# FOSTERING CULTURAL DIVERSITY AND INCLUSIVITY

HOW ONE DISTRICT'S DESIGN PRINCIPLES SHAPE COMMUNITY AND THE PHYSICAL FRAMEWORK



thinkspace

# **AGENDA**

- 1. Introductions
- 2. Goal and origin of design guidelines
- 3. The Design Principles
- 4. SĆIANEW\_SŢEŁIŢĶEŁ context
- 5. Thinkspace's approach
- 6. Design outcomes
- 7. Thoughts + questions

# INTRODUCTIONS

**Pete Godau** 

Manager of Major Capital + Planning, School District No. 62 (Sooke)

- 40+ years in building maintenance & industrial, commercial, residential construction
- 20 years at SD62, part of team that has built
   10 schools / maintains 30 sites
- Currently overseeing delivery of South Langford Elementary School





# **SCHOOL DISTRICT #62 (SOOKE) OVERVIEW**



School District #62 acknowledges the traditional territories of the Coast Salish: T'Sou-ke Nation and Sc'ianew Nation and Nuu-chah-nulth: Pacheedaht Nation. We also recognize some of our schools reside on the traditional territory of the Esquimalt Nation and Songhees Nation.

- School District #62 (Sooke) (SD62) serves the Western Communities of the Capital Regional District, incl. Langford, Colwood, Sooke, Metchosin, Highlands.
- continued growth pattern that BC Statistics estimates with grow by 52% in next 20 years
- City of Langford leads that growth as the 3<sup>rd</sup> fastest growing community, per capita, in Canada
- City of Colwood and the District of Sooke also planning progressive development

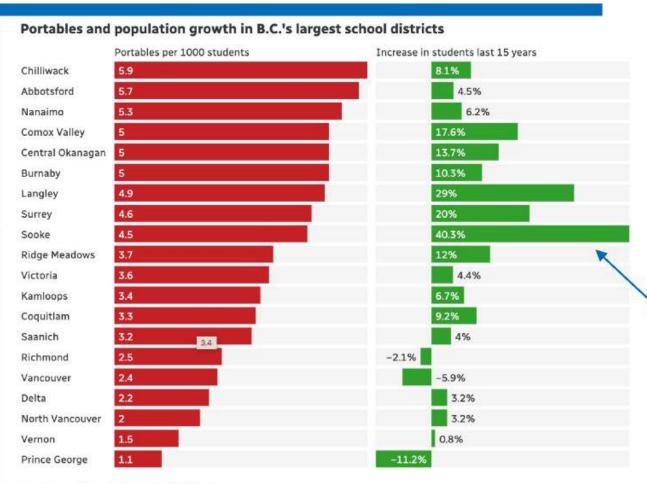
# **OVERVIEW - SD 62 CULTURAL DIVERSITY**



- ESL students make up 13% of the District's population
- 10% of students come from First Nations
- One of fastest growing school districts in British Columbia
- Cultural diversity and inclusivity is important and constantly evolving challenge

# **SD 62 - STUDENT NUMBERS**





SD 62

- 5% growth
- 112% capacity

### City of Langford

- 31.8% in five years
- Fastest growing in BC

 Largest increase in students in last 15 years

Numbers are based off of 2022/2023 data.

Justin McElroy/CBC News

# INTRODUCTIONS Pay Welfe Architect AIRC M

**Ray Wolfe**, Architect, AIBC, MRAIC Thinkspace Architecture Planning Interior Design Ltd.

- Partner and architect at Thinkspace
- Current President of British Columbia A4LE Chapter





ray.wolfe@thinkspace.ca



# THINKSPACE OVERVIEW We transform our clients' complex challenges into elegant solutions... 500+ completed K-12 projects Expertise in K-12 schools, healthcare, post-secondary, commercial + civic projects Projects in British Columbia, Alberta, Yukon, and California Offices in Surrey, Kelowna, Langford







# **SCHOOL DESIGN IN SOOKE**



- Guiding principles for school design in the District have been developed over time, are fluid
- Represent best practices for K-12 design / 21<sup>st</sup> century learning
- Goal is to design space that is flexible, non-structural environmental changes
- Education is shifting, so supporting students and educators with minimal disruption is important
- Operating resources are saved through review and then efficient designs

# **SCHOOL DESIGN IN SOOKE**



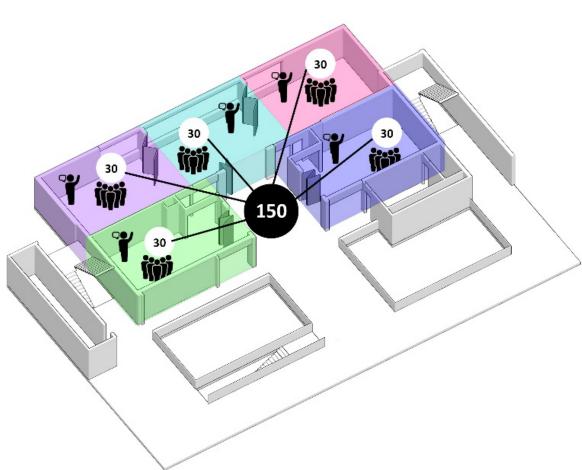
- Process started with monitoring + understanding challenges from previous builds; helped to drive guidelines
- When replacing aging Belmont Secondary, needed to design space to be flexible, and environment to welcoming and comfortable for all learners and educators
- Collaborated with Thinkspace more than a decade ago on that project
- Showed us through their design that they understood what we were looking for



# **SCHOOL DESIGN IN SOOKE**



- District wanted a school that included:
  - neighborhood learning areas with five classrooms
  - educator flex space for each neighborhood
  - student project areas in each neighborhood
  - classrooms that open up to each other
  - project areas to promote team teaching
- Understanding today's educator and today's learners was key to the principles
- Not a formalized spec / checklist
- Vision + Needs from PDR and project set the stage for South Langford Elementary







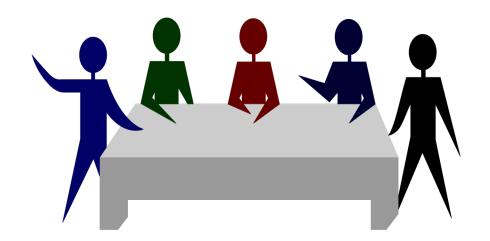




# **COMING UP WITH GUIDING PRINCIPLES**



- Was a process to get from Belmont to South Langford
- Needed to set parameters to manage predicted growth
- Supported by SD62 Board of Education's Strategic Plan goals of "Learning, Engagement, Growth"



- Design education from A4LE and Thinkspace helped SD62 better understand 21<sup>st</sup> century learning, how it needed to be incorporated into principles
- Understand that space has to be flexible to adjust as education changes over time

# COMING UP WITH GUIDING PRINCIPLES – CORE CONCEPTS



- Entrances and accessibility for all learners are clearly identified
- There is a large and open central space that is inviting and environmentally friendly
- Learning neighborhoods incorporated into all designs
- Each neighborhood is open, has collaborative space and learning support

