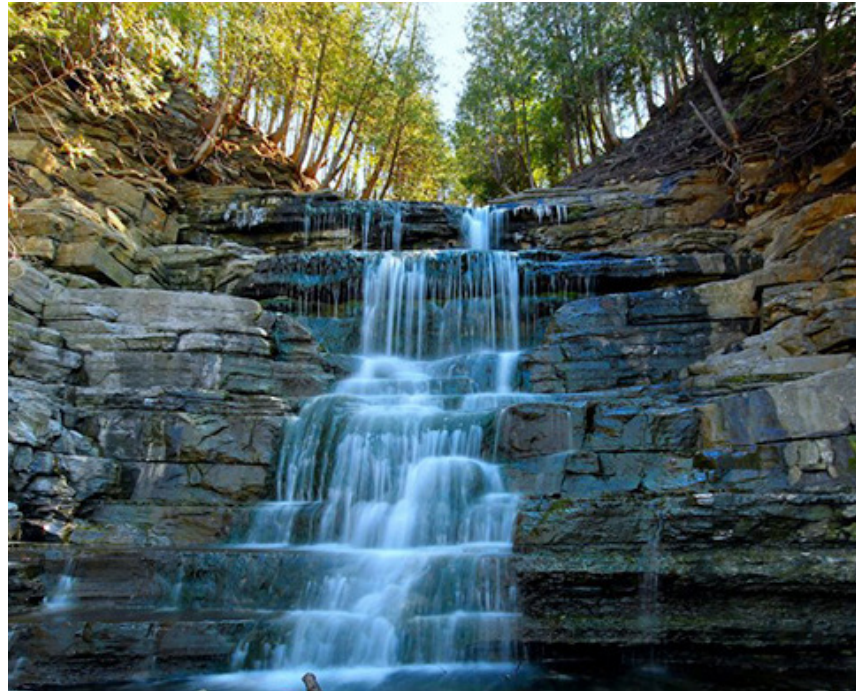


Princess Louise Falls

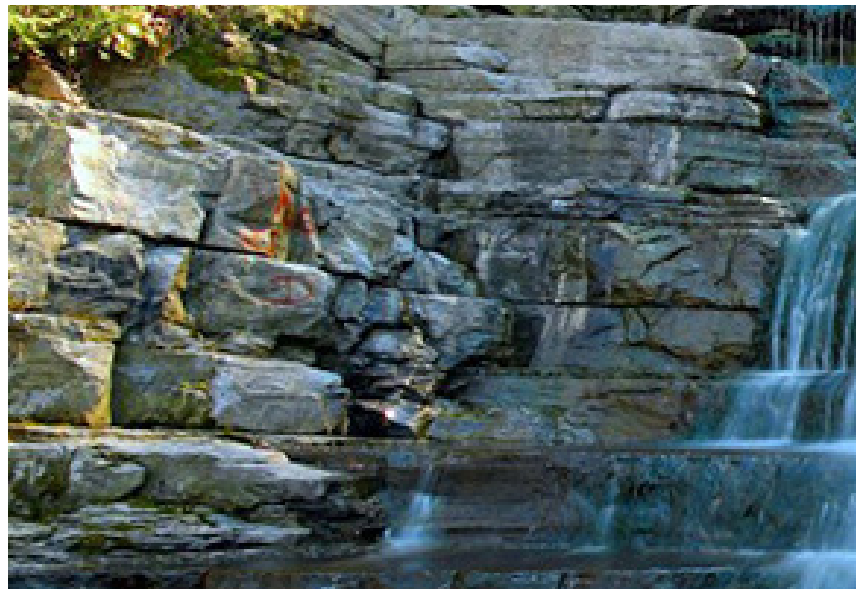


Early Concept Sketch - Approach to Building Massing

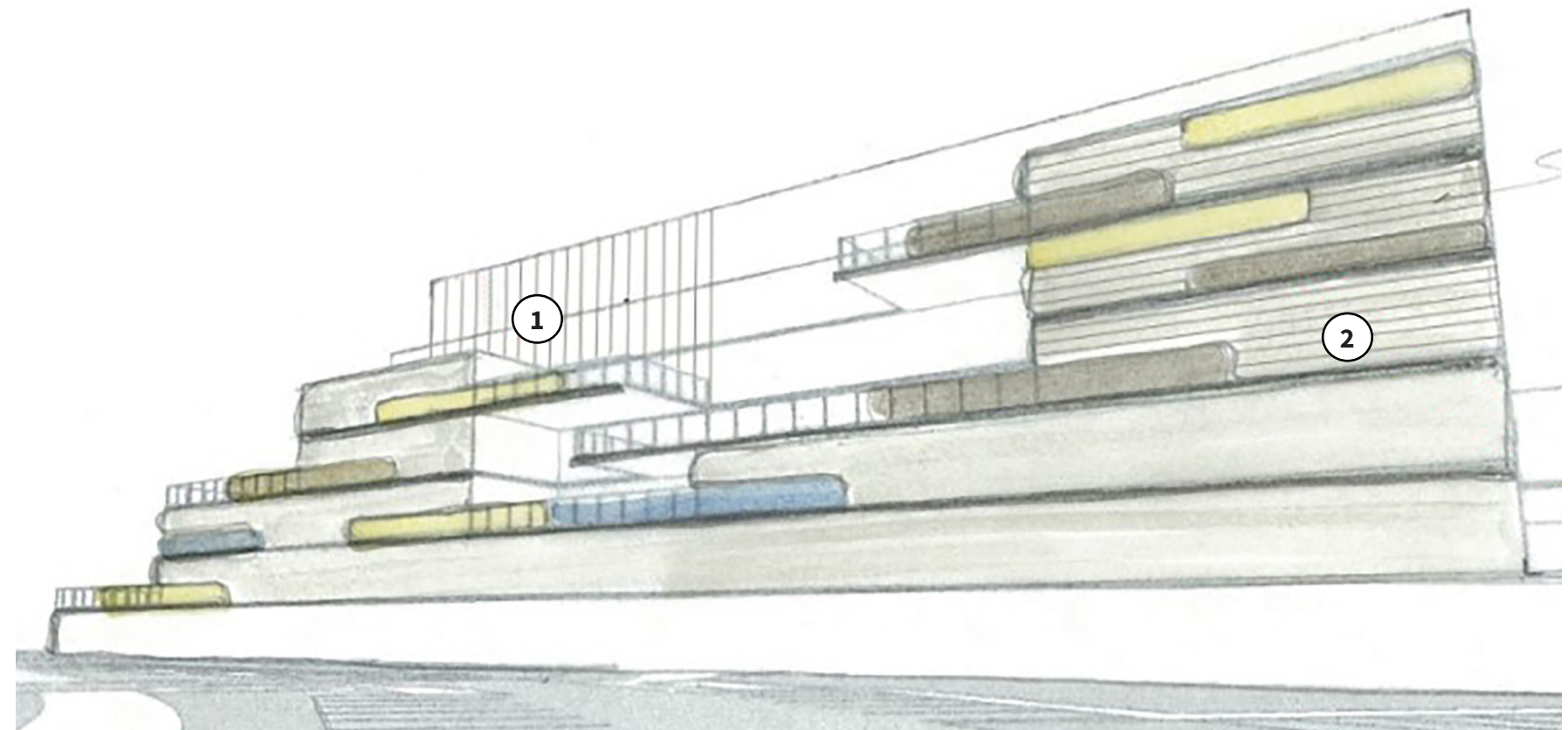
We developed the massing of the building as a representation of a rock formation being eroded by a waterfall, with its irregular profile and a stratification approach to the building envelope to echo the sedimentation layers of the rock formations in the area.



