

Toronto Laneway Housing: Neighbourhood Densification Strategies

by

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Figure 1 - An existing typical laneway in Toronto



Abstract

The COVID-19 pandemic acted as a catalyst to bring the unaffordable housing issue in Toronto to the foreground. However, this crisis has been developing for several decades, and it is caused by many factors. One of the critical factors is the zoning by-law that is restricting density and maintains the Yellow Belt in Toronto. This restriction has created a Missing Middle housing issue that requires a multi-faceted solution to provide Torontonians with affordable housing. However, in the laneways of Toronto, some housing density can be added to the existing housing fabric, and that is the Laneway House.

This thesis is focused on providing housing density to existing laneways within the city, and proposes several improvements on the current zoning by-law for laneway suites implemented by the City of Toronto in 2018. The thesis argues that the existing regulations are deterring homeowners from building laneway suites. With more flexible zoning by-laws and incentivizing homeowners, more laneway suites can be constructed to increase the housing density in Toronto and contribute positively to housing affordability.

Keywords:

Laneway housing, Toronto housing, Zoning by-law, Yellow Belt, Missing Middle

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Preface

The housing prices in Toronto have been consistently increasing since the beginning of the COVID-19 pandemic. There have been many different issues that have led to the current state of unaffordable housing within the city, but what sparked my research on this topic was more of a personal issue. I come from an Asian background, and my family has always been beneath the average family wealth in China. After immigrating to Canada, I grew up witnessing my parents working towards purchasing a house in Toronto. As they saved enough money to finally purchase a house in 2020, the pandemic began and housing prices quickly increased. As a result, my parents opted to purchase a house in Cambridge, Ontario, a city 100km away from Toronto, as they could not afford properties in Toronto anymore.

My parents' experience is now common among Torontonians, and I wish to use this thesis to bring awareness to the general public of a very real problem haunting the city.

Introduction

¹ Michael Daoust et al. *Trends in the Canadian Mortgage Market: Before and during COVID-19* (Statistics Canada, 2021), p.6.

In the last few decades, the Toronto housing market has gradually become more and more unaffordable to the average person. While housing prices may fluctuate on a yearly basis, throughout the last decade, there has been a continuous upward trend¹. The trend has yet to slow down. The direct causes have been the continuous increase in demand from investment, foreign immigration and urban migration. This large demand for housing resulted in an imbalance between the housing prices and the salary of an average worker. Currently, the average paid worker simply cannot afford to buy an average house in Toronto. This is especially apparent in first-time homebuyers, people that do not own any existing assets. In order to attempt to provide a solution and give citizens the opportunity to purchase their first home, there are several direct and indirect issues that need to be analyzed. Specifically, understanding the North American housing ownership framework, the increased demand of housing in urban areas, the unaffordable rental market, and most importantly, the zoning by-law regulations posed by the municipal government.

In order to address the unaffordable housing crisis in Toronto, the housing framework needs to be discussed. Purchasing property in North America is an aspiration of the individual and families, resulting in much more demand than other parts of the world. In Canada, as each person reaches adulthood, they are expected to move out of their parents' home and eventually purchase their own home. The common course of action is for them to live and work in that home until retirement. After retiring, unless they have been investing in other areas, their home serves as their retirement investment. They would downsize and use the difference to live a comfortable retirement life. This idea of owning property is an integral part of Canadian culture. While in the younger demographics, it has become more common to job hop and constantly change living locations with various employment opportunities, as a person grows older, the desire to 'settle down' is deeply rooted in their psyche, and that includes purchasing a house.

The housing ownership framework is simply a cultural phenomenon to own property, it has a slight effect on the current unaffordable housing issue, but it is rather the foundation that other causes rest on. The causes include increased immigration and foreign investment in the city. This has been in part due to the urban design efforts to attract more people to Toronto. However, as the demand for housing increased, the City Council has neither increased the supply of housing nor substantially revised the zoning by-laws to incentivize more construction. Furthermore, the existing infrastructure, i.e. fire hydrants, has not been updated to meet a potential housing density increase. While Toronto has attracted many people from around the world to its neighbourhoods, it currently does not have the housing capacity for all of its citizens. Many people, especially the younger generations who are less affluent, are renting single rooms. These rooms have rents that are similar to a bachelor apartment unit in the beginning of the 2010s². High rental prices is one of the main factors that is causing the current housing unaffordability among young professionals looking to purchase their first home.

² City of Toronto, Affordable Housing Administration, *Current City of Toronto Average Market Rents & Utility Allowances*. (City of Toronto, ON: Affordable Housing Administration, 2017).



Figure 2 - Comparison between Toronto's high-rise and single family house typologies. (Digital Image from Global News).

