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*A Landscape of Intergenerational Living*

by

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## ***Author's Declaration***

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.



## *Abstract*

Ontario is experiencing a demographic shift as a significant proportion of its demographic ages. Over the next twenty years it is estimated that the number of seniors aged 65 and above will double.<sup>1</sup> For small urban centres such as Sarnia, a city in Southwestern Ontario, the shift has been increased by the decline in the population of youth. This has led to a change in the city's urban fabric as multiple schools close and consolidate while proposals of retirement residences across the region begin to proliferate. The closures have left a gap in public infrastructure as places that once facilitated social and community engagement are left vacant and, their communal benefit lost.

This thesis proposes a plan for the revitalization of a secondary school in the heart of the city that is soon to be vacated. Mixed senior and public units dispersed around a community hub would facilitate social and visual stimulus while offering the potential of intergenerational collaboration and interaction.

Age can be subjective; it does not account for the exact mental, physical or emotional state of a human being. Intergenerational mixing in living and community is important to prevent the societal norm of systematically separating generations and benefits all. A typology of living needs to be created to allow for fluid interactions between generations and prevent isolation that can cause quicker degradation of the mind and body. The project creates a landscape in which residents can find agency to view and participate in different aspects of the city's ecosystem. This is to allow for the embodiment of a life lived, the new possibilities of a societal role and the potential for a rewarding, stimulating and culturally rich relationship between all generations acting within the holarchy.

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<sup>1</sup> Ontario Ministry of Finance, *Ontario Population Projections Update 2017-2041*. Queen's Printer for Ontario,[2018].



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## ***Table of Contents***

<i>iii</i>	<i>Author's Declaration</i>
<i>v</i>	<i>Abstract</i>
<i>vii</i>	<i>Acknowledgments</i>
<i>x</i>	<i>List of Figures</i>
<b>1</b>	<b>Introduction</b>
<b>5</b>	<b>Part One: Story</b>
6	The Uniqueness of Story
8	The Nurse
12	The Businessman and Teacher
16	The Free Spirit
21	The Sailor
<b>27</b>	<b>Part Two: Age</b>
28	Knowledge, Wisdom and Interface
31	Generational Interface
36	Generalization and Uniform Fate
38	Perception of Age
41	Typologies and the Invisible Line
44	Demographic Shifts



49	<b>Part Three: Infrastructure</b>
51	Site and Urban Context
60	Suburban Dream
62	Sarnia Collegiate Institute and Technical School
70	Loss of Infrastructure
75	<b>Part Four: Design Proposal</b>
76	SCITS Building Demolition and Retention
82	Design Proposal
95	Landscape Design
100	Programmatic Design
102	Circulation
106	Public Programming
116	Unit Plans
118	Residential Streetscape
122	Degrees of Social Separation
126	Collaborative Ownership and Service
128	Structure
130	Community Presence
136	<b>Conclusion</b>
138	<b>Bibliography</b>

## List of Figures

### Part 1

- 04 **Fig 1.01** *Two Generations Walking Together*  
Photo by Chloe Steeper
- 09 **Fig 1.02** *Bethany Manor Retirement Home, a part of the Bethany Lodge Community*  
Retrieved from Google Maps
- 09 **Fig 1.03** *Couple's Retirement Suite*  
Photo by Author
- 13 **Fig 1.04** *Entertaining Friends*  
Photo by Author
- 13 **Fig 1.05** *Brick House*  
Photo by Author
- 17 **Fig 1.06** *Lynde Creek Manor*  
Image from,  
<https://glosassociates.com/wp-content/uploads/Retirement-Residence-Brochure.pdf>
- 17 **Fig 1.07** *Lynde Creek Manor One Bedroom Suite*  
Photo from,  
<https://www.espritlifestyle.com/locations/lynde-creek-manor/>
- 23 **Fig 1.08** *Sailor's Suite*  
Photo by Christine Abbott
- 23 **Fig 1.09** *Landmark Village Retirement Home*  
Photo by Author
- 24 **Fig 1.10** *Wife of Sailor's Room*  
Photo by Christine Abbott

### Part 2

- 32 **Fig 2.01** *Male Social Relationships and Health*  
Graph from, Social Relationships and Health pg 540
- 32 **Fig 2.02** *Female Social Relationships and Health*  
Graph from, Social Relationships and Health pg 543
- 35 **Fig 2.03** *Experience Corps Hypothesized Pathways Diagram*  
Diagram from, *A Social Model for Health Promotion for an Aging Population: Initial Evidence on the Experience Corps Model* pg 66
- 36 **Fig 2.04** *Simplified Abstract of Human Timeline*  
By Author  
Data Source, Statistics Canada
- 38 **Fig 2.05** *Chart of societal responses to aging from the book*  
Chart from, *Valuing Older People*
- 42 **Fig 2.06** *Concept Diagram of Typical Suburban Assisted Living Residence*  
Diagram from, Perkins Eastman
- 43 **Fig 2.07** *Four Typologies of Retirement Homes*  
By Author
- 45 **Fig 2.08** *World Population Projection for People Age Sixty Plus*  
Chart from, United Nations

- 46 **Fig 2.09** *Age Pyramid of Ontario's Population 2016 and 2041*  
Diagram from, Ontario Population Projections Update 2017-2041
- 46 **Fig 2.10** *Proportion of Population aged 0-14, 15-64, 65+ in Ontario, 1971 to 2041*  
Diagram from, Ontario Population Projections Update 2017-2041
- 47 **Fig 2.11** *Population Growth | Decline by Census Division over 2016 to 2041*  
Illustrated by Author  
Map from, Ontario Population Projections Update 2017-2041
- 47 **Fig 2.12** *Share of Seniors in Population by Census Division in 2041*  
Illustrated by Author  
Map from, Ontario Population Projections Update 2017-2041
- 03 **Fig 2.13** *Growth | Decline in number of children aged 0-14 by census division, 2016 to 2041*  
Illustrated by Author  
Map from, Ontario Population Projections Update 2017-2041
- 03 **Fig 2.14** *Growth in number of Seniors by Census Division over 2016 to 2041*  
Illustrated by Author  
Map from, Ontario Population Projections Update 2017-2041

### Part 3

- 50 **Fig 3.01** *Sarnia Aerial Map*  
Retrieved from Google Maps
- 51 **Fig 3.02** *Sarnia Contextual Diagram*  
By Author  
Image from Google Maps  
Data Source, [https://files.ontario.ca/sawo\\_map\\_en.pdf](https://files.ontario.ca/sawo_map_en.pdf)
- 52 **Fig 3.03** *Industry Along St. Clair River*  
Photo by Author
- 52 **Fig 3.04** *Downtown Sarnia*  
Photo by Author
- 52 **Fig 3.05** *Canatara Beach Park*  
Photo by Author
- 52 **Fig 3.06** *Bluewater Bridge*  
Photo by Author
- 53 **Fig 3.07** *Downtown High-Rise Apartments*  
Photo by Author
- 53 **Fig 3.08** *Typical Sarnia Housing*  
Photo by Author
- 53 **Fig 3.09** *Port of Sarnia*  
Photo by Author
- 53 **Fig 3.10** *Downtown Sarnia*  
Photo by Author
- 55 **Fig 3.11** *Housing Price Diagram*  
By Author  
Data Source,  
<https://sarnialambtonlistings.com/sellersandbuyers/sarnia-neighbourhoods>

56	<b>Fig 3.12</b>	<i>Sarnia Dwelling Types Diagram</i> By Author Data Source, Statistics Canada
57	<b>Fig 3.13</b>	<i>Low Density Housing Diagram</i> By Author
59	<b>Fig 3.14</b>	<i>Zoning Map</i> Data Source, Lampton County GIS
61	<b>Fig 3.15</b>	<i>Suburban Housing Space Diagrams</i> By Author
63	<b>Fig 3.16</b>	<i>SCITS North Face</i> Photo by Author
63	<b>Fig 3.17</b>	<i>SCITS Theatre</i> Photo by Author
63	<b>Fig 3.18</b>	<i>SCITS Typical Classroom</i> Photo by Author
63	<b>Fig 3.19</b>	<i>SCITS Swimming Pool</i> Photo by Author
64	<b>Fig 3.20</b>	<i>SCITS Side Entrance</i> Photo by Author
64	<b>Fig 3.21</b>	<i>SCITS Gymnasium</i> Photo by Author
65	<b>Fig 3.22</b>	<i>SCITS South Face</i> Photo by Author
65	<b>Fig 3.23</b>	<i>SCITS Typical Hallway</i> Photo by Author
66	<b>Fig 3.24</b>	<i>SCITS Aerial Site Image</i> Photo from Google Maps
68	<b>Fig 3.25</b>	<i>Contextual Site Map</i> By Author
70	<b>Fig 3.26</b>	<i>Devine Street School</i> Photo by Glenn Ogilvie, <a href="https://thesarniajournal.ca/seniors-complex-planned-for-devine-street-school-lands/">https://thesarniajournal.ca/seniors-complex-planned-for-devine-street-school-lands/</a>
73	<b>Fig 3.27</b>	<i>Walking Distance to Public High Schools no SCITS</i> Data Source: National Road Network, Resource Canada, Save SCITS documentation PDF, accessed 2018
73	<b>Fig 3.28</b>	<i>Walking Distance to Public High Schools with SCITS</i> Data Source: National Road Network, Resource Canada, Save SCITS documentation PDF, accessed 2018
<b>Part 4</b>		
77	<b>Fig 4.01</b>	<i>Existing SCITS Floor Plans</i> By Author. Source Plans from, Great Lakes Secondary School Administration 2018
78	<b>Fig 4.02</b>	<i>Existing SCITS Demolition Site Aerial</i> By Author. Background Photo from Google Maps

80	<b>Fig 4.03</b>	<i>North-East Design Proposal Aerial</i> By Author
83	<b>Fig 4.04</b>	<i>Ground Floor Site Plan</i> By Author
84	<b>Fig 4.05</b>	<i>Basement Floor Plan</i> By Author
86	<b>Fig 4.06</b>	<i>Ground Floor Plan</i> By Author
88	<b>Fig 4.07</b>	<i>Second Floor Plan</i> By Author
90	<b>Fig 4.08</b>	<i>Third Floor Plan</i> By Author
92	<b>Fig 4.09</b>	<i>Fourth Floor Plan</i> By Author
94	<b>Fig 4.10</b>	<i>South-East Aerial Perspective</i> By Author
97	<b>Fig 4.11</b>	<i>Ground Floor Landscape Plan</i> By Author
98	<b>Fig 4.12</b>	<i>Walking and Skating Path Perspective</i> By Author
101	<b>Fig 4.13</b>	<i>Exploded Program Axonometric</i> By Author
103	<b>Fig 4.14</b>	<i>Exploded Circulation Axonometric</i> By Author
105	<b>Fig 4.15</b>	<i>Ground Floor Circulation Patterns</i> By Author
106	<b>Fig 4.16</b>	<i>Community Garden Perspective</i> By Author
107	<b>Fig 4.17</b>	<i>Daycare Perspective</i> By Author
107	<b>Fig 4.18</b>	<i>Swimming Pool Perspective</i> By Author
108	<b>Fig 4.19</b>	<i>North-South Section A Perspective</i> By Author
109	<b>Fig 4.20</b>	<i>Theatre Lobby Perspective</i> By Author
110	<b>Fig 4.21</b>	<i>East-West Section B Perspective</i> By Author
112	<b>Fig 4.22</b>	<i>Ground and Second Floor Sight Line Plans</i> By Author
114	<b>Fig 4.23</b>	<i>Exterior Atrium Perspective</i> By Author
115	<b>Fig 4.24</b>	<i>Walkway Perspective</i> By Author

116	<b>Fig 4.25</b>	<i>Residential Unit Chart</i> By Author
117	<b>Fig 4.26</b>	<i>Third Floor Unit Plan</i> By Author
119	<b>Fig 4.27</b>	<i>Residential Unit Sections</i> By Author
120	<b>Fig 4.28</b>	<i>Typical Unit Plans Building One</i> By Author
121	<b>Fig 4.29</b>	<i>Typical Unit Plans Building Two</i> By Author
122	<b>Fig 4.30</b>	<i>Residential Corridor Perspective</i> By Author
123	<b>Fig 4.31</b>	<i>Interior Atrium Perspective</i> By Author
124	<b>Fig 4.32</b>	<i>Designed Social Spaces</i> By Author
127	<b>Fig 4.33</b>	<i>Shared Social and Health Programs and Services</i> By Author
129	<b>Fig 4.34</b>	<i>Exploded Farmers Market Axonometric</i> By Author
130	<b>Fig 4.35</b>	<i>East-West Section C</i> By Author
131	<b>Fig 4.36</b>	<i>Front Square Perspective</i> By Author
132	<b>Fig 4.37</b>	<i>Courtyard Perspective</i> By Author
132	<b>Fig 4.38</b>	<i>East-West Section D</i> By Author
135	<b>Fig 4.39</b>	<i>North-West Corner Perspective</i> By Author
137	<b>Fig 4.40</b>	<i>Breaking The Cycle Diagram</i> By Author







## Introduction

*“Aging is characterized by a progressive loss of physiological integrity, leading to impaired function and increased vulnerability to death.”<sup>2</sup>*

*“The study of human lives has become a lively enterprise over the past quarter-century, extending across substantive and diverse boundaries in the social and behavioral sciences. With this change has come an appreciation for “the long way” of thinking about human personality and its social pathways in changing societies. Developmentalists have gained more sensitivity to the interlocking nature of human lives and generations, as well as an informed awareness of individuals as choice makers and agents of their own lives.”<sup>3</sup>*

*“School boards are responsible for managing their school capital assets in an effective manner. They must respond to changing demographics and program needs while ensuring continued student achievement and well-being, and the financial viability/sustainability of the school board.”<sup>4</sup>*

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<sup>2</sup> Carlos López-Otín et al., “The Hallmarks of Aging,” *Cell* 153, no. 6 (Jun 6, 2013), 1194. doi:10.1016/j.cell.2013.05.039. <https://www.sciencedirect.com/science/article/pii/S0092867413006454>.

<sup>3</sup> Glen H. Elder, “Time, Human Agency, and Social Change: Perspectives on the Life Course,” *Social Psychology Quarterly* 57, no. 1 (Mar 1, 1994), 4. doi:10.2307/2786971. <https://www.jstor.org/stable/2786971>.

<sup>4</sup> Ontario Ministry of Education, *Pupil Accommodation Review Guideline* Ontario, [2015].

Everyone dies. Time and its effect on the body has thus far been unbeaten by humanity. Yet, between the period of birth and death, human existence has an opportunity to interact with and influence its environment. This thesis examines how we can sustain and value such experience into the twilight years of human life, not discounting the years near the ultimate end.

Part One of the thesis considers the importance of the individual story. Four stories from people in their later years of life are recounted to showcase their own unique and captivating experiences. Each story is given from the perspective of someone who has left a former private home and moved into a retirement dwelling. In reminiscing about the past, we can learn to understand and respect the life a person has led and is still currently living.

Part Two of the thesis is a series of short studies into how society perceives and interfaces with aspects of human age. Studies into the changing concept of the wise and respected elder, to the institutions in which they often live, are paired with the health benefits of continued social interface as well as the challenges of Canada's changing demographics. It is these demographics that make the studies relevant to a growing portion of the country's population.

Part Three of the thesis is a contextualization of the current infrastructure in the city of Sarnia. Sarnia is a suburban city centre that is characterized by an aging demographic and therefore changing infrastructural needs. Local school boards are facing tough decisions regarding student accommodation and school closures,<sup>5</sup> while there is a rising need for senior support and housing.<sup>6</sup>

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<sup>5</sup> Peter Duck, "Lambton-Kent School Board to Close Additional 50 Classrooms this September," <https://www.cbc.ca/news/canada/windsor/lambton-kent-school-board-classroom-closures-1.5182497>

<sup>6</sup> Ontario Ministry of Finance, *Ontario Population Projections Update 2017-2041* Queen's Printer for Ontario, [2018].

Part Four of the thesis is a design proposal that combines the preceding studies of age and story with soon to be abandoned infrastructure. Proposed is a design for a community centre and social hub accompanied by mixed retirement and public apartments in a soon to be vacated high school. The design proposes various spaces for private reprieve as well as community collaboration and interaction. In providing an assortment of social and private spaces, the design proposes a way in which all members of a local community can live full, engaging lives.



*Fig 1.01 Two generations walking together*



**PART 1**  
*Selected Stories*

## The Uniqueness of Story

A part of my childhood was spent listening to stories told to me by those of another generation. Sitting at the feet of my relatives I would listen enraptured as I heard about their adventures of world travel, dining with kings, sleeping curled up beneath the cool shadows of the Vatican walls, and facing off with wild animals or friends with grenades in their hands. It impressed me to believe that my elders were the keepers of the fantastic and were titans in their own epic journeys that conveyed life lessons to teach the impressionable youth - even if it was just not to get too close to a black bear!

More recently, I have had the pleasure of getting to know a variety of personalities, some of whom I had known in passing since my youth, others completely new, and a few of whom are featured in this thesis. What began as a study of institutional and independent senior living turned into a project of listening to and recording stories, opening my eyes to what lies beyond the polite smile and informal nod of passing someone with whom you are acquainted but do not really know.

There are approximately 7.7 billion life stories being created around the world as this is being written.<sup>7</sup> Some are just beginning, some are near their end, some are as short as others long - yet each one the 7.7 billion stories is unique. The sheer number of living human beings makes it difficult to comprehend and quantify such numbers with as many singular life experiences. If we take Dunbar's Number as proposed by anthropologist and evolutionary psychologist Robin Rodin into consideration, the number of people in an individual's "intimate social network" is situated around 150 people.<sup>8</sup> His study into the relative size of the neocortex in primates'

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<sup>7</sup> United Nations, "United Nations, Department of Economic and Social Affairs, Population Division (2019)," <https://population.un.org/wpp/Download/Standard/Population/>

<sup>8</sup> R. Hill and R. Dunbar, "Social Network Size in Humans," *Human Nature* 14, no. 1 (March 2003), 53-72. doi:10.1007/s12110-003-1016-y. <https://www.ncbi.nlm.nih.gov/pubmed/26189988>, 53

brains in relation to group size<sup>9</sup> and social group size in contemporary Western culture, maintains that while a person may know and interact with more than 150 people, the relative frequency of contact and emotional closeness felt between parties gives credence to a primary social group of around this number of people.

Whether Dunbar's number is an accurate perception of human interaction or not, even raising a person's intimate social group to 500 people is so exceptionally disproportionate to the 7.7 billion humans on this planet that to understand humanity in comprehensible terms, generalizations and statistical numerical data are generated. Singular experiences and stories merge and what is produced are the demographic statistics relating to age, gender, relationship status, economic prosperity, culture and race etc. as can be seen on most countries' census forms.<sup>10</sup> While this data is extremely beneficial for legislative, regulatory, and social and economic services, the negative consequences of such reduction are what make it so critical—it regulates people to numbers in a data set.

The stories and interactions which follow seek to unpack some of those numbers back into the life forms in which they began. Humans are not just numbers in long numeric strings in various statistics, nor are we purely the data as conceived by our internet search histories. If we forget this fact when planning and designing, especially for those of a more vulnerable demographic such as the older generation, we lose sight of what makes humanity so special, which is the uniqueness of the individual. The resulting loss creates spaces devoid of interchange between generations and we lose the opportunity to create exciting new stories.

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<sup>9</sup> R. I. M. Dunbar, "Neocortex Size as a Constraint on Group Size in Primates," *Journal of Human Evolution* 22, no. 6 (1992), 469-493. doi:10.1016/0047-2484(92)90081-J. <https://www.sciencedirect.com/science/article/pii/004724849290081J>.

<sup>10</sup> Statistics Canada, "Census of Population - 2019 Census Test," <https://www.statcan.gc.ca/eng/survey/household/39012019>).

## The Nurse

I dialed the phone number a second time. They knew I was coming and had given me an access code to the side entrance of the dark brick “manor” house. To my growing frustration, the code that I had inserted multiple times into the keypad was not working. A man picked up the phone and I received a cheerful “hello,” then an assurance that he would be “down in a sec,” alleviating my annoyance with the sticky metallic keypad.

A midsized man in his mid-eighties with a bright crown of white hair opened the door. We exchanged pleasantries as he led us down a hallway to a utilitarian staircase which we climbed to the third floor. It opened onto a double-loaded taupe hallway lined with the classic homey trappings of prints and door ornamentations which induced a slightly pleasant atmosphere. Three doors down was the white door to his suite.

We entered the unit and he called out to his wife that I had arrived. Out of the bedroom came a short, salt and pepper haired woman in her eighties with thick round glasses. She ushered us into the living space of the room as she and I exchanged informal pleasantries. We sat down on the plush flower print furniture, they on the couch, myself on a side chair.

This was a couple that I had known for most of my life, admittedly though, they had always taken more time getting to know me, and I was eager to turn the tables.

We began to talk about the retirement residence into which they had recently moved; the man jovially telling me that this was the same home in which one of his parents stayed when they needed care. They themselves had moved from a bungalow some 45 minutes away, which they had shared since getting married later in life some 17 years ago. Pausing at this point, they led me on a quick tour of the suite (which took about one minute), and was composed of the bedroom, closet, bathroom, and compact living space. The spaces were furnished quite comfortably and cozy, albeit a bit “snug,” the woman noted.

We sat back down and I began by asking about the broader circumstances of their lives. We discussed where they grew up, places they had lived,





*Fig 1.02 Bethany Manor Retirement Home, a part of the Bethany Lodge Community*



*Fig 1.03 Couple sitting in their suite at Bethany Manor*

their education, careers, travels, and how they felt about their new living arrangements. Jotting down the relayed information, my questions began to be less relevant to what I had initially aspired to learn and more about the stories from their lives. Setting aside my now boring fact-finding agenda, we dove deeper into those stories. Here is one such story.

Her career began as a resident nurse at Toronto General Hospital before receiving a postgraduate bursary to study maternal and child healthcare in Boston. After her time on the East coast, her career took her back to Toronto where she worked for the University of Toronto's hospital service. It was during this that an acquaintance in the medical community had taken notice of her work and began to try to persuade her into helping him run a clinic in South-Central Africa. His persistence eventually paid off with her acceptance and by 1967 the young nurse was traveling across the Atlantic into the unknown.

She arrived at a village in Eastern Angola near the border with Zambia and settled into her temporary accommodations. It was up to her to find permanent housing, so she set about planning a small bungalow made of concrete block and thatched roofing. This process of building in a foreign country as a woman with little knowledge of customs or people for assistance became one of her self-proclaimed "proudest accomplishments." She quickly discovered that her role in the clinic was even more demanding than what she was first led to believe. The clinic had no permanent physician and was serviced by a mobile doctor who visited various clinics across the region, leaving most of the care up to her. While different levels of care were administered by her over the years, one experience stood out from among the rest.

She was in the clinic when she heard the news. A man working down by the river had been mauled by a wild animal. The man was brought as quickly as possible to the clinic on a homemade stretcher and laid on the table. He was in terrible shape. His back had been ripped open, with both flesh and bone out of place and she knew if he was not treated immediately he would die.

The physician was not near the village and the nearest hospital was several hours away, leaving her the responsibility of staving off death so that the

man could be transported to have the needed intensive surgery. Settling her resolve she began the task of quickly and efficiently stitching up the torn flesh and skin, leaving a large scar running up the length of his back. With the wound contained the local men quickly and almost wordlessly strapped the injured man into the back of a truck and sped off in a cloud of dust in hopes of reaching the nearest hospital in time.

She never heard from him again, nor was she told of his fate, however years later she did see a man working in the local fields with a very similarly shaped scar running up his back.

I sat back amazed as she told this and other stories of her 13 years working overseas. Further stories were then added from her husband. In front of me sat a couple I had regularly conversed with throughout my youth and yet with whom I had ignorantly neglected to begin a real conversation. The easy smiles and soft grandparent-like appearances hid such a rich unknown history and complex understanding of the world in which they have lived.

## **The Businessman and Teacher**

The house sat at the end of a long drive through a densely wooded forest. Dappled sunlight filtered through the high, flourishing canopy of poplar and maple trees as I drove along the dirt road. The forest broke at a curve in the drive to accommodate a massive two-storey garage before fully giving way to a grassy clearing in which rested the gabled two-storey red brick house. Parking the car in front of what I assumed to be the foundations for a future second garage, I approached the timber supported, covered porch attached to the one-storey south wing of the house. I knocked and waited. The door was answered by a tall gentleman who greeted me with a quick smile and “hello, good to see you.” He led me down a short hallway to an open concept living room filled with comfortable furniture that opened onto a large eat-in kitchen. It was afternoon and light streamed in the western kitchen windows. The east-facing windows in the living room exuded a soft glow, providing a view down the hill to the forest edge where a fenced vegetable garden had been constructed. After being offered something to drink by his tall, brown-haired wife, we sat down and began to chat.

We began with discussing their early life before meeting and the activities they enjoyed in their past. They had grown up in separate cities—she in Ottawa, he in Oshawa. She enjoyed her youth running around Ottawa with her friends and then going to camp in the summer. After graduating high school, she had earned her teaching degree and began a job in the public elementary school system.

He also enjoyed idyllic summers at camp as a youth while also starting his own amateur radio station. He began a career working at a solid-state physics lab after finishing his education, working on transistors, and then transferred his knowledge to start his own electronic security company.

During his early career, he had moved from Oshawa to Montreal and then transferred to Ottawa for work. It was here that they met during a young people’s group that she had been attending for a few years before his arrival in the city. Hitting it off, they were soon married and enjoying life together. After several years they had two children, had moved to Richmond Hill and she chose to stop working to raise the kids. Parenting was full of adventures and the four were soon heading out on family road



*Fig 1.04 Entertaining friends in living room*



*Fig 1.05 Exterior of two-storey brick house*

trips across the country with a trailer in tow.

At the age of forty the woman decided to go back to teaching. She recalls being a bit nervous about going up against “all those fresh young teachers” at her job interview but was set at ease by the principal who told her he was tired of dealing with young teachers and their lack of experience. This started another twenty-seven years of teaching home economics, a job which she just retired from six years ago and with more than just a few grey hairs!

The synopsis of their earlier life complete, we began chatting about the house in which they now resided. It was becoming apparent that they were living in their dream home - a true blessing which had been a labour of love.

The journey towards building such a house began at the end of their forty-year tenure in Richmond Hill. They had been considering downsizing for a few years when their son approached them with a proposal. He had been looking at land and suggested that they pool their resources to build a home to provide the privacy and accommodation for which they all had been searching.

After a few fruitless land viewings, a property came to their attention that was near to local amenities, including a regional hospital and shopping centre, while still offering the acreage and desired country living. One visit later and they were in love.

To pay for the land the older couple sold their house, packed up their belongings, and made a major role reversal shift by moving into their son’s basement apartment.

They both laughingly recalled that the first Christmas after purchasing the land was spent almost entirely cutting down trees and clearing the land on which the house was to rest. Every day after coming home, the man would yearn to be over at the property either enjoying the peacefulness or sitting on the foundations watching the building take shape.

The project was not without hiccups, including dealing with a surly building inspector who fortunately was only seen once! Overall, the family based construction came together smoothly.

The design of the home offered nuances that the couple have really enjoyed over the years. Their portion of the house has a roughly thirty by forty-foot footprint, with a full basement below. All the key living spaces are on the main floor with a study and secondary living space in the basement which is currently occupied by their daughter. They are fully independent from the main house but do share a formal dining room that can be closed off from either side. This shared central space has allowed the family to continue a tradition of Saturday dinners with their entire family. “Home is where my family is,” the woman explained as she said she enjoyed being able to see her grandkids when they come home after school and being close to her two children. “Sometimes a little too close,” chuckled the man as he explained the only (small) drawback he has noticed, is the sometimes lack of privacy when family issues arise - “But that is inconsequential to what we have now...” he said gesturing around him.

It is a healthy intergenerational environment that they have settled into, and one that affords them the comforts and perks of having help in maintaining a dream property alongside the bursts of laughter and excitement from their surrounding family, and they would not have it any other way.

## The Free Spirit

The manor house stood against the backdrop of a deep green ravine system. To access the building, one must travel through a maze of semi-detached, independent living houses that are part of the retirement complex. The manor entrance was unremarkable yet comfortable, with its reception desk, looped pile carpet, and overstuffed seating arrangement. A receptionist offered a friendly smile as I approached reception to sign-in. I then made my way over to the elevators and hit the button for the fourth floor. An older woman, her back stooped with age joined me in the cab on my ride to the top floor. To my surprise, she did not get off but hit the return button to go back down. Shrugging, I turned down the hallway, and passed a pool table in a widened section of the utilitarian hall, that along with a half-filled shelf of board games and had the makings of a games room. Knocking at a door down the hall I heard a “come on in,” and entered the suite.

The suite, like others in retirement communities, was composed of a small kitchenette, combined living and dining space, with an attached bedroom and bathroom. The composition was where the similarities ended however, as the room furnishings looked like a Sotheby’s antique auction brochure. Skewed around the room were knick-knacks from around the world, first edition books in glass cases, Queen Anne chairs, a folding changing screen decorated with images of wild horses and paintings of rugged coastlines and ships at sea. The only item that seemed out of place was the old boxy white couch on which my host lay.

She was in her nineties and her white, carefully curled hair spilled out from around her head as she sat half upright on the couch. She motioned for me to sit down and I took a chair across from her. We began with informal greetings, she asked about what my parents and siblings and I had been up to lately. I asked about her health, family and how she was doing. We then began talking about her current situation, with her giving me some helpful insights into retirement life and the experience of being required to move into a retirement home—or rather “an institution” was how she phrased it. She missed having her own house and both the privacy and agency that it afforded. Our conversation then turned to her past life and once again I was astonished at the stories that came forth from this slim, aged senior.





*Fig 1.06 Lynde Creek Manor*



*Fig 1.07 Typical Lynde Creek Manor one-bedroom suite*

She was raised in an affluent household in Ottawa as the daughter of a World War One Colonel turned historian. Her family, though modest, would often rub shoulders with the country's political elite but this did not stop her, nor her siblings from getting into youthful trouble. Some of her fondest memories included sneaking gifts from boys who climbed up the trellis beneath her window or climbing out of her childhood home's fourth floor dormers to walk the roof ridgeline—much to the chagrin of her mother and amusement of her sisters. The youngest daughter of five, she and her three sisters would attend dances and balls and had admirers aplenty. This was later contested by her slightly older sister who said that her sister was the one with the admirers and she only got those who had been turned down.

During this recounting of her life two new stories of youth and recklessness came out. The first involved the trellis beneath her window, the second an impromptu bicycle journey - both highlighting the impetuosity of her youth.

A stout vine grew up the trellis to her and her sister's third-floor bedroom window, making it easy to climb. As mentioned, it was not unheard of for boys to climb the trellis late at night to show her neat items they had found and to talk.

One boy, having found something extraordinary, thought that he would later that night show it off to her. Being as silent as possible, he quietly climbed the vine and knocked on the window.

“Hey ‘L,’ you awake.”

Roused from bed, she went over and opened the window. Now unfortunately for the boy, her father was at the same time rounding the corner of the house. Having just returned from war, to his horror, he saw a young man at his daughter's open window... with a live grenade in his hand.

To put it mildly - all hell broke loose. With a booming yell from her father, the young man was quickly torn down from the trellis, flattened to the ground and the grenade swiftly removed from his hands.

That was the last time the trellis was used for a long time.

A little later in life as she was attending finishing school in Montreal, she and a good friend decided to take an impromptu bicycle trip south. In her mind they would cross the U.S. border and traverse the countryside all the way down to Pennsylvania. With nothing but a little money in their pockets they started out in the cool of a young summer morning. They rode down country roads and through small villages, enjoying the escape from the city. However, as cool morning turned to noon, and the heat of the sun began to beat down on them, the novelty of the adventure began to wane in her friend. The friend decided she had had enough adventure and turned back north.

Faced with going back with her friend or to keep exploring, she chose the latter and continued to bike south. By mid-afternoon her own resolve to continue the ride broke, and she decided to turn back north and began the long trip home.

It was not to be a simple matter of peddling however, as unbeknownst to her during her backroad expedition she had made it across the American border. Her trip home took her through the unexpected route of a different road - and a stop by border security. With no I.D., a few coins and little else, the border guard grew suspicious and would not let her cross the border back into Canada. Thinking the bike might have been stolen or at least been bought in the U.S., he asked to see a receipt. Having none and with no proof of who she was or where she came from, the guard refused to let her cross.