1. Panel vertical orientation for the fall component

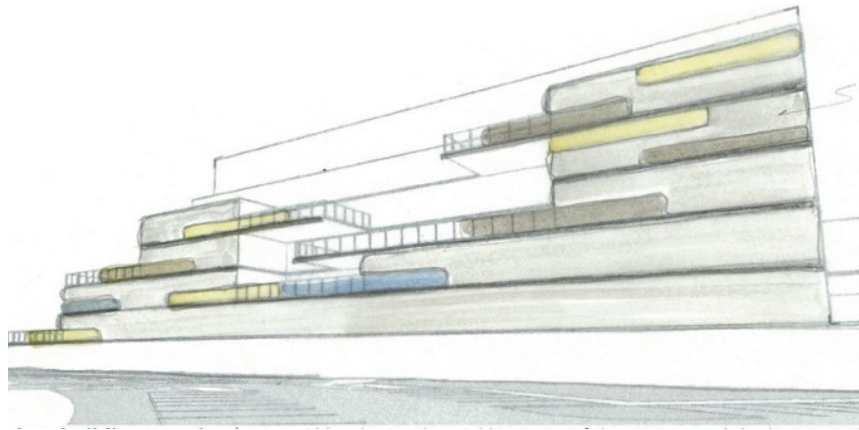


2. Panel horizontal orientation for the rock components



Early Concept Sketch - Approach to Architectural Language

We further orient the panels and reveals to represent the horizontality of the rock formations and the verticality of the waterfall.



Ground view of 1Door4Care main drop-off from the south-east



1.



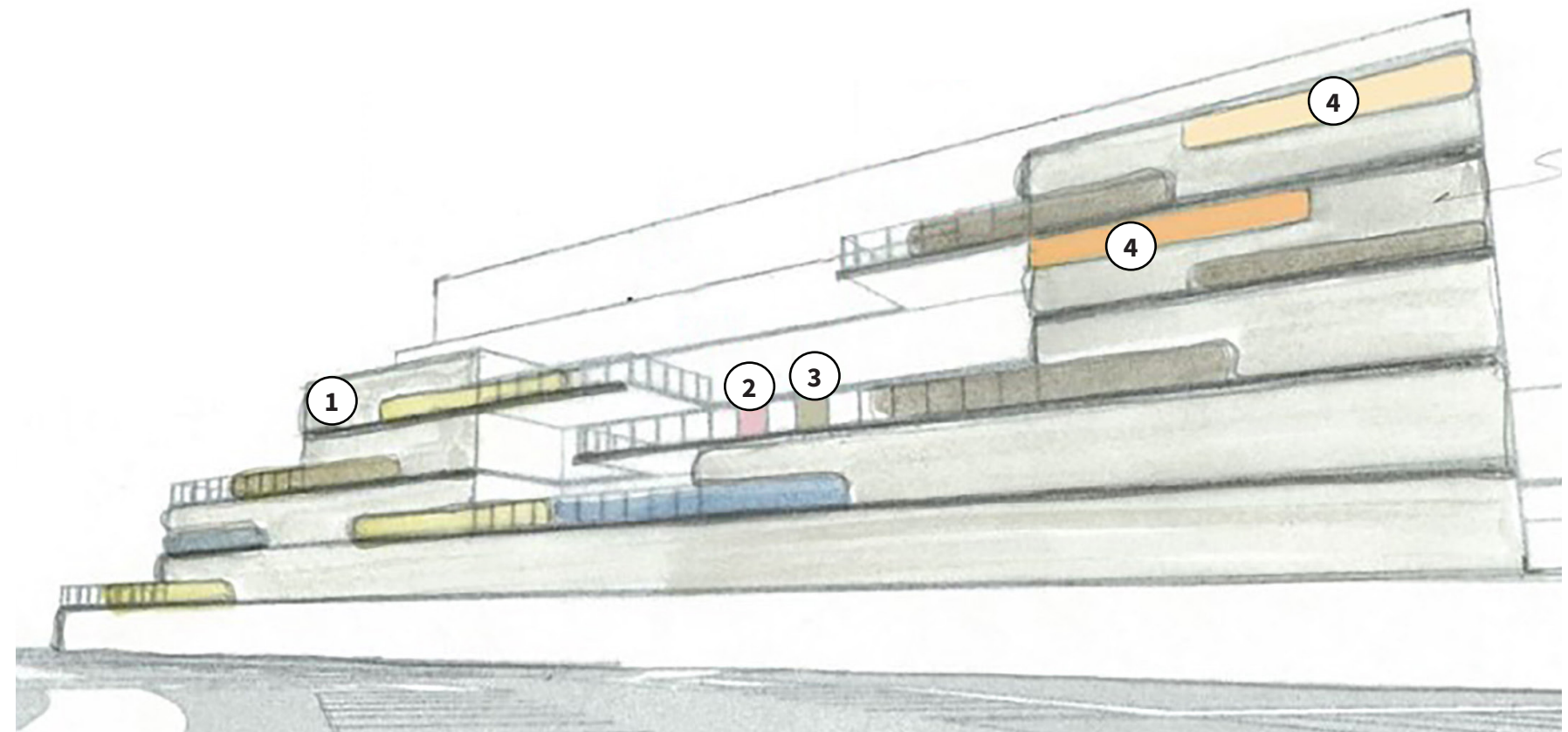
2.