3 Realosophy,
"Neighbourhood
Guide: Toronto Real
Estate Prices, Trends
and Insights," last
modified March, 2022,

As housing prices continue to rise, the rental housing market is also experiencing the same increase. Renters continue to pay higher and higher amounts of rent, creating 'forever renters'; while the owners are generating revenue for profit or to pay for their mortgages³. In the current housing market, the average person's salary can no longer afford the average Toronto house. Thus, more potential first-time buyers who are currently in the rental market are delegated to continue renting. Many potential first-time homebuyers are spending around half of their salary on rent. Along with other expenses, there is not be much left for them to save for a down payment to purchase a home in the future. For the majority of people who do not currently own any property, it is extremely difficult to save enough money for a down payment and also cover the monthly rent payments within the City of Toronto.

Another one of the main causes of unaffordable housing is the zoning by-law regulations. The current rules are restricting potential density while retaining the Yellow Belt in Toronto. These restrictions have created a Missing

Middle housing issue, a term coined by Daniel Parolek in his book *Missing Middle Housing* to describe the lack of mid-rise apartment units and the over-reliance on cars⁴. However, as a solution, it is infeasible to purchase these single-detached houses from individuals, demolish them, and build mid-rise residential buildings. This mid-rise solution has worked in other countries, however, in Toronto, it is not a comprehensive solution. The current Toronto urban fabric is unmalleable, but there are areas in the laneways of Toronto that can provide some potential density to the existing housing fabric.

In 2018, the Toronto City Council adopted the “Changing Lanes Program”. This program allowed the construction of laneway houses in the backyard of houses that are adjacent to laneways. In 2019, this program has expanded to all of the laneways in Toronto⁵. This has created thousands of available sites for potential increase in housing density. However, due to the fairly new zoning by-laws, many of the clauses are very restrictive and do not adapt to the relatively small sizes of laneway sites.

Through the design of the three chosen sites, this thesis aims to propose improvements on the Changing Lanes Program. It provides alternatives and changes to the various restrictions and limitations caused by the zoning by-law, firefighting and other infrastructural services. The design projects aim to provide an alternative to condo towers for young adults who are looking to reside in the downtown core of Toronto. The ultimate goal is to provide additional housing opportunities, and to turn these bleak laneways into lively communities. The unfortunate aspect of current laneway suites legislations is that it caters to large properties in affluent neighbourhoods. In order to help target affordability within the private sale of homes, we first must allow laneway suites to be constructed in a broader context of city neighbourhoods, especially in neighbourhoods with lower property values. This thesis analyzes these less affluent neighbourhoods and argues for potential laneway suites to be constructed in these smaller lots.

⁴ Daniel G. Parolek, *Missing Middle Housing: Thinking Big and Building Small to Respond to Today's Housing Crisis* (Island Press, 2020).

⁵ City of Toronto, City Planning Division, *Changing Lanes: Laneway Suites in the City of Toronto* (City of Toronto, ON: City Planning, 2018).

⁶ City of Toronto, Affordable Housing Administration, *Laneway Suites Programs*, (City of Toronto, ON: Affordable Housing Administration, 2018).

⁷ City of Toronto, City Finance, *Development Charges By-Laws & Rates* (City of Toronto, ON: City Finance, 2017).

The current understanding of laneway suites is that it is a small detached building that provides an additional studio or sleeping area to the main house. However, there are many practical ways to use a laneway suite. This includes various financial benefits for the homeowner as well. The most common use of a laneway suite is to rent it to a tenant. Toronto City Council has the Affordable Laneway Suite Program to provide a loan of up to \$50,000 to property owners if they rent their Laneway Suites at or below the City of Toronto average market rent⁶. This is beneficial for both the property owner and the renter as the owner is subsidized for the laneway house, and the renter receives a relatively affordable rent. An alternative way to receive a large sum of money from the laneway house is to sever the property and make the laneway house independent. This is a tempting option for homeowners who are already looking to downsize or sell their house. Instead of selling their current house and purchasing a smaller house, they can simply stay in their current house and sell the laneway house. Unfortunately, under current laws, a development fee of several thousand dollars is charged for severing a lot in order to increase the number of independent laneway houses⁷. This fee discourages homeowners from building laneway houses and increasing housing density.

There are two other incentives to build laneway houses that are based on the idea of co-op living. In an average family with children wanting to move out of the house, they might have difficulty doing so because of the high rent prices. Instead of moving out, the family can build a laneway house and their child can live in it. Even though they are technically living on the same property, the laneway house acts as an independent unit and provides enough privacy for those who wish to live with their parents but also want their own space. Another option for co-op living with the use of laneway houses is for two friends or relatives to purchase the property together. One family would live in the main house, the other in the laneway house. This is a unique situation and there are various issues to think about, such as trust, finances, ownership and living spaces to name a few. However, it can be an interesting



type of housing tenure. Even when the family living in the laneway house may eventually move in to a larger house in the future, the laneway house can be rented or severed to continue providing the additional density that Toronto desperately needs.