She was forced to call her father in Ottawa. He had to drive down to the border in his car, show both his and her credentials and vouch for the bike. He then packed her and the bike into the back of the car and drove her home without a word.

While she had plenty of other adventures during her youth, her life dramatically changed when she met her future husband who was an itinerant pastor and missionary. She chuckles as she recalls the only reason she first went to see him speak about his faith was for a laugh - and rumours he was good looking.

The couple married and moved almost immediately to Hawaii to work with Intervarsity Christian Fellowship, and then with a growing church in Honolulu. It was there where their six children were born and were established in their early years. The family would move back and forth between Hawaii and different locations in Ontario for the remainder of their marriage, serving with different ministry opportunities. Being married and aiding those in need was another fulfilling adventure throughout her lifetime, which culminated in nursing her husband for over ten years after a series of strokes until his death in his late eighties. After living alone for ten years and nearing her nineties, there was a need for her to move into a retirement home.

The wit and life in her eyes as she retold more stories belied a youthful humour that seemed to radiate out of a stately appearance. She was a woman who had grown up with every comfort and convenience, married a baker's son, had seen much of the world, and laughed through life. Yet her current living situation hid her from parts of the world that she still wished to see and enjoy. In her final years she was constantly at the phone, waiting to hear or be called with news or conversation.

## **The Sailor**

In front of me was a man I had known my entire life. A close relative, he had watched me grow up as I watched him grow old. His face was deeply tanned and covered with sunspots that belied his penchant for being on the water. Now in his nineties, his body was having difficulty keeping up with his mind.

We were sitting at a cottage table, playing cribbage in a building he and his wife had constructed by themselves a little over a decade and a half ago. He was winning and not for my lack of trying. It was after a winning hand that he started into a story from his past, as he often did when the day had quieted, and the bugs had come out to claim the night air.

I had heard many of his stories. He had grown up in the “north country” as he liked to call the region around Sudbury, being born in a boxcar. He learned to fish, hunt and run a dog sled, while barely passing in school. His teacher would bribe him with cookies to stay after class and read to her, allowing him to pass English. His father had then moved the family south to Sarnia when war broke out in Europe. In 1944, lying about his age and without telling his parents, he enlisted in the Royal Canadian Navy. He jokingly said he only did so to avoid having to write his final exams.

Returning unscathed from the war and travels, he set about building boats—the first one in his mother’s living room which required the removal of her bay window to take out the hull. His fledgling business grew, he met his wife, and after marriage quickly started a family. Within the next decade the couple had eight healthy and extremely active children who grew up alongside the business beside their home.

His boat building business slowly transitioned to specializing in sailboats, until one day, a shop customer loudly protested that a boat builder could never truly build a great sailboat unless they had sailed one themselves. During the next regatta he was hauled onto the customer’s sailboat where he got his first taste of sailing—limping across the finishing line near the back of the fleet. A little while later he was called up and asked by the same man if he would fill in for him during the next race. He agreed, skippered the boat and won. That was the start of his long and accomplished sailing

career, and it was at this part of his life story that our evening conversation began.

He had been sailing for many years and had become quite competent, even winning a world championship. At a formal dinner celebration at the end of such a regatta in Europe, he noticed that the drinking glasses set out were engraved with the logo of the event. Not having much money and wanting a souvenir of the trip, he slowly and secretly set two glasses aside so they would not be taken by the wait staff.

At the end of the evening and trying to be as subtle as possible, he put on his blazer and one by one slipped a glass underneath each armpit. But as he was treading lightly towards the door a security guard stopped him.

“Sir, you cannot leave yet. There is someone wanting to meet you.”

Nervously, having wanted to make a quick exit, he slowly turned to see one of the Scandinavian kings approaching.

“I just wanted to shake the hand of the man who beat my boat,” he was greeted by the king, who held out his hand.

He was now sweating profusely, which was not aiding in holding up the glasses. His mind panicked as he fought with what to do. Finally, deciding that he had no other choice, he pinned his arms as tightly as he could to his sides and held out his hand.

His efforts were in vain. As soon as the king gripped his hand and began to shake, both glasses, one after the other, fell as if in slow motion to shatter on the floor below. Silence. Then the king, without a word turned to the nearest wait staff and said, “Could you please get Mr. ‘A’ a new set of glasses, and make sure that they are packed safely this time.” This was his first but not last encounter with the king who he saw regularly at sailing and social events.

I laughed and rolled my eyes when he finished the story. This was just one of many tales that he could pull out at visits to entertain us. Yet I was suddenly deeply impressed with all that the man had done throughout his



*Fig 1.08 Interior of the sailor's suite*



*Fig 1.09 Landmark Village, Sarnia*



**Fig 1.10**

*Interior of the sailor's wife's shared long-term care room.*

long life. After selling his business to his sons, he stayed on to help while also working around his self-built country house. Then one day at the age of eighty and with the encouragement of two grandsons, he decided to fulfill his dream and build himself an airplane. Several years later and with the removal of another window, this time in his basement to extract a fuselage, his dream at eighty-five was complete. He had built an airplane. This past year he furthered that dream by flying in it with his son from Sarnia to his cottage, taxiing up to the dock. It took him eighty-some years to cut his travel time from eight to three hours.

If you were to visit him in his current retirement home in Sarnia, one would not be able to discern this history by merely looking at him. His wife of sixty-nine years has been transferred to a nursing home and his suite is filled with generic furniture with a few hunting paintings on the walls. Almost all of their possessions and plans for their final years went up in smoke when the country house he built for he and his wife's final years burned to the ground in a fluke accident. Despite this discouragement and destruction nothing has prevented him from continuing to be an active life participant. For him, palliative care has been the ability to leave the



retirement home and continue to work in the local boat shop - and to still skipper at ninety-three to win the last spring regatta series in his sailing class.

Dropping him off at the retirement home in Sarnia after his trip to the cottage, it was both sobering and encouraging to see the crowd of seniors congregate around him. They wanted to hear his stories. Not those of his past life as told in these pages, but of everything he had seen and heard while away from the home.

Each of these interviews, along with others not mentioned, taught me valuable lessons in understanding the uniqueness of the personal story and endowed several life lessons. The Nurse provided self-admonishment for casting unknown seniors into typological sets by general appearance. The Businessman and Teacher showed me the value of intergenerational living and striving for a balanced approach to retirement. The Free Spirit lauded the ideals of living life to its fullest, and the importance of maintaining and forging new relationships as one ages. Finally, the Sailor taught me to never give up on your dreams, no matter how old you are.

What is written down in this thesis though is not what is important for promoting intergenerational living or valuing the life stories of others. The stories themselves are interesting and insightful, and yet merely exciting life stories. What is significant is what lies in the personal interaction and discourse that associates person and story to a second party, in this case, me. The stories as written could be inaccurate, but that would not change the new ideas and knowledge that I have gained nor change the time seniors had interacting with a younger outside party, laughing and reminiscing while recounting stories and wisdom from the past and present.

Residential complexes that feature senior living need to understand and promote this form of interaction, treating the health and mobility issues to be sure, but allowing for spaces of discourse, impromptu meetings and life experience exchanges that allow communities to form.



**PART 2**  
*Age*

## Knowledge, Wisdom and Interface

In a rapidly changing world of data collection, information relay, and digitally archiving, our concept of interface during the acquisition of knowledge and wisdom can become skewed as traditional sources become obsolete and new ones emerge. Ever since the dawn of mankind we have constantly been evolving in the way knowledge is passed between individuals and different generations. Throughout history we have used the traditional forms of oral language, pictographs, written texts, built forms and architecture, to the more recent developments of radio, television and the globalization of digital and social media. First Nation Hereditary Chief Stephen J. Augustine, explains the way knowledge was once formulated in his culture,

*“The Elders would serve as mnemonic pegs to each other. They will be speaking individually uninterrupted in a circle one after another. When each Elder spoke they were conscious that other Elders would serve as ‘peer reviewer’ they did not delve into subject matter that would be questionable. They did joke with each other and they told stories, some true and some a bit exaggerated but in the end the result was a collective memory. This is the part which is exciting because when each Elder arrived they brought with them a piece of the knowledge puzzle. They had to reach back to the teachings of their parents, grandparents and even great-grandparents. These teachings were shared in the circle and these constituted a reconnaissance of collective memory and knowledge. In the end the Elders left with a knowledge that was built by the collectivity.”<sup>11</sup>*

While one could argue that knowledge is still founded on the “collective memory” of humanity, two key differences have emerged in today’s digital climate. Primarily is the uploading and mass collection of source knowledge to a global platform, and the second is the way we receive and interface with that information and with each other.

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<sup>11</sup> Renée Hulan and Renate Eigenbrod, *Aboriginal Oral Traditions: Theory, Practice, Ethics* (Halifax [u.a.]: Fernwood Publ. [u.a.], 2008), 2-3.

The first difference is our reliance on the current digital infrastructure in the storage, maintenance and relaying of knowledge and information. Society has been dutifully uploading much of our collective works and data, both past and present, including visual, audio, text and even built form from scanned buildings and objects.<sup>12</sup> This resource housed on massive data centres spread across the globe, allows for humanity to create an archive and ever evolving platforms of knowledge collection and exchange.

Knowledge can now be sought out with search engines, websites and online platforms that can be accessed from anywhere one can receive a signal with smart technology. This is slowly replacing older formats of knowledge acquisition which includes the physical and intimate interaction between people and the knowledge held by our elders. There no longer needs to be direct discourse or contact between the possessor of knowledge and the person seeking it, the internet or online databases act as third party facilitators, connecting yet separating the two parties.

Yet while knowledge and its interface are changing, another sought quality imbued in our elders is that of wisdom. Wisdom as defined as “the quality of having experience, knowledge, and good judgement,”<sup>13</sup> has as Amia Lieblich writes in her book, *Narratives of Positive Aging*, historically been attributed by traditional societies to their elders.<sup>14</sup> This position has changed in more modern times as “youth became the favored, idealized, and omnipotent social age group, and old people were driven to the margins of society”<sup>15</sup> The domination of youth has continued into the present but “as a result of the vast improvements in quality of life for the aged, and the growing impact of social policy theories and empirical studies in gerontology, we are now seeing a gradual return to the image of the elderly as wise people, whose rich life experiences carry a worthwhile lesson for us all.”<sup>16</sup> The resurgence of the wise elder is of great importance

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<sup>12</sup> Google, CYARK and University of South Florida, “Open Heritage,” <https://artsandculture.google.com/project/cyark>

<sup>13</sup> Lexico, “Wisdom,” <https://www.lexico.com/en/definition/wisdom> (accessed May, 2019).

<sup>14</sup> Amia Lieblich, *Narratives of Positive Aging* (US: Oxford University Press, 2014), 141.

<sup>15</sup> *Ibid.*, 141.

<sup>16</sup> *Ibid.*, 141.

not just for the generation in said demographic but also for the younger generations with whom that wisdom can be shared. The knowledge that one gains from inhuman digital platforms requires that ethical, moral and experiential literacy that our elders have gained throughout their lifetime and which was been passed down through humanity's generations. The phrase "lest we forget" often cited at war memorials or remembrances exemplifies the need to remember, learn and grow as a species, not just by studying the past and its compilation of knowledge and information but in honouring those whom have experienced and shaped it directly. New approaches in interfacing in a digital world need to be explored to bring together all generations so that we can continue to evolve and learn while not regressing into past mistakes. I would argue that how our life stories interact with one another, and the knowledge and wisdom that is gained and passed on from said interactions, is the basis for human society and even civilization itself.

## Generational Interface

Over the past few decades there has been a paradigm shift in the scientific and academic community of noting the importance of maintaining human relationships for all ages. In a published article titled, *Social Relationships and Health*, authors James House, Karl Landis, and Debra Umberson state, “Scientists have long noted an association between social relationships and health. More socially isolated or less socially integrated individuals are less healthy, psychologically and physically, and are more likely to die.”<sup>17</sup> The three ways in which relationships benefit health, specifically behaviorally, psychosocially, and physiologically,<sup>18</sup> as outlined by Debra Umberson and Jennifer Montez, have broad effects across a person’s lifestyle. Behavioral benefits are tied to the monitoring and promoting of better health choices in one’s lifestyle either by a social group or significant other as they “can instill a sense of responsibility and concern for others that then lead individuals to engage in behaviors that protect the health of others, as well as their own health.”<sup>19</sup> Psychosocial benefits are related to the interconnected mechanisms of relationships that add to “social support, personal control, and mental health,”<sup>20</sup> and physiological benefits come from a lifetime of social influences that help reduce the stress on our physical bodily systems as we respond to our social environment.<sup>21</sup> Of course, this is assuming all social relationships positively contribute to a person’s life, as negative interactions can have the inverse result.

The benefits of human relationship and interaction between seniors and other members of society, coinciding with environmental influences have more recently been the focus of gerontologists. Glen Elder in a paper titled *Time, Human Agency, and Social Change: Perspectives on the Life Course* writes, “No principle of life course study is more central than the notion

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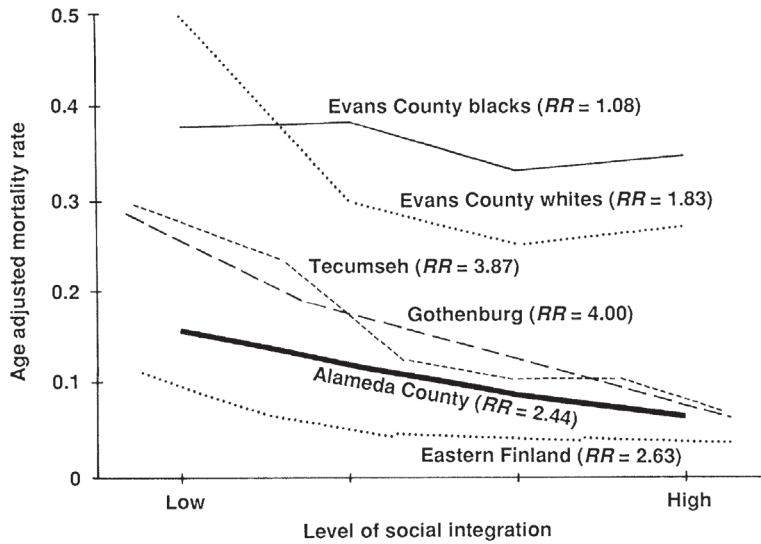
<sup>17</sup> J. S. House, K. R. Landis and D. Umberson, “Social Relationships and Health,” *Science* 241, no. 4865 (Jul 29, 1988), 241. doi:10.1126/science.3399889. <http://www.sciencemag.org/cgi/content/abstract/241/4865/540>.

<sup>18</sup> Debra Umberson and Jennifer Karas Montez, “Social Relationships and Health: A Flashpoint for Health Policy,” *Journal of Health and Social Behavior* 51, no. 1\_suppl (Jan 1, 2010), 2. doi:10.1177/0022146510383501. <https://www.jstor.org/stable/20798316>.

<sup>19</sup> *Ibid.*, 3.

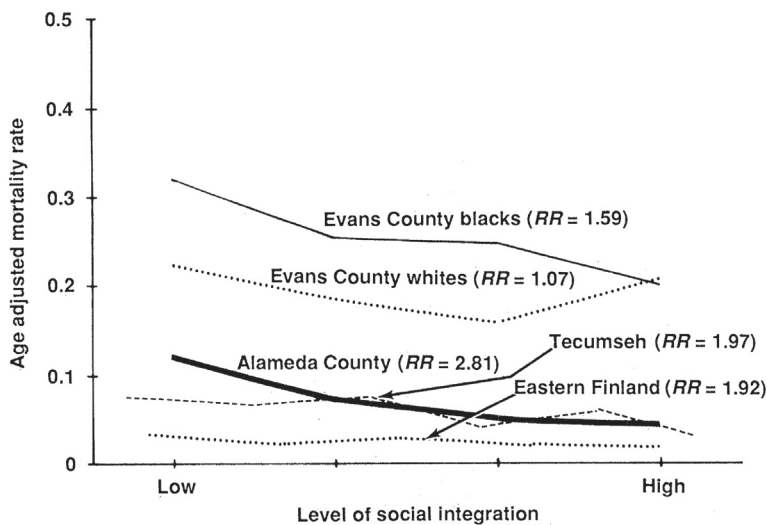
<sup>20</sup> *Ibid.*, 3.

<sup>21</sup> *Ibid.*, 3.



**Fig 2.01**

Graph from Social Relationships and Health, showing level of social integration and age adjusted mortality of males in five prospective studies. RR represents the relative risk of mortality at the lowest versus highest level of social integration.



**Fig 2.02**

Graph from Social Relationships and Health, showing level of social integration and age adjusted mortality of females in five prospective studies. RR represents the relative risk of mortality at the lowest versus highest level of social integration.



of interdependent lives. Human lives are typically embedded in social relationships with kin and friends across the life span.”<sup>22</sup> Human life, from infancy to death is a “multilevel phenomenon” which is influenced by both broad societal organizations and establishments and the “social trajectories of individuals and their developmental pathways.”<sup>23</sup>

The multi-level phenomenon can best be categorized into three distinct environmental influences as described by Elspeth Stirling. The levels, comprised of the societal, community, and family and intimate network<sup>24</sup> allow for the study of different intergenerational pilots and case studies involving seniors. These were influential in the design of the thesis. Interactions and relationships are of such importance to the functioning of humans that we must not deprive the senior population based on societal bias against aging.

Across the globe there have been many pilot and experimental projects in intergenerational programs in schools and daycares, with a greater appetite for expansion from retirement homes. The basic premise, as outlined by Matthew Kaplin in his paper, *Intergenerational Programs in Schools: Considerations of Form and Function*, is to have “Civic-minded senior adults contribute to the educational process and make important contributions to children’s lives. Conversely, children [or youth] bring much energy, enthusiasm, and support into the lives of seniors.”<sup>25</sup> The relationships that can be formed between the youth and senior support the continuation of intergenerational activity, offering benefits to both. Results from various programs<sup>26</sup> show students increasing their grade point average, comparatively improved literacy skills for at-risk students,

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<sup>22</sup> Glen H. Elder, “Time, Human Agency, and Social Change: Perspectives on the Life Course,” *Social Psychology Quarterly* 57, no. 1 (Mar 1, 1994), 6. doi:10.2307/2786971. <https://www.jstor.org/stable/2786971>.

<sup>23</sup> Ibid., 5.

<sup>24</sup> Elspeth Stirling, *Valuing Older People*, 1. publ. ed. (Chichester: Wiley-Blackwell, 2010), 20.

<sup>25</sup> Matthew S. Kaplan, “Intergenerational Programs in Schools: Considerations of Form and Function,” *International Review of Education / Internationale Zeitschrift Für Erziehungswissenschaft / Revue Internationale De L'Education* 48, no. 5 (Sep 1, 2002), 308. <https://www.jstor.org/stable/3445459>.

<sup>26</sup> Ibid., 317. \*Please see *Program Impact* from report for information on various studies and positive feedback associated with them.

increased articulation and social observance of personal and observed experiences, and better attendance and academic involvement, to name a few.<sup>27</sup> The older participants meanwhile received regular social interaction and involvement in the local community, increasing mental and physical stimulation.

In the article *Effect of a Purpose in Life on Risk of Incident Alzheimer Disease and Mild Cognitive Impairment in Community-Dwelling Older Persons*, a seven year study was conducted to establish links between the rate of loss of cognitive function and disease and those who feel they have a purpose in life.<sup>28</sup> The conclusion of which was that having “greater purpose in life is associated with a reduced risk of AD [Alzheimer Disease] and MCI [Mild Cognitive Impairment] in community-dwelling older persons.”<sup>29</sup> Another study presented by Daniel George in, *Neurons in Neighborhoods: How Purposeful Participation in a Community-based Intergenerational Program Enhanced Quality of Life for Persons Living with Dementia*, again compares community participation with cognitive function of those suffering from dementia.<sup>30</sup> The results of this study “suggest that intergenerational volunteering enhanced the QOL [quality of life] of intervention group participants as demonstrated by a significant decrease in stress in the quantitative data and the emergence of multiple biopsychosocial benefits in the qualitative data.”<sup>31</sup>

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<sup>27</sup> Ibid., 317-318.

<sup>28</sup> Patricia A. Boyle et al., “Effect of a Purpose in Life on Risk of Incident Alzheimer Disease and Mild Cognitive Impairment in Community-Dwelling Older Persons,” *Archives of General Psychiatry* 67, no. 3 (Mar 1, 2010), 304-310. doi:10.1001/archgenpsychiatry.2009.208. <http://dx.doi.org/10.1001/archgenpsychiatry.2009.208>.

<sup>29</sup> Ibid., 304.

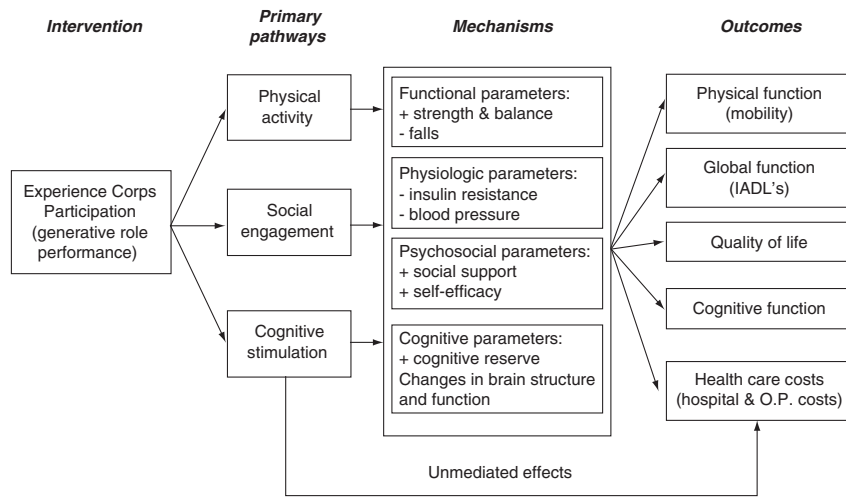
<sup>30</sup> Daniel George, “Neurons in Neighborhoods: How Purposeful Participation in a Community-Based Intergenerational Program Enhanced Quality of Life for Persons Living with Dementia,” in *Enhancing Cognitive Fitness in Adults*, 1st ed. (New York, NY: Springer New York, 2011), 447-467.

<sup>31</sup> Ibid., 462.

The Experience Corps, a group which “places older volunteers in public elementary schools in roles designed to meet schools’ needs and increase the social, physical, and cognitive activity of the volunteers,”<sup>32</sup> wrote an article on the effects of its programs to substantiate its hypothesis and mission statement. The outcome, which involved volunteers between the ages of 60 and 86 years old for a 4 to 8-month trial showed increased physical, social, and cognitive activity levels of older adult volunteers.<sup>33</sup> As stated in the research paper, all three areas of improvement are significant predictors of “important health outcomes in late life, including disability, dependency, and dementia.”<sup>34</sup>

**Fig 2.03**

*Causal pathways through which the Experience Corps program is hypothesized to benefit the health and function of older adults. IADLs, independent activities of daily living; O.P., outpatient*  
 Chart from A Social Model for Health Promotion for an Aging Population: Initial Evidence on the Experience Corps Model



Other studies could be cited but there is much conclusive observational data that supports the continued involvement of seniors on all three levels of environmental influences, to reduce and delay the inevitable effects of aging on both the mind and body while providing benefits to the younger generations.

<sup>32</sup> Linda Fried et al., “A Social Model for Health Promotion for an Aging Population: Initial Evidence on the Experience Corps Model,” *Journal of Urban Health* 81, no. 1 (Mar, 2004), 64. doi:10.1093/jurban/jth094. <https://www.ncbi.nlm.nih.gov/pubmed/15047786>.

<sup>33</sup> Ibid., 73.

<sup>34</sup> Ibid., 73.

## Generalization and Uniform Fate

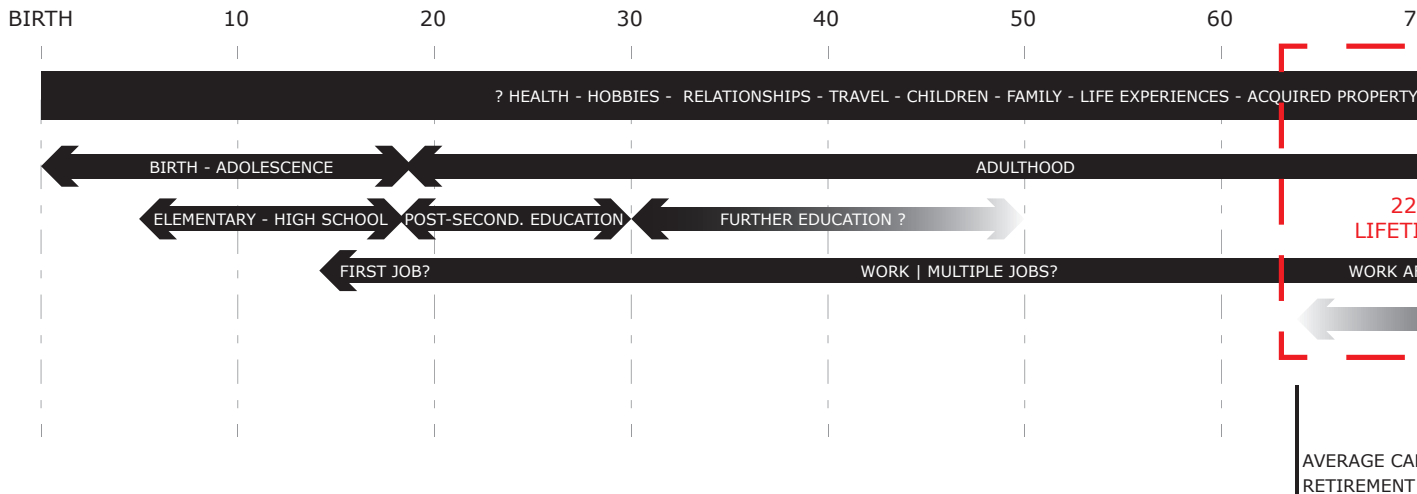
Aging is fraught with generalizations which can lead to the perception of uniformity in the process. To generalize is not necessarily a societal evil for as Martha Craven writes, if we “didn’t generalize, we would never be able to learn or teach others. If the past ever serves as a guide for the future, or one person’s experience for another’s, it is because some types of generalizing are useful.”<sup>35</sup> She further explains that generalizing becomes problematic when it is used to provide an unfounded description that society uses to enforce conformity—often among more vulnerable demographics such as seniors who are “long victims of denigrating stereotypes.”<sup>36</sup> The application of these “descriptive generalizations” serves to take agency away from the recipient, resigning them to be aligned with qualities and societal groupings foreign to them. For Martha, “Age arrives as a metamorphosis. It just happens to you. Even the aging body is not just a given, it is a set of possibilities that one can actualize in many different ways.”<sup>37</sup> This is often contrary of the scientific community’s tendency to treat aging as a medical experience with governmental and medical institutions managing one’s existence.<sup>38</sup> One reason for society’s need to

<sup>35</sup> Martha Craven Nussbaum and Saul Levmore, *Aging Thoughtfully* (New York, NY: Oxford University Press, 2017), 13.

<sup>36</sup> *Ibid.*, 14.

<sup>37</sup> *Ibid.*, 20.

<sup>38</sup> Atul Gawande, *Being Mortal* (Toronto: Doubleday Canada, 2014), 16.

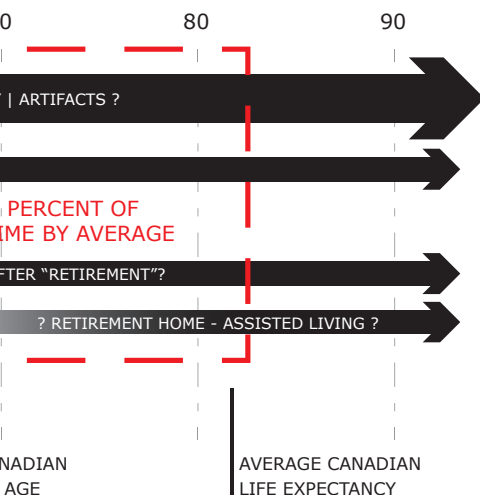


compartmentalize and conform a demographic is the lack of life stories that showcase the “extent of variety within aging, thus too few to make us as suspicious as we should be of the partial truths.”<sup>39</sup> Slowly as a society we have begun to realize the importance of specificity and uniqueness in the path of one’s life story. Glen Elder reveals that, “Developmentalists have gained more sensitivity to the interlocking nature of human lives and generations, as well as an informed awareness of individuals as choice makers and agents of their own lives.”<sup>40</sup>

The ‘retirement years’ in western civilizations account for just under 25 percent of our lifespan. To re-instill agency back into the lives of those further down the life timeline, society needs to learn of the uniqueness of the final quarter-chapter, maintaining interaction between all generations so that the youth of today do not suffer the same fate tomorrow. For some seniors their life’s climax may not have yet occurred. If we take the Sailor’s story into account, his did not happen until he was in his eighties. Time is uniform, life is not, and we need to make sure that we allow for all possibilities without conforming anyone into a sterile and lifeless box.

<sup>39</sup> Nussbaum and Levmore, *Aging Thoughtfully* (New York, NY: Oxford University Press, 2017), 16.

<sup>40</sup> Glen H. Elder, “Time, Human Agency, and Social Change: Perspectives on the Life Course,” *Social Psychology Quarterly* 57, no. 1 (Mar 1, 1994), 4-15. doi:10.2307/2786971. <https://www.jstor.org/stable/2786971>.



**Fig 2.04**  
*Simplified and abstract human life timeline.*

## Perception of Age

In the book, *Being Mortal*, Atul Gawande pens the words, “death, of course, is not a failure. Death is normal. Death may be the enemy, but it is also the natural order of things.”<sup>41</sup> Western society’s perception of aging past our youth is often tied to the ultimate end of our life on Earth, death, and therefore the narrative of age is often negative. These beliefs that society contrives are, as Elspeth Stirling says, “powerful influences in shaping how society sees the older person, how the society responds to the individual and to groups and what services are deemed to be appropriate for that group of people.”<sup>42</sup> The paradigm that she describes relies on ‘western’ culture’s devaluation of the group that rarely upholds the “social worth, personal fulfillment or socioeconomic values”<sup>43</sup> that exist within the senior community. This is further compounded by any physical or mental impairment that an older person may incur that reduces them to being seen by society as “being a burden.”<sup>44</sup>

<sup>41</sup> Atul Gawande, *Being Mortal* (Toronto: Doubleday Canada, 2014) 8.

<sup>42</sup> Elspeth Stirling, *Valuing Older People*, 1. publ. ed. (Chichester: Wiley-Blackwell, 2010), 14.

<sup>43</sup> *Ibid.*, 14.

<sup>44</sup> *Ibid.*, 14.

How beliefs about ageing in technologically dependent societies have influenced societal responses and service models

<i>Belief: definition of ageing</i>	<i>Image: person seen as</i>	<i>Society’s response</i>	<i>Service model</i>
Biologically pre-programmed	Reminder of mortality/death	Protect society: denial	Separation, detention
Disability, cumulative	No future	Containment for safety	Warehouse, all together
Unproductive	Limited value, economic burden	Protect society from economic ‘dependence’	Separate services and benefits
Disease	Sick	Technical: find the cure	Hospital, disease, fund-raising
Second childhood	Child again	Protect, contain: for own safety	Caretaking, sitting, pretend living
Decay	Suffering, wanting to exit by choice	Pity, fear	Euthanasia, extermination, non-treatment
‘Broken’ machine	To be fixed	Technical: fix the machine	Therapies, accreditation of providers
Social oppression	‘Geri’-activist	Political action	Expect all elders to be activists
No different	Just like younger people	Don’t have to grow up; extended life	‘Stay young’, individualistic self-care
<i>Ecological, continuity</i>	<i>Part of a whole; unique purpose; part of a wider environmental context</i>	<i>Conscious about death; future focus; taking care of each other and the environment</i>	<i>Community development; promote humanitarian and pro-social competencies</i>

**Fig 2.05** Chart of societal responses to aging from the book *Valuing Older People*.

This concept of aging is problematic as the self-perception of the older person does not reflect the evaluation of the younger person. In a book about livable retirement communities, Scott Ball states that, “older adults do not generally define their challenges as those of aging. In fact, aging is so relative that it can seem as if no one is doing it. Ask 65-year olds what age they become senior and they are likely to answer 85. Ask 85-year olds the same question and they are likely to say 92.”<sup>45</sup> Our current culture’s obsession with youth and vitality has all but erased the concept of aging gracefully, a person is labeled and a line drawn between being a benefit and contributor to society or being a burden. For society to begin to erase its negative prejudice, the socioeconomic worth of the senior must be re-evaluated and new categories established in determining their place in the world. How is one to value a life lived, or the experiences, wisdom and knowledge that each individual person possesses? Does not the experience of surviving one’s youth and living into their twilight years deserve respect and admiration?