3.



4.



Early Concept Sketch - Approach to Architectural Language

The earthy tones at the base to anchor the building to the ground, the lighter colors at the top to reflect the sky and blend building and sky to reduce the building massing, and the careful and measured introduction of saturated colors to mimic the naturally occurring colors in the rock as result of natural mineral oxidation.

3b. Response to Context and Civic Identity

The building's massing is articulated to respond to its low scale residential context, the massing steps down in the direction of this sensitive context (refer to the diagrams below). At the same time as the building addresses the low scale residential context, it also has the presence and identity of a significant community asset.



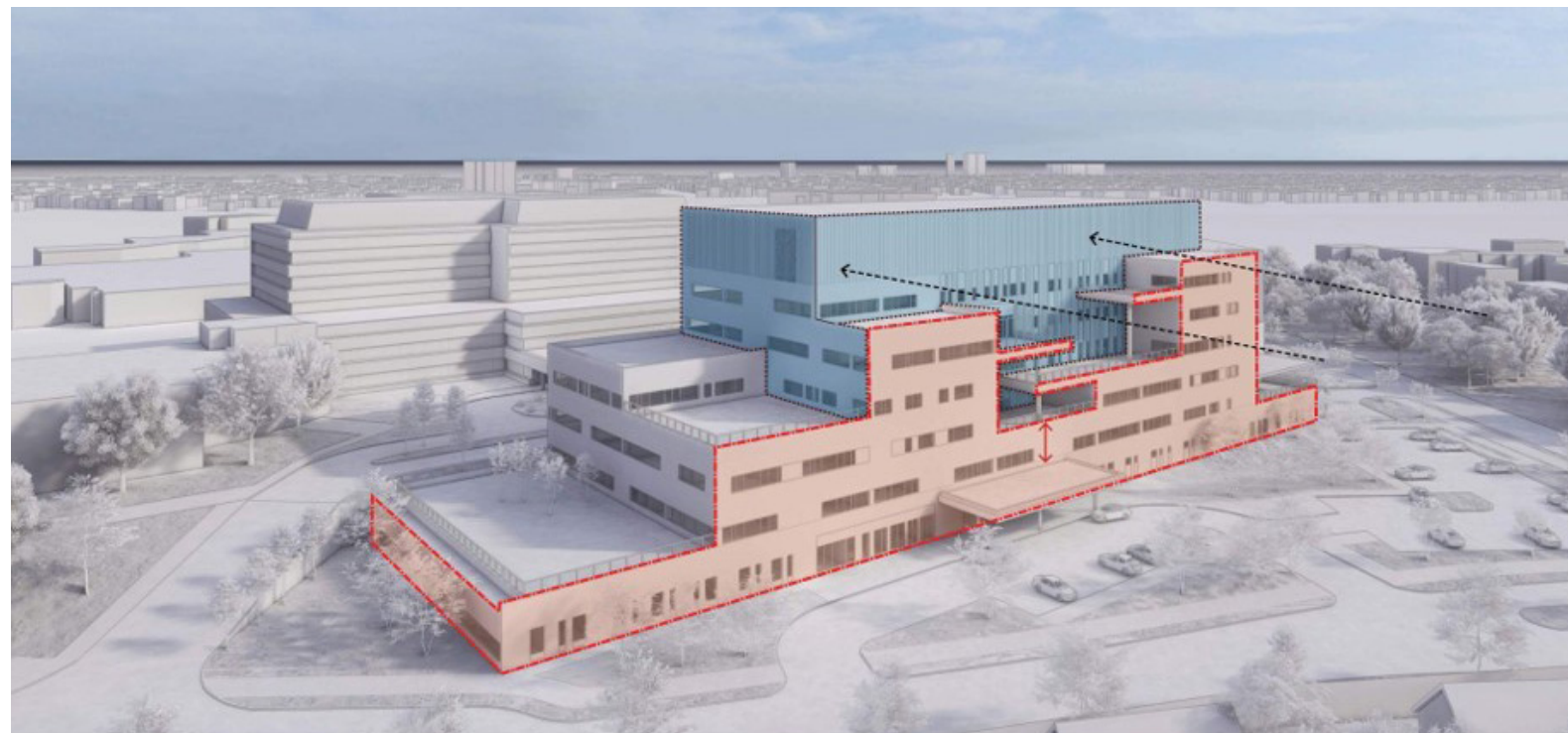
Immediate Context | Low scale residential to the south and west