# COMING UP WITH GUIDING PRINCIPLES – PROCESS



- Prior to gaining support for SĆIANEW\_STEŁITKEŁ, SD62 went through an extensive District Program Review
- Review recommended to further define design standards and guidelines
- District leadership and committees gathered information from other districts, as well as within the District
- Reviewed designs on new and existing buildings
- SD62 leadership consisting of principals, vice principals, managers, directors and executive met and discussed the best way to move forward

# COMING UP WITH GUIDING PRINCIPLES – PROCESS



- Committees were set up to review and set standards and philosophies
- Capital Educators responsible for gathering information, steering the process
- Created Capital Steering Committee to make suggestions and apply the principles
- Our guidelines and standards evolved from the education and design ideas we gained when designing Belmont
- Refined the principles on three projects leading up to starting the design of SĆIANEW\_STEŁITKEŁ

### BE SUPPORTIVE OF THE BOARD'S VISION, MISSION AND VALUES



#### **Vision**

 We honor student voice and choice through engaging, purposeful and experiential learning in a safe and respectful community.

#### Mission

 Our mission is to help develop informed, literate and resilient citizens through engagement in a safe, respectful, inclusive and responsive SD62 learning community.

#### **Values**

 Relationships, Choice, Respect, Integrity, Trust, Safety, Diversity, Equity



# **GUIDING PRINCIPLE #2**INCLUSIVE AND WELCOMING



- Welcoming landscaping leading to main entry
- Clearly defined and identified main entry, inviting and open to all
- SD62 territorial acknowledgement on display in main entry area
- Inclusive signage
- Open gathering spaces
- Accessibility standards over and above building code to create barrier-free environment
- Secure buildings and sites to ensure students and staff feel safe
- Consistent floor plans on all levels

### REPRESENTATIVE OF THE DIVERSE STUDENT AND STAFF POPULATIONS



- Small spaces for personal and cultural needs
- Gender neutral wash and change rooms
- Evidence of multiple languages reflecting our community



# REFLECTIVE OF OUR NATURAL SURROUNDINGS AND LOCAL INDIGENOUS CULTURES



- Planned in consultation with Indigenous nations
- Local Indigenous artists consulted for symbols / artwork
- Artwork / displays reflect staff and student diversity
- Natural local materials (wood, plant life, stone) connect building to the land
- Bright, engaging, connected spaces
- Greenery



# BUILT WITH THOUGHT TO THEIR SUSTAINABILITY AND ENVIRONMENTAL IMPACT

SOOKE 62 SCHOOLS 62 Shaping Tomorrow Today

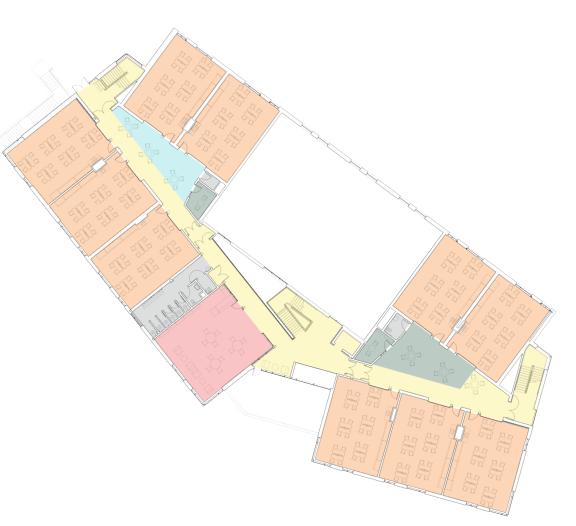
- Materials that are sustainable or minimize environmental impact; buildings are to be built equivalent to a LEED Gold standard
- Energy modelling done during planning process, and then in design
- Use local resources as much as possible; monitor delivery of resources to ensure that is kept to minimum
- Spaces designed to use local, natural elements as primary source



### FLEXIBLE, FUNCTIONAL, INNOVATIVE AND PRACTICAL



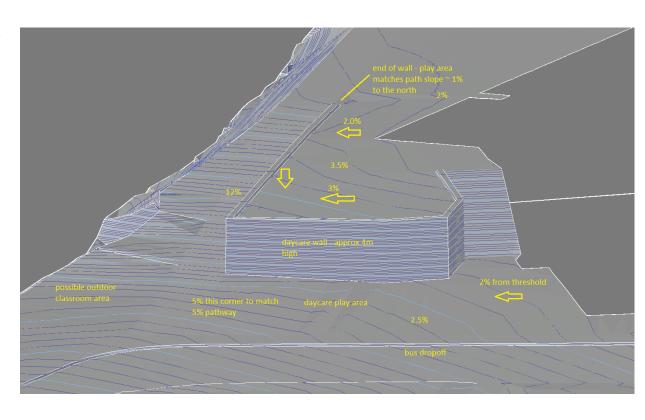
- Open spaces with clear sight lines
- Flexible rooms that allow for collaborative teaching and seamless transitions
- Storage spaces
- Covered play and learning spaces
- Multi-use areas for collaboration
- Common areas to support ease of movement and informal gathering
- Consideration of technology usage



# GUIDING PRINCIPLE #7 BUILT WITH THOUGHT TO PROVIDE SAFE AND HEALTHY SPACES



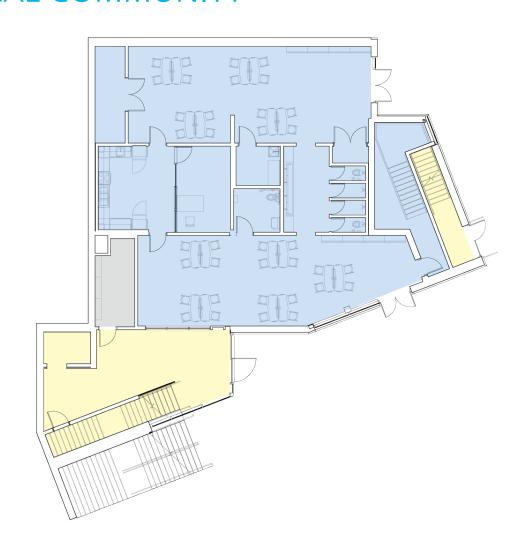
- Traffic and transportation management
- Safe building access
- Attention to sensory needs (quiet spaces, low light spaces, tactile environment)
- Natural surroundings, topography utilized in building design to ensure sites are accessible and safe to maneuver around
- Systems to provide comfortable environments where air quality can be easily managed and adjusted
- Buildings and sites with acceptable lighting levels for all seasons