If we are to look at how to change perceptions, to introduce a new dialogue about aging, we must first get to know the individual, whether younger or older, detaching the person from the large institutional structures and classifications under which we have placed them. For it is in these intimate encounters that new narratives are established. Sheldon Wolin in an essay, *Whose Utopia*, critiques society’s reliance on the immense social structures we have cultivated. He says,

*“Rather the goal is a society in which growth is measured by intensity and the proliferation of smaller forms. This conception of growth may be described by saying that it presupposes that growth consists in the enhancement of human experience through activity; that it exists in inverse proportion to the scale of structures in which it occurs; and that, for the immediate future, it will be experienced mainly in the form of divesting human life of its dependency on large and impersonal structures.”*<sup>46</sup>

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<sup>45</sup> M. Scott Ball, *Livable Communities for Aging Populations* (Hoboken, NJ: Wiley, 2012).

<sup>46</sup> Sheldon S. Wolin, “Whose Utopia?” in *The Universitas Project: Solutions for a Post-Technological Society* (New York: The Museum Of Modern Art, 2006).

If we apply this statement with regard to aging, then we must strive for the enhancement of understanding of our senior population by the investment of activities in the local infrastructures. It is imperative that we perceive age not as an unstoppable and detrimental effect on the human body, but as a resource to be used in the localised expansion of activity, knowledge and wisdom for the betterment of society at large.



## Typologies and the Invisible Line

On studying examples of senior retirement homes and long-term care living facilities<sup>47</sup> in small city, suburban or rural regions, four typologies emerge.

The first type is the suburban retirement community. Sometimes gated, these communities are comprised of detached, semi-detached or small duplex residences on larger parcels of land, allowing for landscaping throughout the development. They can have a small central building or park but are comprised mainly of residential units arrayed in layouts akin to suburban sprawl. They have one or two entrances into an internalized streetscape. Services offered in the community are frequently limited to those organized and operated by residents. Often the only additional services offered are property maintenance and visits by external support agencies.

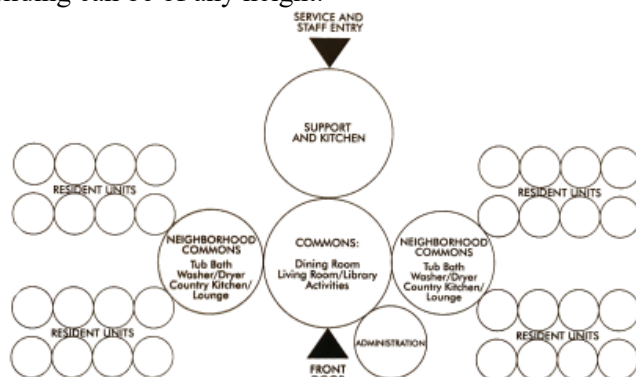
The second type is the manor community or campus. This is similar in layout and type to the suburban community except for the large manor house situated among the smaller residences or arranged in mid-sized campus buildings. The manor house is designed to include residential suites and programed community and service support space. Resident services are often greatly increased at the main manor or campus house, including meals, community programming, suite cleaning and health services. The increased variety of service benefits the surrounding residents in neighbouring detached units or mid-rise blocks.

The third type is the manor house. The manor house is comprised of residential units with centrally programed community and service support space. They are often located beside residential communities, strip malls and box stores, though they are sometimes located in rural settings. Services include meals, community programming, suite maintenance, and in the case of long-term care, full nursing and healthcare support. Manor houses are constructed on larger plots of land to allow for small parks, gardens and walking trails and do not usually exceed 8-10 stories.

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<sup>47</sup> International Association of Home and Services for the Ageing, *Architecture for an Ageing Population*, ed. Driss Fatih (Victoria: Images Publishing, 2014).

The fourth type is the urban high-rise. Like the manor house, the urban high-rise has the same services and accommodations but is situated in an urban environment, thus restricting the building's footprint. Community services are centralized and located on the ground floor, while some communal space is dispersed on the upper floors. Parks and exterior community space are relegated to the roof, balconies and pocket gardens. These building can be of any height.



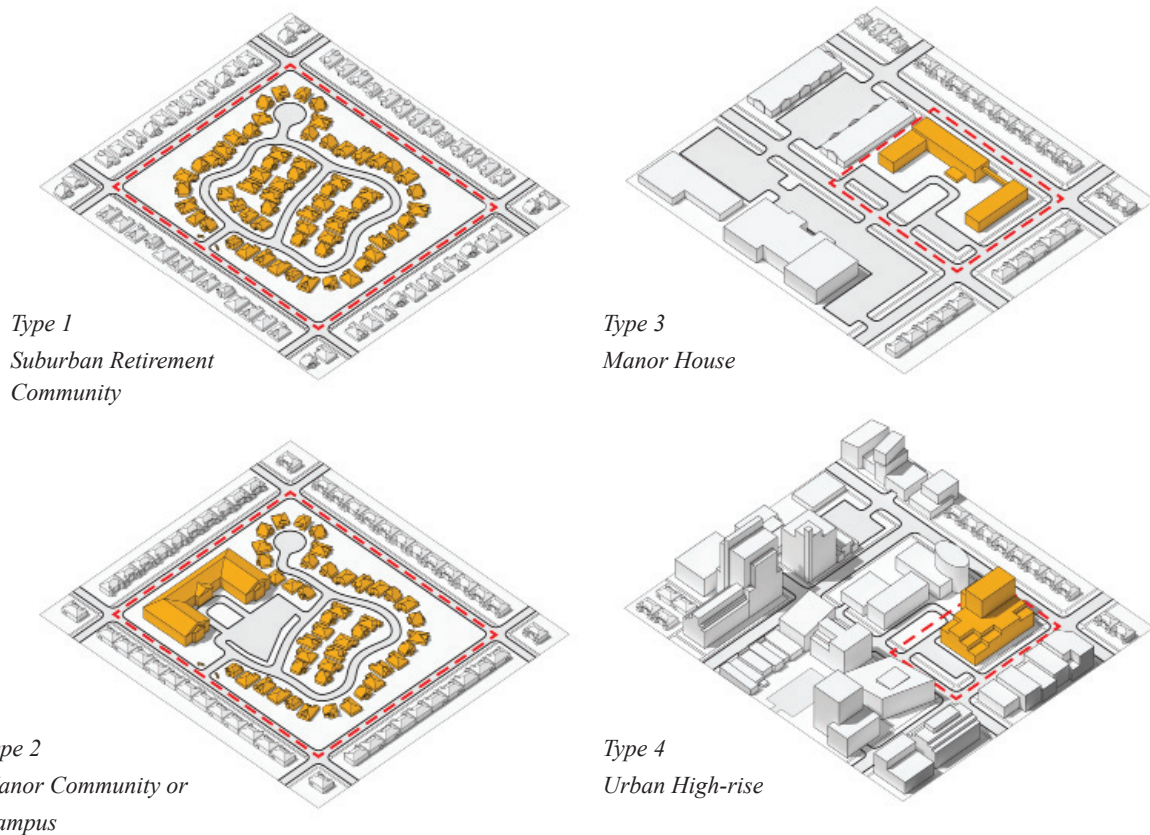
**Fig 2.06**  
*Conceptual diagram for the first floor of a typical suburban assisted living residence, from Perkins Eastman*

One commonality that becomes apparent with these typologies is the edge condition of the site. This I have dubbed the invisible wall, both figuratively and literally. It is an invisible separation between the local community and those living in the residences. All four typologies are inward looking. Suburban communities restrict inter-community pedestrian and traffic flow, and units do not front onto the surrounding streetscapes. Manor houses and urban high-rises have great central intra-community spaces that accommodate the local tenants but have little to no programming that brings in the surrounding community. While a facility might be designed to take care of all the residents' needs it can be further isolating as there is no need to venture out into the surrounding community. These residences often lend themselves to feeling like institutions and offer little incentive to welcome local (especially young) community members to come into their spaces and interact with the residents. This results in residents missing out on the benefits of intergenerational and community activity, which can be stimulating and has been proven to be beneficial to maintaining health.<sup>48</sup>

<sup>48</sup> Daniel George, "Neurons in Neighborhoods: How Purposeful Participation in a Community-Based Intergenerational Program Enhanced Quality of Life for Persons Living with Dementia," in *Enhancing Cognitive Fitness in Adults*, 1st ed. (New York, NY: Springer New York, 2011), 447-467.

*“Age-segregated, senior living developments have tended to be constructed as secured compounds rather than connected neighborhoods, and this is not a trend that should be continued, if for no other reason than the oversupply of gated retirement communities. A neighborhood edge should be defined by perceptual boundaries that define a neighborhood without segmenting and separating it from the rest of the community.”<sup>49</sup>*

<sup>49</sup> M. Scott Ball, *Livable Communities for Aging Populations* (Hoboken, NJ: Wiley, 2012).



**Fig 2.07** Four basic typologies of retirement homes.

## Demographic Shifts

Ontario is going through a demographic shift. The birth rate or natural increase in the population is decreasing<sup>50</sup> while life expectancy is increasing<sup>51</sup> creating an overall aging population. In most regions of south-central Ontario, specifically around the Greater Toronto Area, this shift is offset by the increase in immigration and migration to the region,<sup>52</sup> maintaining growth. For smaller regions and cities outside of the GTA, net migration is not enough to offset the declining birth rate, which is further compounded by young people leaving the more rural regions for larger cities and more opportunities. This has a variety of repercussions throughout those regions including: the closure of schools, the strain on pension funds, the need for better government and health services for seniors and new typologies of housing, to name a few. Ontario will have to face this issue and find unique solutions to ease and support the demographic shift especially for the non GTA communities.

This is not just a localized issue to Ontario as increases in life expectancies around the world have increased, with the projected population of those sixty or older to reach approximately two billion by 2050, roughly double what is its today, and approximately three billion by 2100.<sup>53</sup>

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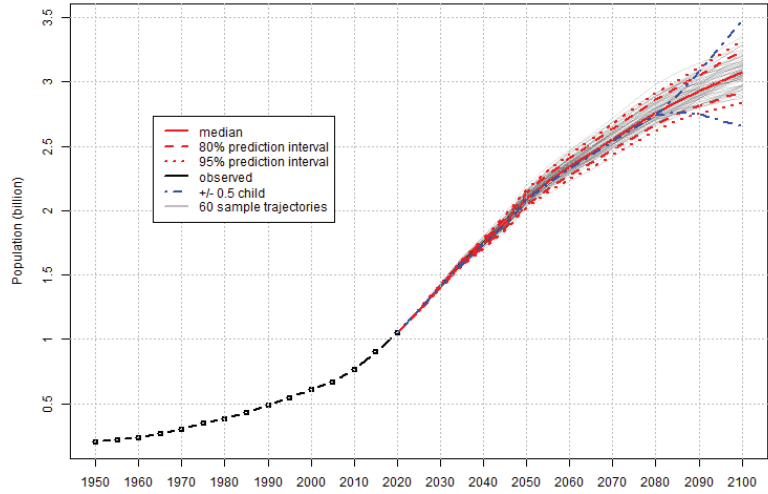
<sup>50</sup> Ontario Ministry of Finance, *Ontario Population Projections Update 2017-2041* Queen's Printer for Ontario, [2018], 7.

<sup>51</sup> *Ibid.*, 21.

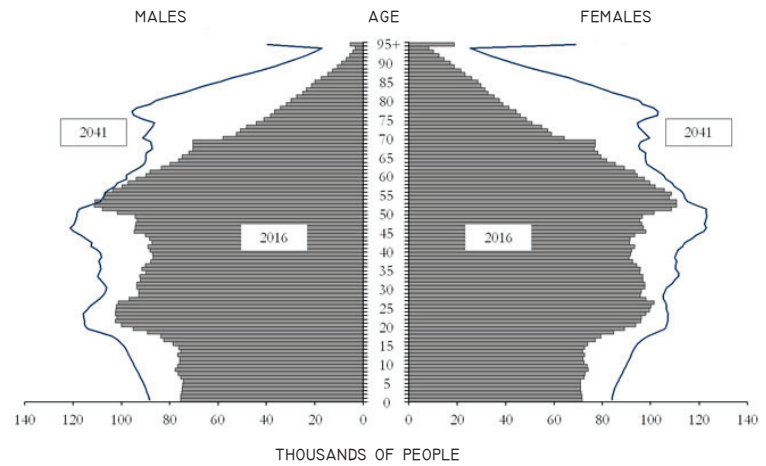
<sup>52</sup> *Ibid.*, 7.

<sup>53</sup> United Nations, "United Nations, Department of Economic and Social Affairs, Population Division (2019)," <https://population.un.org/wpp/Download/Standard/Population/>

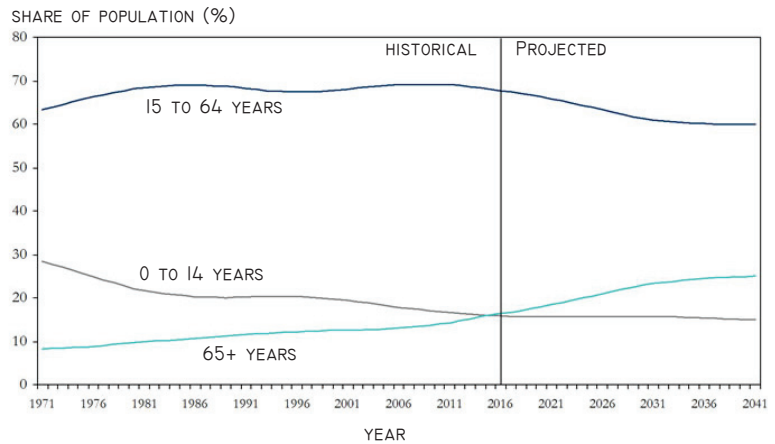
— Age —



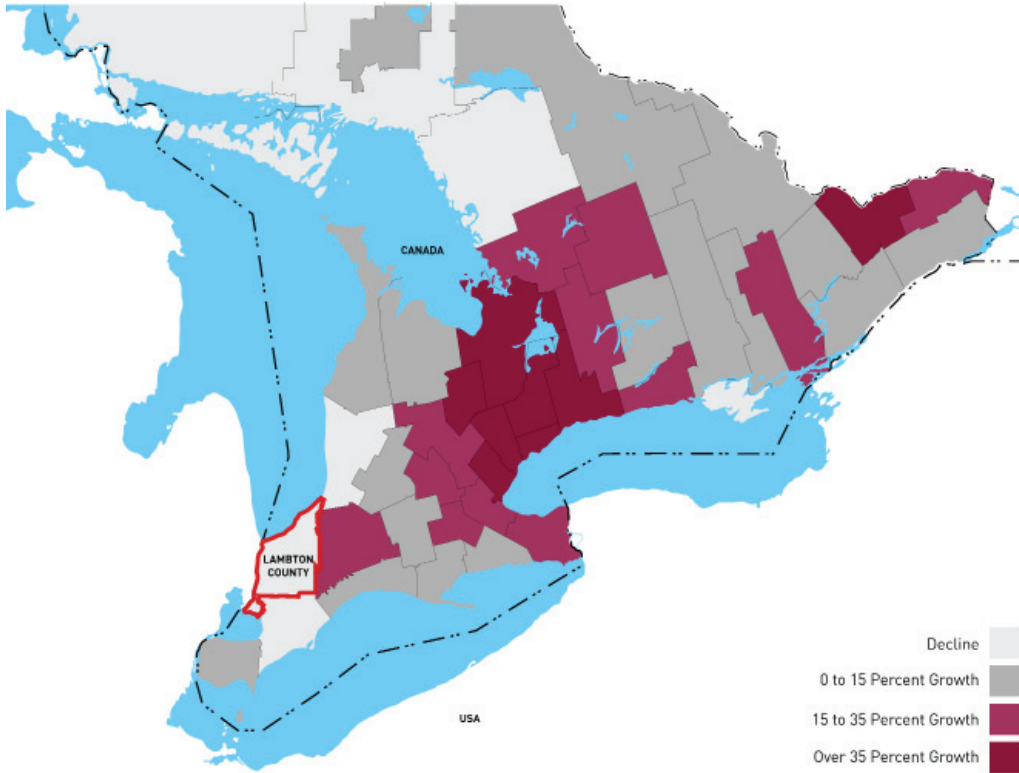
**Fig 2.08**  
World Population projection  
for people Age 60+



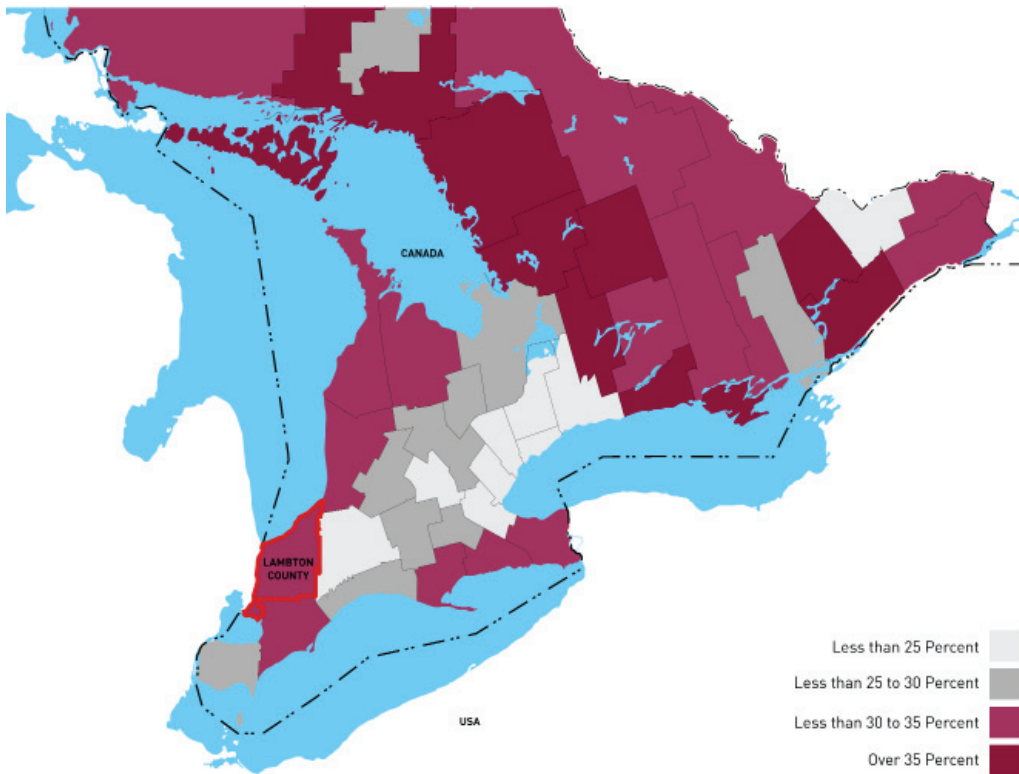
**Fig 2.09**  
Age Pyramid of Ontario's  
Population 2016 and 2041



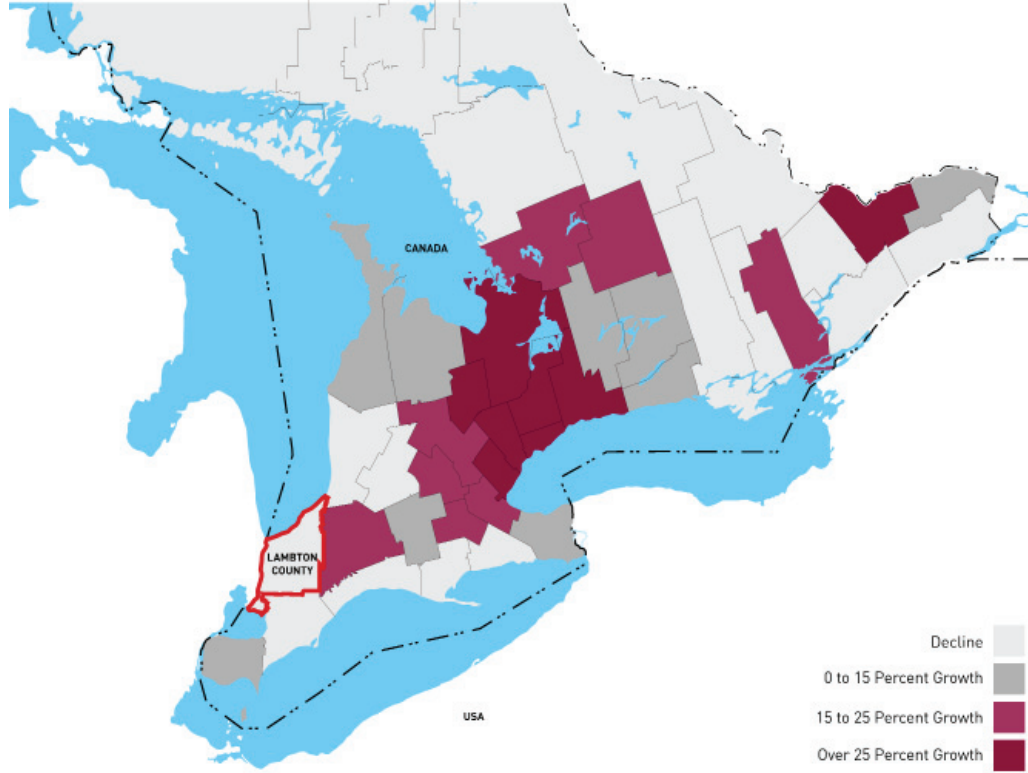
**Fig 2.10**  
Proportion of Population aged  
0-14, 15-64, 65+ in Ontario,  
1971 to 2041



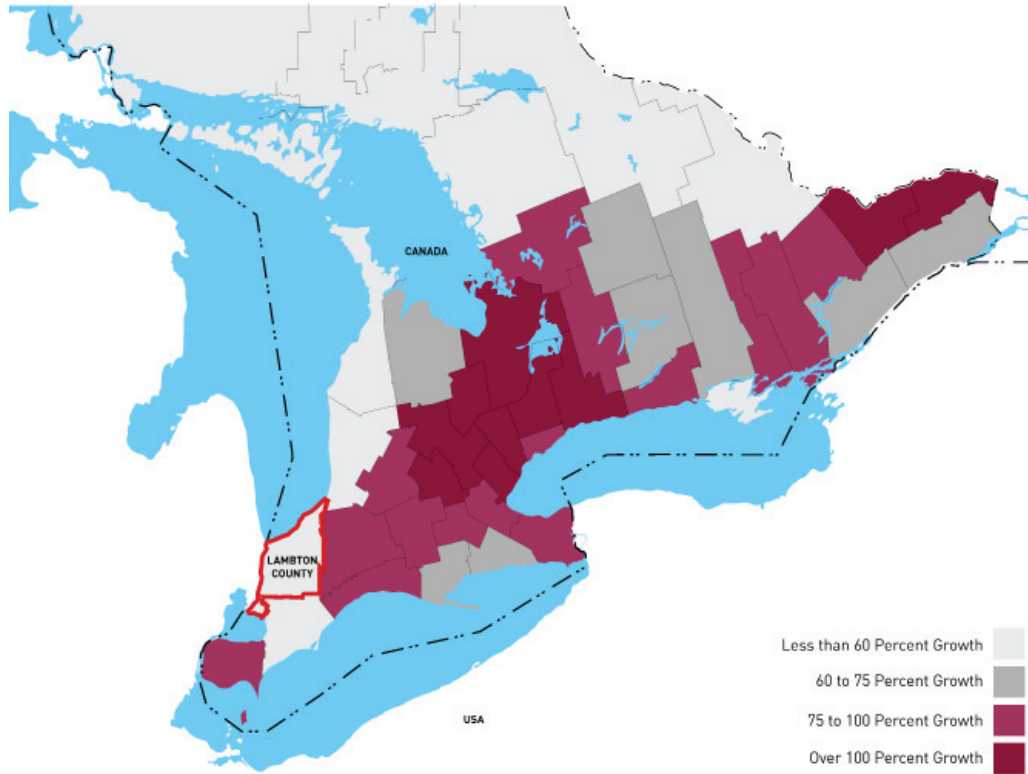
*Fig 2.11 Population Growth | Decline by Census Division over 2016 to 2041*



*Fig 2.12 Share of Seniors in Population by Census Division in 2041*



*Fig 2.13 Growth | Decline in number of children aged 0-14 by census division, 2016 to 2041*



*Fig 2.14 Growth in number of Seniors by Census Division over 2016 to 2041*





**PART 3**  
*Site and Infrastructure*



## Site and Context

**Fig 3.01**

*Left Page - Google Earth  
Pro Aerial of Sarnia,  
Ontario and surrounding  
region*

The city of Sarnia lies at the crossroads of two major transportation routes. It serves as the terminus of the provincial 402 highway as it crosses into the United States and as a port city at the entrance of the St. Clair River from Lake Huron—a vital linkage in the St. Lawrence Seaway system connecting the Upper and Lower Great Lakes.

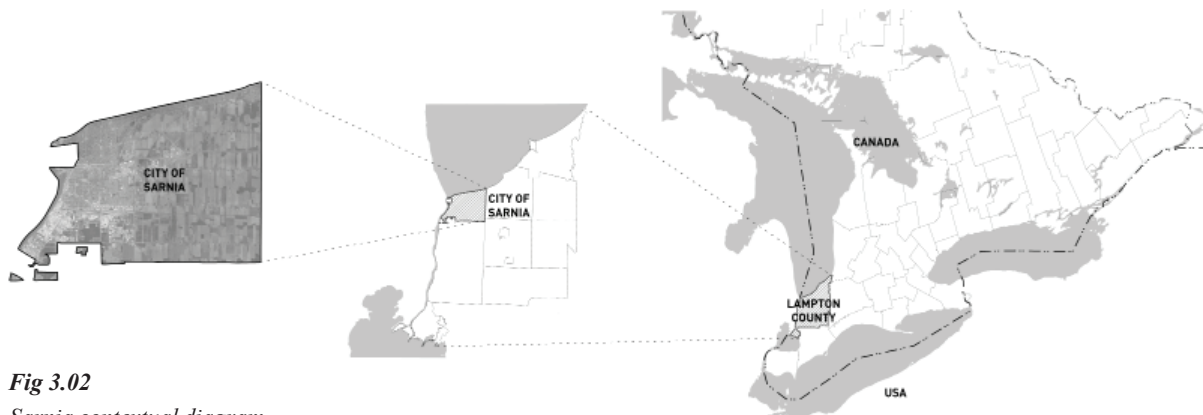
A city of 72, 000 people,<sup>54</sup> it serves as a regional center for the smaller villages and towns in Lambton County, with the closest neighbouring cities being London, Chatham, Windsor and Detroit. The city has an airport, public college and regional hospital. Fronted on two sides by water, the city hosts several marinas and a large boating community. Large public beaches rim the Southern edge of Lake Huron, providing locals with escape to the water’s edge.

The region was the site of Canada’s first commercially operating oil well,<sup>55</sup> and while the city has tried to encourage other industries, many jobs are still located in oil refineries in a large industrial tract south of the city dubbed by locals as “chemical valley.” Petrol related industry is a major economic element for the city, with the surrounding area hosting industry titans Shell, Imperial Oil and Suncor, leading it to be a major heavyweight in Canada’s petrochemical industry.<sup>56</sup>

<sup>54</sup> City of Sarnia, “About the City,” <https://www.sarnia.ca/about-sarnia/about-the-city/> (accessed Dec 10, 2018).

<sup>55</sup> “Oil Museum of Canada.” <https://www.lambtonmuseums.ca/oil/> (accessed June , 2018).

<sup>56</sup> Innovation Government of Canada, “Petrochemicals Industrial Profile,” Innovation, Science and Economic Development Canada, <https://www.ic.gc.ca/eic/site/chemicals-chimiques.nsf/eng/bt01135.html> (accessed Aug 12, 2018).



**Fig 3.02**

*Sarnia contextual diagram*

**Fig 3.03** *Industry along St. Clair River*



**Fig 3.04** *Downtown Sarnia*



**Fig 3.05** *Canatara Park Beach along the shores of Lake Huron*



**Fig 3.06** *Bluewater Bridge. The bridge spans the St. Clair River to the United States and is an important boarder crossing.*

*Fig 3.07 Downtown high-rise apartments*



*Fig 3.08 Typical South Sarnia housing*



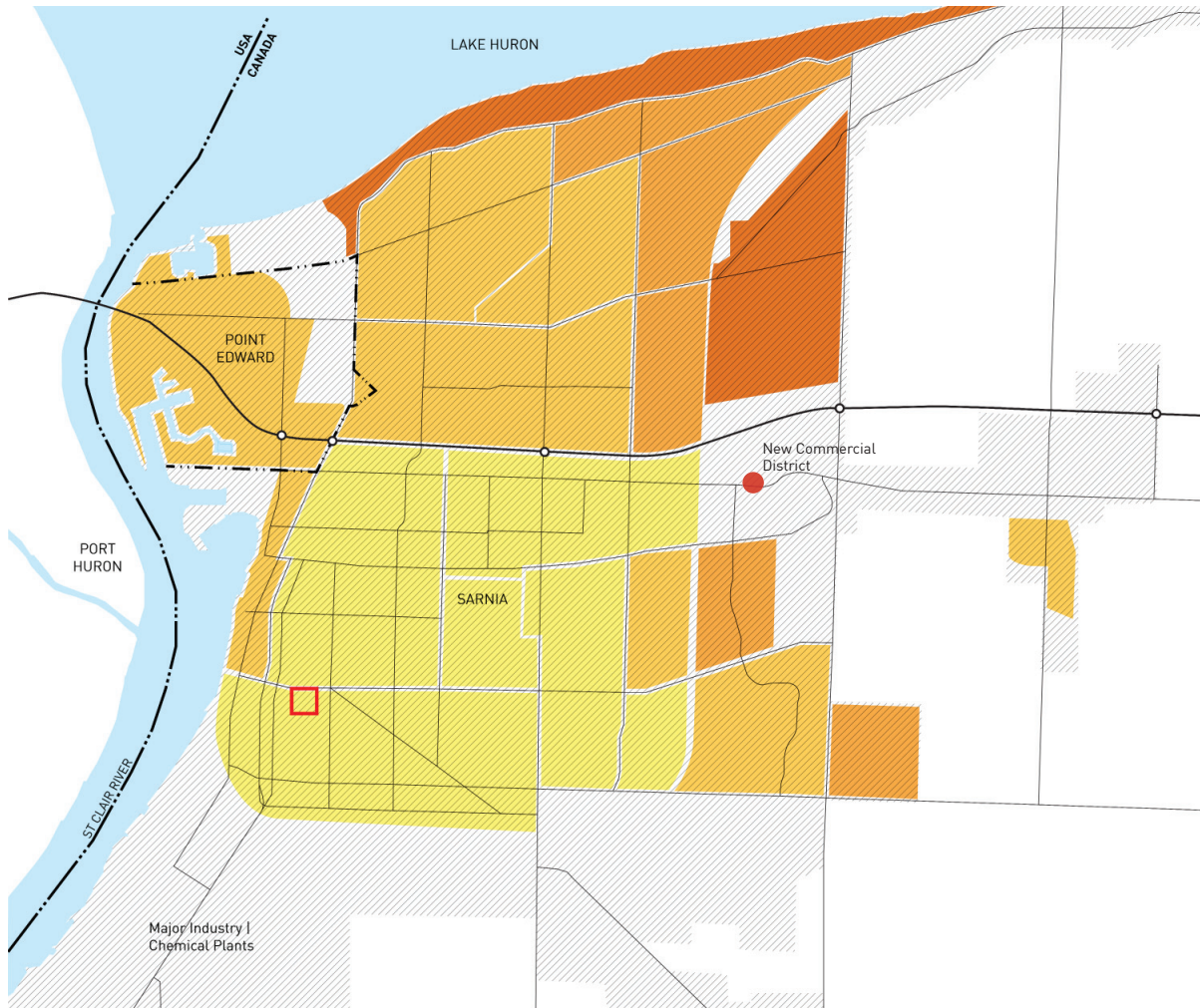
*Fig 3.09 Port of Sarnia*



*Fig 3.10 Downtown Sarnia*

With large industrial development located to the south of the city there is a gradation in the affluence of neighbourhoods as you move north away from the pollutants and towards the lake. Services and retail have also followed this trend with major box stores and a new mall located away from the historic downtown centre.