Figure 3 - A single family housing Toronto neighbourhood looking at two high rise condo towers, (Digital Image by Don Pittis).

There are a variety of different incentives to build laneway houses. However, the current zoning by-law prevents more laneway houses to be built. Chapter 4 analyzes three different sites with different conditions to consider. It argues that not all of the laneways are the same, and that the over-generalization of the zoning by-law is not the correct way to address laneway suite designs. All three sites are designed to break the limitations of the zoning by-laws, and to explore ways to improve the current by-laws on laneway suites. The first site on Pen-drith Street, or the 'central site', is a fairly small site with multiple lots too small to build a typical laneway house. There is also a change in elevation between the front of the road and the back laneway. This site explores the concept of verticality. The current regulations state that laneway houses should not exceed 6 metres in height. However, what effects would it have if that is broken and

what kind of neighbourhood would proliferate if there are rows of tall, narrow buildings?

The second site on Ravina Crescent, or the 'east site', is a windy pathway that has a laneway looking over a large open field. Since the houses on Ravina Crescent are mainly semi-detached houses, the designs for the laneway suites explore the potential of semi-detached laneway houses and unconventional ways to use the property line to divide two houses. The third site near James Culnan Catholic School, or the 'west site', is a fairly regular site that provides a prototype for the generic laneway neighbourhood throughout Toronto. This site explores the potential of a hybrid approach to pre-fabricated and on-site construction methods, toward the creation of unique but affordable laneway houses.

The issue of housing affordability can be slightly ameliorated as more laneway suites are constructed. This is a complex issue that envelopes many different disciplines. However, potentially, these designs on the three distinctively different sites provide a realistic prospective of increasing the housing density in Toronto.

1

Affordability of Housing in Toronto

The unaffordability of housing in Toronto has been caused by a multitude of factors. Since March 2020, the COVID-19 pandemic acted as a catalyst to increase the housing prices. This issue has since been pushed to the foreground and was a major part of the campaign promise of all the political parties in Canada's 2021 federal election. However, housing has been considered unaffordable for many years, and this is caused by building regulations, economic influences and cultural traditions.

1.1 The Impact of the COVID-19 Pandemic

⁸ Steffen Wetzstein, “The Global Urban Housing Affordability Crisis,” *Urban Studies*, no. 14 (November 2017): p.3160, 3164.

⁹ *ibid.*, p. 3160.

COVID-19, one of the most contagious viruses in modern history, has had significant impacts on the lives of everyone in the world over the past two years. In particular, it acted as a bifurcation event that changed the market values of goods, services and real estate in North America. Specifically, from all of the panic buying in the beginning of the lockdowns in March 2020, to the current rising prices of everyday goods. However, one market has had a higher price increase than other markets, and that is the housing market.

Even prior to the COVID-19 pandemic, the issue of unaffordable housing has loomed over Torontonians for many years. According to Steffen Wetzstein, housing has been increasingly viewed as investments rather than homes, and

“[many] ... people are forced to live in overcrowded or badly maintained accommodation while, for others, housing may eat up so much of their income that their food choices, healthcare needs, educational prospects and sustainable commuting options are heavily compromised⁸.”

As evidenced in the beginning of the pandemic, there are striking similarities between the current pandemic-induced economy and the Global Financial Crisis (GFC) of 2007⁹. Specifically, in 2021 and 2022, as governments are attempting to revive the global economy, several factors that have caused the housing price to increase in 2007 are having more severe impacts. Toronto has been one of the cities that is hit hardest by inflationary prices due to a multitude of factors.

Wetzstein speaks of three contemporary global issues that are the main causes of housing unaffordability.

First, “the (re)urbanisation of capital and people has pushed-up demand for housing”;

second, acquiring “cheap money has facilitated extensive mortgage lending”; and third, “the rise of intra society inequality has reduced the ability of lower socio-economic households to pay growing housing and energy bills¹⁰.”

This first issue speaks of a growing number of people moving into the city and living an urban lifestyle, rather than owning a suburban house. There is an increasing desire to live in more walkable neighbourhoods than to drive everywhere¹¹ (see chapter 2.1). The second issue of easy money was pushed to the extreme with the record low interest rates and government sponsored relief programs worth billions of dollars given to individuals and businesses in 2020 and 2021. The application process was quite easy and screening process non-existent, so a large sum of money was given to the people. However, on the larger economic scale, this has created cheap money. On top of that, due to the 2% yearly inflation rate set in many countries around the world including Canada, everyone is simply encouraged to spend or invest their money instead of saving it in the bank¹². Also, many individuals and families were encouraged to take the low interest rate mortgages and use the money the government gave them for property down payments. On the Bank of Canada records, the floating interest rate for mortgages was 2.9% in January 2020, 1.78% in December 2020, and 1.32% at the time of writing¹³. These extremely low interest rates encourage people to make the decision to buy a house. This pushed housing prices to a historic high due to inflation. The third issue noted by Wetzstein on the less affluent households is discussed in detail in section 1.2.2.