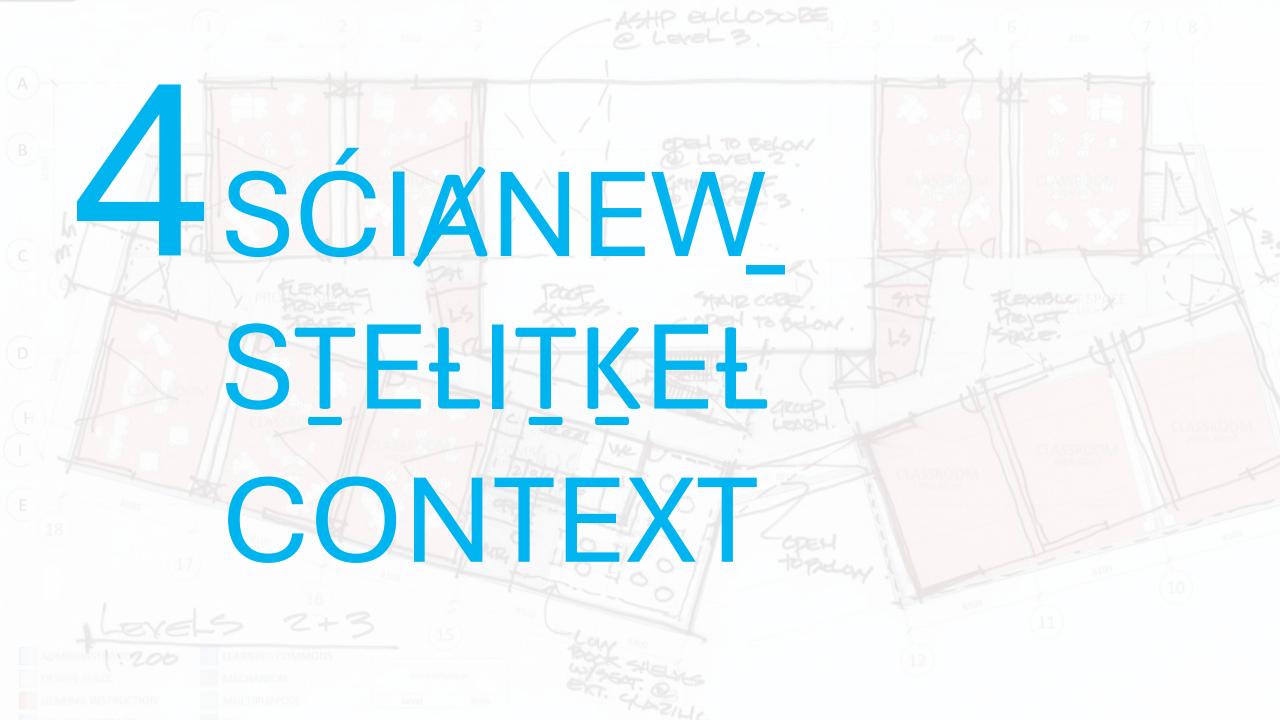




# TO MAXIMIZE PARTNERSHIP OPPORTUNITIES THAT REFLECT MUTUAL INTEREST IN PUBLIC EDUCATION AND THE SOCIAL, ECONOMIC AND ENVIRONMENTAL WELLBEING OF THE LOCAL COMMUNITY

- Multiple uses to support school and community
- Collaborate and maximize public funds in development of community resources





# SCIANEW STEŁITKEŁ PRONUNCIATION

SCIANEW STELITKEL ELEMENTARY SCHOOL

SENCOTEN

PRONUNCIATION

ELDER AND SENCOTEN TEACHER LAVINA CHARLES



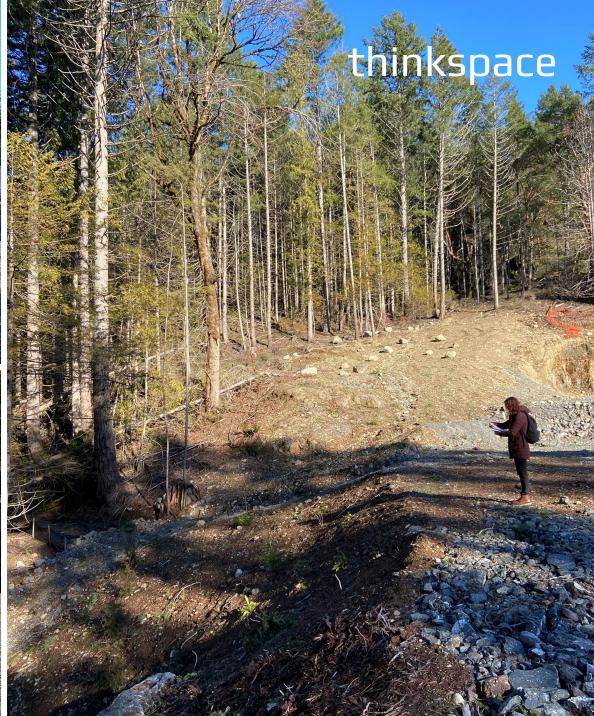












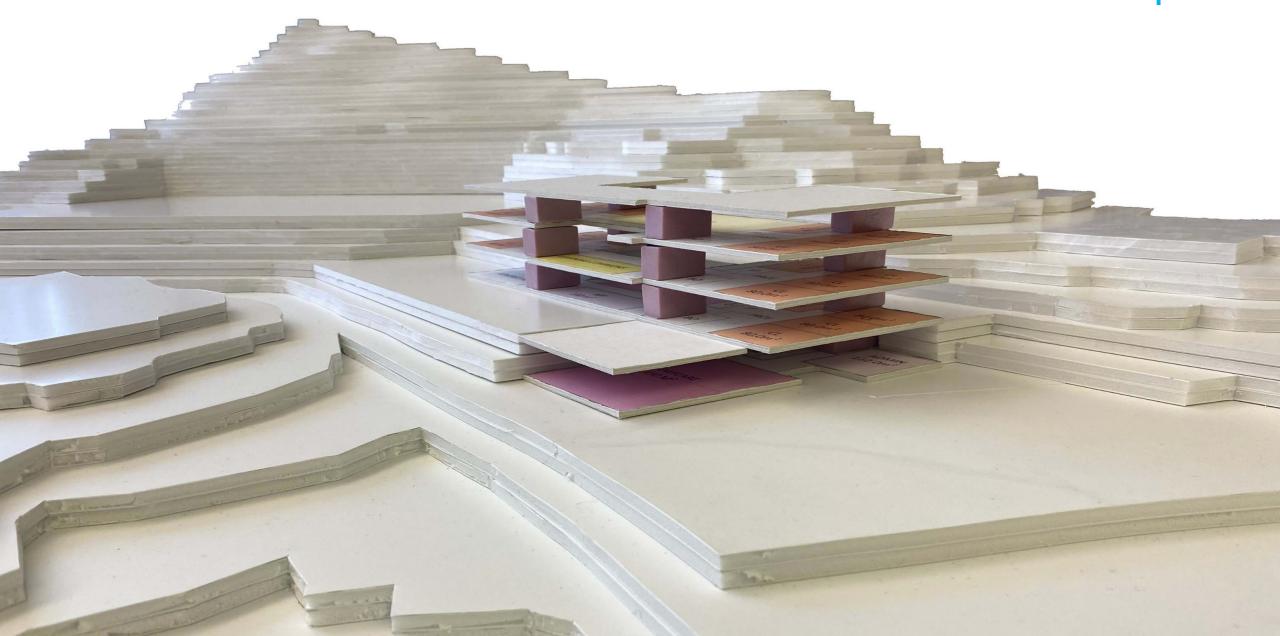


## SCIANEW STEŁITKEŁ BY THE NUMBERS

- Four storeys of mass timber @ 4,178 sq m / 44,972 sq ft
- Four kindergarten spaces and 16 classrooms
- 480 Grade 1 to 5 / 80 kindergarten students
- Site size 2.14 HA / 5.3 ac
- Site slope 15m / 45'
- Construction budget \$40 million CAD
- Completion date summer 2025