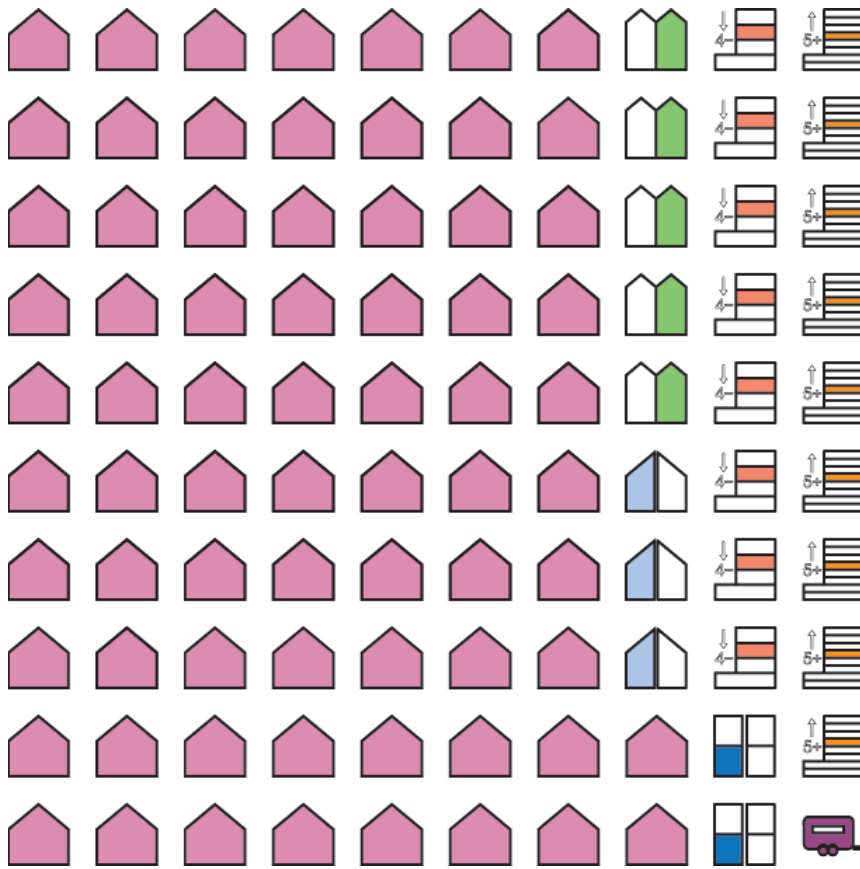
The city's built form consists of a fine grain downtown along the St. Clair River where some high-rise apartment buildings are located. The remainder of the city is mostly composed of detached and semi-detached homes, with most box stores being located in and around the new shopping mall in the newer, eastern subdivisions.



**Fig 3.11** Housing Price by neighbourhood








*Housing Price by Neighborhood*



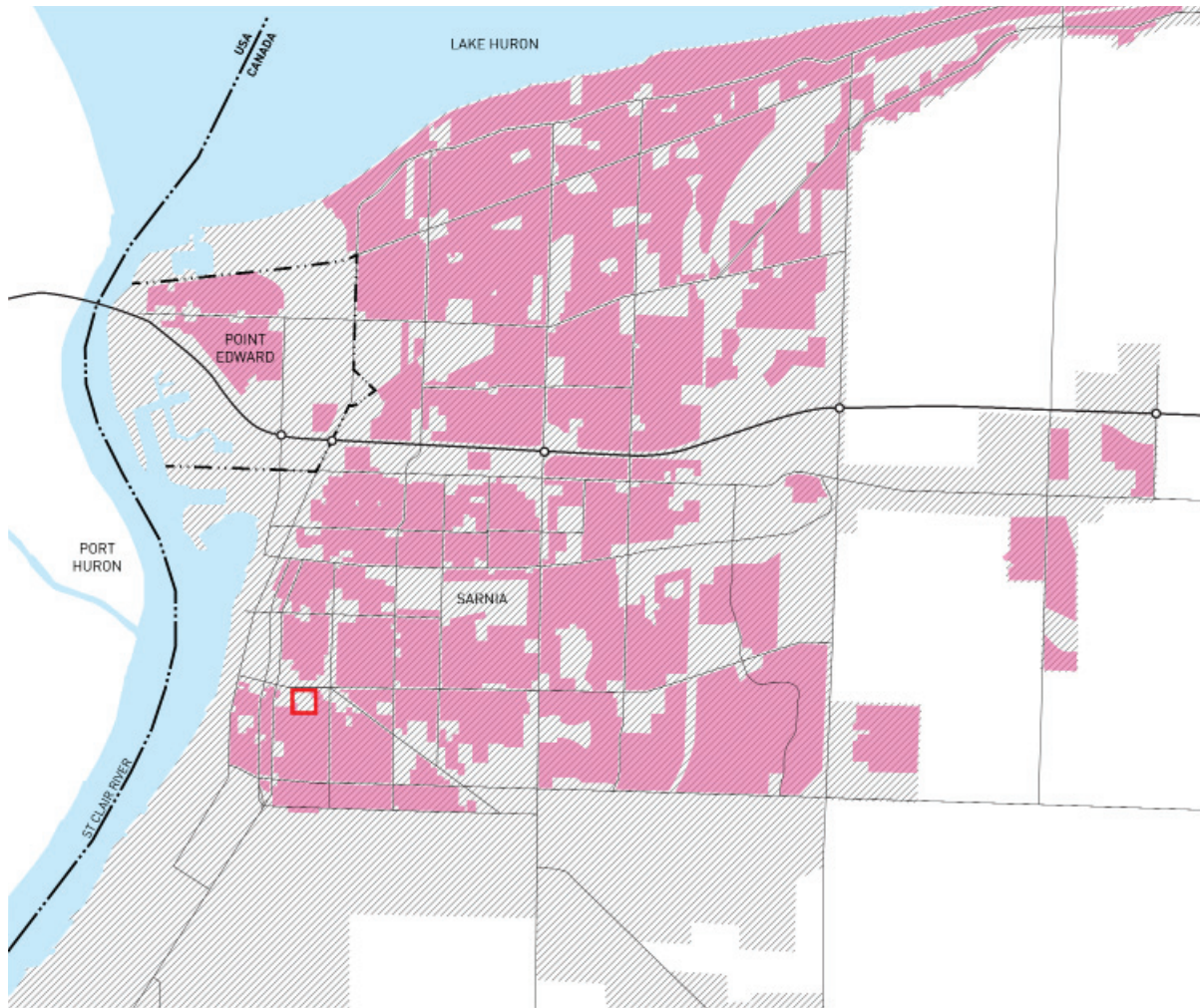


**Fig 3.12** Percentage of Dwelling Types for Sarnia

*Percentage of Dwelling Types for Sarnia*

-  Detached
-  Semi-Detached
-  Row House
-  Apartment, building with 5+ stories
-  Apartment, building with up to 4 stories
-  Apartment or Flat in a duplex
-  Other dwelling types

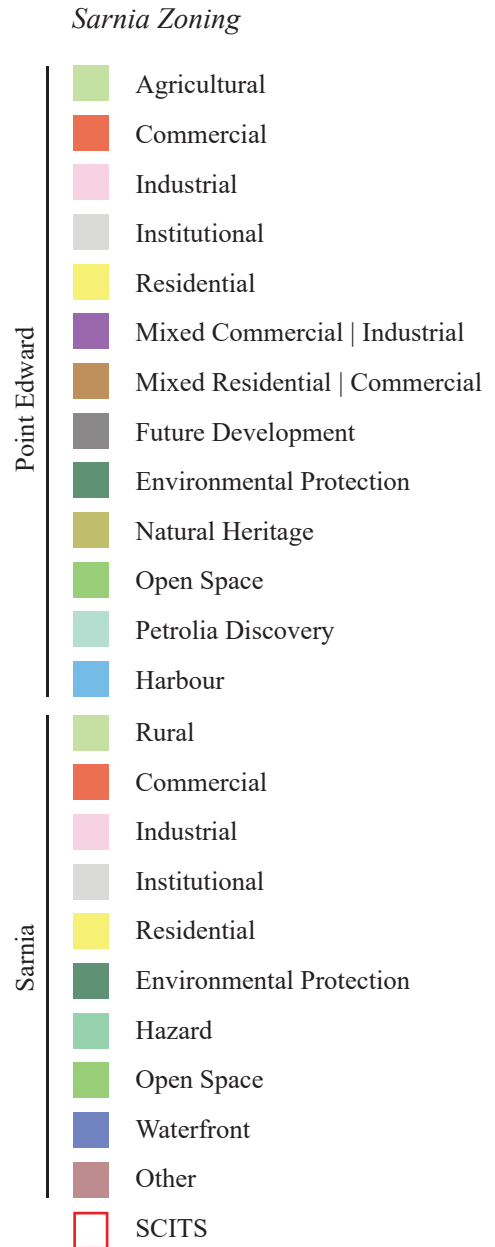


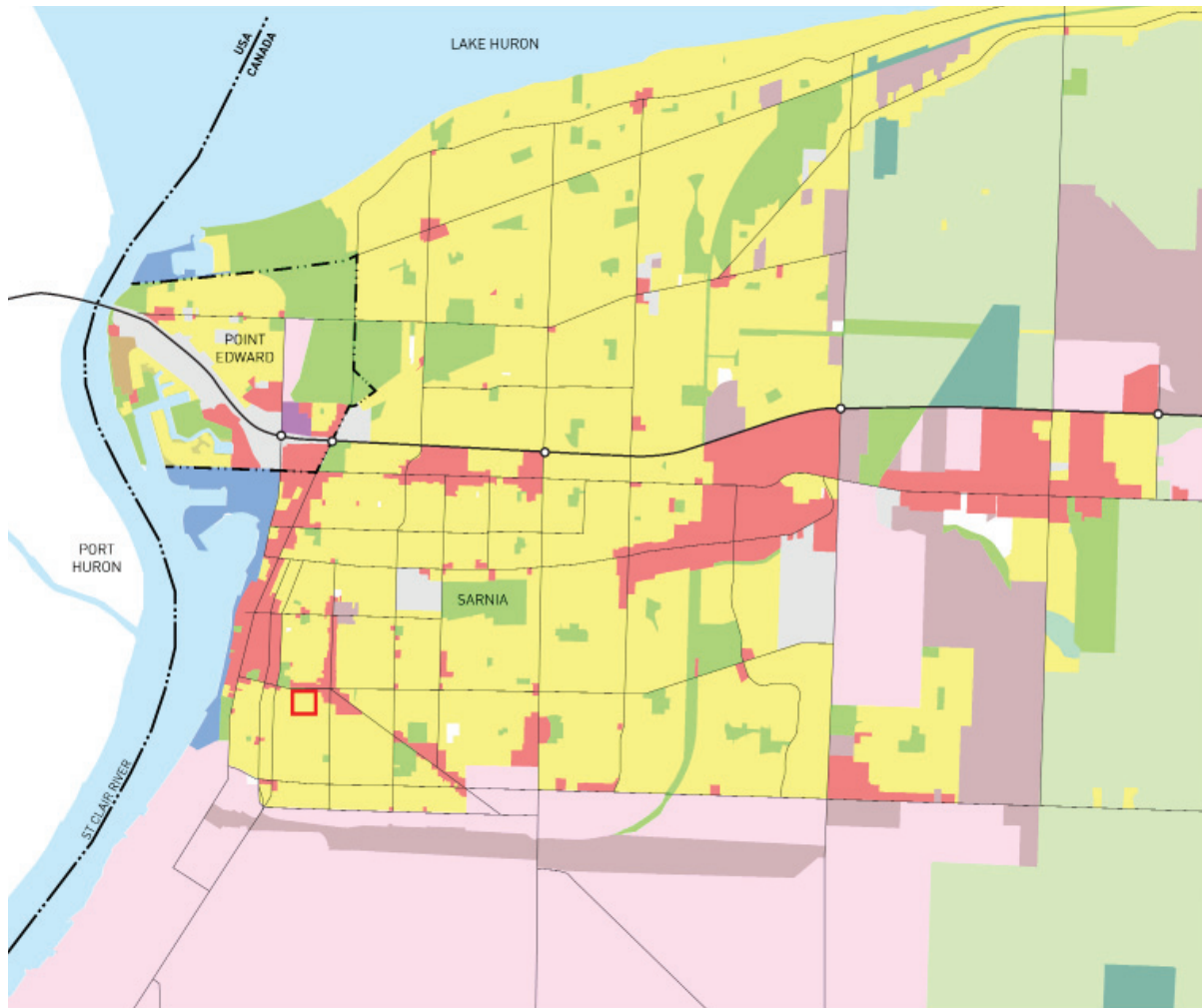


**Fig 3.13** *Low Density Housing*

*Low Density Housing*

- Low Density Housing
- Built Up Area
- SCITS





**Fig 3.14** Sarnia and Port Huron zoning map

## **Suburban Dream**

The suburban dream is a system of living that was sold to many people in North America, especially post World War Two and to the baby boomer population. The dream offered detached dwellings with large yards and allowed for the feeling that owners were the masters of their own domain. The detached homes and large yards also afforded significant amounts of extra space that could be used for expanded house programming, hobbies, working and leisure. For many who live in the suburbs and enjoy the freedom and opportunity provided by the excess of private space, leaving their current home to downsize can be a difficult choice.

The impetus for change in living arrangements later in life can be impacted by a variety of factors including less maintenance and upkeep, not requiring as much space, financial reasons, accessibility, and health. This can be especially difficult for those who wish to age in place and yet are no longer able to stay in their homes due to their declining condition.

A part of the desire to age in place is the ability to stay connected and established in a community and maintain habits and activities afforded by a comfortable home. When some people are forced to leave a home they once considered to be their last they often leave behind many of these affordances to live in a retirement community or residence.

In providing new living arrangements, a new type of living is required that would allow members of the community to move into this new style of community earlier in life that will allow them to age in place, even as factors such as age, economics, accessibility, and productivity change.



**Fig 3.15**

*The suburban house offers extra spaces for inhabitants such as: full kitchens, garages and workshops, studio spaces or extra bedrooms, and private yards for landscaping or gardening.*

## Sarnia Collegiate Institute and Technical School

Sarnia Collegiate Institute and Technical Institute, commonly referred to as SCITS, is a high school located in South Sarnia. Nestled among old war era vinyl sided housing, on the edge of the historic downtown, the school was built in 1921 and was at the time the only public high school in the city<sup>57</sup>. The original building was designed in quasi gothic collegiate style with an interior featuring wide daylit hallways, a grand staircase with large auxiliary staircases, and heavy mixture of brick, plaster and wood finishes. The facilities included: separate girls and boys gymnasiums, a theatre with balcony, indoor swimming pool, gun range and workshops. Subsequent additions added a new gymnasium, cafeteria, film greenroom, large technical and shop classrooms, and a new front entrance.

In its ninety-seven year history the school has seen approximately “80, 000 students or more come through its halls”<sup>58</sup> while being a central community hub and gathering place for Sarnia’s southern neighbourhoods. Over those years it has served host to: the Annual Renvue (a variety show that has been produced since the school’s inception), recitals, plays, swimming competitions, outdoor hockey rinks and many other community activities.

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<sup>57</sup> Lambton Kent District School Board, *SCITS School Information Profile* SCITS - Sarnia Collegiate Institute & Technical School, [2016].

<sup>58</sup> Tyler Kula, “End of Classes Marked at Former SCITS Building,” *Sarnia Observer* June 19, 2019. <https://www.theobserver.ca/news/local-news/end-of-classes-marked-at-former-scits-building>.

*Fig 3.16 SCITS North Face*



*Fig 3.17 Theatre*



*Fig 3.18 Typical Classroom*



*Fig 3.19 Swimming Pool*



*Fig 3.20 Side Entrance*



*Fig 3.21 Old Basement Gymnasium*





*Fig 3.22 South view of school*



*Fig 3.23 Typical hallway in original building*

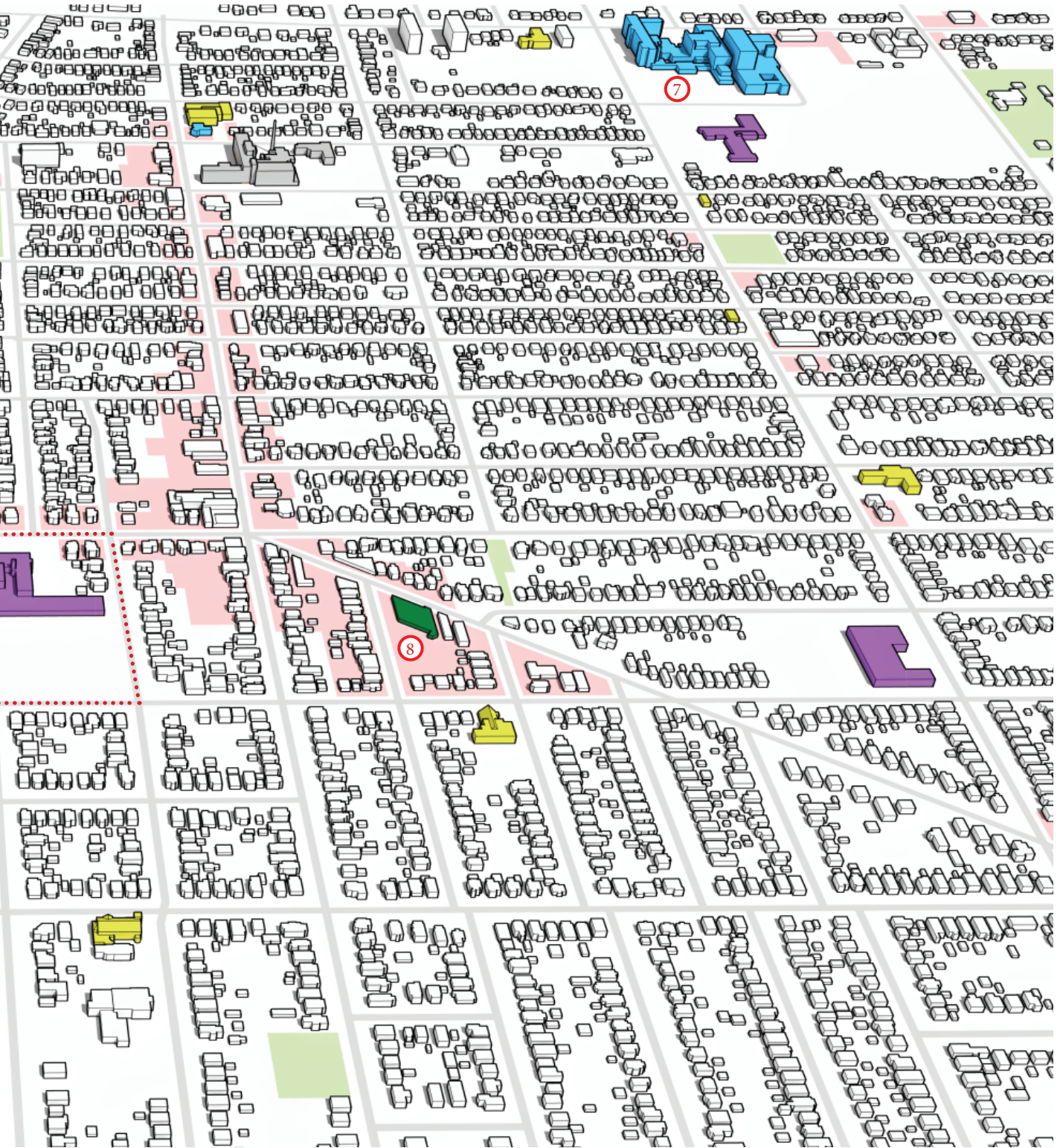


Fig 3.24 SCITS Aerial site image





Fig 3.25 Contextual Site Map



## Loss of Infrastructure

The shift in demographics that the city of Sarnia is facing, like many small cities and towns in southern Ontario, has created a change in the infrastructural needs of the community. This shift is tangibly being played out in the reduction of classrooms and closure of schools as the population ages and the large expensive buildings are no longer needed to provide learning spaces for young pupils. The Lambton Kent District School Board, the public school board for Lambton County and Kent region to the south, has seen a reduction of enrolment in their primary schools by 6.7 percent<sup>59</sup> and in their secondary schools by 23.2 percent<sup>60</sup> over the 2018 to 2019 school year, with total enrollment over the past twenty years down by 27.9 percent.<sup>61</sup> This reduction in students has decreased the utilization rate of public schools to 71.93 percent, not including schools already shuttered, with space for an additional 8,557 students in the existing buildings.<sup>62</sup> The extra pupil space in schools along with the expensive upkeep of the buildings has led the school board to consolidate and close schools across

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<sup>59</sup> Jim Costello, Gary Gurardi and Brian McKay, *LKDSB Pupil Accommodation Report 2018/2019, REPORT NO: B-18-111* (Lambton Kent District School Board, [2018]).2.

<sup>60</sup> *Ibid.*, 2.

<sup>61</sup> *Ibid.*, 2.

<sup>62</sup> *Ibid.*, 4.



*Fig 3.26 Abandoned Devine Street School*

the district. A void or empty shell has been left where key pieces of civic and community infrastructure stood within the local neighbourhood.

The closure of schools is not just a loss for the students who inhabited their classrooms, but also for the surrounding community that had access to their larger social infrastructure properties and effects, including their gymnasiums, sports fields, playgrounds, rentable spaces and community events. The vibrancy of children and young adults in the locality is also lost when students are bused to another area to receive their education, effecting local businesses who rely on the demographic, and changing the ethos of the community.

In recent years Sarnia has seen proposals and the redevelopment of shuttered schools within the city.<sup>63,64,65,66</sup> While these proposals and developments benefit the community by filling in gaps of abandoned urban fabric, they do not extend the social infrastructure to the full extent of their previous use. Some proposals have addressed the changing demographic in their development plans with new senior housing<sup>67</sup> but they adhere to classic typologies of senior living, removing active community use of the site which subsequently does not encourage community interaction with its new residents.

Sarnia Collegiate Institute and Technical School is one such high school that is facing closure and consolidation, effecting the southern Sarnia region. The loss of the school and its relocation to the eastern suburbs of the city will leave a deficit of public infrastructure close to an already struggling downtown and lower income neighbourhood. In a staff report by

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<sup>63</sup> Cathy Dobson, “Former School Reopens as Self-Storage Business,” *The Sarnia Journal* January 9, 2015. <https://thesarniajournal.ca/former-school-reopens-self-storage-business/>.

<sup>64</sup> Melanie Irwin, “BlackburnNews.Com - Council Approves St. Peter School Development,” *Blackburn News* March 20, 2018. <https://blackburnnews.com/sarnia/sarnia-news/2018/03/20/council-approves-st-peter-school-development/>.

<sup>65</sup> George Mathewson, “Seniors Complex Approved for Devine Street School Lands,” *The Sarnia Journal* October 30, 2017. <https://thesarniajournal.ca/seniors-complex-approved-for-devine-street-school-lands/>.

<sup>66</sup> Dobson Cathy, “Nursing Home shows Interest in Redeveloping SCITS Property,” <https://thesarniajournal.ca/nursing-home-shows-interest-in-redeveloping-scits-property/>

<sup>67</sup> Ibid.

the city of Sarnia,<sup>68</sup> the city proposed the retention of the high school citing its rental income and the potential consequences of businesses closing or moving and families leaving the neighbourhood. Conversely, the school board chose to close the school citing the economic construction viability<sup>69</sup> rather than the community impact of moving the school.

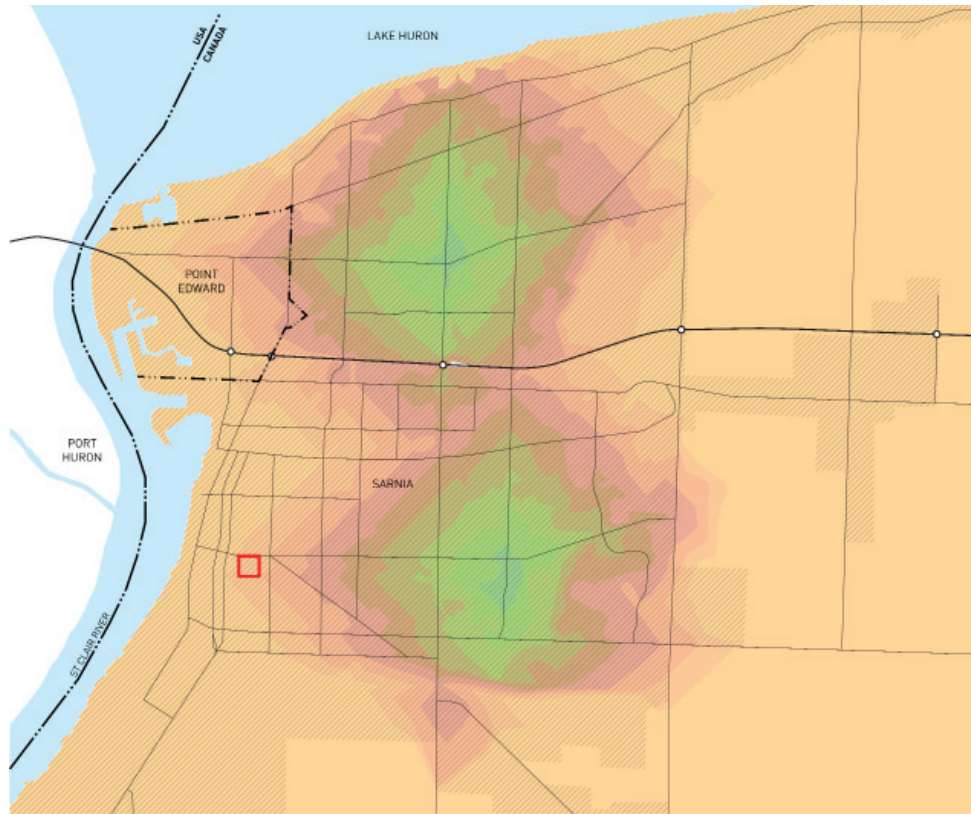
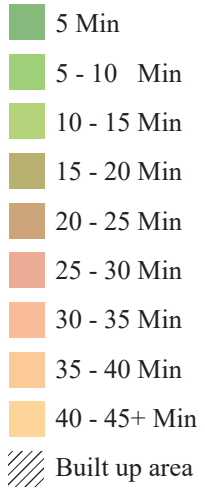
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<sup>68</sup> City of Sarnia, *Community Impact Assessment - Accommodation Review of Sarnia Collegiate Institute and Technical School and St. Clair* City of Sarnia, [2016].

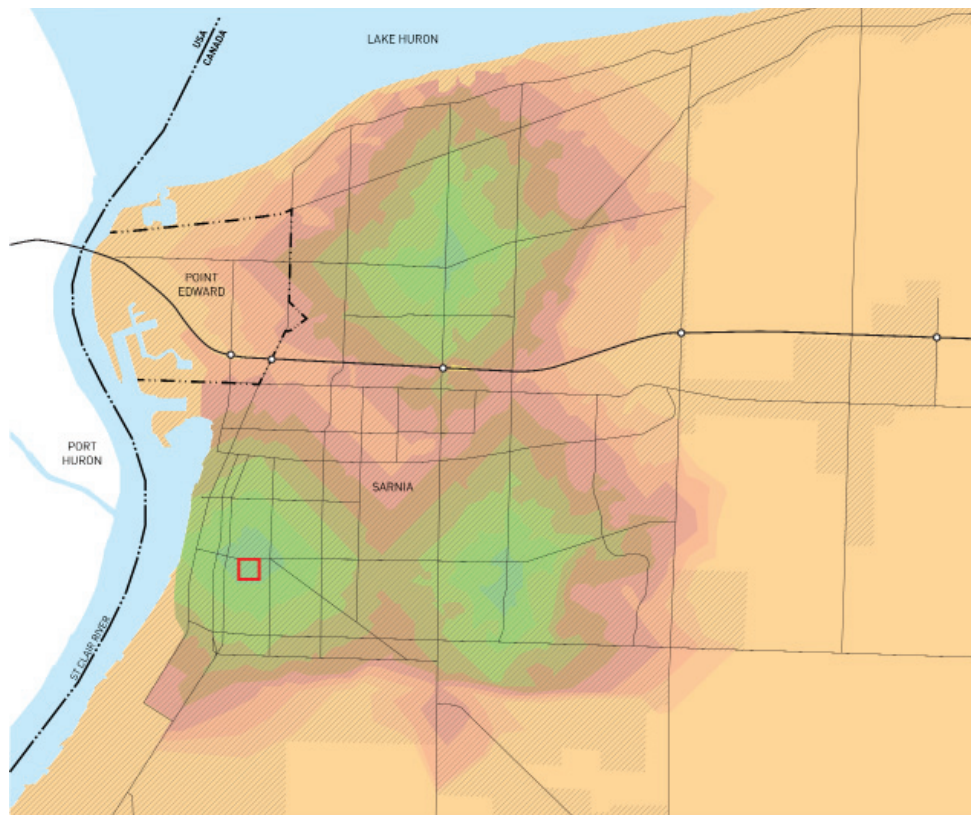
<sup>69</sup> Jim Costello, *Addendum to the Final Staff Report on the Consolidation of St. Clair Secondary School (SCSS) and Sarnia Collegiate Institute and Technical School (SCITS) and the Revision of the City of Sarnia Secondary School Boundaries* (<https://www.lkdsb.net/Board/BoardMeetings>: Lambton Kent District School Board, [2016].



*Walking Distance*



**Fig 3.27** *Walking distance to public secondary schools after SCITS closure*



**Fig 3.29** *Walking distance to public secondary schools with SCITS open*



**PART 4**  
*Design Proposal*

## SCITS Building Demolition and Retention

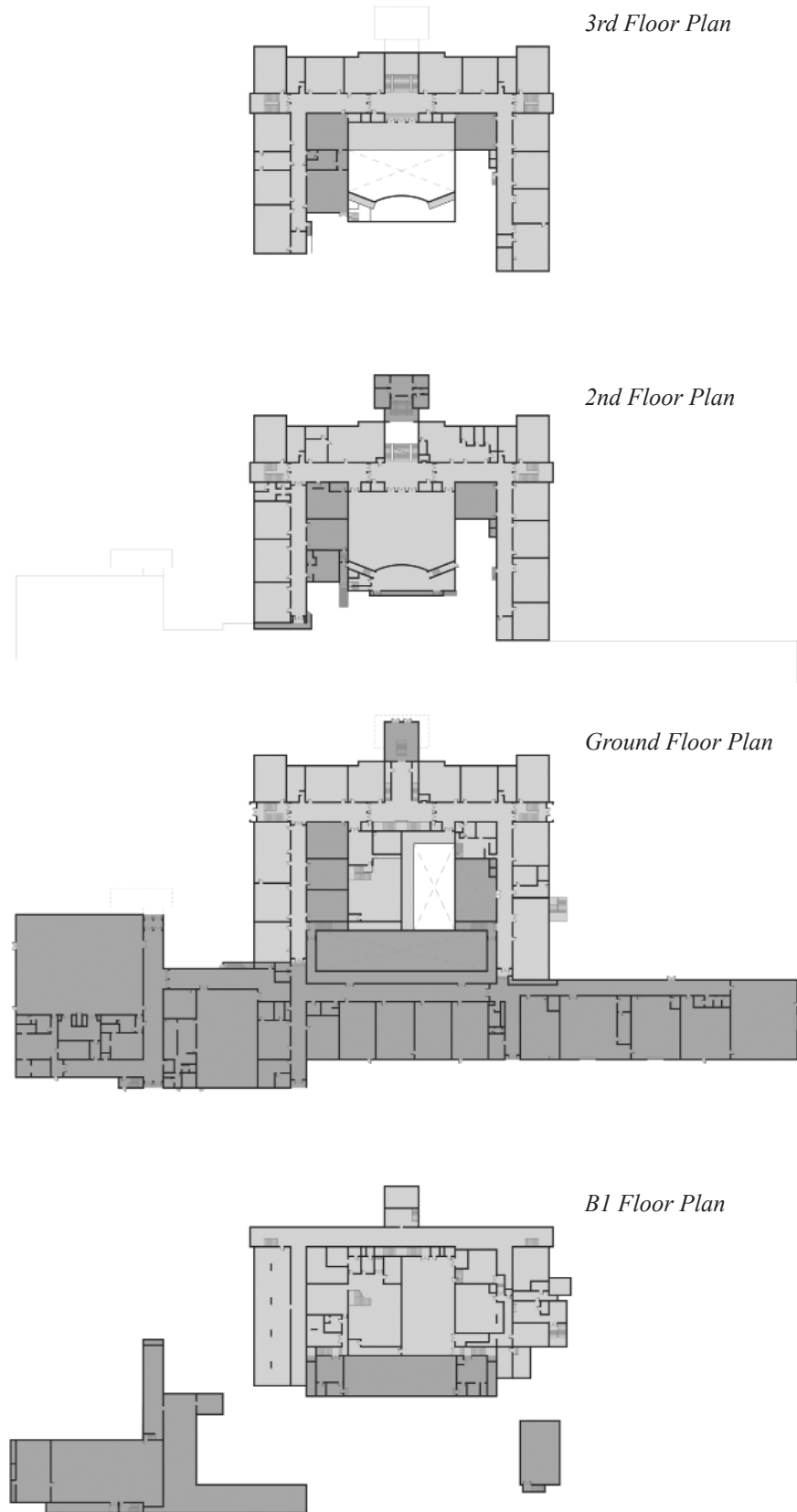
To construct the new design proposal, a decision on key programmatic and structural elements to retain in the existing building must be made. Careful consideration was given to distinguish what is important and worth saving versus what elements can be demolished to make way for a new and better functioning building.