In the beginning of the first COVID-19 lockdown in March 2020, there was in fact a drop in housing prices as many people have predicted to happen (figure 4). However, it was mostly due to the strict lockdown restrictions that impacted open houses and in-person viewing of these houses¹⁴. However, “as time spent at home increased during the pandemic, shifting housing

¹⁰ Steffen Wetzstein. “The Global Urban Housing Affordability Crisis,” p. 3162.

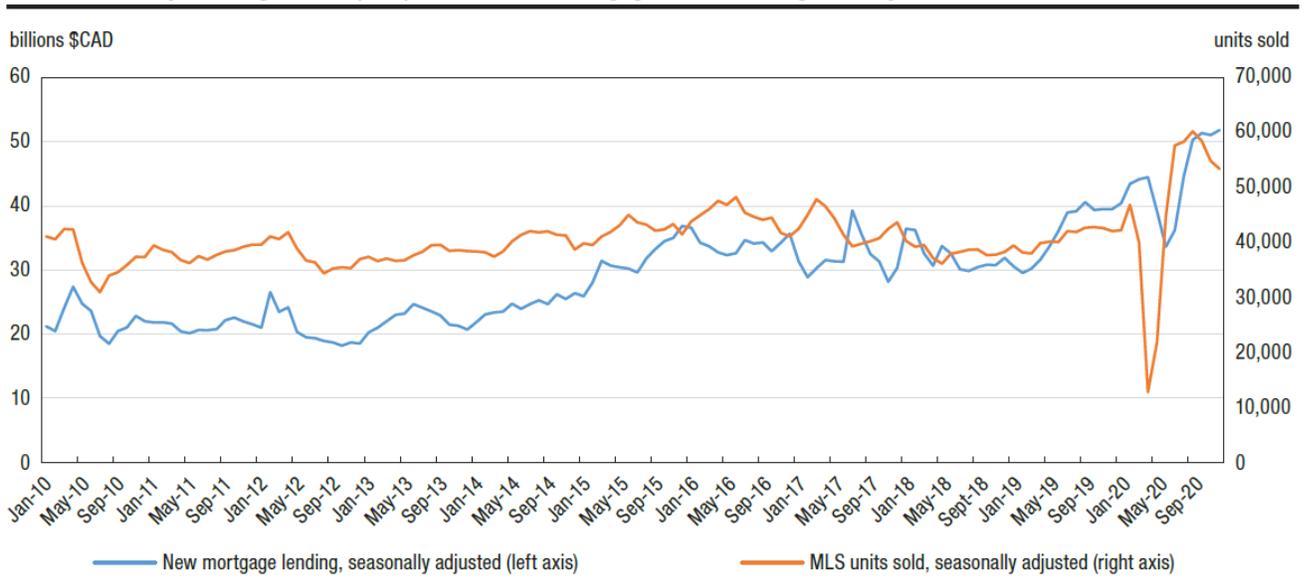
¹¹ Ann Forsyth, “What Is a Walkable Place? The Walkability Debate in Urban Design,” *Urban Design International*, no. 4 (Winter 2015), p.276-277.

¹² Brendan Brown, *The Case Against 2 Per Cent Inflation: From Negative Interest Rates to a 21st Century Gold Standard* (Cham: Springer International Publishing, 2018).

¹³ Canada, Bank of Canada, *Canadian Interest Rates and Monetary Policy Variables: 10-Year Lookup* (Canada: Bank of Canada, 2021).

¹⁴ Michael Daoust et al, *Trends in the Canadian Mortgage Market: Before and during COVID-19*, p.7-8.

Chart 4
Number of Multiple Listing Service (MLS) units sold and mortgage related lending, monthly



Source: Canadian Real Estate Association (CREA), Haver Analytics, Statistics Canada calculations. Bank of Canada Report on New and Existing Lending (A4).

Figure 4 -Number of Multiple Listing Service units sold and mortgage related lending from 2010 to 2020, (graph by Michael Daoust et al).

15 Michael Daoust et al, *Trends in the Canadian Mortgage Market: Before and during COVID-19*, 2021, p.8.

preferences coupled with pent up demand pushed home sales to record levels throughout the summer.” Many people have realized that the working from home model is here to stay for the long run, and securing suitable housing options has become a top priority¹⁵.

As more and more people are attempting to purchase larger properties, this extra demand on top of the existing demand from the growing population of Toronto has pushed housing prices to historically high numbers.