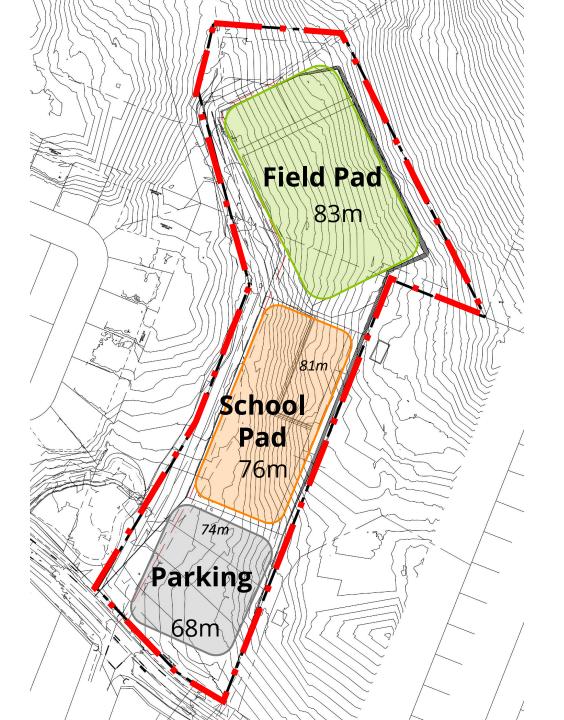


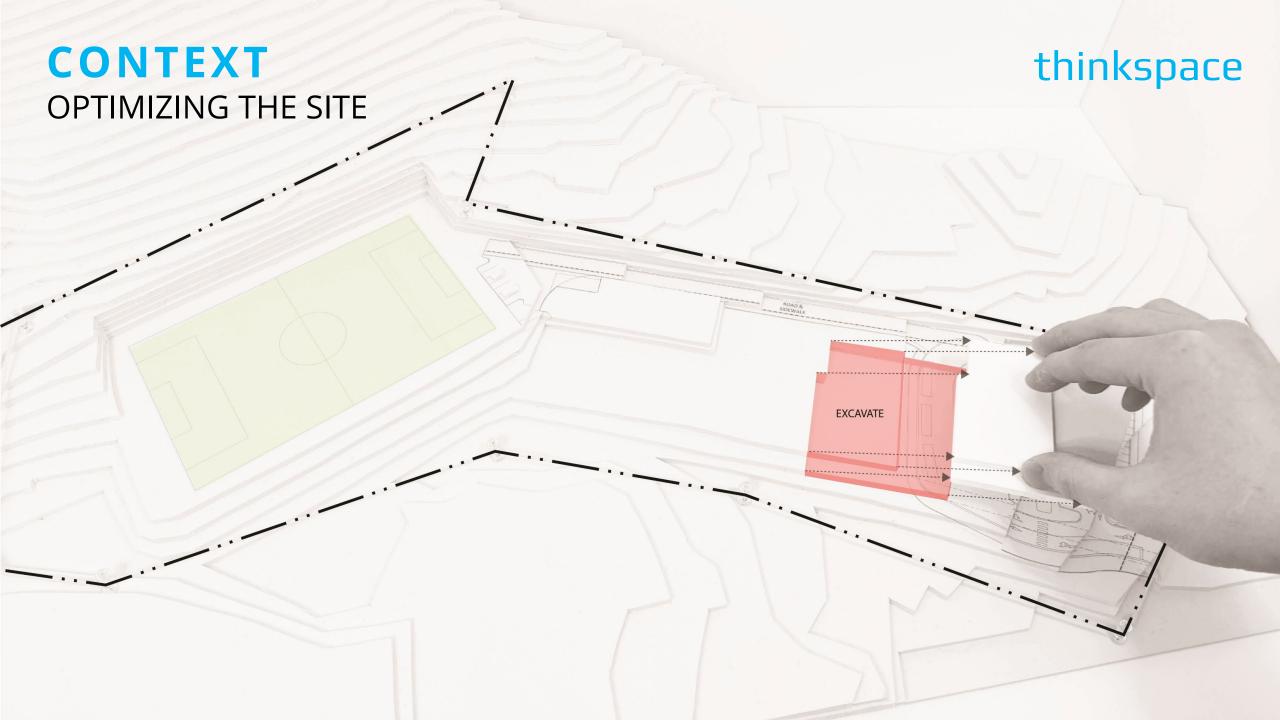
### **VISION AND NEEDS**

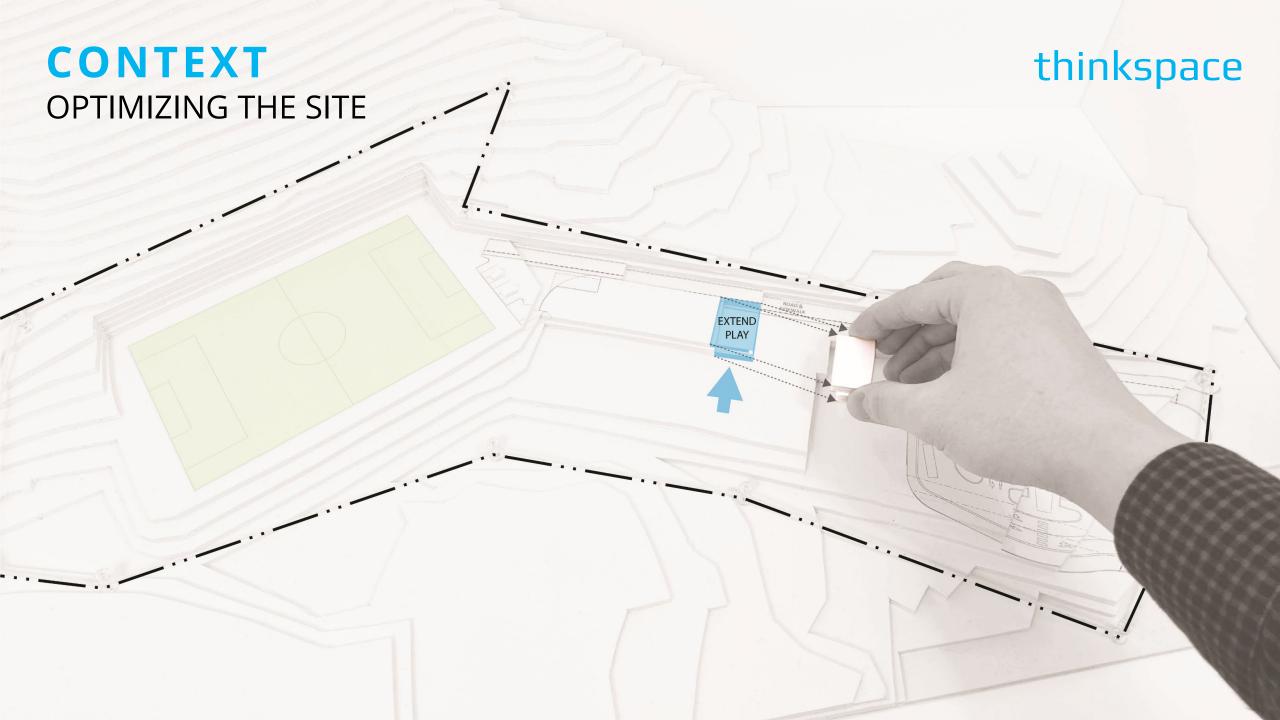


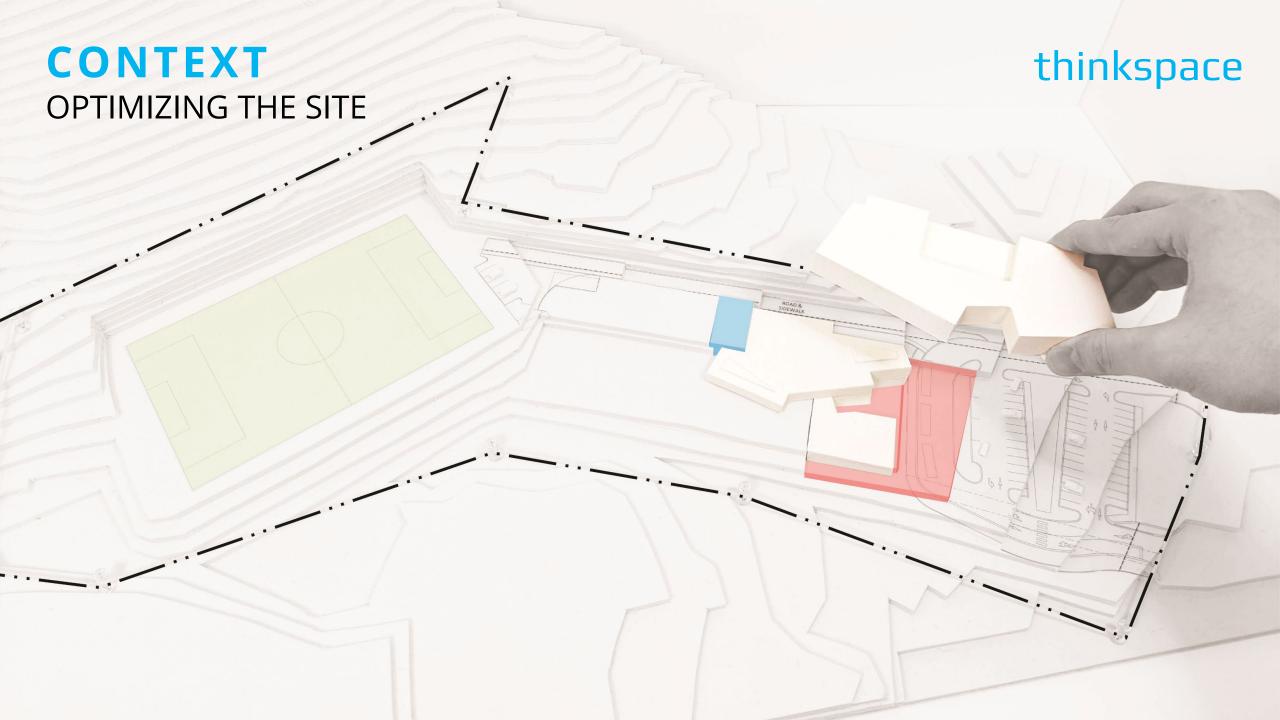
#### **CONTEXT**

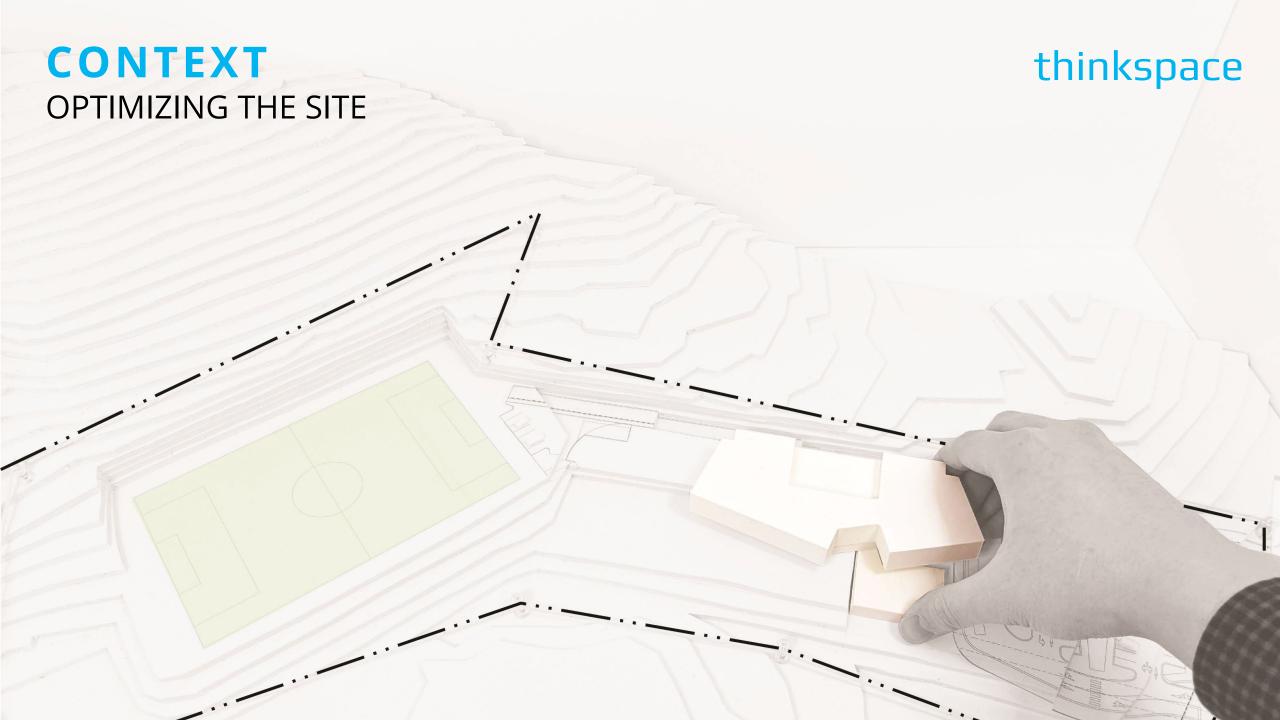
**ESTABLISHED PADS** 







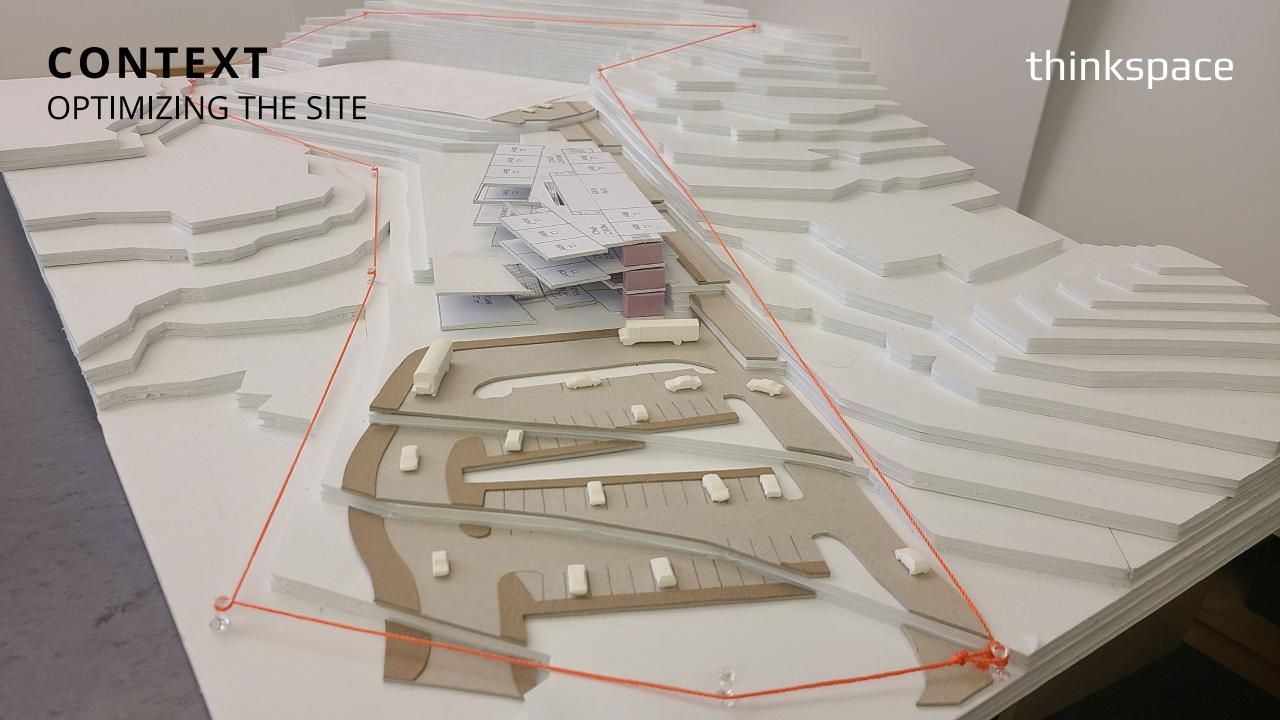