The existing high school, having gone through four additions and renovations<sup>70</sup> is a warren of flights of stairs, dark hallways, and utilitarian spaces. To accommodate the new design, a significant portion of the building, through mainly the previous additions, is to be demolished. All the southern one storey classrooms, workshops and new gymnasium are to be demolished, as well as the existing swimming pool which is dark and not universally accessible. The original light wells between the theatre and the east and west wings of the school will also be reopened down to be ground and basement levels to allow for natural light to be admitted into the new design. The modernist entrance on the front of the school will also be demolished to let the façade breathe at the main entry. At the front of the school the central staircase, as well as adjoining rooms and floors will be cut and removed to allow for an accessible and grand entrance that can service the revived theatre which is to remain. On the ground floor, several classrooms are to be expanded by removing the second storey floor above to create an open, airy and inviting public programmed space. All exterior ground floor windows and walls that are not structural will be removed to create a more welcoming presence around the entire façade.

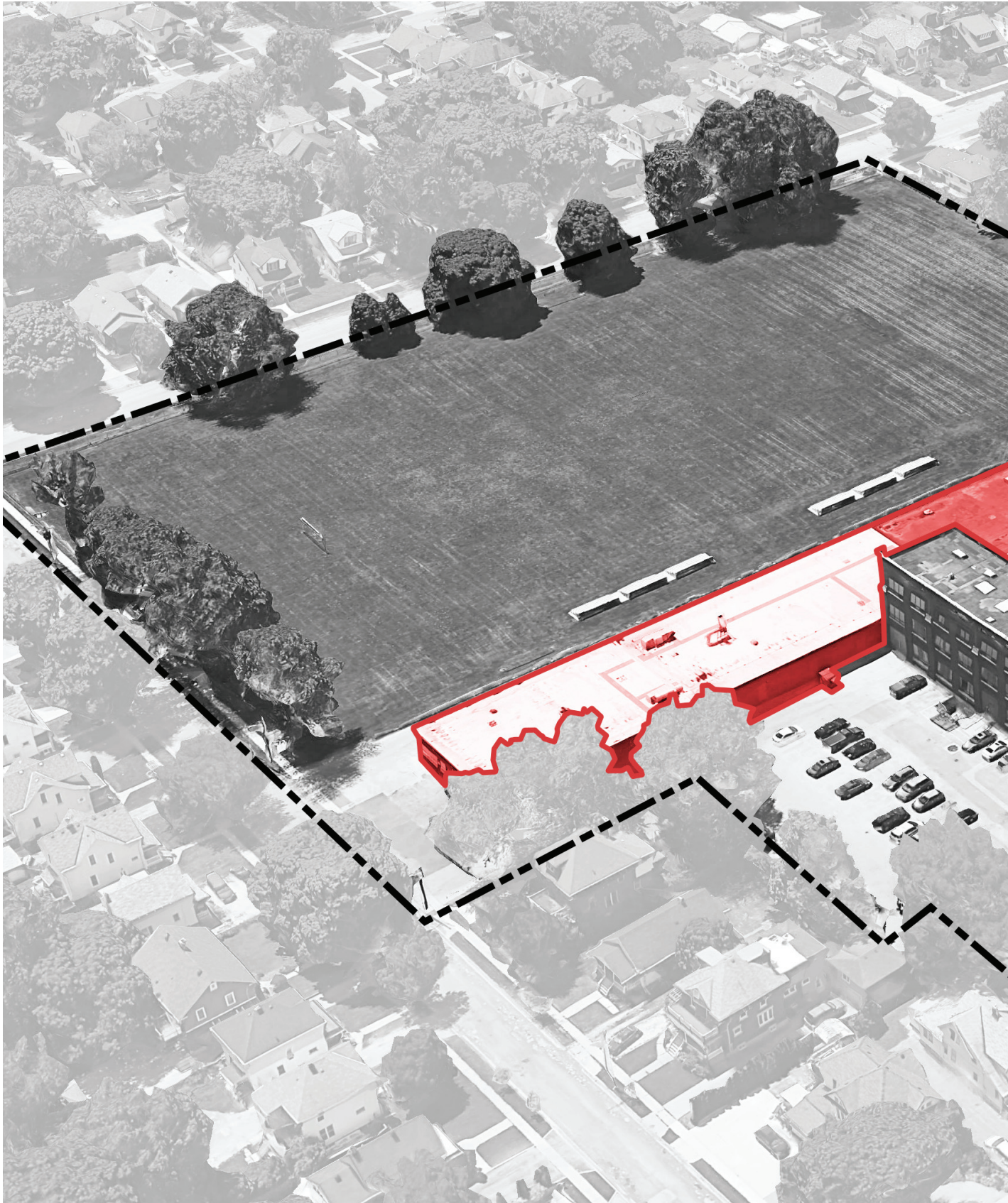
As indicated, the theatre and lower gymnasiums are to be retained as well as the main C-shape of the original building. The upper second and third storey classrooms where the floor has not been removed will be converted to residential units that generally follow the existing classroom footprint. Except for the ground floor, the façade of the East, West and North faces will be kept and restored. The key circulation paths will be retained and their exterior fenestrations expanded back to the structure.

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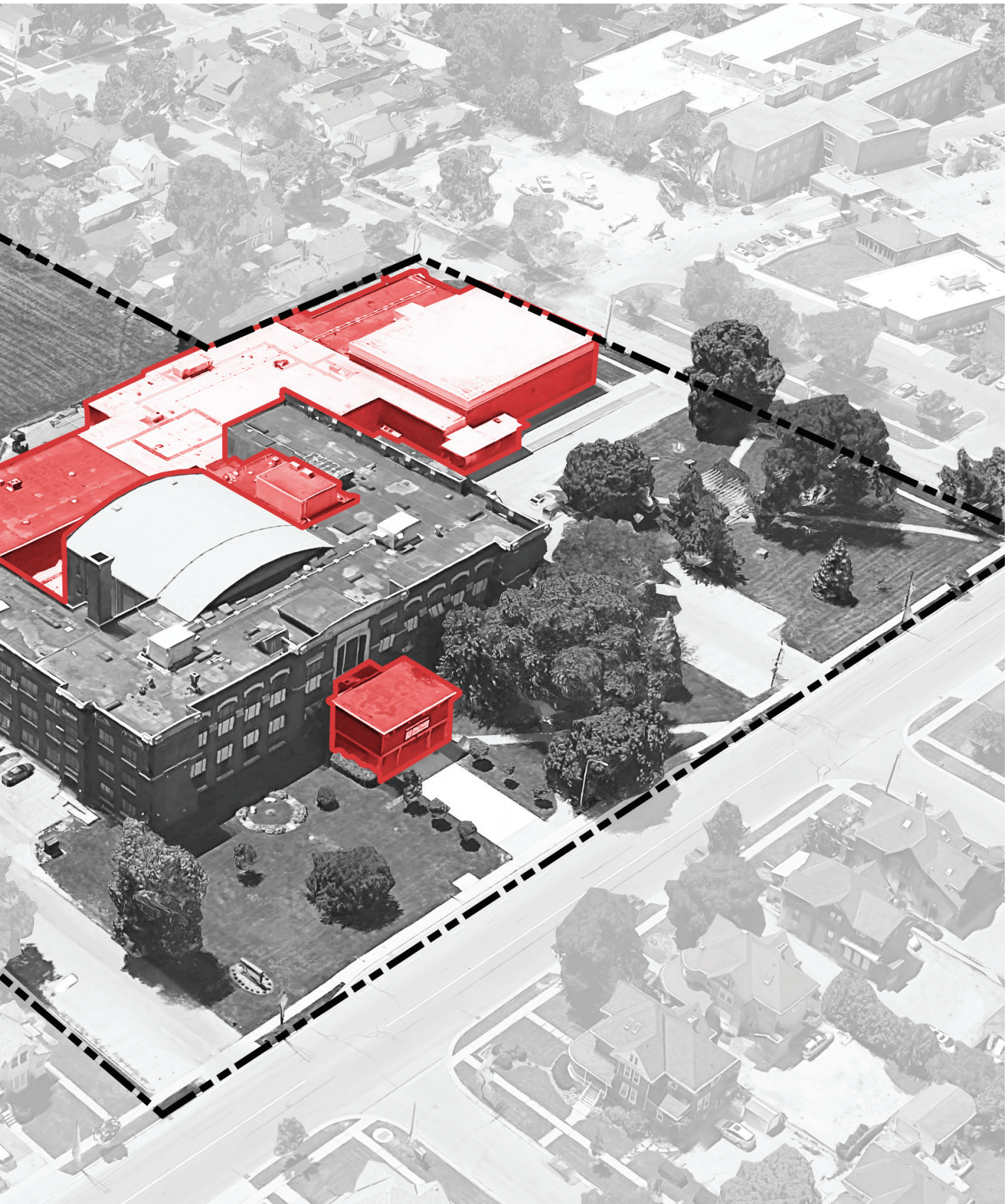
<sup>70</sup> Lambton Kent District School Board, *SCITS School Information Profile* SCITS - Sarnia Collegiate Institute & Technical School, [2016].



**Fig 4.01**  
Existing SCITS floor plans.  
Light Grey represents areas  
of the building to be kept.  
Dark Grey shading shows  
areas to be demolished.



*Fig 4.02 Existing SCITS Aerial. Red shading represents areas of the building to be demolished.*





*Fig 4.03 North-East Design Proposal Aerial*





## Design Proposal

This design strives to accomplish three main objectives:

First, is to maintain and expand an integral and historic piece of social infrastructure that all generations can use and enjoy. SCITS has been serving the local community for almost one hundred years,<sup>71</sup> and the design helps to extend that service.

Secondly, is to create homes for seniors that allow for greater daily social interaction and physical participation with the surrounding community while retaining their independence and privacy.

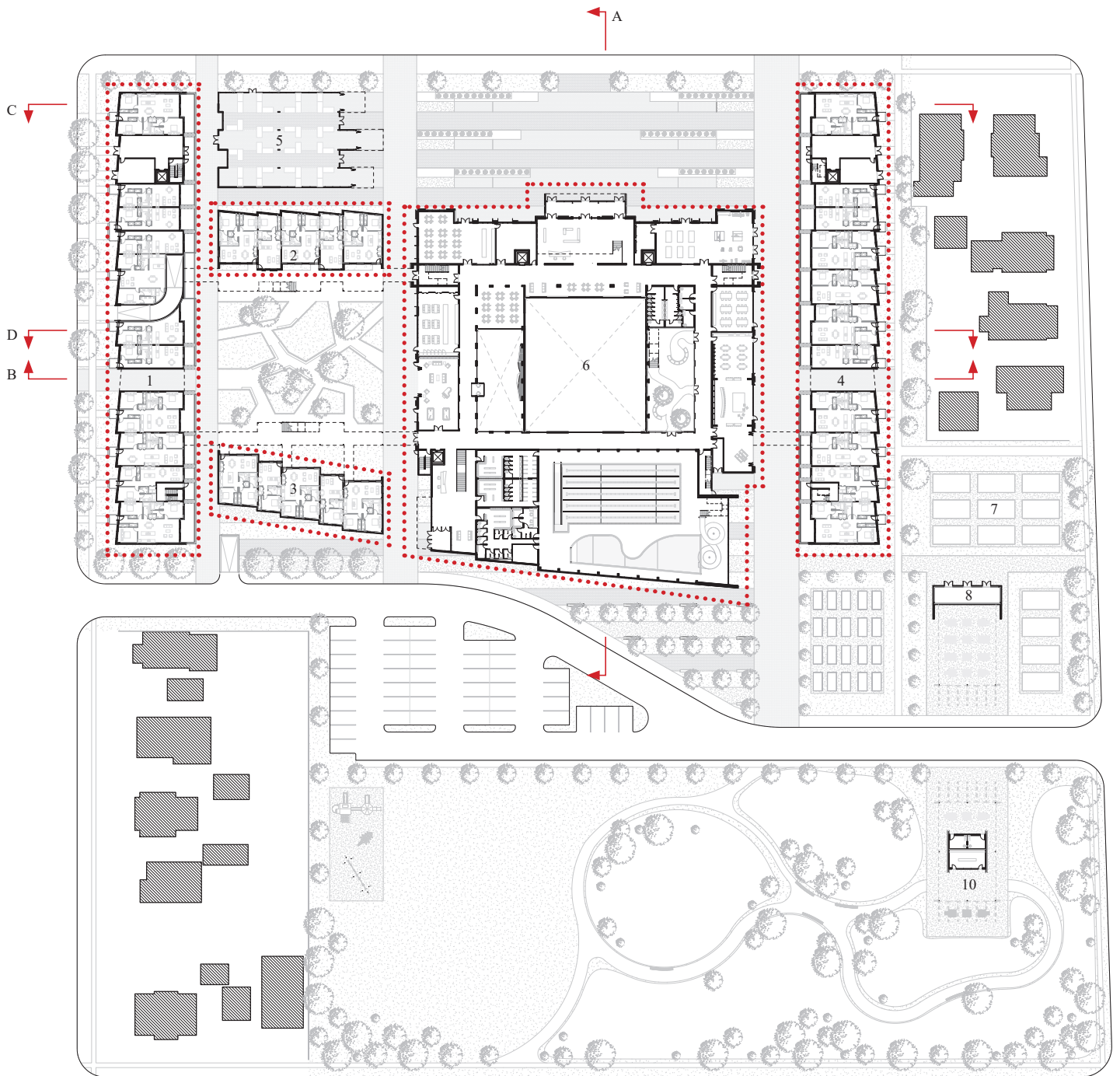
Thirdly, is to create a hub of programmatic space that will encourage the interaction and participation of all generations to facilitate healthy relationships, while promoting the dissemination and sharing of ideas, wisdom and knowledge. In doing so there can be an expanding and extending of the life stories of all in the local community.

The design itself can be broken down into four building blocks across the site. The first is a central community hub that hosts social infrastructure including a theatre, community classrooms and kitchens, daycare, restaurant, workshop, and recreational centre. Four residential buildings comprised of mixed public apartments and senior residences, create the second block. The relocated farmers market and public square are the third. An exterior landscape with a variety of social and spatial programming rounds out the fourth.

A new access street splits the site into North and South areas providing polar entrances to the hub and through the site. The south is landscaped as a public park while the north accommodates the first three building blocks. Two residential buildings bookend the north site while creating typical residential streetscapes to the property line. Between the pair lie the hub and two more residential buildings set back to match the hub's façade. Pedestrian bridges span all five buildings to allow seamless movement across building floors without having to change levels.

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<sup>71</sup> Meghan Realesmith, "Save SCITS," <http://www.sarniahistoricalociety.com/save-scits/>



*Ground Site Plan*

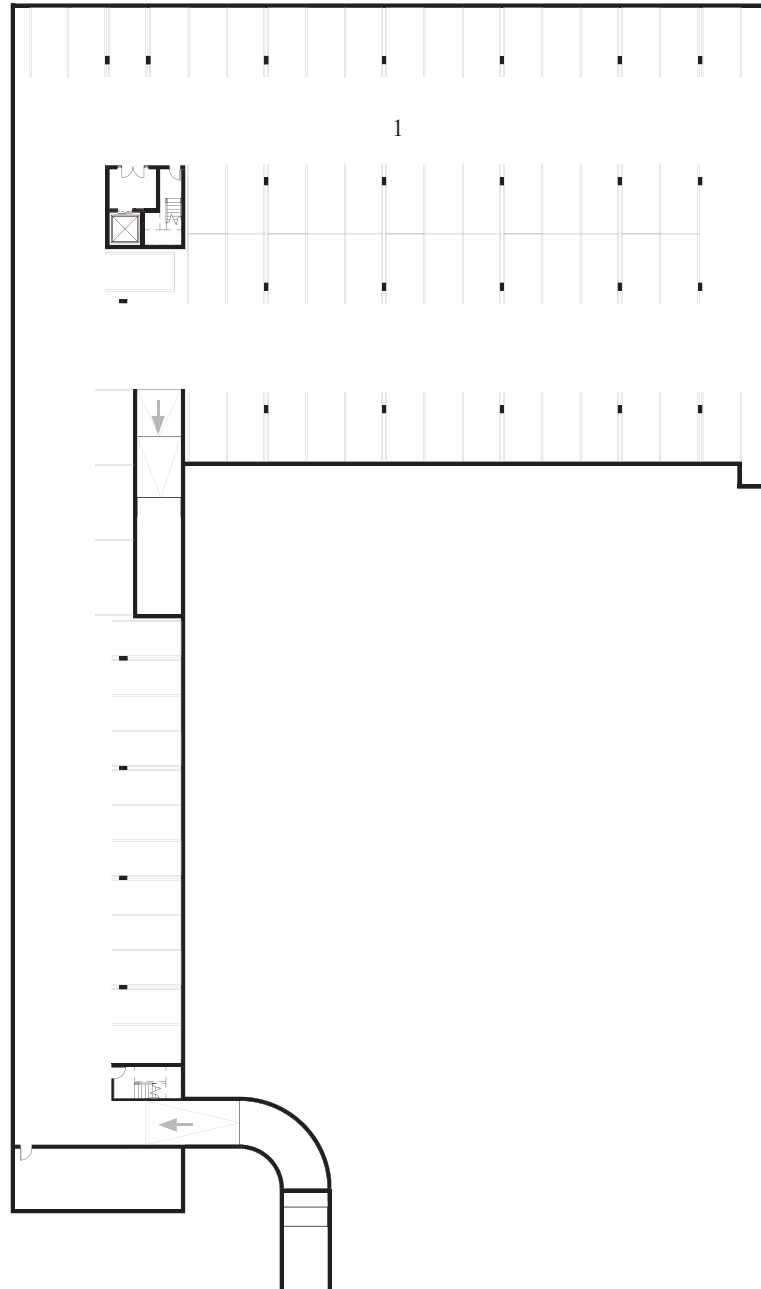
- |                           |                                    |
|---------------------------|------------------------------------|
| 1. Residential Building A | 6. Community Centre                |
| 2. Residential Building B | 7. Community Garden                |
| 3. Residential Building C | 8. Community Garden Center Storage |
| 4. Residential Building D | 9. Picnic Patio                    |
| 5. Farmers Market         | 10. Washroom and Change Room       |



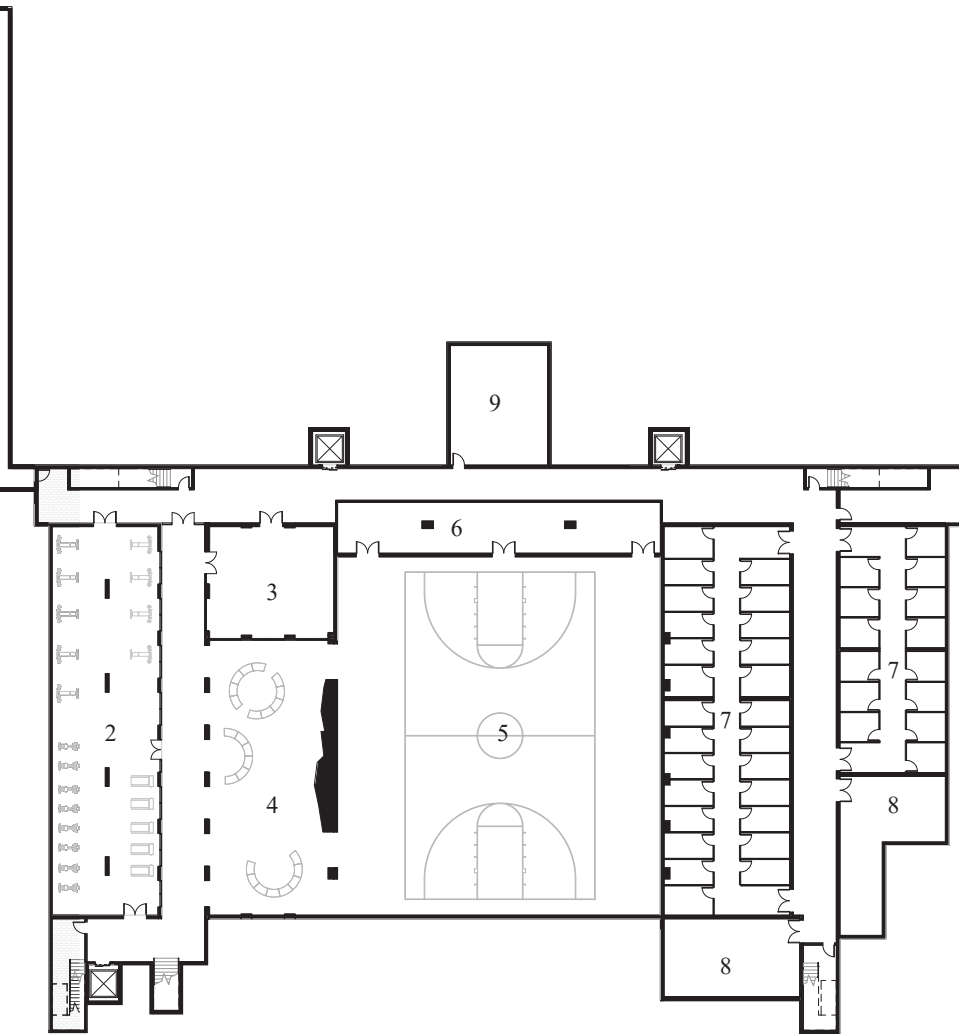
*Fig 4.04 Ground floor site plan 1:1250*

*Basement Floor Plan*

1. Parking Garage
2. Fitness Room
3. Fitness Class Room
4. Lounge and Rock Climb
5. Gymnasium
6. Gymnasium Storage
7. Residential Unit Storage
8. Mechanical
9. Janitorial



*Fig 4.05* Basement floor plan 1:600



Ground Floor Plan

1. Residential Units
2. Residential Lobby
3. Residential Service
4. Farmers Market
5. Restaurant
6. Restaurant Kitchen
7. Theatre Lobby
8. Workshop Storage
9. Workshop
10. Community Classroom
11. Daycare
12. Outdoor Play Area
13. Community Kitchen
14. Great Room
15. Recreation Center Lobby
16. Mens Change Room
17. Womens Change Room
18. Family Change Room
19. Life Guard Rooms
20. Pool Storage
21. Swimming Pool

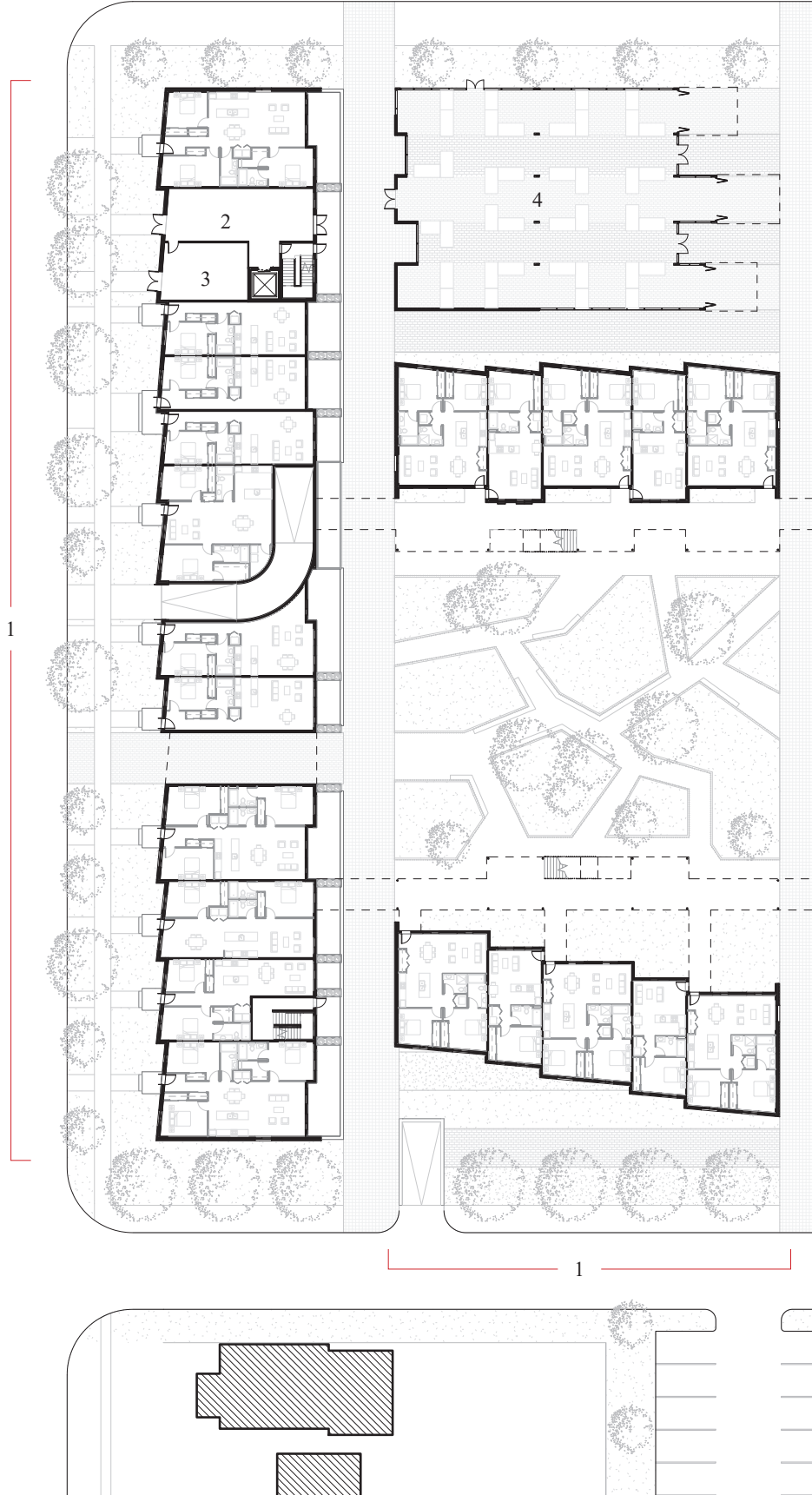
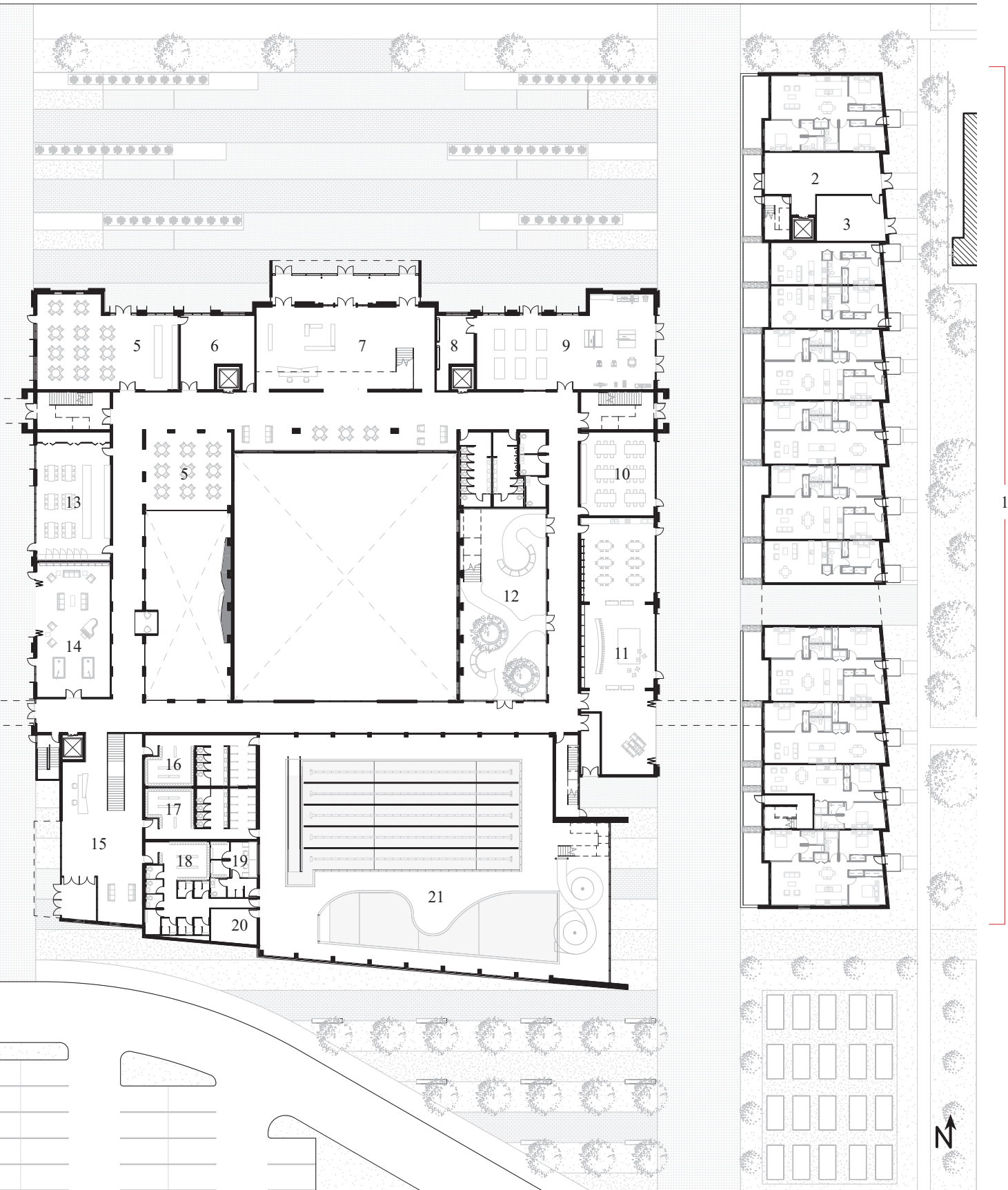