1.2 Other Issues Impacting the Housing Market

Even though the COVID-19 pandemic acted as a catalyst to bring the issue of housing unaffordability to the foreground, this has been an issue for several decades¹⁶. This subchapter will speak to the longer term issues that have existed for decades.

¹⁶ Ted Tyndorf, *Perspective on Housing Affordability* (City of Toronto: City Planning Division, 2006).

1.2.1 The North America Housing Ownership Framework

North Americans have been indoctrinated with the idea of purchasing their own home and continue to improve the size of their home as they move up the social-economic ladder. These are long term investment plans that can be used to raise a family. After the children grow up and move out of the house, the owners can sell their house, move to a smaller house or a condo, and use the difference as retirement money. This model of financial management way of living is based on the fact that the federal and provincial government is providing minimal amounts of retirement money for its citizens, and also that children are often not culturally required to take care of their elderly parents.

This is very different compared to European or Asian countries. In Europe, many people can rent their homes throughout their life without worrying about not being able to afford their rent nor a lack of retirement money. The European jobs pay a lot more and their governments provide enough retirement money for its citizens to live worry-free retired lives even if their children do not support them.

In Asian countries, families value multi-generational living, so children do not need to move out of the house as they become adults. Even though Western ideologies of becoming independent has proliferated in Asia, and many young individuals are moving out of the house, they are not belittled if they live with the older generation. The essence of this framework is that the younger generations need to take care of the older generations until they eventually pass away. So, the younger generations

- 17 There are two different types of investment: the long-term investment of a house for comfortable retirement purposes that is talked about in 1.2.1, and the shorter-term investment for pure money gaining purposes due to the attractiveness of the Toronto market
- 18 The number of dwelling is counted as all of the unit that are currently occupied by residents
- 19 City of Toronto, Children's Services, City Manager's Office, City Planning, Economic Development, Social Development, Toronto Police Service, Toronto Public Health, Toronto Water, Transportation Services, 2016 *Census: Population and Dwelling Counts* (City of Toronto, 2017).

purchasing their separate homes might hinder them taking care of their parents.

After comparing these three different frameworks of living in North America, Europe and Asia, it is important to note that any one of them is not necessarily better than another, and all three have their advantages and disadvantages. However, for the purpose of this study of housing in Toronto, the North American framework is burdening the housing market more than the other two frameworks. Since it is very difficult to change this cultural way of living that many North Americans believe in, this thesis will be working within this framework and propose solutions that would aid it rather than replace it.

1.2.2 Increased Demand of Housing

In addition to citizens purchasing their homes as an investment for retirement, foreign and local investors are also buying properties for their investment needs¹⁷. Foreign and local investors have increased in recent years in the Toronto housing market and have caused a larger demand for all types of housing, from single-family houses to condos.

On top of the demand from all of the new investors, Toronto's population has been on a constant rise from 2,385,421 in 1996 to 2,731,571 in 2016. As for the number of dwellings, there are a total of 903,580 recorded in 1996 and 1,112,929 in 2016¹⁸. This would mean that if everyone were to live in these 1,112,929 number of units, there would need to be at least 3 person living in one unit. Of course, that is not the case. Single and two person(s) households count for the majority of households in Toronto¹⁹. Thus, the number of housing units in Toronto are simply not enough to serve its population. Many people working in Toronto are living in the surrounding municipalities of the Greater Toronto Area and need to drive into Toronto.

As previously noted, there has been an increased need for dwellings with larger space. Also, there has been a general trend indicating that people are voluntarily spending

less on commodity goods but more on mortgages during the current pandemic period, causing further increased demand for housing²⁰. While this increase in housing prices have benefited people who already own properties, those who are renting and trying to save up to purchase their first property are simply priced out of the housing market.

²⁰ Daoust et al, *Trends in the Canadian Mortgage Market*. p.14.

²¹ First-time buyers means an individual or family that does not currently own any property and are attempting to buy one

1.2.3 The Below Average Demographic

In subchapter 1.1, there are three issues that Wetzstein speaks to the issue of unaffordable housing. This section analyzes in detail the issue of the increased uneven distribution of wealth.

As housing prices continue to rise, the rental housing market is also experiencing the same increase. Renters continue to pay higher and higher amount of rent, creating forever renters; while owners are essentially set to own their homes forever or until they choose to sell their homes. In the 1990s, housing prices were affordable with average wages and salaries. In the current situation, due to the various factors that have caused the housing price increase, the average salary can no longer afford the average house. Thus, more potential first-time buyers who are currently in the rental market are delegated to continue renting. In figure 5, the population density map illustrates that the majority of people aged 20-34 are located in central areas with a high concentration of high rise condo towers. Many of these potential first-time buyers would spend around half of their salary on rent²¹. Along with other expenses, there would not be much left for them to save for a down payment to purchase a home in the future. For the majority of people who do not currently own any property, it is extremely difficult to save enough money for a down payment and also support the monthly rental payments on any Toronto home with current market prices.