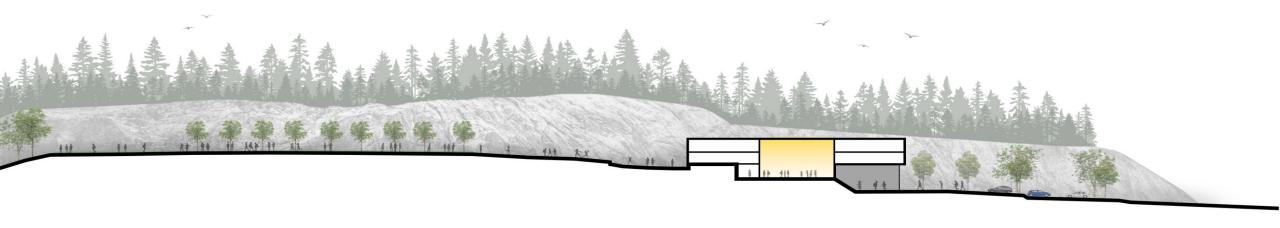




#### **CONTEXT**

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#### **OPTIMIZING THE SITE**





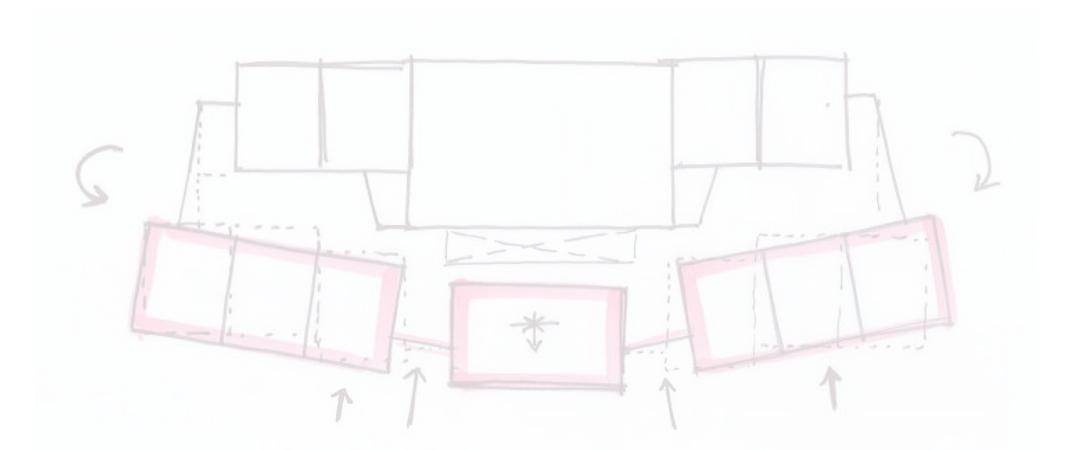




Provide a shared center | Foster a sense of community | Equality for all | Access to views and daylighting | Connection between inside and outside | Maximize play areas