Fig 4.06 Ground floor plan 1:600



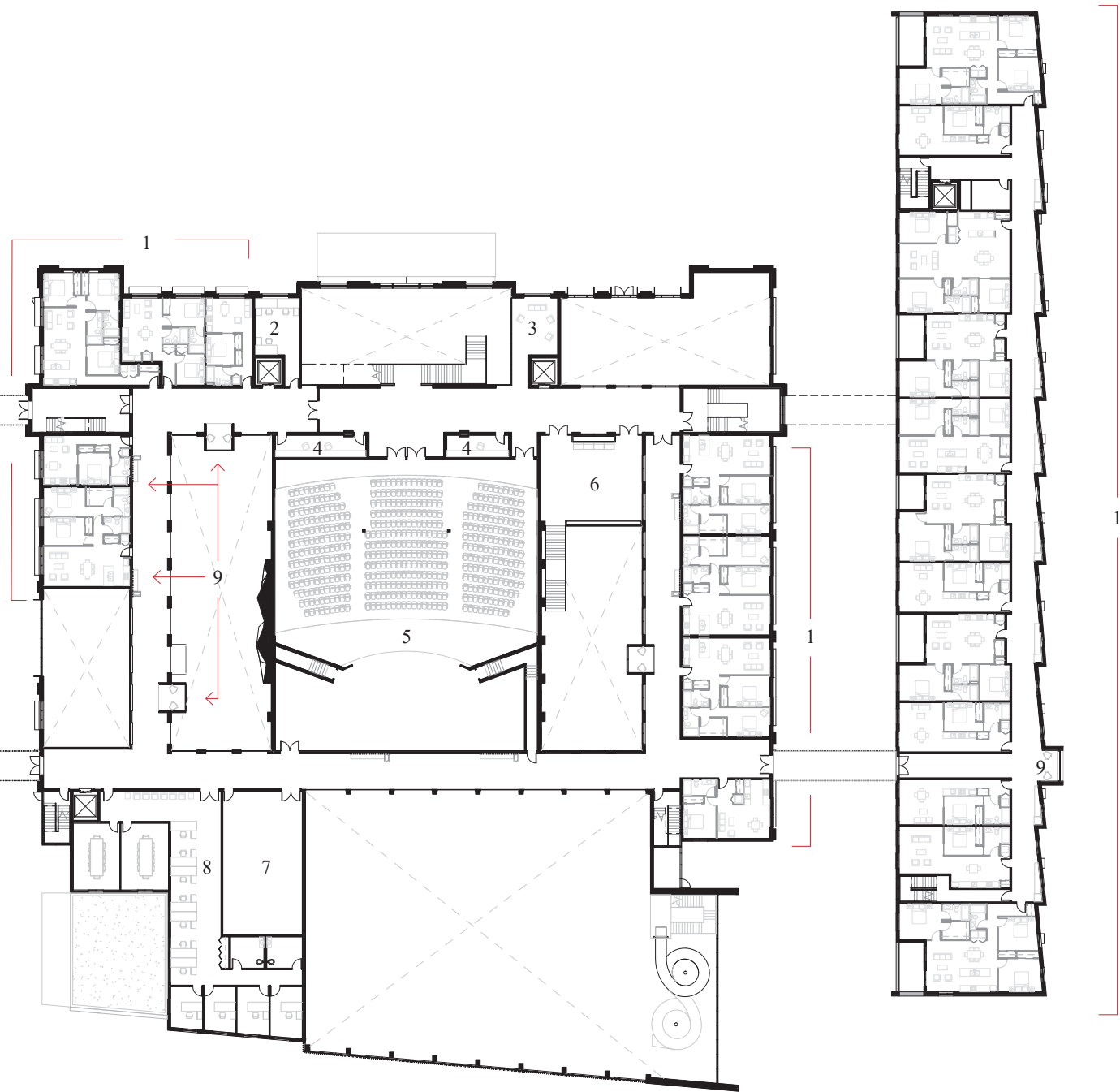
*Second Floor Plan*

- 1. Residential Units
- 2. Theatre Ticket Back Office
- 3. Lounge
- 4. Theatre A|V Rooms
- 5. Theatre
- 6. Outdoor Patio
- 7. Theatre Storage
- 8. Centre Offices
- 9. Semi-Private Enclaves



*Fig 4.07 Second floor plan 1:600*



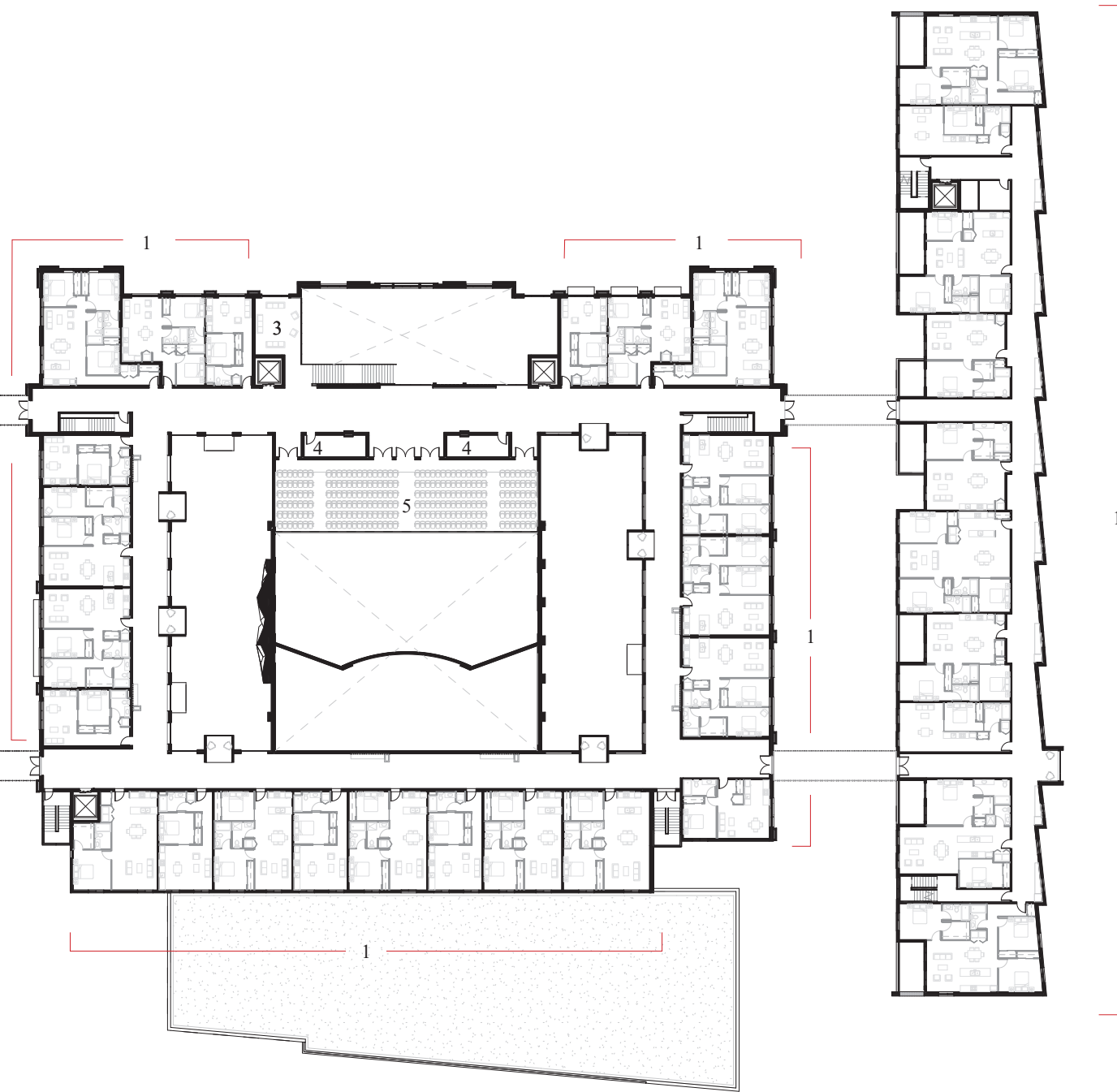


*Third Floor Plan*

- 1. Residential Units
- 2. Resident Lounge
- 3. Lounge
- 4. Theatre A/V Rooms
- 5. Theatre Balcony Seating

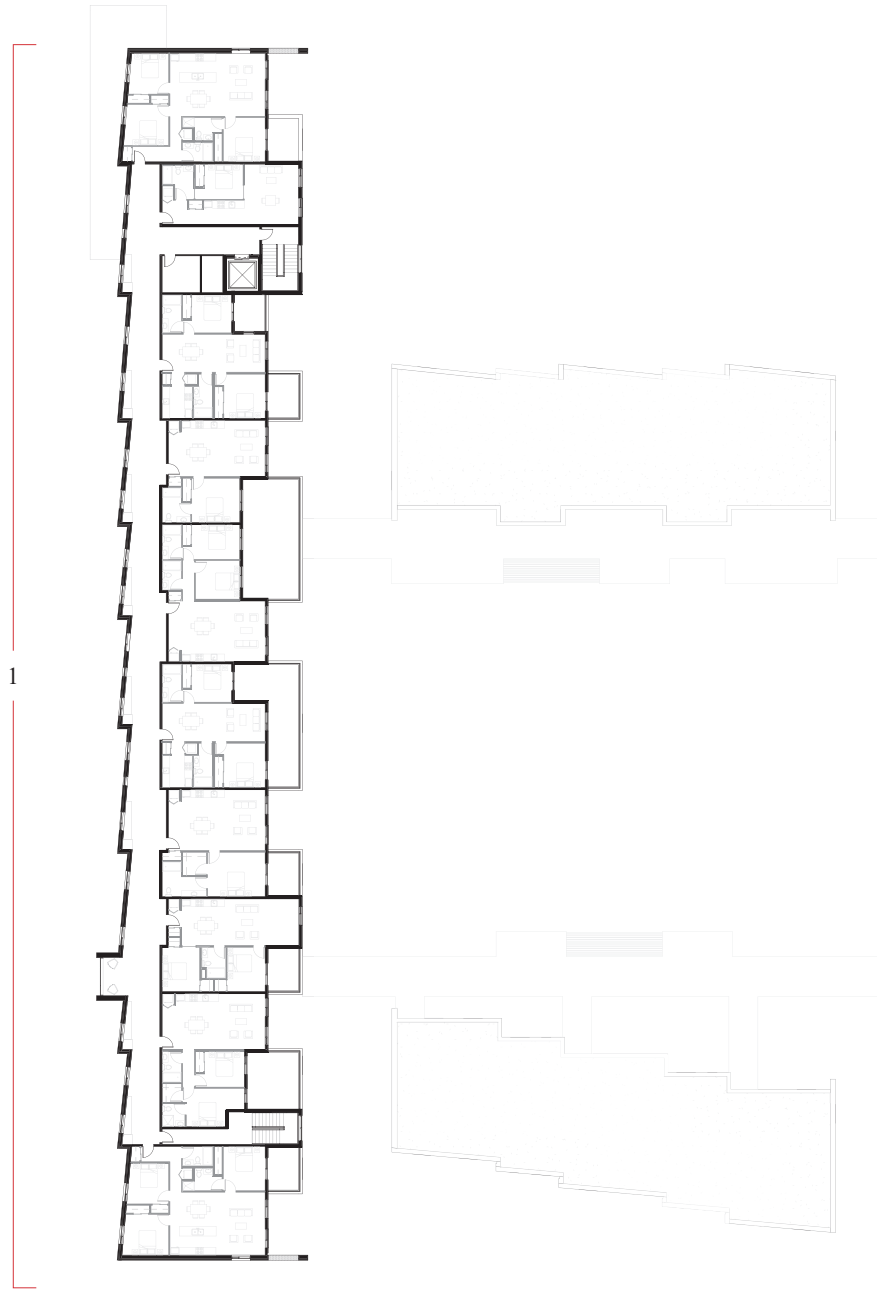


*Fig 4.08 Third floor plan 1:600*

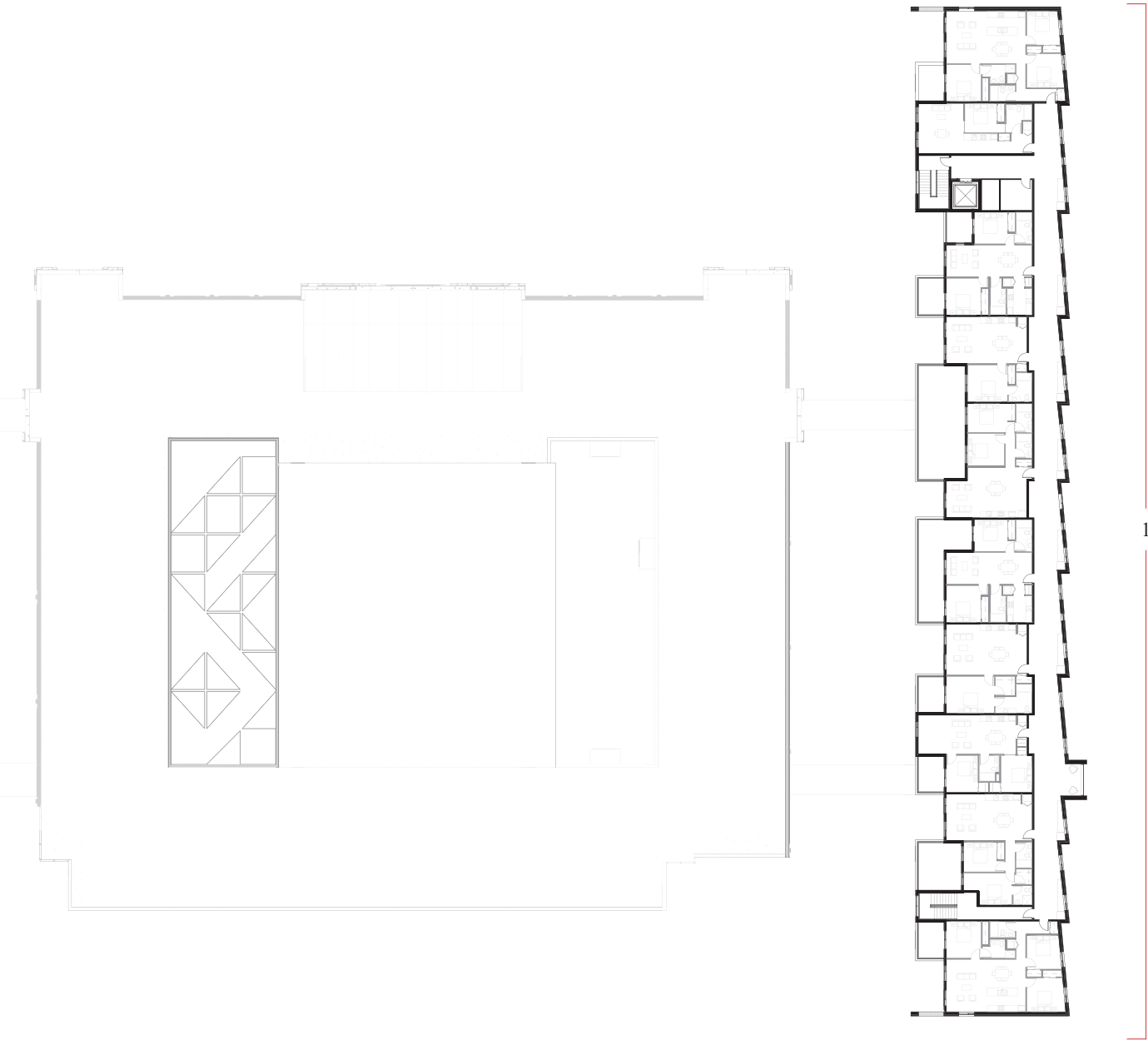


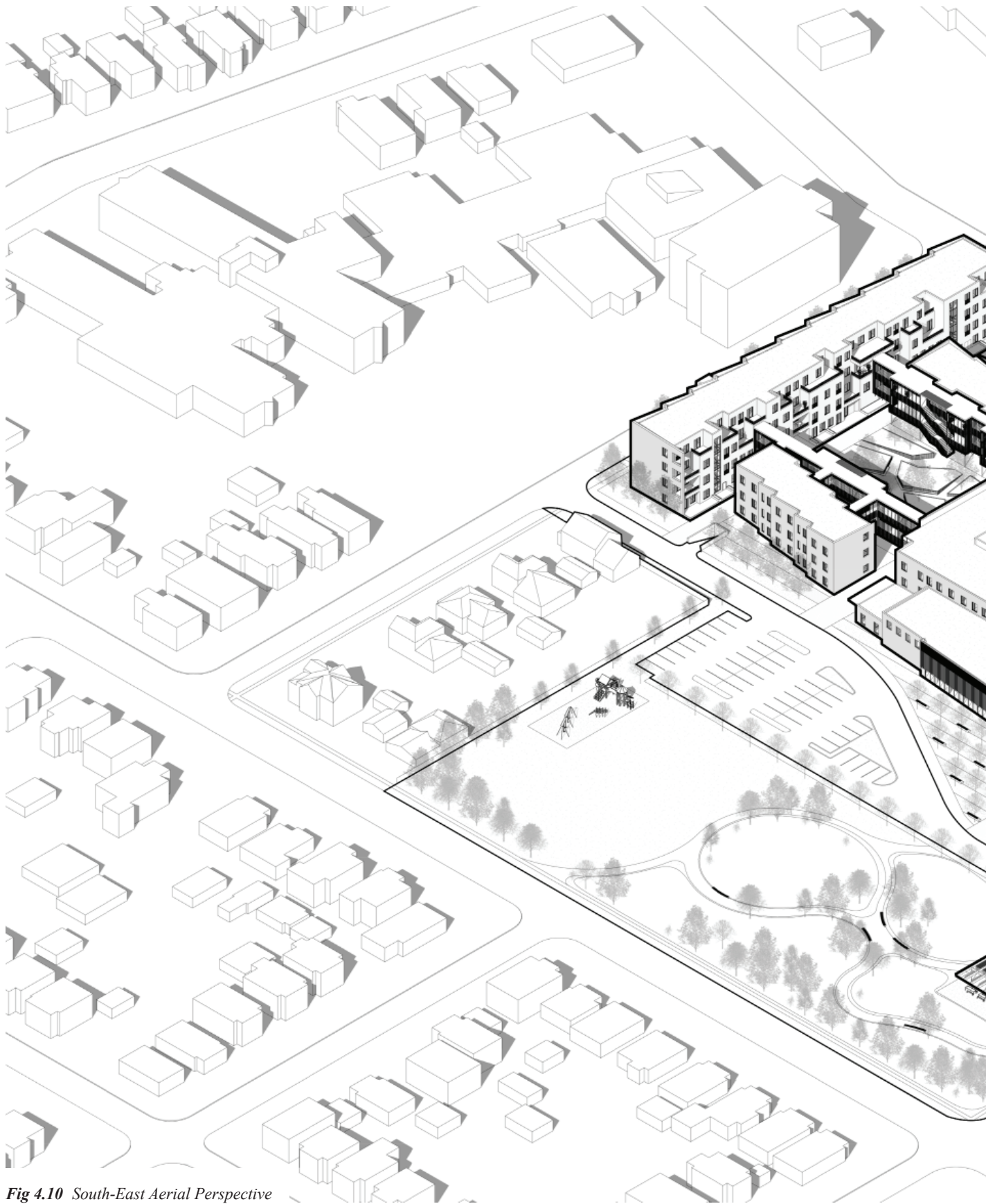
*Fourth Floor Plan*

1. Residential Units

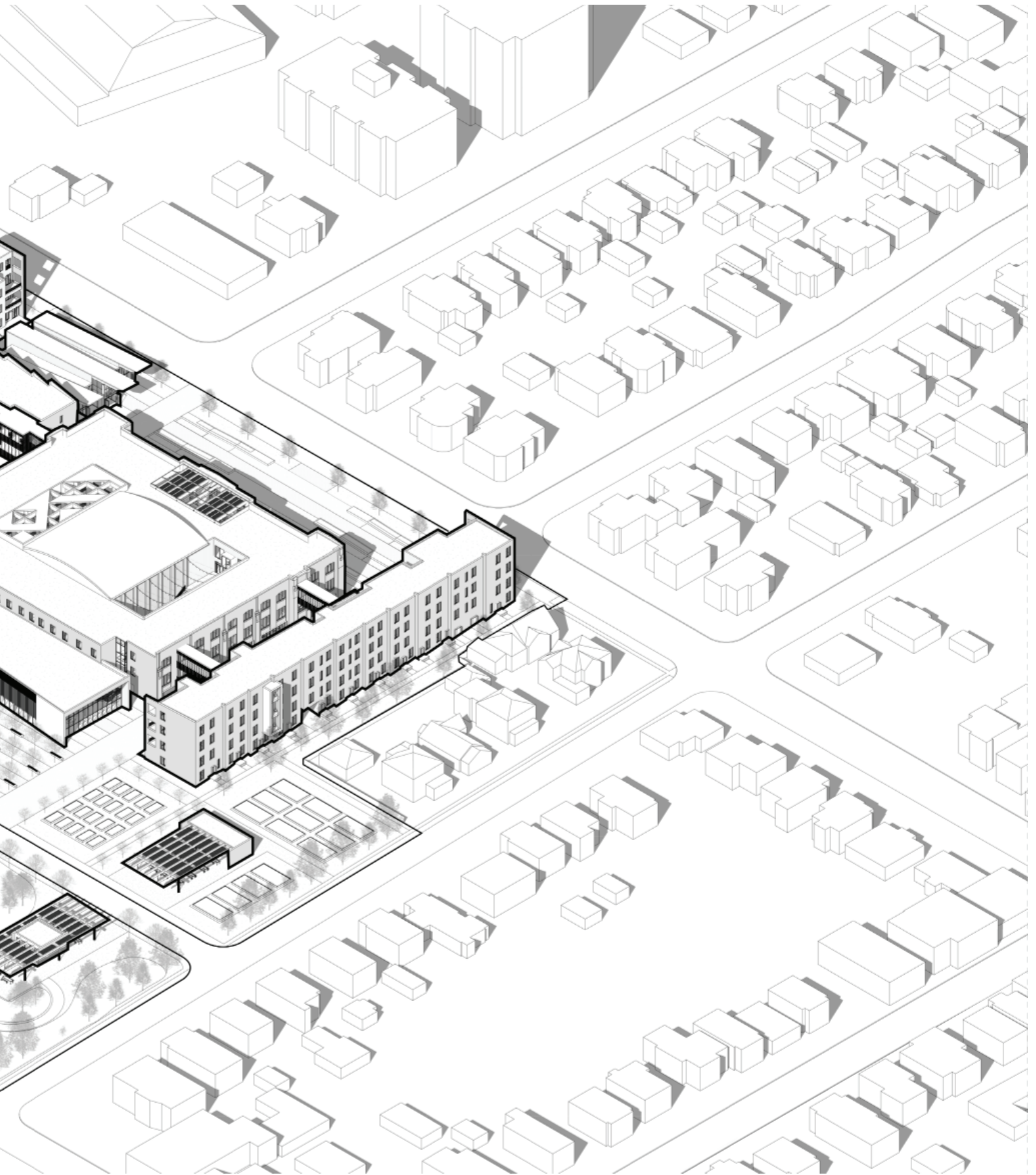


*Fig 4.09 Fourth floor plan 1:600*





*Fig 4.10 South-East Aerial Perspective*

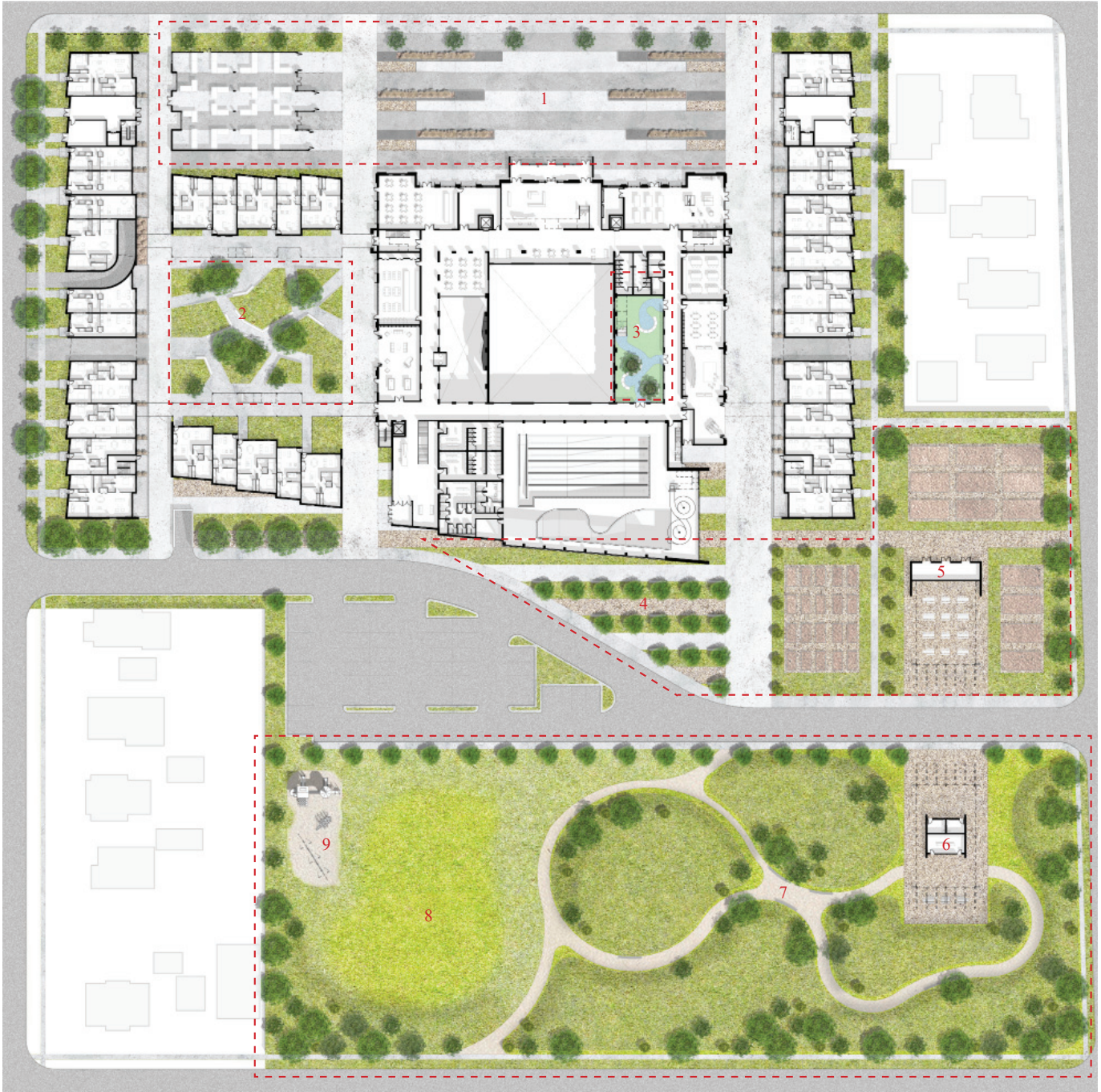


## Landscape

There are four distinct landscaped regions across the site.

- A. On approaching from the North, the two residential bar buildings bookend a large public square fronting the renovated historic school façade. A restaurant and woodshop spill out onto the surrounding stripped hardscaping which rises and falls in tune with the concrete planters and benches which accent the square's linearity. Within the square, the farmers market rises on the western edge and projects across the space on timber columns and beams. Doors within the glazed interior open to allow the market to expand east into the square as the warmer temperatures and growing season expand the market.
- B. Arriving from the South, one is greeted by meandering trails weaving through trees and grassy mounds that open to a field and playground. Kids play on the equipment while a family throws around a Frisbee. Not far off, a pair of seniors are arguing about the results of their lawn bowling game. Tucked into the small grassy mounds is a small trellised field shed with surrounding picnic tables. In the winter this shed will be a warm shelter and change-station for those using the skating paths, which follow the same course as the walking trails.
- C. Extending the shaded trellis across the southern access road is another seating and picnic area where community gardeners can enjoy their harvests. It lies at the center of the community garden which spreads out in three directions. A small outbuilding of stone and wood mirrors the field house across the drive and provides storage for the gardeners. Seating and reprieve are provided just to the west of the gardens, with rows of plantings, trees and benches. This area provides a landscaped and quiet buffer to the glazed envelope of the swimming pool.
- D. A landscaped square pocketed amongst the residential buildings provides a quiet place of relaxation. Angular slabs of earth lift off the ground, providing soft zones of relaxation while trees provide shade overhead. Benches project off the extruded landscape which is held back by a concrete and wood wall. The small park is enclosed on all sides by terraced units and wood bridges connecting the residential buildings to the main community hub.





*Landscape Plan*

- |                                     |                            |
|-------------------------------------|----------------------------|
| 1. Farmers Market and Front Square  | 6. Field House and Seating |
| 2. Residential Relaxation Garden    | 7. Walking   Skating Loop  |
| 3. Play Area and Theatre Overflow   | 8. Open Field              |
| 4. Rec Centre Shading and Seating   | 9. Playground              |
| 5. Community Garden and Picnic Area |                            |

*Fig 4.11 Ground floor landscape plan*



*Fig 4.12* Walking and skating paths, summer and winter seasons



## **Programmatic Design**

The design's program is primarily composed of two main categories: the community realm, and the residential or private realm. The community program is mainly centralized in the shell of the old high school. Retaining the gymnasium and theatre in their current locations, the other programmatic elements are situated on the basement, ground and second floors. All community programming wraps or has lobbies around the perimeter of the ground floor, each with large operable fenestrations that allow easy access, light, and potential projection into the surrounding landscape. The residential suites, both senior and public, are located in four bar buildings on all levels as well as on the second and third levels of the old school. Enclosed parking and covered bicycle storage are provided in the basement, connecting to both the residential bar buildings and the existing school.

The programmatic layout allows the old school to perform as an activity hub in which both residents and community members of all generations can congregate and interact. The four stacked bar buildings pull away from the hub allowing for degrees of separation from the excitement of the centralized activity, while the openness of the site plan allows for views out towards other programming.