Massing Response to Context | Low massing steps down towards west, south and north to minimize impact on low residential context



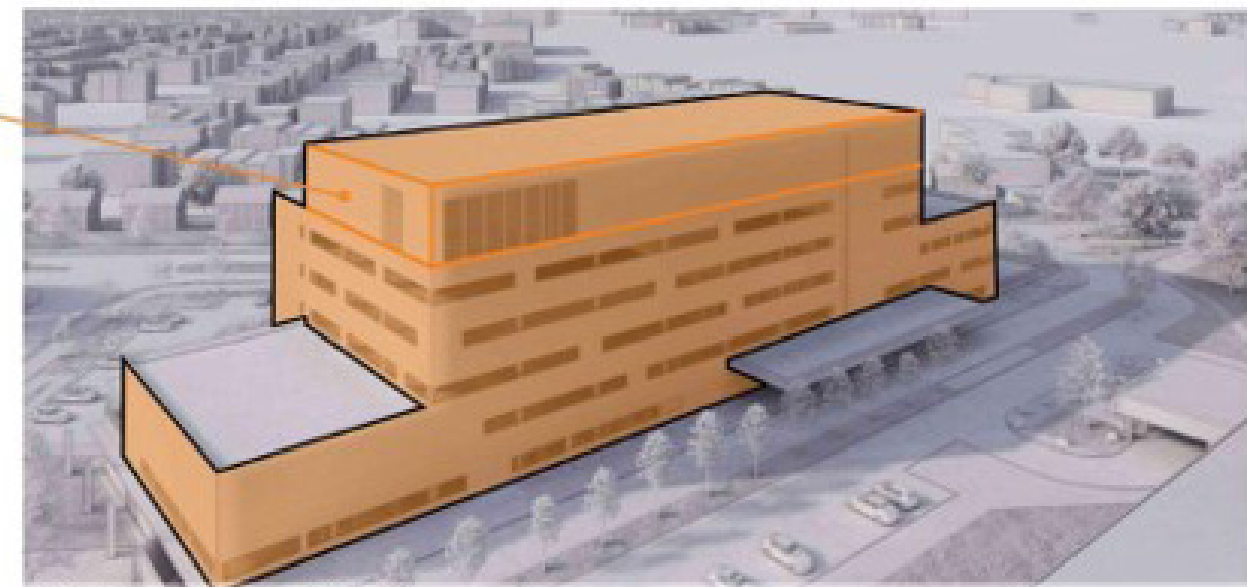
Massing Response to Context | View from ring road north of 1Door4Care



Building massing calibrated to both express the importance of 1Door4Care as a community support anchor as well as being eroded and recessed at the main entrance to achieve an appropriate and friendly scale particularly for young children.



South-West view (L1 entrance)



North-East view (L1 entrance)

Cohesive Design Language

The mechanical penthouse has been seamlessly integrated into the massing of the building

4 SITE DESIGN FEATURES

4a. General Principles

The 1Door4Care CHEO Integrated Treatment Centre (“1Door4Care” or the “Project”) site has been designed to invite the community in by putting People First and supporting universal accessibility. All design strategies have been considered in terms of their ability to support a welcoming, safe, comfortable, and inclusive environment for all. Culturally sensitive spaces that employ best practices in the design for persons of all abilities facilitate ease of use, legibility, and flexibility at the new 1Door4Care.

Spaces are designed to promote a connection with the outdoors and foster community interaction while also providing clarity, safety, and security. Beautifications around the site as well as features like the Indigenous Gathering Place and Main Entry and Arrival Garden, extend a welcoming gesture to the surrounding neighbourhood. To further that sense of accessibility and welcome, the building massing steps down toward the residential neighbourhood, dematerializing the building and bringing it to a residential scale.

4b. Design For Welcoming Nature Of Approach And Arrival Sequence

The Community Gateway, encountered as you approach the site along the campus Ring Road, is the inviting, highly intuitive vehicular entrance to the 1Door4Care building and the Children’s Hospital of Eastern Ontario (“CHEO”). A combination of arrival signage, planting, and unique site furnishings will welcome pedestrians, cyclists, and vehicles to the site.



Bird’s eye view of 1Door4Care from south-west

4c. Design And Purpose Of Building Entrances and Connection Between CHEO And 1Door4Care

1Door4Care's proposed main entrances are clearly defined, safe, accessible, and weather-protected. The main entrance drop-off area is 40m long and is located south of the proposed building, accessible via Ring Road. The secondary entrance, located on the north side of the building, across from the existing CHEO hospital, features a 100 m-long drop-off area and also accommodates the school entrance as well as an extended loading zone for a wide variety of drop-off vehicles, including ramp-operated accessible school buses and private vehicles.

Canopies at all entrances provide weather protection and are also aesthetically pleasing, with identifiable features to highlight access points. Views are unobstructed from all entrances to respective drop-off areas, and site entrances lead directly and clearly to major building entrances and nodes. Major exterior elements, such as colour and material, are highlighted and visible from the interior, promoting a strong indoor-outdoor connection and maximizing intuitive wayfinding.

A barrier free path of travel is established between CHEO and 1Door 4 Care which is protected by a canopy that connects the existing CHEO entrance canopy and the new 1Door 4Care entrance canopies.