SD 62'S NEEDS

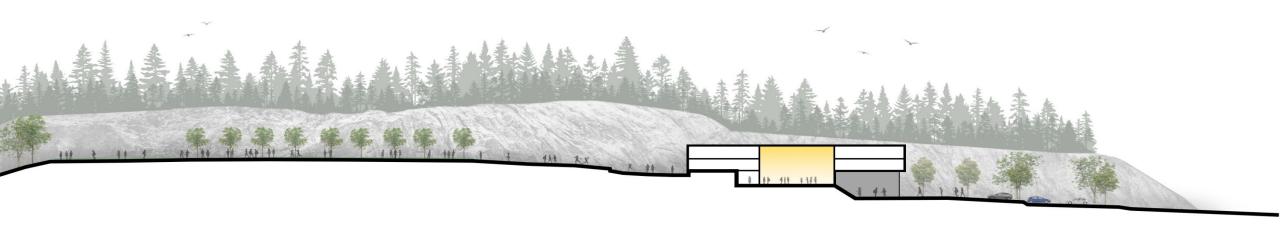
Provide **four kindergarten** spaces and **16 classrooms** | Provide **daycare** space | Provide access to **outdoor play** spaces | Provide **natural play area** | Incorporate **natural colours** | Supervision | No hidden corners