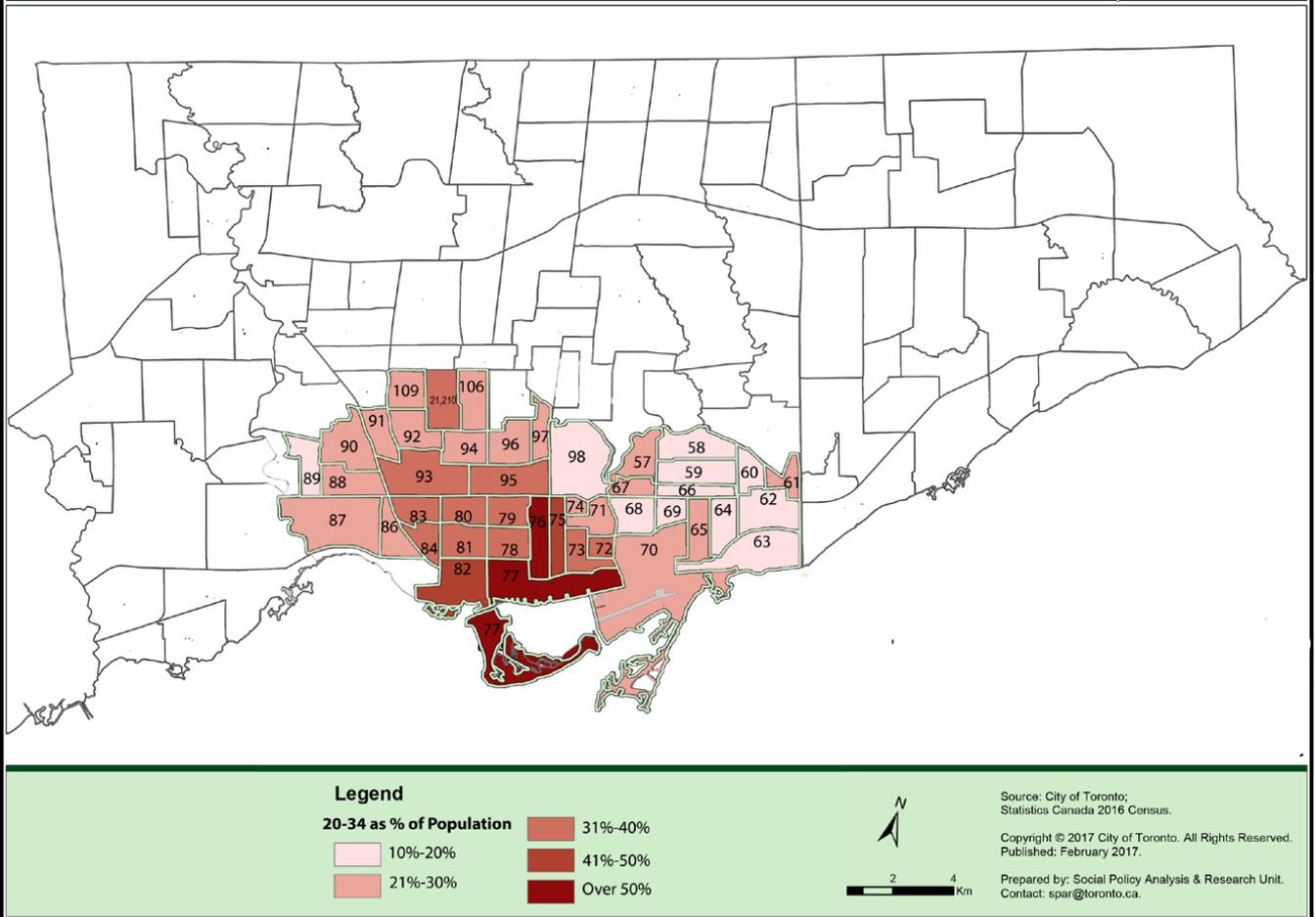


Figure 5 - The 20-34 Age group as a percentage of total population in the downtown Toronto neighbourhoods, (Map by Statistics Canada), modified by author.

1.2.4 The Zoning By-Law and City of Toronto Regulations

Among the many issues affecting housing affordability, the current zoning by-law of Toronto is the main issue that is limiting growth and exacerbating the housing crisis. Due to historic urban development and various barriers to permit the construction of new housing types, the low housing density is the main issue surrounding the lack of dwelling units. Since this issue and its theoretical solution are a key framework that this thesis is focusing on, the following chapter discusses Toronto’s zoning regulations in detail.