1Door4Care main drop-off to the building



North elevation including main drop-off and entrances

4d. Vehicular and Pedestrian Approach and Connections

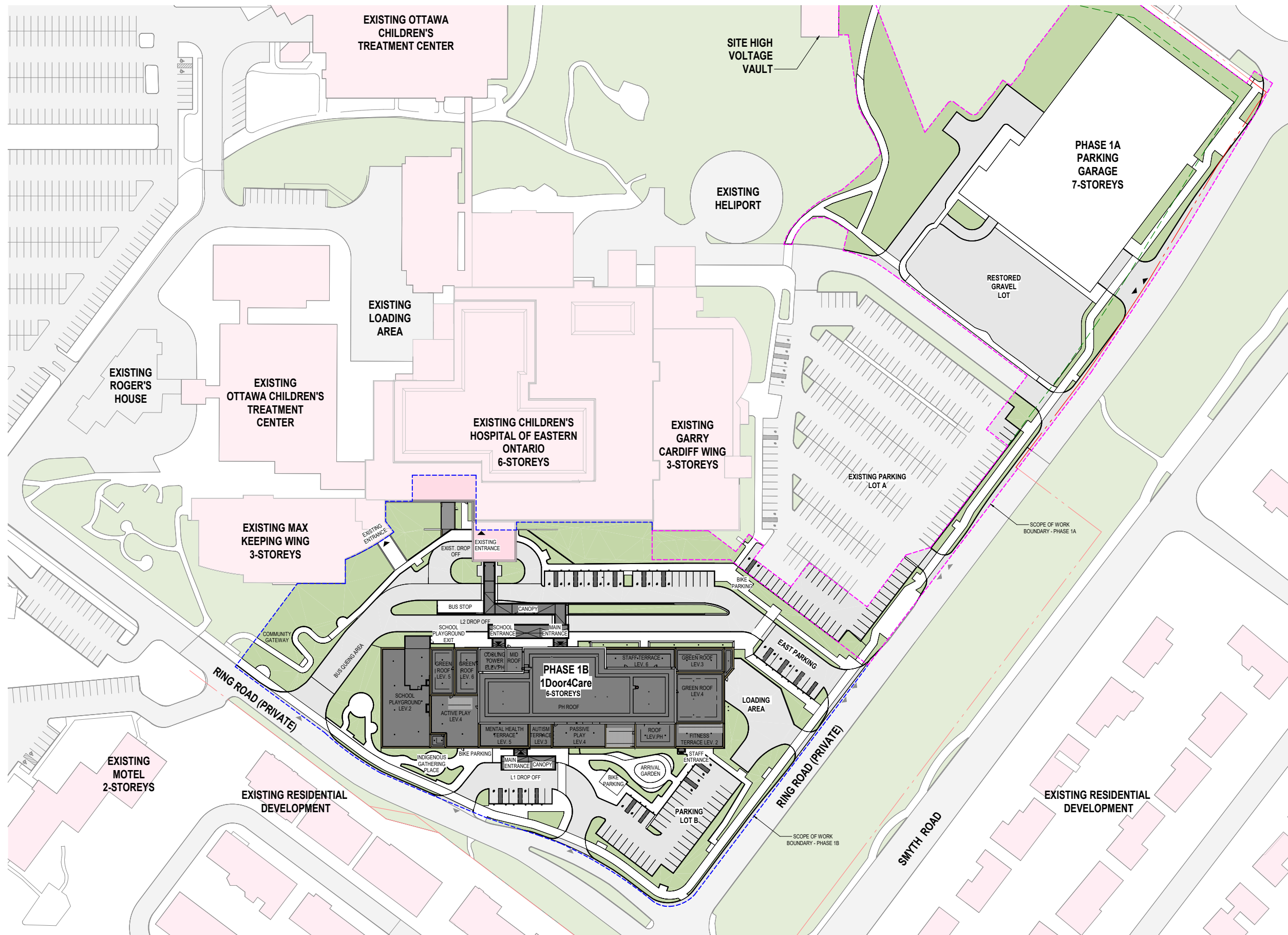
The site is located east of the Rideau River and is accessible by vehicle via Highway 417 and in close proximity to the Ottawa Train Station to the north. Primary vehicular access is provided via Hospital Link Road to the north and Smyth Road to the south. A multi-level parking garage accommodating 1,050 stalls serves both the existing CHEO facility and the new 1Door4Care building.

A multi-use path (pedestrian and bicycle) borders the northern, eastern, and part of the southern edges of the campus along Ring Road and leads to Lynda Lane Park. Pedestrian access is also provided via Ring Road to the west and Smyth Road to the south. The path connects the parking garage with the 1Door4Care building.

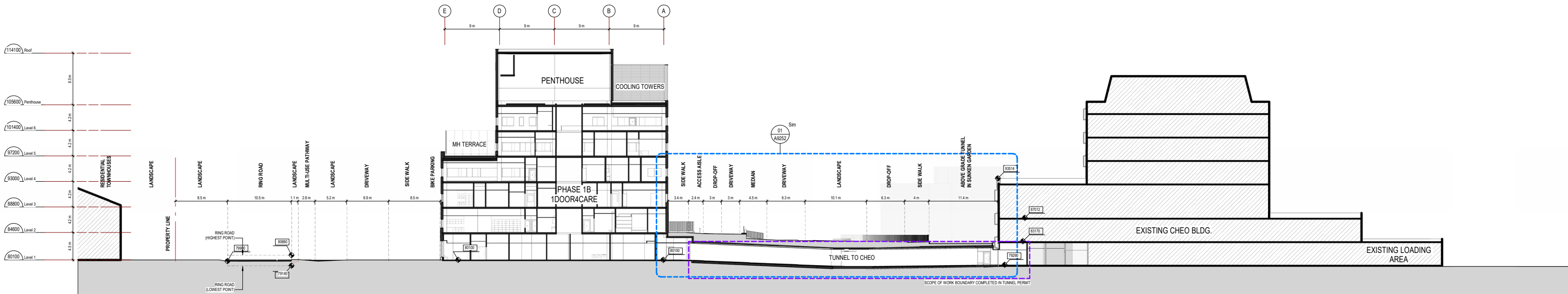
There are three (3) bus stops that serve CHEO, located along the multi-use path and sited in front of the above-ground parking lot, at the southern tip of parking lot A, and in the median tucked between the main entrance of CHEO and the proposed north entrance of the 1Door4Care building. The existing two-way access to the main CHEO entrance and Max Keeping Wing currently has bus stops and bus service in both directions. The new one-way access accommodates the bus stop and service in the eastbound direction. Westbound service can be accommodated by re-routing busses “around the block” along the south and west portions of Ring Road. Impacts to existing transit service will be coordinated with OC Transpo as part of the Phase 1B Site Plan process for the 1Door4Care building.