# SAFE AND HEALTHY SPACES, REFLECTIVE OF NATURAL SURROUNDINGS

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Traffic management | Safe building access | Natural surroundings and topography are utilized in building design to ensure sites are accessible and safe to maneuver around | Supervision from the office area directly to the play areas | Accessible play field throughout | Attention to sensory needs (quiet spaces, low light spaces, tactile environment) | Design buildings and sites to have acceptable lighting levels for all seasons



#### REFLECTIVE OF NATURAL SURROUNDINGS

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 façade is an articulation of the light that filters through the gaps between the trees in a forest





#### LANDSCAPE DESIGN

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#### Playfield | Nature / adventure play | Outdoor teaching space | Asphalt & children's garden

#### 1. Nature Play

#### Spatial Relationships:

- Adjacent to play field (fence required for ball control)
- Far from building (less supervision)
- Within perimeter fence

#### Design intent:

- Simple nature play space with river rock, logs and natural area
- Log terracing to decrease slope
- At-grade, timber frame stairs connecting to adjacent communities

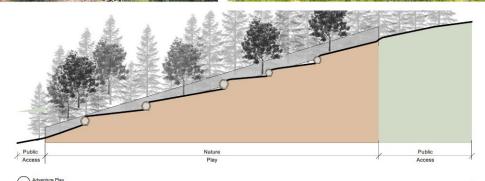
#### Requirements:

- Close attention to safety fencing and restricted access to upper
- Low maintenance plantings
- Trail connections









#### 2. Adventure Play

#### **Spatial Relationships:**

- Views toward green space and creek
- Retaining wall at back of slope
- Stairs and ramp leading to play field

- Quirky adventure play space build on the slope
- Combination of sloped and flat play
- Sloped areas=climbing walls, rock and log climbers, slides
- Flat areas=river rocks and open running space
- Wood chip on flat sections with resilient surfacing at base of sloped play
- Mounds/tunnels/bridges at top of play area
- Mural along concrete retaining wall with children's art sections

- Close attention to safety
- Low maintenance plantings

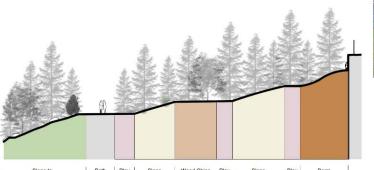








SLOPE PLAY



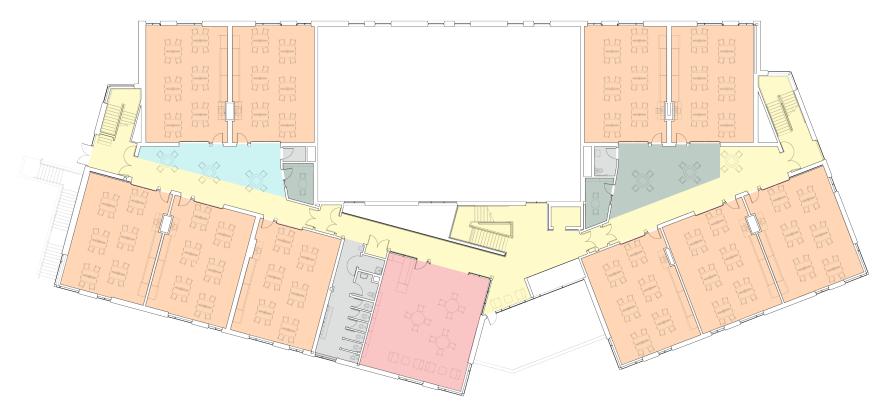


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# FLEXIBLE, FUNCTIONAL, INNOVATIVE AND PRACTICAL

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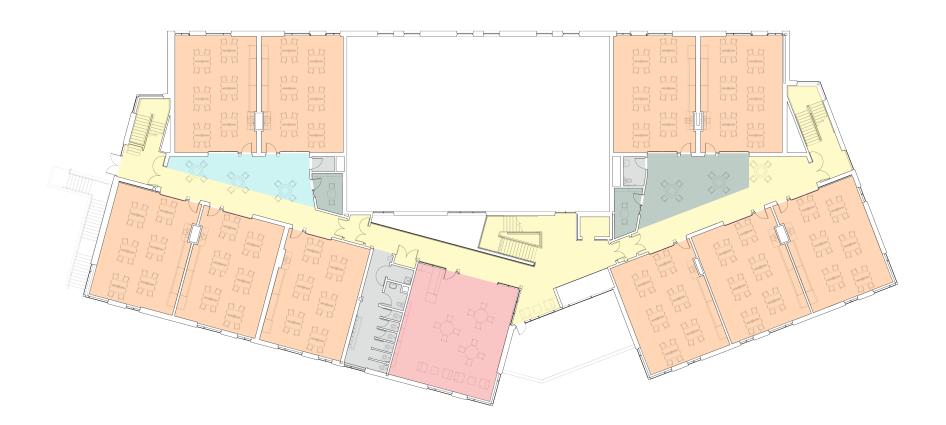
Classrooms are equal and identical to allow seamless transition between rooms | All classrooms include sliding glass doors, with central design space that can be shared amongst the adjoining classrooms | Floor plates are stacked on level 02 and 03 for ease of construction | Multi-use areas for collaboration | Common areas support ease of movement + informal gathering



# REPRESENTATIVE OF DIVERSE STUDENT & STAFF POPULATIONS

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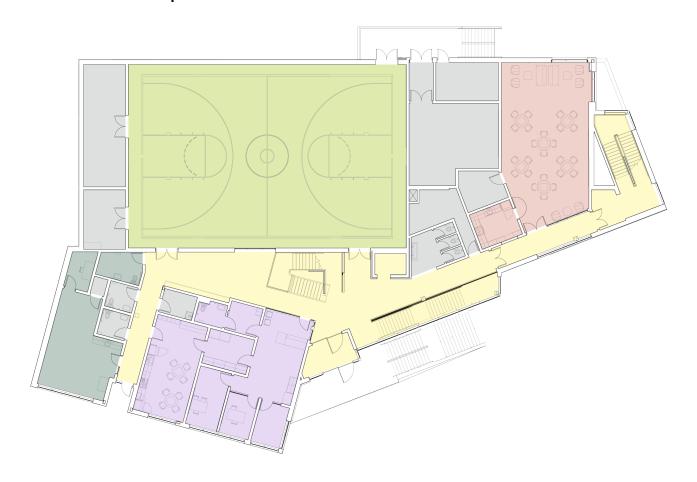
Allow students to collaborate and learn in various environments that suit them best | Fully barrier-free / accessible facility, including outdoor spaces | Gender-neutral washrooms