2

Toronto's Strategy to Increase Housing Density

The Toronto municipal government is aware of the lack of housing density and the issue of Missing Middle. In order to combat the housing crisis and increase housing density in Toronto, the City Council has announced the Changing Lanes Program, a laneway housing program that allows laneway suites to be built.

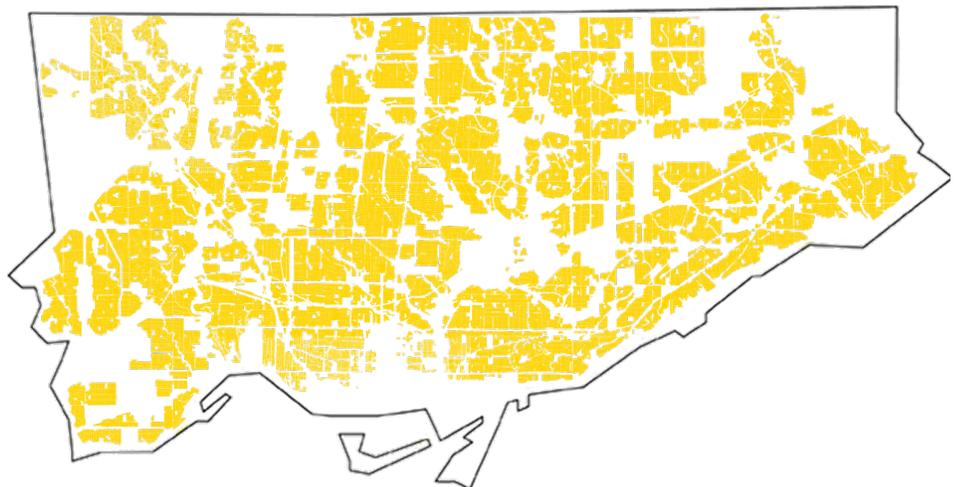
2.1 “Yellow Belt” and the Zoning Problem

²² Floor Space Index is an index figure that limits the height or the building area, and in turn, it ultimately limits housing density, see Figure 3.

The main issue contributing to the housing crisis in Toronto as outlined briefly in section 1.2.4 is the current zoning limitations. Figure 6 indicates all of the residential zoned areas in Toronto, which are zoned only for residential detached, semi-detached and townhouse housing typologies. This area covers 35.4% of total Toronto land and has been termed ‘The Yellow Belt’ to indicate the yellow colour of the residential zoning. These buildings are limited to a single family, 10 metres maximum height and an average of a 0.6 Floor Space Index (FSI)²². This FSI value is one of the main values that is preventing more density development in Toronto. As shown in figure 7, if the building is to be constructed at 10 metres for three storeys, there would be a lot of space left over that is simply empty. With a common FSI of 0.6 in most residential areas according to the zoning by-law, there is a lot of two storeys houses sitting on large lots of land with an underused backyard.

In order to accommodate for the lack of density in the Yellow Belt areas, developers have used the 5.2% of Mixed-Used zoned areas plus 3.5% of Apartment zoned areas to construct condos and apartments for everyone else without Residential houses (figure 8). This has created a Missing Middle, a term coined by Daniel Parolek

Figure 6 - All residential zoned areas in Toronto, (Map by City of Toronto), modified by author.