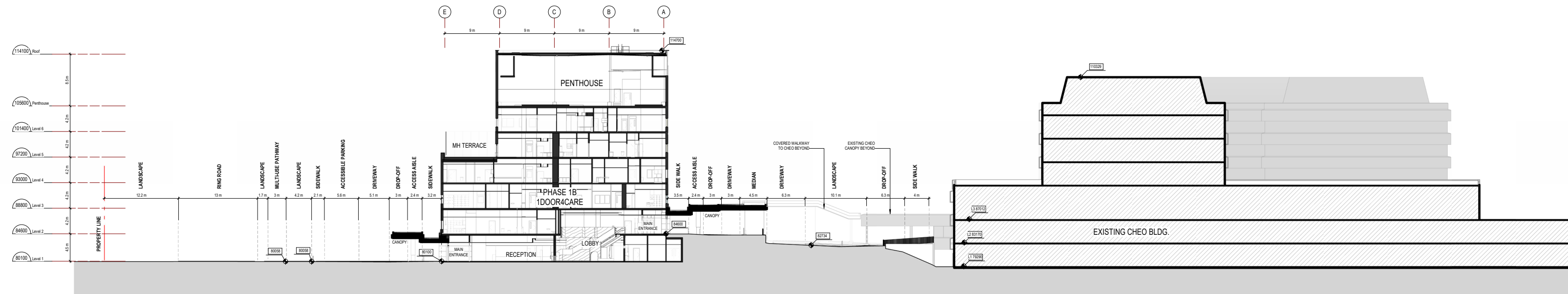
Bird's eye view of 1Door4Care from north-west



Site Plan



3 SITE SECTION NORTH-SOUTH AT TUNNEL BETWEEN 1DOOR4CARE & EXISTING CHEO
A0603 1: 250



2 SITE SECTION NORTH-SOUTH AT LEVEL 1 & 2 MAIN ENTRANCES
A0603 1: 250

Site Sections

4e. Sustainability, Parking, Accessibility, Wayfinding

Sustainability Measures In Site / Landscape Design

To encourage cycling, a dedicated secure bicycle parking area is located between Parking Lot B and the proposed new building, and short-term bike parking locations are connected to the multi-use path. The design offers a mix of secure weather-protected bicycle parking for staff and exterior short-term racks for visitors .

Maintaining Access: Emergency Department, Main Entrance, Flightpath And Helipad Access

The location of the 1Door4Care site does not impact existing emergency or helipad access. Emergency access, including ambulance access to the north of CHEO and helicopter access at the northeastern corner of CHEO, will be retained during the construction of the new parking garage and 1Door4Care building. The fire route will also be preserved during construction. The design will accommodate a detailed phasing approach that works to preserve access.

Parking Garage Site Development And Planning

A multi-level parking garage accommodating 1,050 stalls is located for the southeastern corner of the campus. A path with accessible rest areas provides pedestrians with a comfortable route from the Parking Garage to the 1Door4Care building. The design of the Parking Garage relates aesthetically to the overall building design extending the building's sense of welcome and warmth.



Phase 1A Parkade

Design For Accessibility

Facility arrival is supported with accessible paths of travel stemming from all arrival points, including drop-off zones, parking areas, pedestrian sidewalk access, and the local transit stop. To ensure independent movement and ease of access for all, these public and private sidewalks, pathways, and walkways are supported with designated rest areas at 30m intervals. Accessible parking stalls are distributed throughout the parking areas to provide both public and staff entries with accessible parking options and are located in proximity to these entries - ensuring walking distances are as short as possible.

Vehicle Separation

The site plan design ensures that pedestrian paths, particularly those at main entrances, exits, and emergency access locations, are clearly defined and separate from vehicular driveways. Pedestrian access is maintained at all existing CHEO entry and exit points and will remain during and after construction. A 3m multi-use path is provided along the north side of the southern section of Ring Road, as well as along the east side of the western section of Ring Road. The path connects all on-site long-term and short-term parking locations.

Three (3) bus stops offer easy access and strong connections to drop-off areas. The bus stops are located along the multi-use path and sited in front of the above-ground parking lot, at the southern tip of parking lot A, and in the median tucked between the main entrance of CHEO and the proposed north entrance of 1Door4Care. The north and south entrances of the 1Door4Care building lead to a central L1-L2 feature stair connection, offering intuitive wayfinding, orientation, and a sense of arrival for users.

School Bus Dropoff At 1Door4Care

The school bus pick-up/drop-off area has been designed to accommodate through traffic and the downstream parent pick-up/drop-off area. A designated bus queueing area is provided in addition to the bus pick-up/drop-off area to avoid any impact on the traffic flow along the north-south Ring Road.