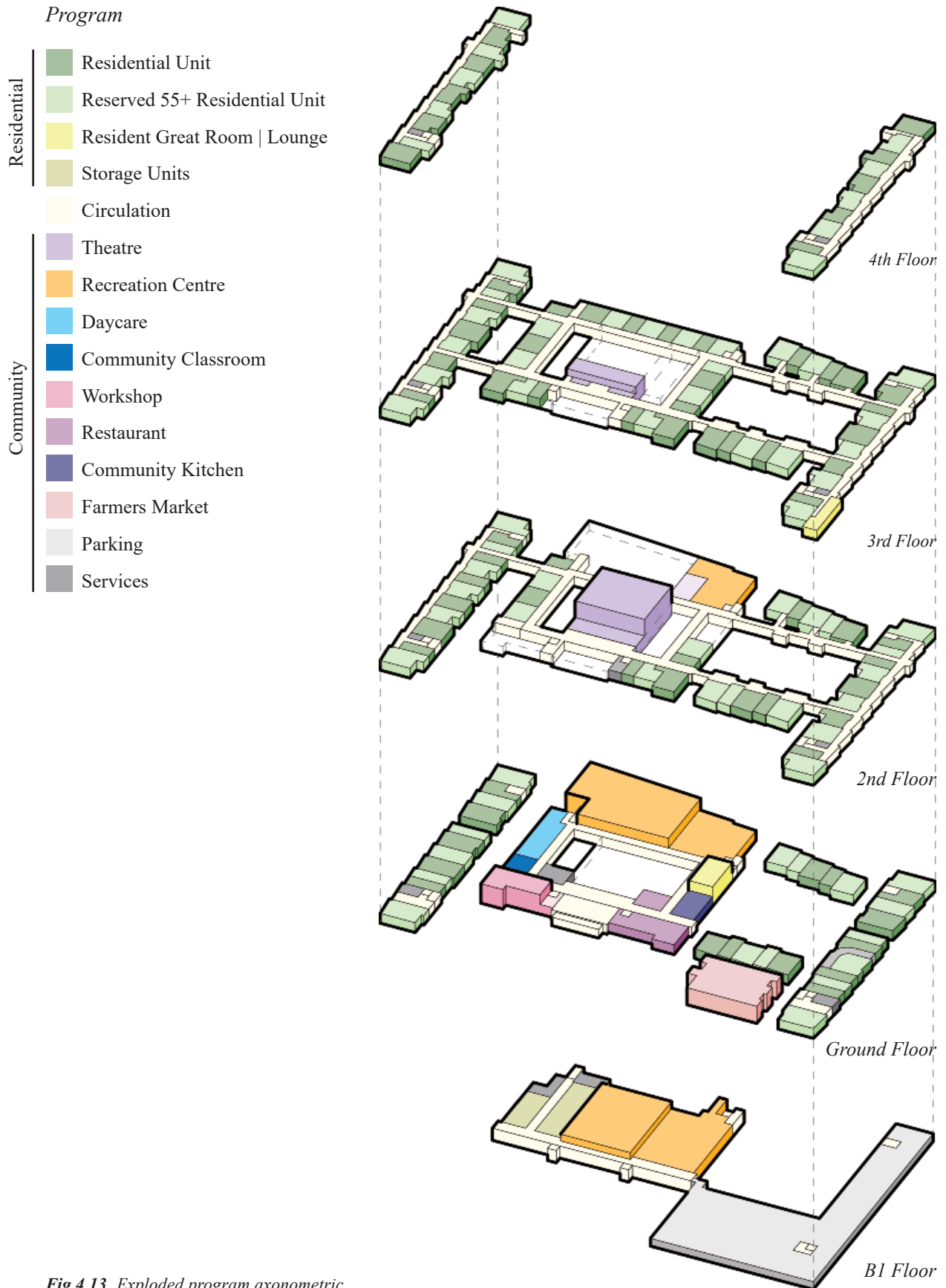


Fig 4.13 Exploded program axonometric

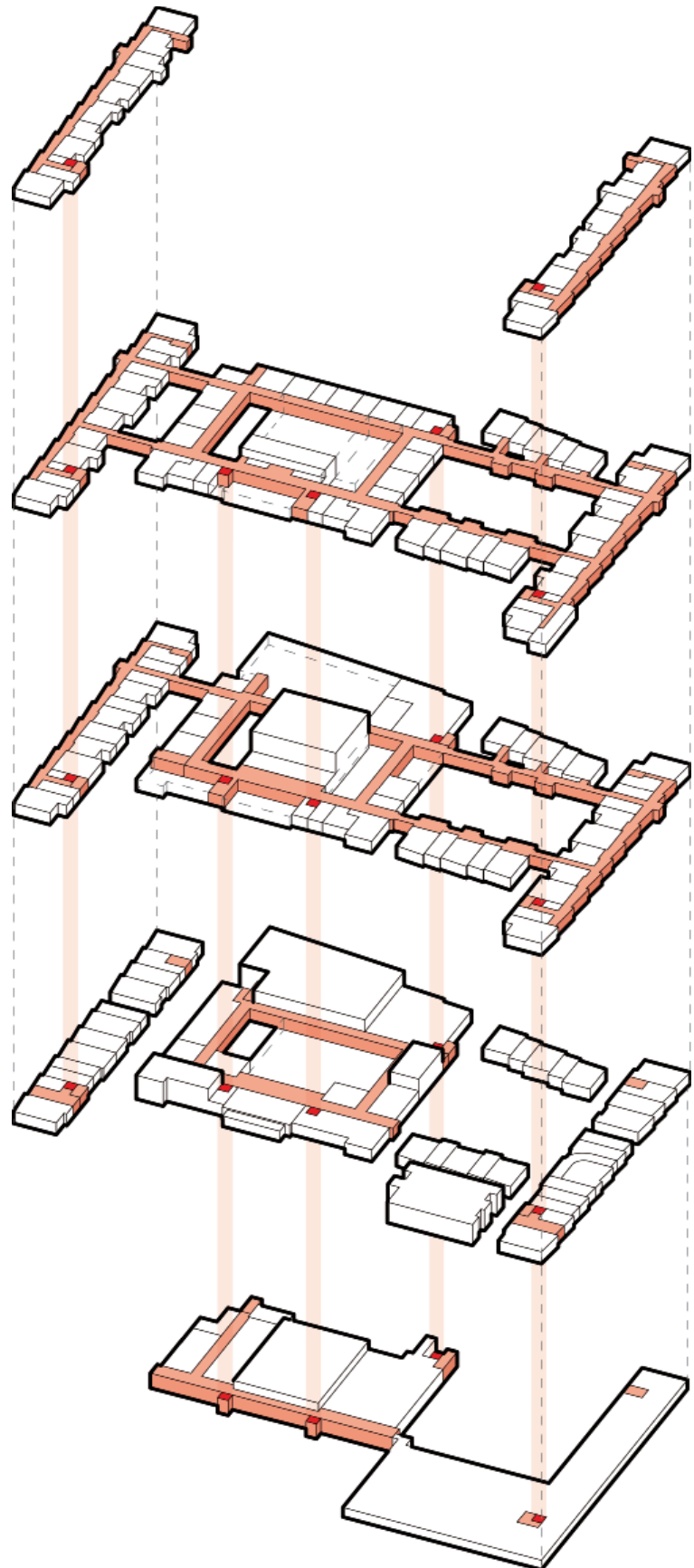
## **Circulation**

All circulation paths are accessible with no level changes requiring steps or ramping on each of the upper floors. There is a grade change on the ground floor residential units to provide a distinct spatial separation from the surrounding public realm, in which case ramping is provided for the accessible needs of residents. Each circulation path provides access to daylighting and views for both public and private corridors. The main hub circulation wraps around the theatre and two central atriums, providing an inner streetscape that looks down upon the community programming. Six skybridges extend out from the east-west portions of the central loop to connect to the residential buildings. The residential corridors are situated on the exterior of the buildings, allowing for the continuation of an internal streetscape.

Three private and two public elevators provide assisted vertical circulation. Eleven staircases provide additional access and exiting for programs and residential units.




*Circulation*

- Circulation
- Elevators







*Fig4.14 Exploded circulation axonometric*

*Program*

-  Community Program
-  Internal Public Circulation
-  Vision Nursing Home

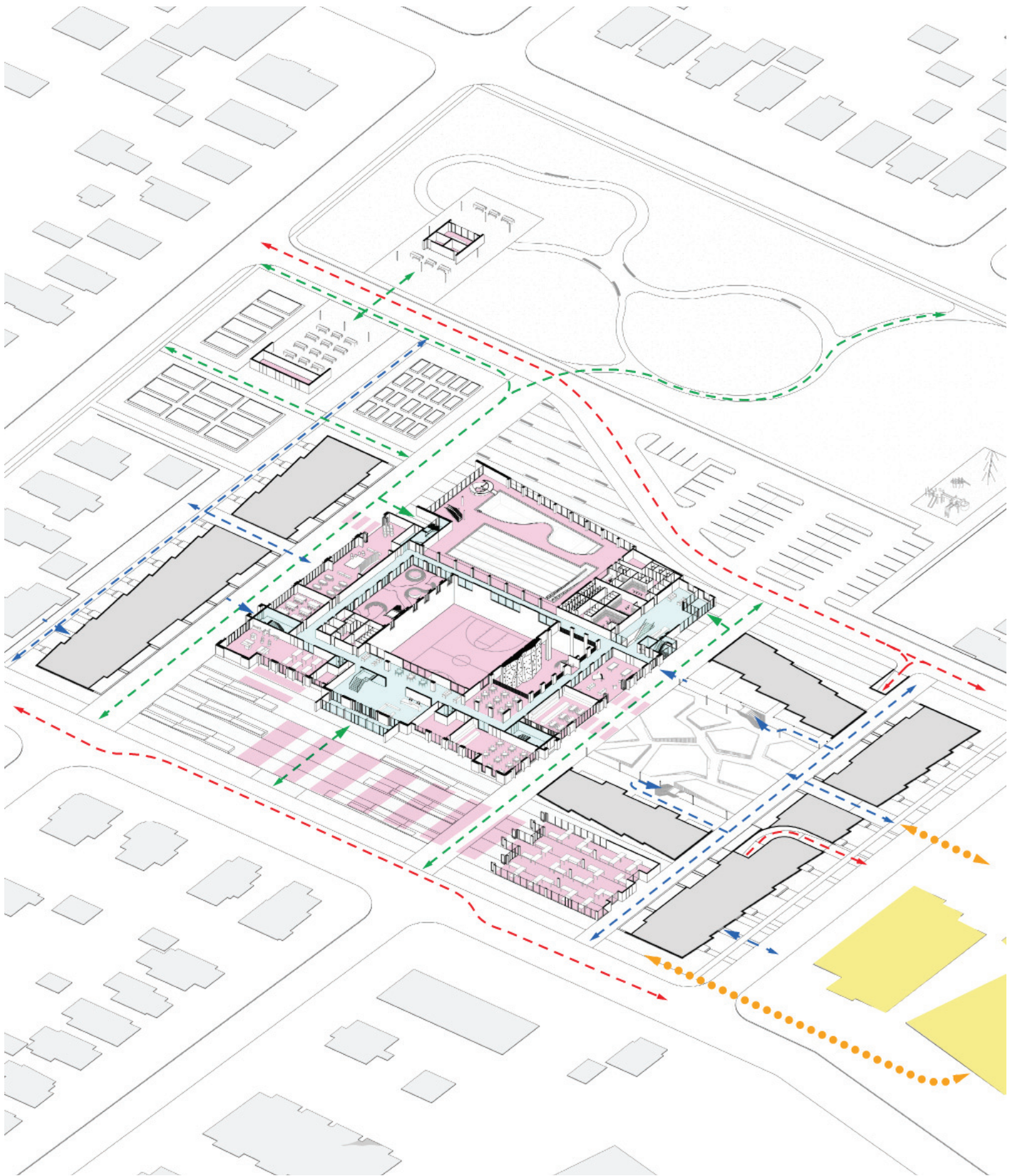
*Site Flow*

-  Vehicular Circulation
-  Public Circulation
-  Private Circulation
-  Vision Resident Access

**Fig4.15**

*Ground floor circulation patterns and paths for different visitors to the site*





## Public Programing

Spread across the site, the design has twelve public programmatic elements that facilitate learning, interaction and entertainment among community members.

### *Daycare*

A daycare will be located in the South-East corner of the main hub. The compilation of three former classrooms, the daycare will service the local community with lots of space for intuitive, play-based, and formal learning. Part of the daycare’s mission will be to introduce intergenerational programming. Over the course of the past few decades, there have been many test programs established and research done into the mixing of generations in an education setting, with “rich narratives about how program participants learn, find greater motivation to learn, and derive richer life perspectives from their experience.<sup>72</sup>”

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<sup>72</sup> Matthew S. Kaplan, “Intergenerational Programs in Schools: Considerations of Form and Function,” *International Review of Education / Internationale Zeitschrift Für Erziehungswissenschaft / Revue Internationale De L’Education* 48, no. 5 (Sep 1, 2002), 305-334. <https://www.jstor.org/stable/3445459>.



**Fig 4.16** View of community gardens



*Fig 4.17 Daycare Perspective*



*Fig 4.18 Swimming Pool Perspective*

The East atrium will serve as the governmentally mandated exterior play space<sup>73</sup> while the daycare will also have access to the playground on the rear field.

### *Theatre*

The existing theatre is to be preserved with a new grand lobby expanding the types of shows and activities that can use the space. An agreement with the retirement management creates the potential for discount balcony tickets for retirement residents.

### *Community Classroom*

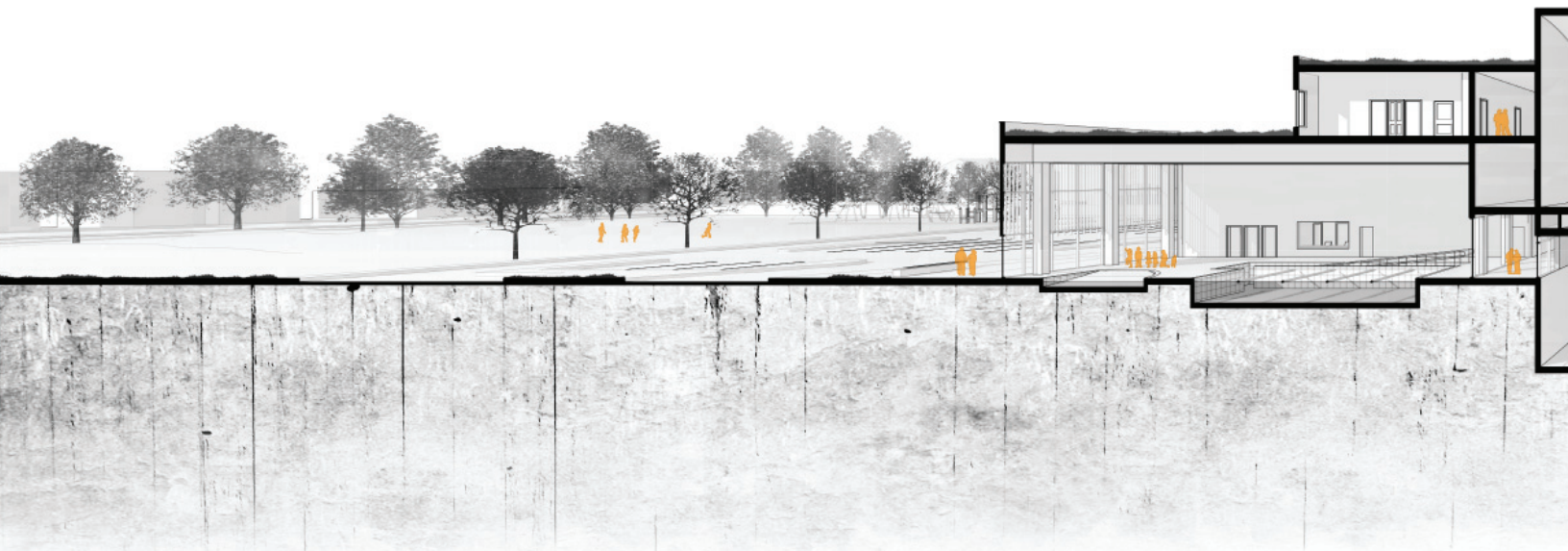
One existing classroom, with open programming, remains on the ground floor to allow for community classes.

### *Workshop*

A community woodworking shop is located in the North-East building corner of the hub, with doors opening onto the public square to the

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<sup>73</sup> Ontario Ministry of Education, “Child Care Licensing: Building, Equipment and Playground,” <http://www.edu.gov.on.ca/earlyyears/building-equipment-and-playground.html>



**Fig 4.19** North-South Section A Perspective



*Fig 4.20 Theatre Lobby Perspective*



North and East. The shop will be managed by the community centre administration and is proposed to be run like the workshop in the David Durward Centre in Cambridge, Ontario<sup>74</sup>. The space will allow tenants on site, and local community, a space to create and pass on skills and knowledge to the next generation.

#### *Restaurant*

A restaurant will primarily service the site’s tenants but will be open to the public with potential collaboration with the theatre for special events.

#### *Community Kitchen*

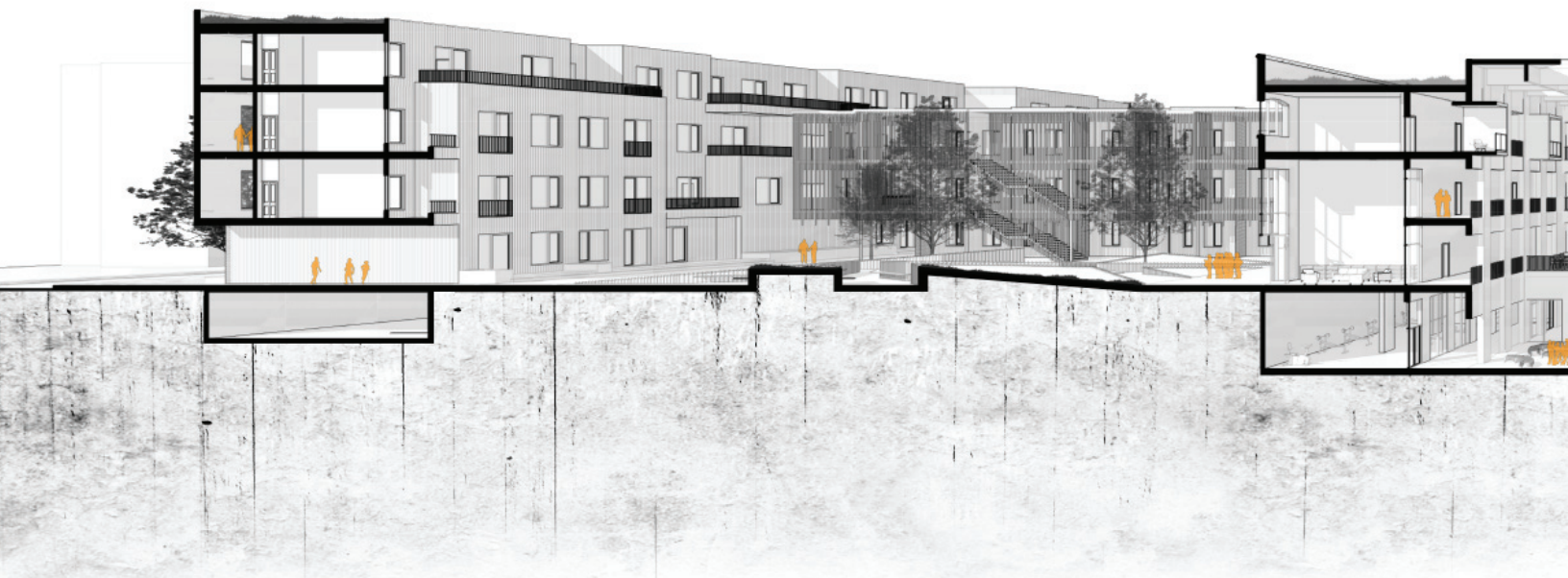
A large community kitchen is proposed to help expand and encourage a testing ground where recipes and great food can be shared with all generations and community members.

#### *Great Room*

A large great room will be primarily for residents of the site. It houses a small library, games and billiards tables as well as a piano. It will be

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<sup>74</sup> City of Cambridge, “Spring Summer 2018 50 Recreation Centres Newsletter,” <https://www.cambridge.ca/en/parks-recreation-culture/Recreation-and-Programs-50.aspx> (accessed October, 2018).



**Fig 4.21** East-West Section B Perspective

rentable to host large parties or community events for the residents of the site.

#### *Recreational Centre*

Featuring a new pool, gymnasium, weightlifting zone, climbing wall and fitness studio, the centre will allow both residents and local community members a location to stay physically active and fit, helping to promote healthy minds and bodies.

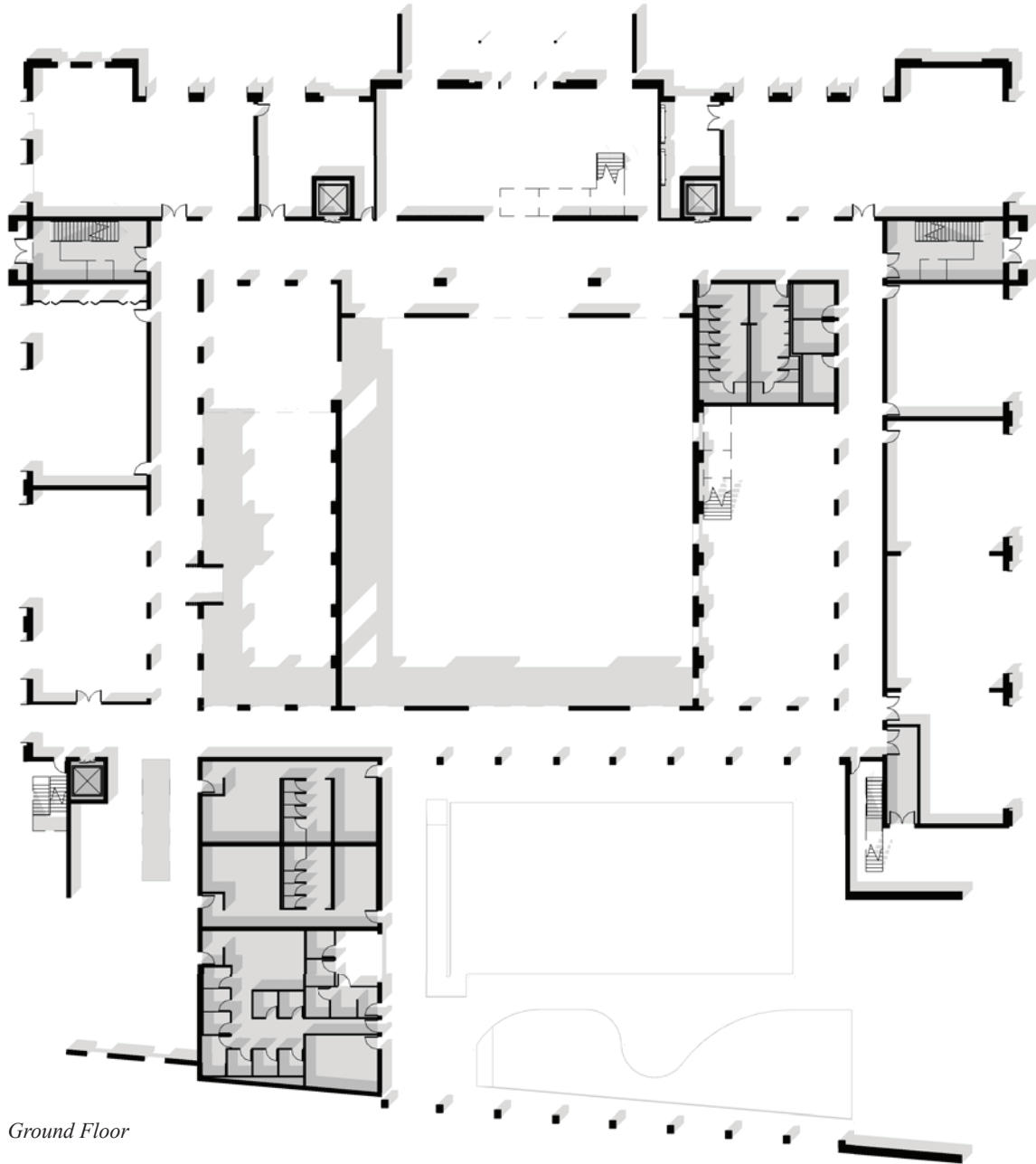
#### *Community Garden*

For a nominal fee that pays for maintenance and communal supplies, plots will be assigned by request every year. The gardens will help promote healthy diets and provide another interactive medium for the community. A large shaded picnic area will cultivate relationships as people share food, knowledge and stories.

#### *Walking Trails, Park and Playground*

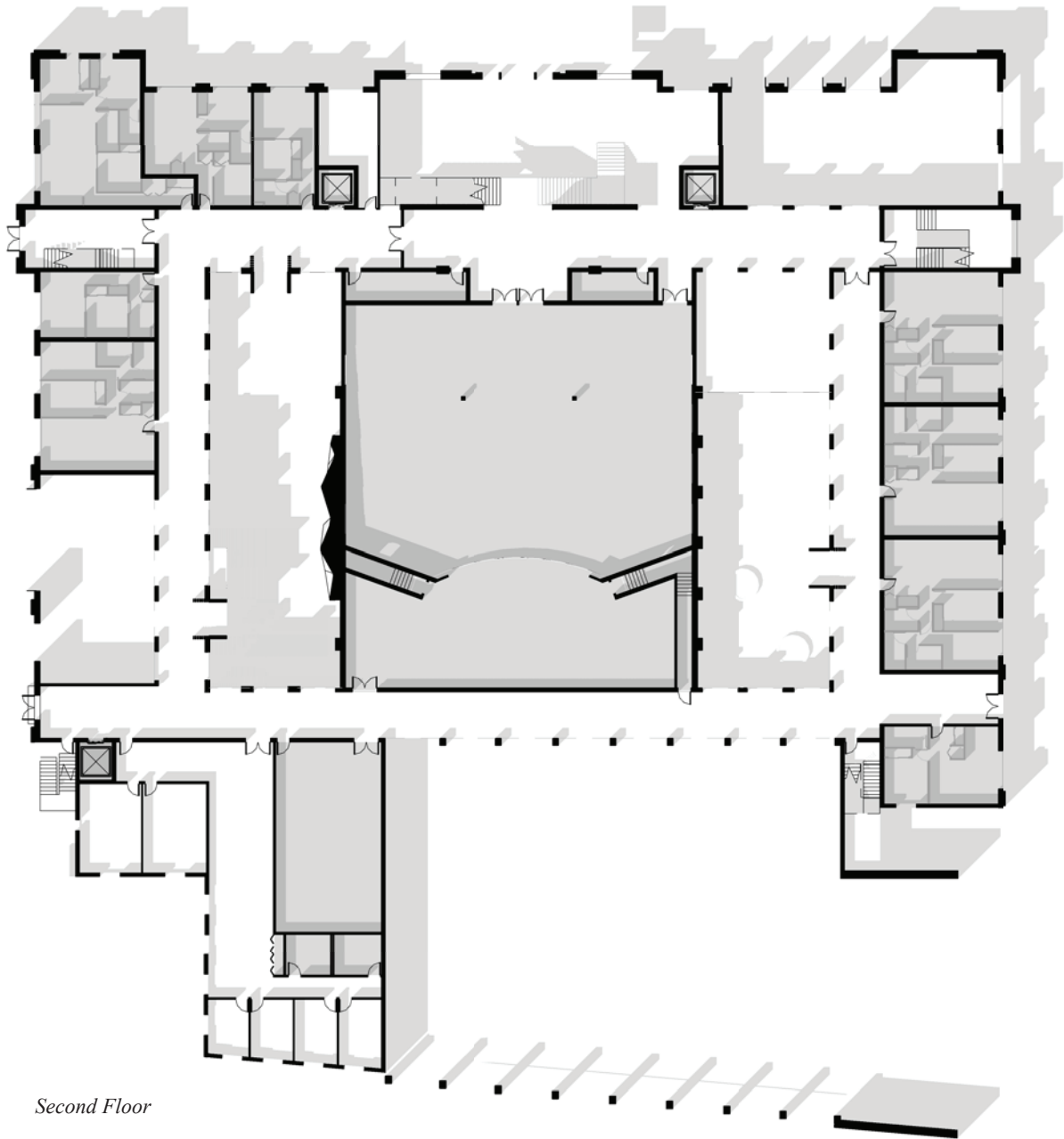
Situated south of the access road that splits the site, the trails, field, and playground provide places of outdoor activity and relaxation. In the winter the trails and open space will be flooded to provide an outdoor skating rink. The skating trails and rink will be serviced by the Sarnia arena down the street.





**Fig 4.22**  
*Ground and second floor plan showing open fenestrations allowing for sightlines through the hub, visually connecting the public programming through the building and out into the surrounding landscape 1:500*





*Second Floor*



*Fig 4.23 Exterior Atrium Perspective*



*Fig 4.24 Walkway Perspective*

## Unit Plans

The units offered in the proposal are a variety of one to three-bedroom suites spread across the site. There are no clusters of the three suite types to encourage the dispersal of families and different inhabitant types. Public and retirement units alternate down hallways so that there is an injection of people surrounding the resident seniors, establishing a pattern of continued movement as residents arrive home and leave the site. This is to help promote interaction among neighbours in different stages of life. All units are designed with a full kitchen and laundry to allow for the independence of renters, both senior and public. There are also no studio units, creating a degree of privacy when entertaining, even in the smaller one-bedroom units.

The variety of units offered to seniors is similar to the public apartments. Allowing the option of a two or three-bedroom retirement unit allows a senior to downsize without losing the ability to entertain or give accommodation to guests. It also prevents seniors from having to reduce their possessions down to a small living room arrangement and a few pictures.

<i>Unit Occupant Type</i>	<i>Unit Type</i>	<i>Average Unit Size</i>	<i># of Units</i>	<i>Total # of Units</i>
Rental Units	3 Bedroom	104 m <sup>2</sup> (1120 ft <sup>2</sup> )	18	73
	2 Bedroom	88 m <sup>2</sup> (950 ft <sup>2</sup> )	27	
	1 Bedroom	56 m <sup>2</sup> (603 ft <sup>2</sup> )	28	
Retirement Unit	3 Bedroom	104 m <sup>2</sup> (1120 ft <sup>2</sup> )	10	73
	2 Bedroom	88 m <sup>2</sup> (950 ft <sup>2</sup> )	35	
	1 Bedroom	56 m <sup>2</sup> (603 ft <sup>2</sup> )	28	

*Fig 4.25 Residential Apartment counts for rental and retirement units*

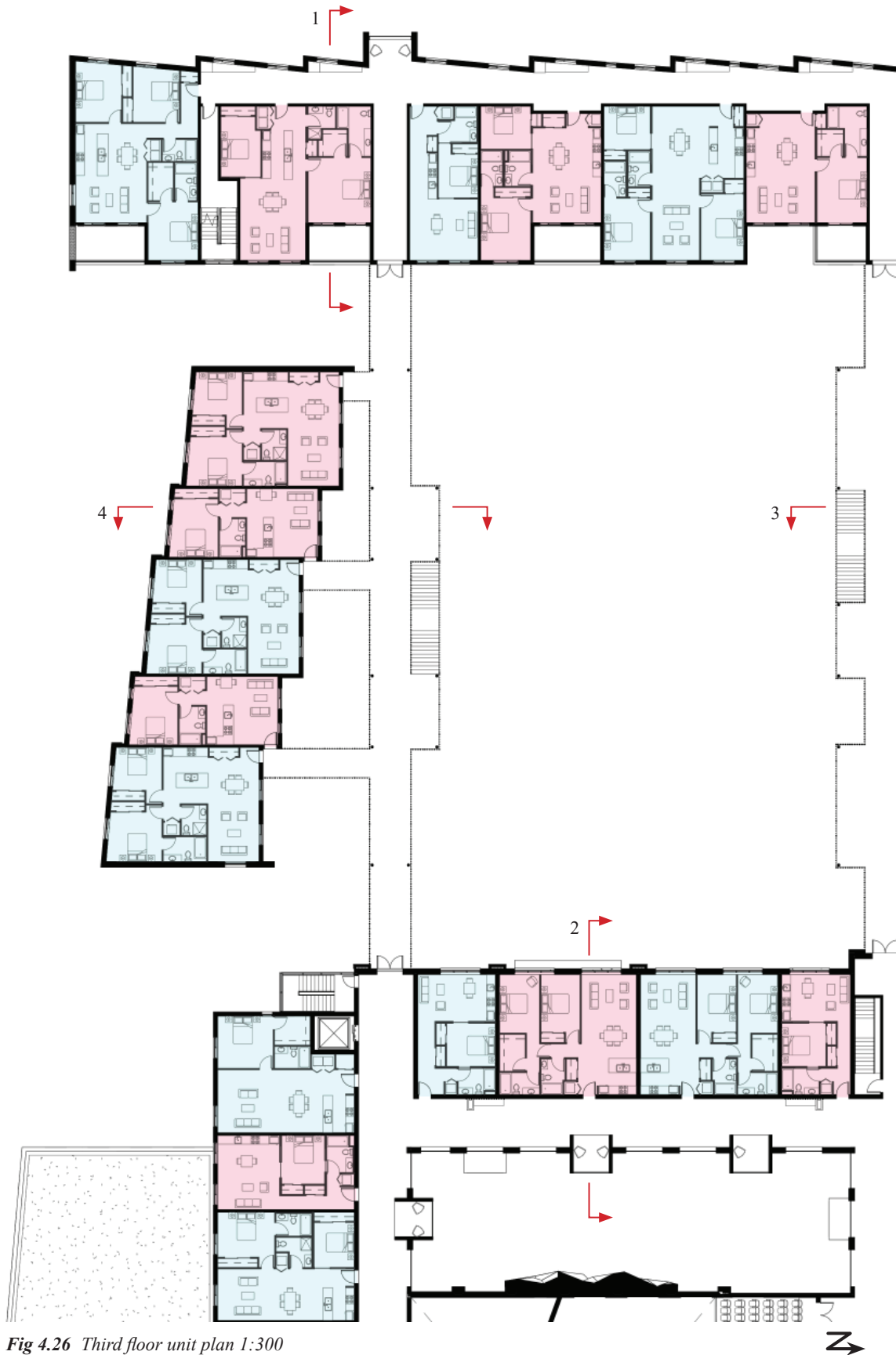
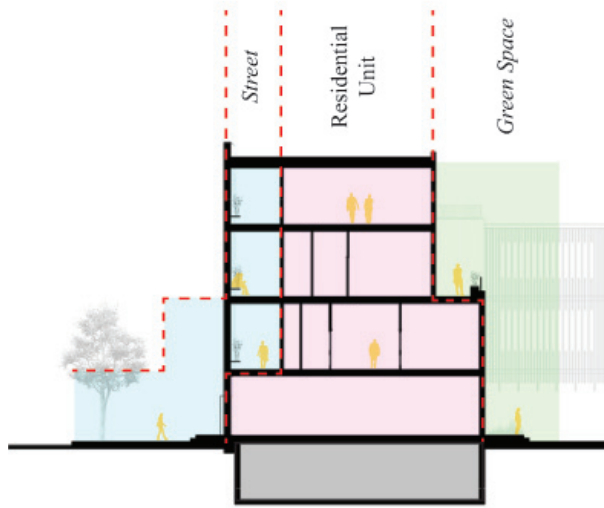


Fig 4.26 Third floor unit plan 1:300

## **Residential Streetscape**

The residential units have all been designed to extend the concept of a suburban streetscape to each floor. The front of each unit is accessed by a single loaded corridor that itself looks out onto the public realm. Semi-private seating alcoves line the hallways to mimic a classic residential front porch. The residential units in the hub use the two atriums that look down onto public programming to further this concept.