# REPRESENTATIVE OF DIVERSE STUDENT & STAFF POPULATIONS

### thinkspace

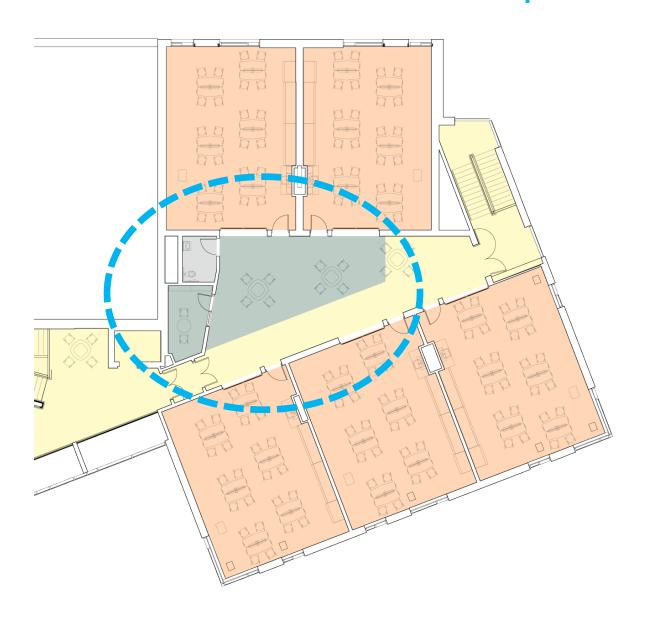
21st century learning concept / neighborhoods of **150 students** | **Moveable, flexible** and open concept spaces | **Center of the school** acts as heart | **Connects all areas** with classrooms located at the upper two levels | Acts as the treehouse itself



#### **SAFE AND HEALTHY SPACES**

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No hidden corners | **Operable windows** in all classrooms allow **natural ventilation** in warmer months | **Learning support spaces** incorporated into classroom wings









#### **PURPOSE AND CONNECTIVITY**

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Grow thru time | Branches reach out from the trunk | Always come back to the heart



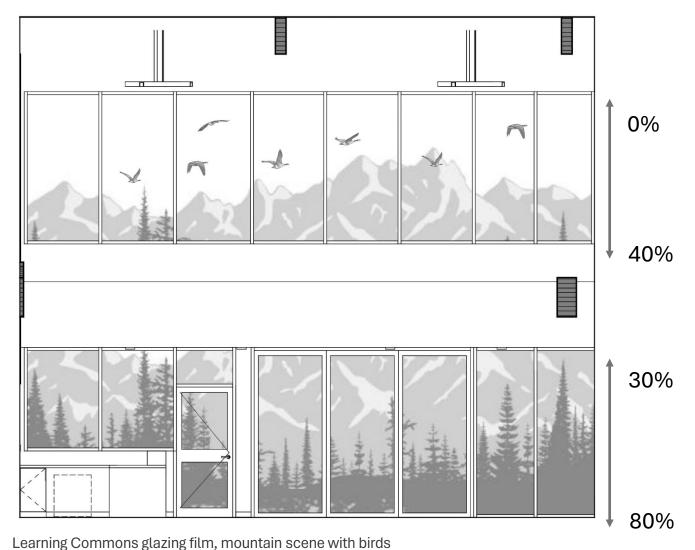




#### REFLECTIVE OF NATURAL SURROUNDINGS

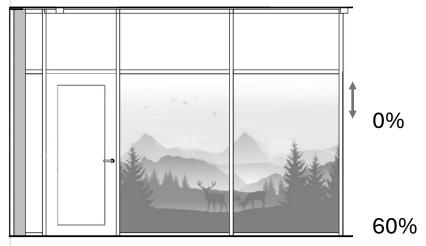
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#### Interior glazing

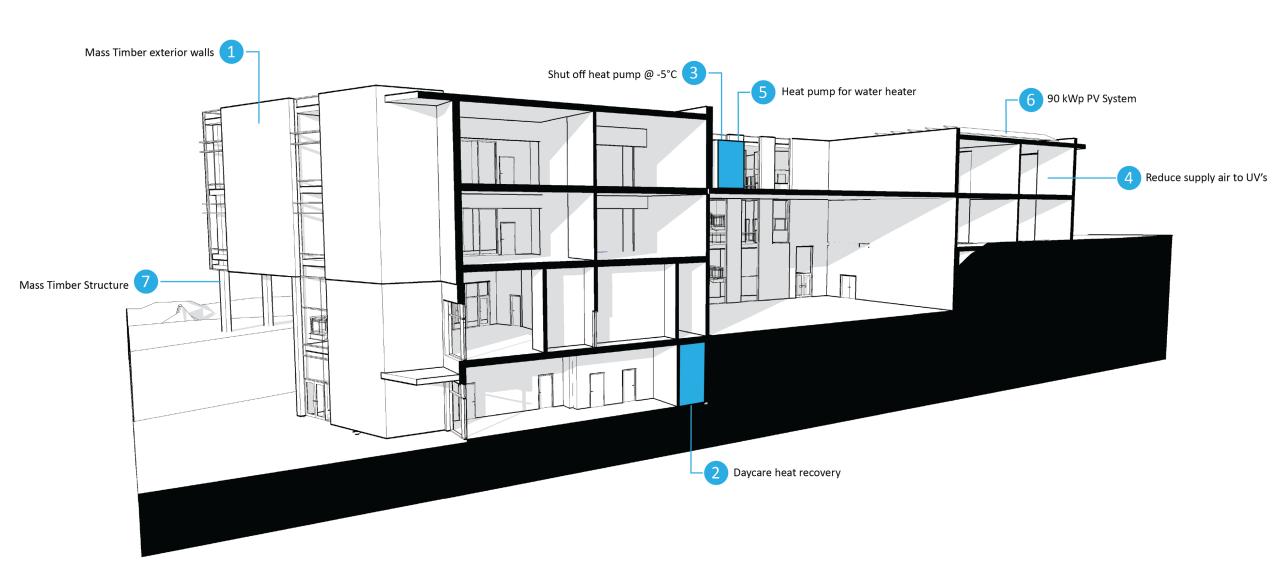


0%

Multi-purpose Room Glazing Film, Ocean Waves



General office glazing film, mountain scene with woodland animals



Mass timber construction is renewable, more sustainable than other construction methods | Supports the local economy in British Columbia | Embodied carbon reduction



Building produces **2.75 times less GHG emissions** than a similar building using conventional construction | **64% of site energy requirements** are achieved **on site** thru renewable energy sources / photovoltaic panels | building uses **60% less energy** than a similar building using conventional construction | **southwest facing windows** allow for maximum solar gain

#### thinkspace



#### **CARBON PROFILE**

YEAR STUDY PERIOD

TOTAL EMISSIONS

<u>3100</u>

STORAGE+AVOIDED

**2300** 



**482** 

96 DEBATIO 554 LIFE CYCLE



Stacking is essential for success | Mass timber layout can accommodate teaching methodology | Supports environmental causes + local economy | Flexible spaces / biophilic qualities | Lower embodied carbon