Crime Prevention Through Environmental Design

The design of the 1Door4Care building follows Crime Prevention Through Environmental Design (“CPTED”) principles and avoids creating dark corners, and blind spots and allows for adequate cameras, lights and line of sight surveillance. Furthermore,

electronic security including, but not limited to, video surveillance and access control, have been strategically designed to provide the required level of security while attempting to maintain a welcoming and inviting atmosphere for staff, patients and visitors.

Clear Wayfinding

The existing CHEO’s main entrance is along the southern edge of the building, currently identifying the campus from Smyth Road. The new 1Door4Care building will provide a new front door visible from Smyth Road and, therefore, a new identity for the campus that exudes the vision and mission of CHEO. The building massing, with its cascading terraces, direct the view of those approaching the building from Smyth Road, via the ring road, to the main entrance’s drop-off canopy.



Ground view of 1Door4Care south elevation – approaching from Smyth Road

4f. Architectural Language And Identity

The building architectural language and site design is:

Timeless, to provide a design that endures and maintain relevance

Inclusive, making everyone feel welcome through the articulation of the accessible terraces and its transparency, particularly to the

waiting areas

Organic, biophilic and calming, maximizing opportunities for connections to outdoors, in spite of the small site area; inspired by nature, is design to improve the wellbeing of its occupants

Community centered, as it recognizes the multicultural mosaic of

1Door 4Care’s community, including the indigenous population, it also facilitates community integration with its shared outdoor spaces and welcoming and open lobby

Playful, with a design that is whimsical, including elements that amuse, inspire users to interact and applies standard elements in unexpected ways

4g. Landscape and Gardens

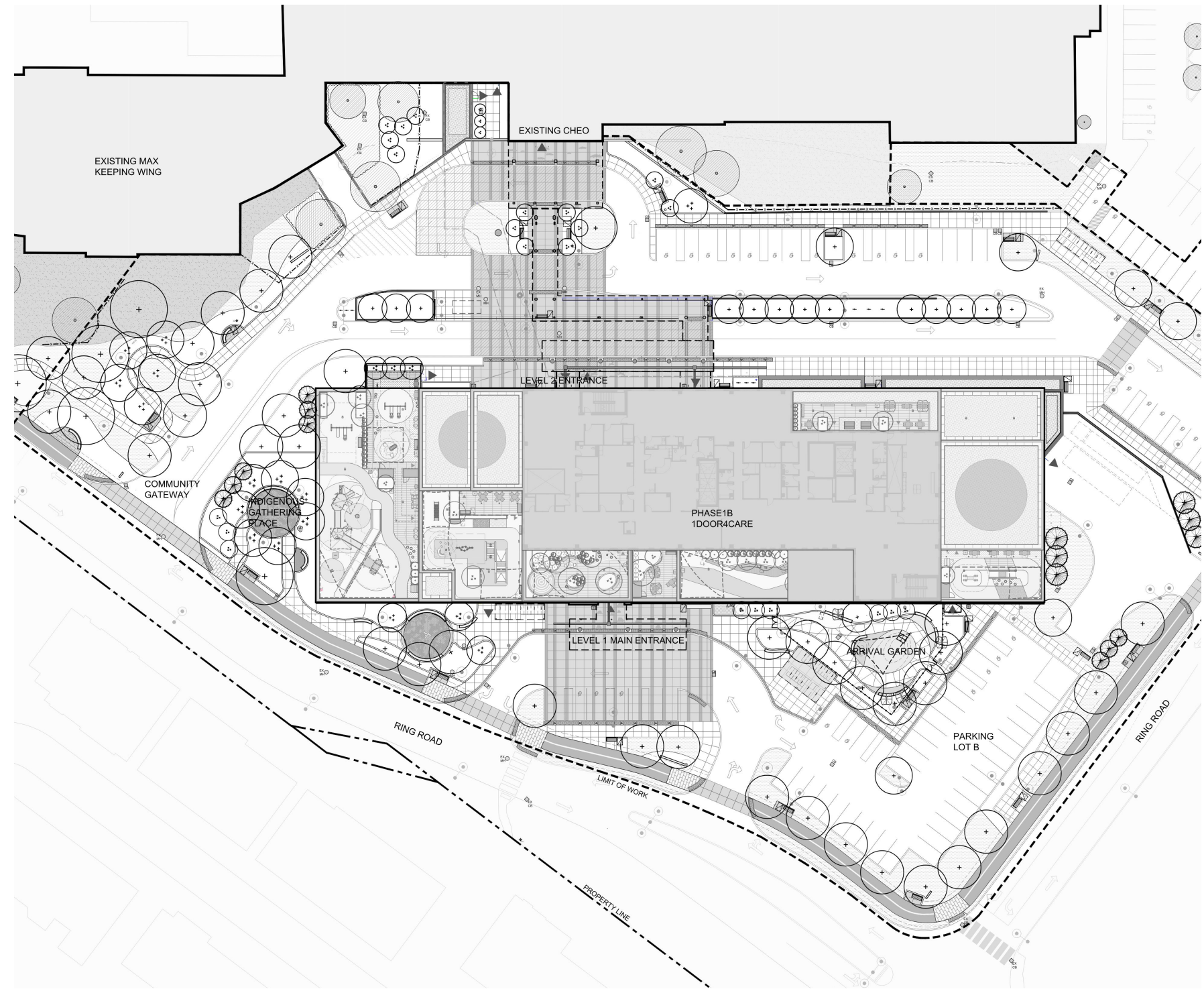
Landscape Design

Stewardship of Mother Earth is rooted in many North American Indigenous cultures as expressed through the concept known as **Planning for the Seventh Generation**. Through the use of sustainable practices, we aim to instill Indigenous Values throughout the site. We look to capitalize on the site context, including its indigenous vegetation, topography, and views that make this place unique and a ground for healing. We propose a sensitively designed landscape concept that is integrated with the existing natural and cultural context.