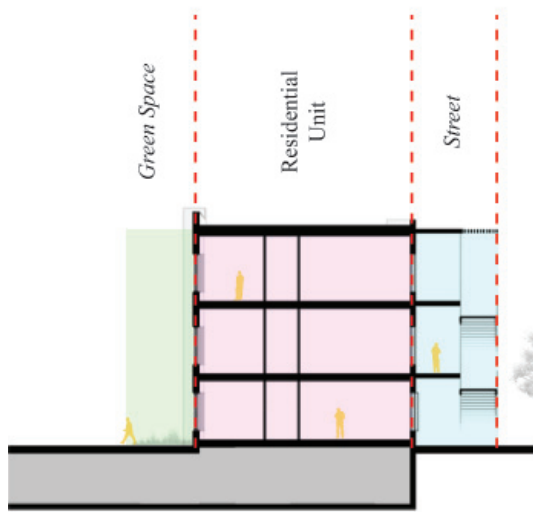
The back of the units have expansive views, balconies or raised decks that allow for the enjoyment of the surrounding environment. The units of the East and West bar buildings step back as one moves up the building, increasing the number of balconies and expanding access to private outdoor space. All units that do not have private open space have a Juliet balcony.



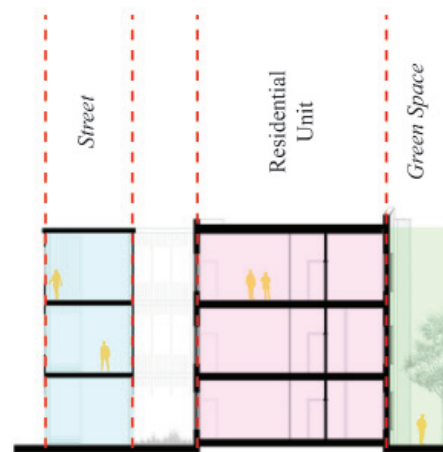
Section 1



Section 2



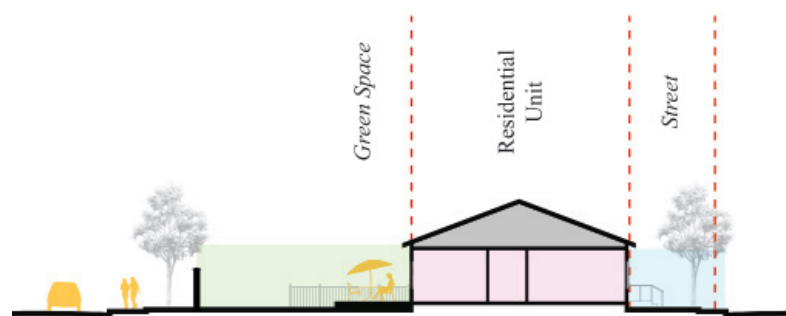
Section 3



Section 4

**Fig 4.27**

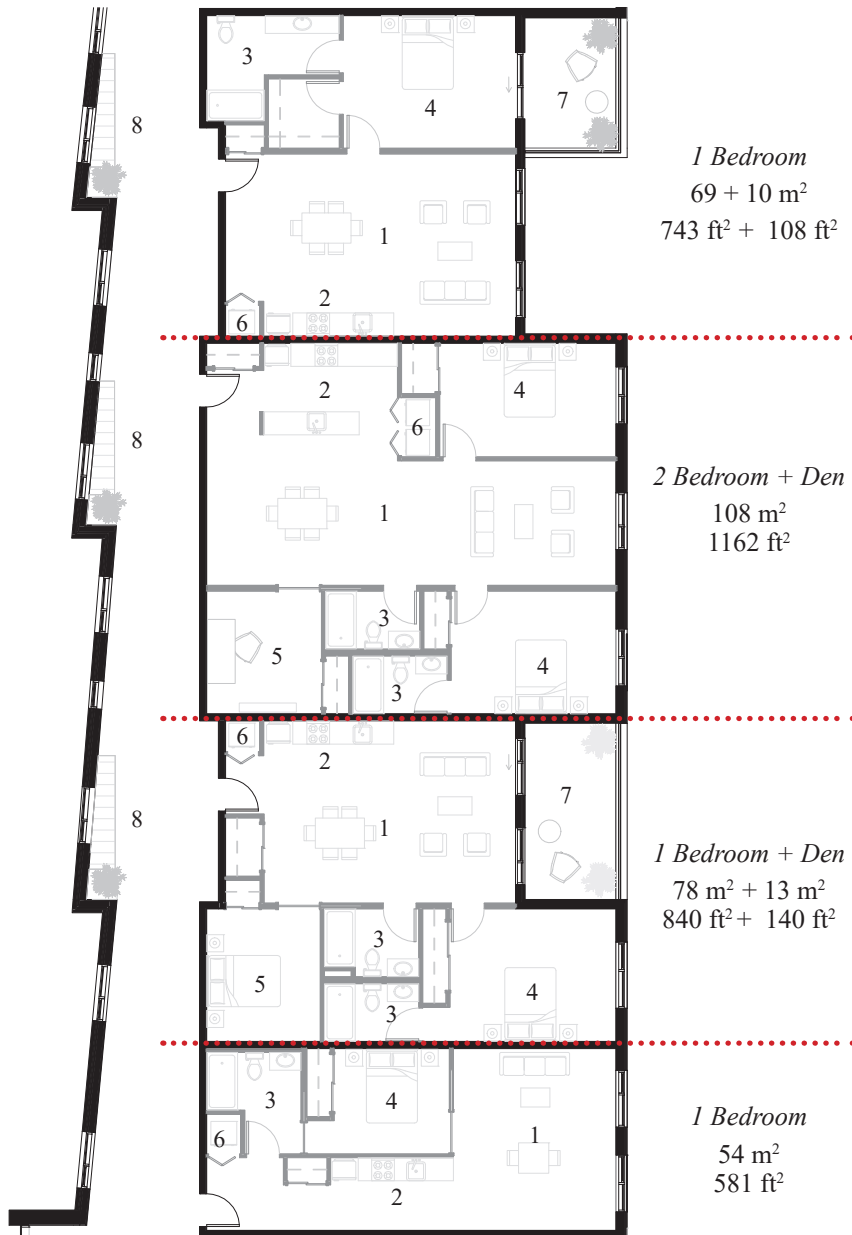
*Residential unit sections. The residential building design mirrors the typical suburban cross section by fronting on a single-loaded “streetscape” while also looking out onto greenspace.*



Section 5 - Typical suburban cross-section zoning

*Unit Plans*

- 1. Living | Dining
- 2. Kitchen
- 3. Bathroom
- 4. Bedroom
- 5. Bedroom | Den
- 6. Laundry
- 7. Balcony
- 8. Semi-Private Seating



**Fig 4.28** Typical Units Plans Building 1 1:200





Fig 4.29 Typical Units Plans Building 2 1:200

## Degrees of Social Separation

An important component to the design proposal is providing different degrees of separation and socialization in spatial types throughout the site. Forcing interaction between generations and strangers is not conducive to a healthy atmosphere, possibly causing residents to feel exposed and without privacy. An effort has been made in providing a variety of spaces that promote both visual and physical interaction between members of the local and residential community. Spaces encourage residents to inhabit circulation corridors, seating enclaves, balconies and other spaces to encourage casual discourse that can occur between neighbours.



*Fig 4.30 Main Building residential corridor perspective*



*Fig 4.31 Interior Atrium perspective*





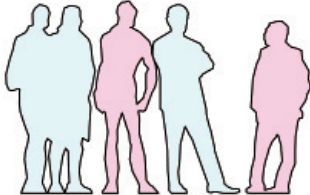

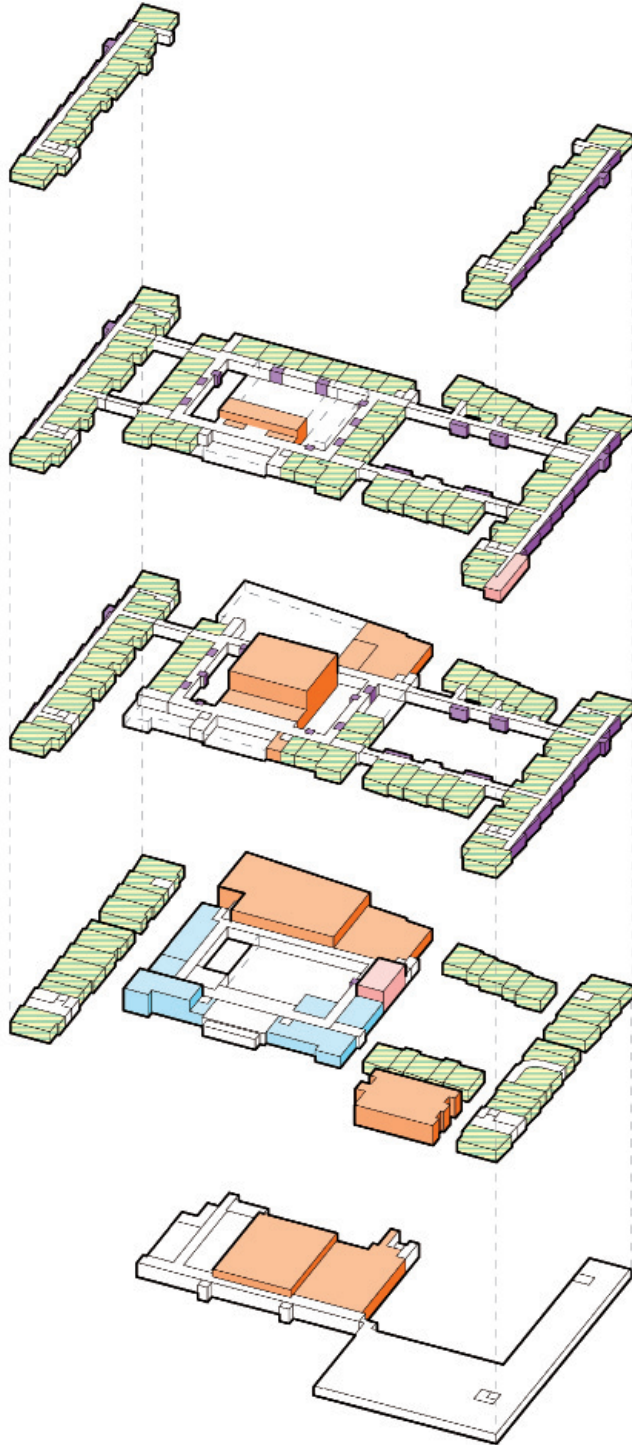
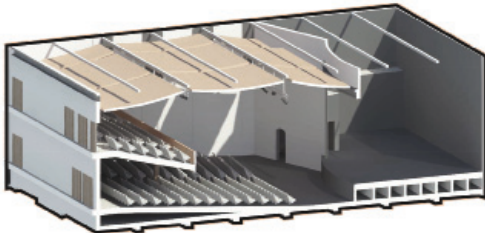
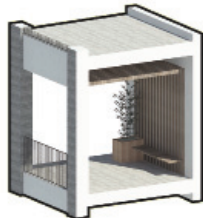
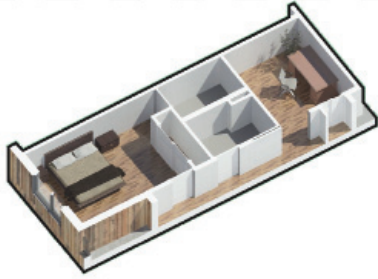
<p><b>Private Space</b></p>	<p>- Space provided in residential units for private relaxation and separation from social and community activities. <i>Eg. Separate Bedroom, 2nd Bedroom   Den</i></p>	
<p><b>Private Social Space</b></p>	<p>- Space provided in residential units for private social entertainment <i>Eg. Full Kitchens, Dining and Living Space, Balconies</i></p>	
<p><b>Intra-Residential Private Space</b></p>	<p>- Semi-private intimate spaces provided along circulation paths for residents to meet, socialize and view broader community activity <i>Eg. Balcony Projections, Bench Units</i></p>	
<p><b>Intra-Residential Social Space</b></p>	<p>-Space provided for large residential group gatherings and activity <i>Eg. Residential Community Living and Party Rooms</i></p>	
<p><b>Inter-Community Social Space</b></p>	<p>-Space provided for community group gatherings and activity <i>Eg. Community Kitchen, Community Gardens, Daycare, Community Workshop, Restuarant, Green Space</i></p>	
<p><b>Inter-Community Group Social Space</b></p>	<p>-Space provided for large community group gatherings and activity <i>Eg. Fitness   Recreation Centre, Theatre, Farmers Market, Skating and Walking Trail</i></p>	

Fig 4.32 Designed social spaces



-  Private | Private Social Space
-  Intra-Residential Private Space
-  Intra-Residential Social Space
-  Inter-Community Social Space
-  Inter-Community Group Social Space

## **Collaborative Ownership and Service**

A partnership between the city, private development interests and the neighbouring long-term care home will be used to facilitate the development and management of the community centre and residential units.

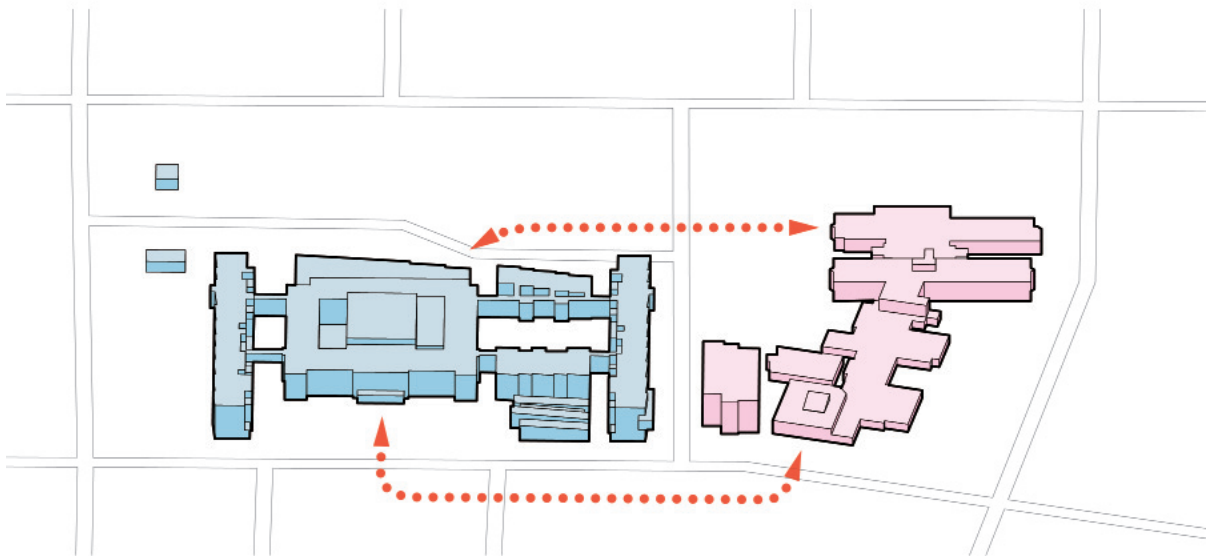
A public-private partnership between the city, private developers and Vision Nursing Home would allow for the city to retain a community centre and hub in southern Sarnia while reducing the costs of saving and renovating SCITS. The city will take on partial financial burden of the renovation and construction of the community centre portions of the development including: the farmers market, theatre, recreation centre and community rooms in the basement, ground and second floors, as well as the park to the south of the site. The private developer will take on the financial burden of constructing the residential units in the four new residential buildings as well as renovating the future units in the existing building. The residential units will be leased at market rates to the public.

Vision Nursing Home, immediately west of the development and who has offered interest in developing the site<sup>75</sup> will be the third partner in the development and management of the site. They will offset development costs and manage the retirement units across the site while offering reduced and satellite health services to the senior residences. The expansion of community services and programs offered beside the existing home will benefit current Vision Nursing Home residents. In addition, for the new senior residents of the development, the nearby health services and senior care attributed to the nursing home will be of great importance.

The management of the community centre, farmers market and theatre will be administered by corporations or existing models established by the city.

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<sup>75</sup> Dobson Cathy, “Nursing Home shows Interest in Redeveloping SCITS Property,” <https://thesarniajournal.ca/nursing-home-shows-interest-in-redeveloping-scits-property/>



*Fig 4.33 Shared social and health programs and services*

## Structure

The existing high school structure is a blend of poured concrete, concrete masonry block, brick masonry and steel framing. The high school has had four additions built since the school was first constructed in 1922<sup>76</sup> and has a variety of assemblages.

### *Existing Structure for New Design*

The demolition for the new design proposal retains most of the exterior shell and structural elements of the original 1922 building. All other additions and structural elements will be demolished. The exterior brick and concrete structure of the original building will require inset steel beam headers to span between where the masonry and brick has been removed to increase light permeation on the ground floor. The steel beams will be located between the retained structural columns on the ground and second floor to support the retained second and third floor exterior brick masonry and glazing units.

### *Structure for Addition to Existing Building*

The main structural pool span will have heavy timber beams supported on timber columns. The two new atriums will also be spanned by heavy timber beams and will have either partially or fully glazed ceilings. The remainder of the new structure will be constructed of concrete walls and columns, with light-gauge steel framing used for infill support. The exterior of the addition will reuse the demolished brick cladding from the existing school to match existing colour and texture and save stored embodied energy.

### *Structure New Buildings*

The western residential buildings and farmers market will sit on an underground parking garage constructed of poured concrete walls, columns and floors. The new residential buildings above will be built of concrete walls between units, as well as for the stair and elevator shafts. Wood framing will be used to infill between structural elements. The cantilevered portions of the residential building will be built using welded steel framing

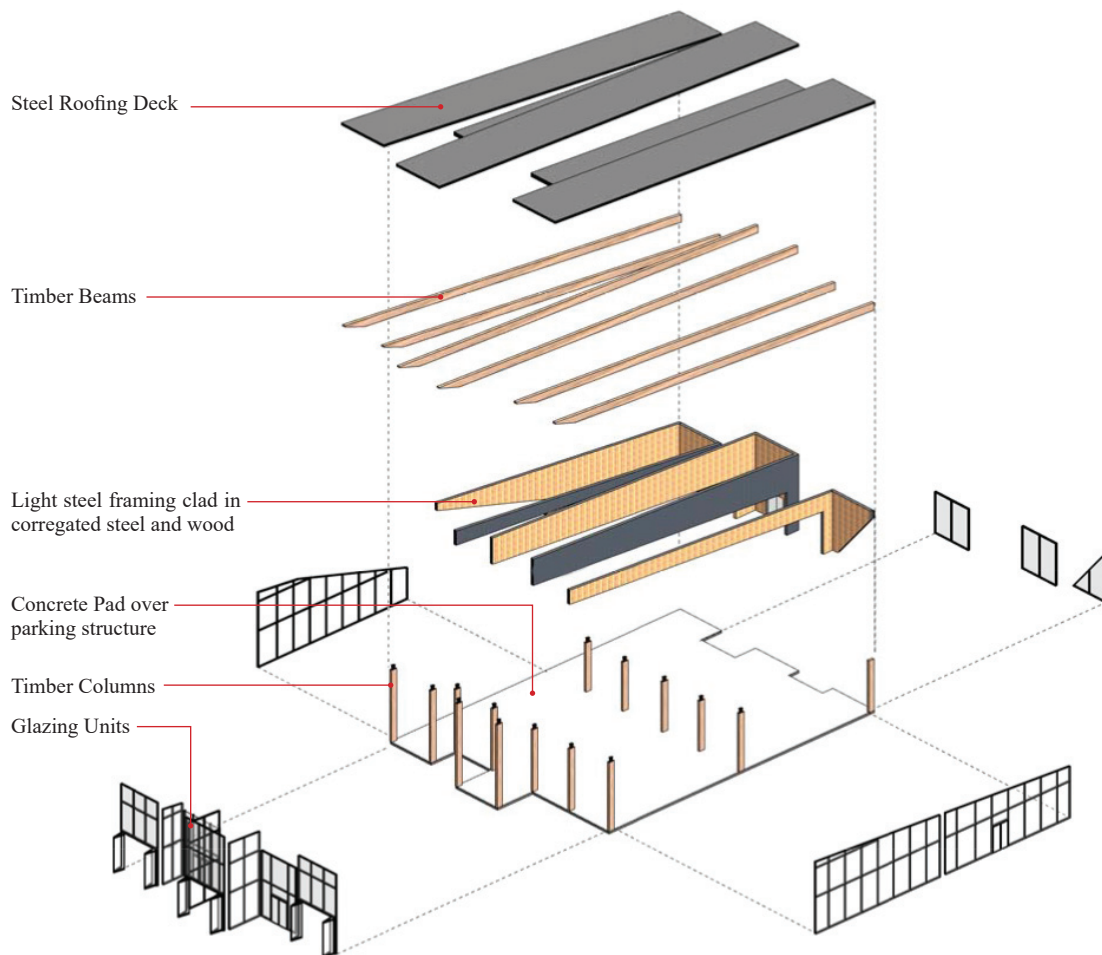
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<sup>76</sup> Lambton Kent District School Board, *SCITS School Information Profile* SCITS - Sarnia Collegiate Institute & Technical School, [2016].



attached back to the concrete structure. Grey brick and vertical wood siding will be the exterior finishes on the residential buildings.

The farmers market will be built with heavy timber columns and beams with light-gauge steel framing for infill. It will be clad with vertical corrugated steel siding and finished on the inside with wood siding.



*Fig 4.34 Exploded farmers market axonometric*

## Community Presence

The fostering of community support for the design will encourage neighbours and local community members to be active in the continued programming and management of the spaces provided within the proposal. Seeking local engagement at the start of the project will help surrounding residents to feel comfortable with the scale of the project by showing how the project will benefit them, as well as making them feel they participated in the creation of the finished product.

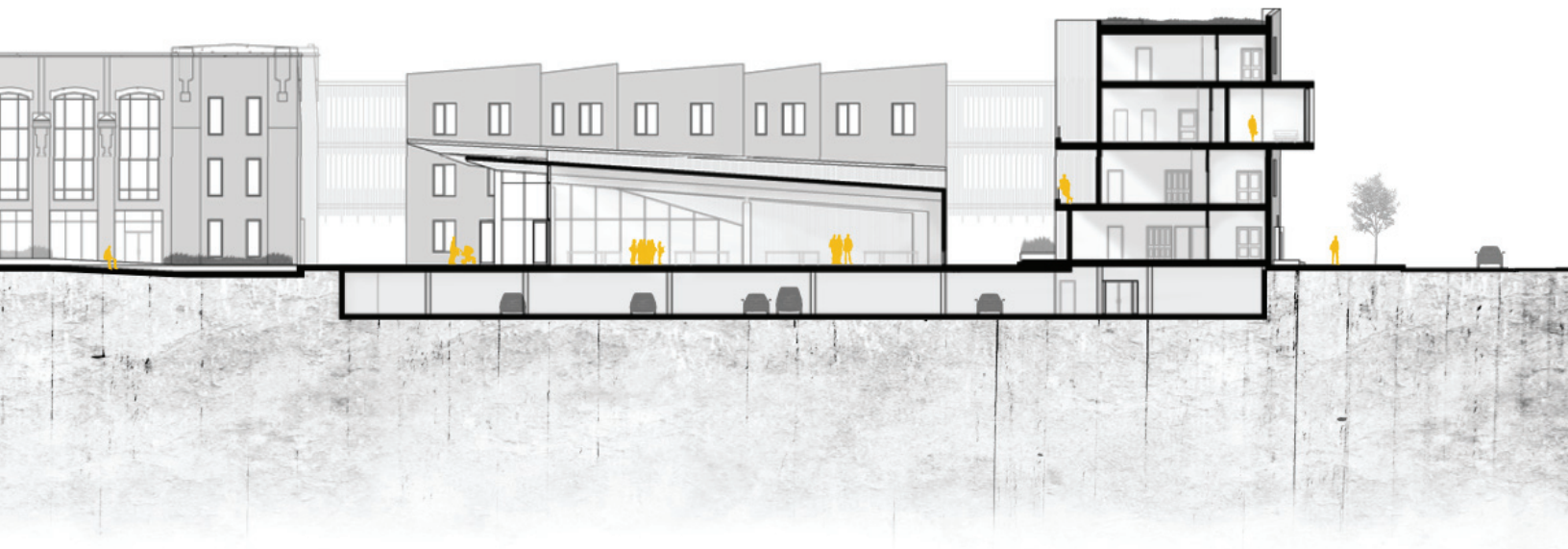
By enticing a variety of members of the community, with the wide range of offered and potential programming, the site will continue to act as a hub for social and intergenerational engagement, creating a larger social impact than the current high school. The retention of the larger programmatic elements such as the theatre, gymnasium, and new farmers market and fitness facilities, will further promote the locale as being a center of activity where members of the public can go and socialize with their fellow neighbours.



*Fig 4.35 East-West Section C*



*Fig 4.36 Front Plaza Perspective*

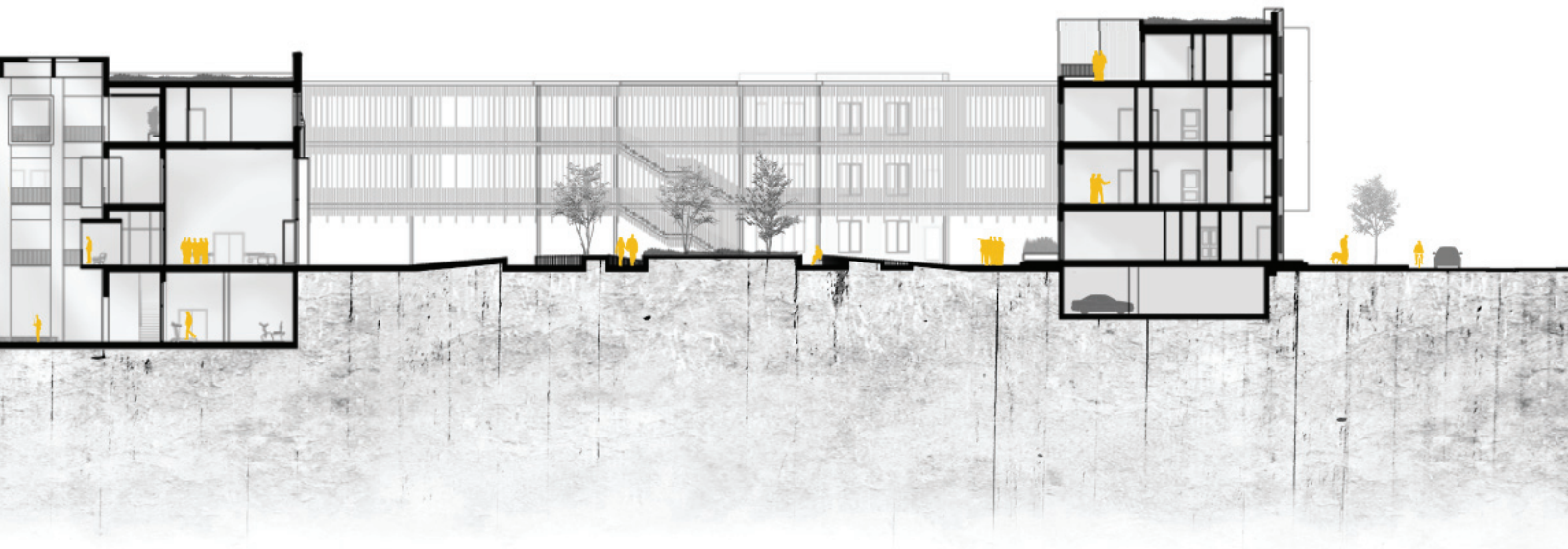




*Fig 4.37 Courtyard Perspective*



*Fig 4.38 East-West Section D*





*Fig 4.39 North-West Front corner perspective*



## ***Conclusion***

This thesis was born from the stories told to me in my youth and the history and knowledge retained from their impartation. As I grew up and the orators grew older, I began to discern the infused wit, eccentricities, pleasures and pains, that each story possessed, endowed by the story teller of whom I had often detached from the tale. Men and women of another generation who had lived through so much more complexity than I had ever understood. My focus shifted, and what was discovered was a huge disparity between the richness of life experiences these individuals possessed and the limitations of the dwellings these people inhabited. It was clear that for some in a retirement home, the experience of limited contact with the outside world and a somewhat myopic view of living within a retirement community in their later years was visibly draining life from their minds and bodies. In contrast, others living in retirement homes who had a retention of a dynamic interface with the surrounding community were thriving in their spaces, continuing to add to their life stories and still creating new and exciting memories.

What was taken away from this initial experience was the simple recognition of the importance of one enterprise: communal interaction. Relationships with younger and older generations that bring together new ideas with old wisdom and experience, help to weave together their collective stories and increase involvement on a broader intergenerational scale, adding vibrancy to the lives of all involved. Such interactions do not solely benefit the older generation, as was clearly evident from the vast amount of wisdom and knowledge gained from my many conversations with elderly individuals during the course of my research. Much of this was of a personal nature, which due to privacy requests, is not included in this thesis. For this interface to exist, we as a society need to break away from the typology of separating our elders out from the local community and consolidating them into what might justifiably be called expiration homes.

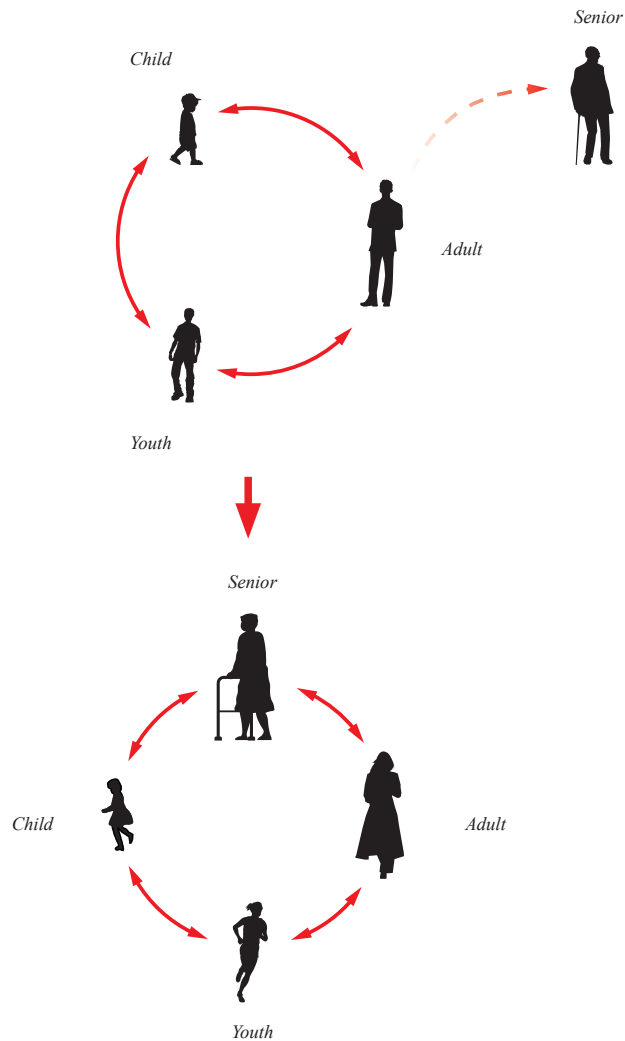
We can not control time, nor can we prevent our bodies from failing as we age. This reality requires that as those in the general population get older, the need for extra levels of support increases. Despite these changing needs of the aging senior populace, this should not prescribe the



segregation or separation from younger groups of this valuable sector of society, regardless of when they reach any particular age or stage.

The design presented is a proposal of how we can maintain levels of interaction within the local community, in particular including the senior populace as demographics change and fluctuate, thereby exposing the younger generations to their knowledge and history and retaining them as valued members of society.

We must break the cycle of segregation and make sure our seniors are integrated in the built and social fabric of vibrant communities rather than constructing isolating and lonely subcommunities.



**Fig 4.40** Breaking the cycle of segregation

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