Our site falls within the Eastern Temperate Deciduous Forest region, which has the most diverse forest life in Ontario. The region includes many rare plants, mammals, birds, and insects that we hope to showcase on our site. Our landscaped spaces offer an opportunity for storytelling. Themes and motifs embedded in the landscape design can deepen our understanding of culture and place, highlighting the Algonquin Anishnabe Nation, including the Algonquins of Pikwakanagan and Kitigan Zibi Anishnabeg, and the many other indigenous communities who will be accessing the 1Door4Care CHEO Integrated Treatment Centre (“1Door4Care” or the “Project”).

Gardens and Therapeutic Play Areas

Children learn through play; therefore, the creation of a therapeutic play environment should provide for a range of activities while catering to multiple levels of ability. At CHEO’s 1Door4Care, treatment will take place outdoors in an engaging setting, which will assist in motivating kids to achieve their individual goals. The design of the landscape at 1Door4Care is based on the belief that exposure to nature, whether through views, or direct access to the outdoors, contributes to the healing and wellness of clients, their families, staff, and visitors. The cascading terraces, hosting the therapeutic and play areas as well as the school playgrounds, are clearly visible as one approaches the main entrance, providing a clear identity for the building as a healing place for children and youth



Landscape Site Plan

5 SITE PARAMETERS

Community Gateway

As you approach the site along the campus Ring Road, the Community Gateway will be the inviting, highly intuitive vehicular entrance to 1Door4Care and CHEO. A combination of arrival signage, planting, and unique site furnishings will welcome pedestrians, cyclists, and vehicles to the site. The parklike landscape on either side of the entry drive will provide a destination for clients, their families, and staff on breaks. An accessible walking route will connect the ring road to the existing CHEO entrance. Several opportunities for storytelling along the route allow clients, visitors, and the community to engage in learning. Interpretive signage at the designated rest stops could inform children of the indigenous forest species and their importance as habitats for specific animals.

Indigenous Gathering Place

Just west of the Level 1 Main Entrance is the main Indigenous Gathering Place. It is tucked into the landscape and enveloped at the north end by a terraced woodlot that features species native to the mixed deciduous forest, including birch, basswood, hackberry and cottonwood, which all have unique characteristics throughout the seasons to keep visitors, and especially kids, interested in learning. The paving at this main gathering space could be inspired by traditional Algonquin handicraft.

Enhanced Drop-Off (Level 2)

The Enhanced Drop-Off will be a playful, fun, and artistic landscape expression, visible from both CHEO and the new treatment centre. The Preschool and School Playground are also accessible from this drop-off. A variety of columnar trees will provide seasonal and visual interest to this busy drop-off. A continuous array of vertical elements set within the landscape will draw the attention of passers-by and delight children arriving at 1Door4Care or at CHEO. We are proposing to introduce a series of stylized water, land and sky animals that might be formed out of translucent resin in colours similar to the architectural guards that enclose the terraces.

Main Entry & Arrival Garden (Level 1)

As you approach the Level 1 building entrance, the secure Arrival Garden will be highly visible, featuring a sculptural playscape and ample planting. This will be a positive distraction for kids who may be nervous about their visit to 1Door4Care. We also imagine it as a popular destination for visiting siblings. An engaging accessible play area and an exciting misting station will act as the focal points within this space, surrounded by a series of sitting nooks.

Outdoor Accessible Playgrounds And Terraces

A number of therapeutic outdoor playgrounds and terraces have been developed to serve specific program requirements including:

Pre-School and School Playgrounds (L2)

The School and Preschool Playgrounds are located at the west side of the building adjacent to the School program area. The fun and exciting space features separate and distinct zones for Preschool Play (aged 2-4), and School Play (aged 5-12). The entire terrace is surrounded by a colourful transparent architectural guard.

Fitness Terrace (L2)

The Fitness Terrace is located at the southeast corner of Level 2. The terrace is adjacent to the interior multi-use gymnasium. A wheeling track for mobility aid training runs around the perimeter of the terrace. The ramp and landing, with handrails on both sides, are set in the centre of the main track providing a challenging shortcut for kids who might be racing their friends.

Autism Therapy Terrace (L3)

The Autism Therapy Terrace is located on Level 3 and is accessible from the autism program. The main play space on the east side is covered by the terrace above and includes a series of stepping pods with hand holds and a vertical Brocco play structure that has a compact fall zone.

Active Therapeutic Play Terrace (L4)

The Active Therapeutic Play Terrace is located adjacent to the indoor therapeutic programs of Development and Rehab, and provides several physical challenges for kids, including a wheeling

track, in an invigorating setting. A curvy rubberized wheeling track provides a looped circuit connecting a series of therapeutic play areas.

Passive Therapeutic Play Terrace (L4)

The Passive Therapeutic Play Terrace, located at the south side of Level 4, will act as an extension of the indoor therapeutic programs, providing flexible space for activities to be moved outside. An unencumbered open space at the west end will accommodate equipment and group therapy.

Mental Health Therapy Terrace (L5)

The Mental Health Therapy Terrace is located at the south side of Level 5. The curvilinear layout of the terrace will serve as a serene backdrop for the mental health program. This passive space includes safe comfortable seating and significant buffer planting to provide privacy for terrace users, as well as attractive views for those looking out from indoors.

Staff and Medical Staff Terrace (L6)

The Staff and Medical Staff Terrace is located to the northeast corner of Level 6. We appreciate the importance of having a dedicated outdoor space for staff where they can relax and socialize. The Staff Terrace will feature comfortable site furnishings for staff respite and lush planting away from the daily hustle of the facility.

A palette of durable, attractive hard and soft landscape materials, site furnishings and play equipment will be installed on each terrace to address program needs and provide an additional space for therapy to take place .



CHEO

1000MCARE