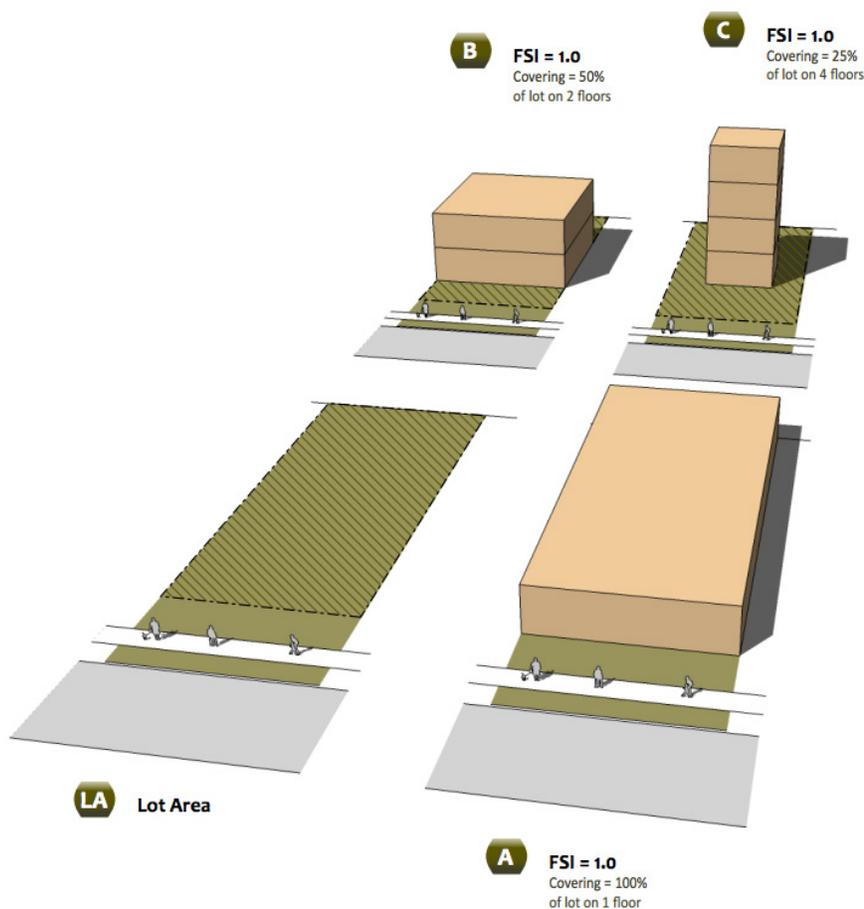


Figure 7 (left) - Diagram Explanation of the Floor Space Index, (Digital Image by Stefan Novakovic).

Figure 8 (top right) - Official Plan Land Use Designations as a % of City of Toronto Land Area, (Image from City Planning Division).

Figure 9 (middle right) - Diagram of Missing Middle Housing, (Image by Daniel Parolek, *Missing Middle Housing*, 2020).

in 2012 that speaks of the “shifting demographics and market demand for walkable urban living²³.” Figure 9 is a Missing Middle diagram by Parolek that demonstrates the various types of housing typologies including the mid-rise apartment units²⁴. The Missing Middle is clearly identifiable in aerial photographs of City of Toronto (figure 2). Other than single detached houses, townhouses and high density condos, there are very few other types of housing in Toronto. When everyone lives in a house or a high-rise building, there is a clear divide between the older generations living in the houses and the younger generations living in the condos. Also, these high-density condo towers has put concentrated pressures on parts of the transit system that neighbour these condos.

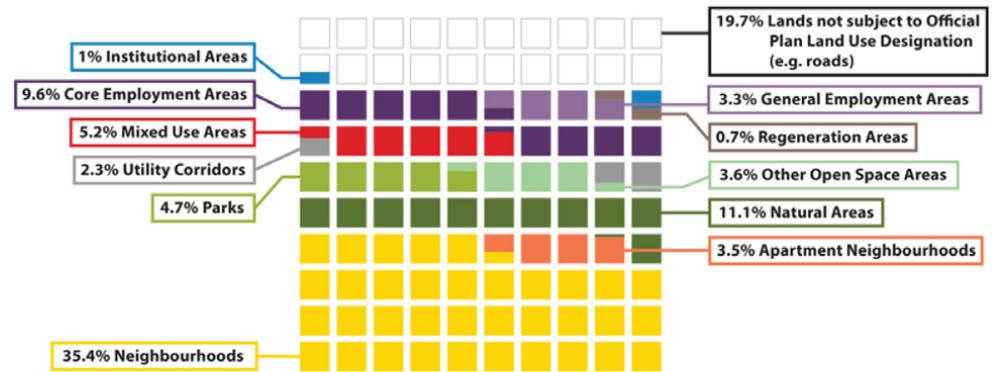
²³ Parolek, *Missing Middle Housing*, p.xvii-xviii.

²⁴ *ibid.*, p.9.

The residential houses with laneways to access the garages at the back has been the car-centric model that the City of Toronto developed along with the box store

City of Toronto - Official Plan Land Use Designations

As a % of total City of Toronto land area (634.04 Square Kilometres)



Note: The graph excludes the 'Special Study Areas' land use designation which measures 0.1 square kilometres (0.02% of the City's land area)

Source: City Planning Division: Official Plan, February 2019



shopping malls, five lane roads, high-rises besides those roads and houses behind those towers. However, in 2022, driving has been less and less desirable due to personal issues like the inconvenience and costs of owning a car, and global issues like the release of carbon into the atmosphere. Thus, there has been a continued growth of urban migration as more households are moving back into city from suburban neighbourhoods.

Due to the zoning limitations mentioned earlier, there is a significant shortage of housing in the City of Toronto, especially in the city centre, downtown Toronto. So is it possible to simply change the regulations and build large

mid-rise housing units as described by Parolek in downtown Toronto? No, not at the moment. Toronto's regulations restrict demolishing large areas of single-family houses. This is happening throughout the City, but very slowly due to a lot of resistance. However, the City can encourage individual house owners to increase density themselves by constructing granny suites, additions, renovations and laneway houses. This will increase housing density in Toronto, alleviate housing costs and create more walkable neighbourhoods.

2.2 Toronto's "Changing Lanes Program"

²⁵ City of Toronto, "Monitoring Program", *Changing Lanes*.

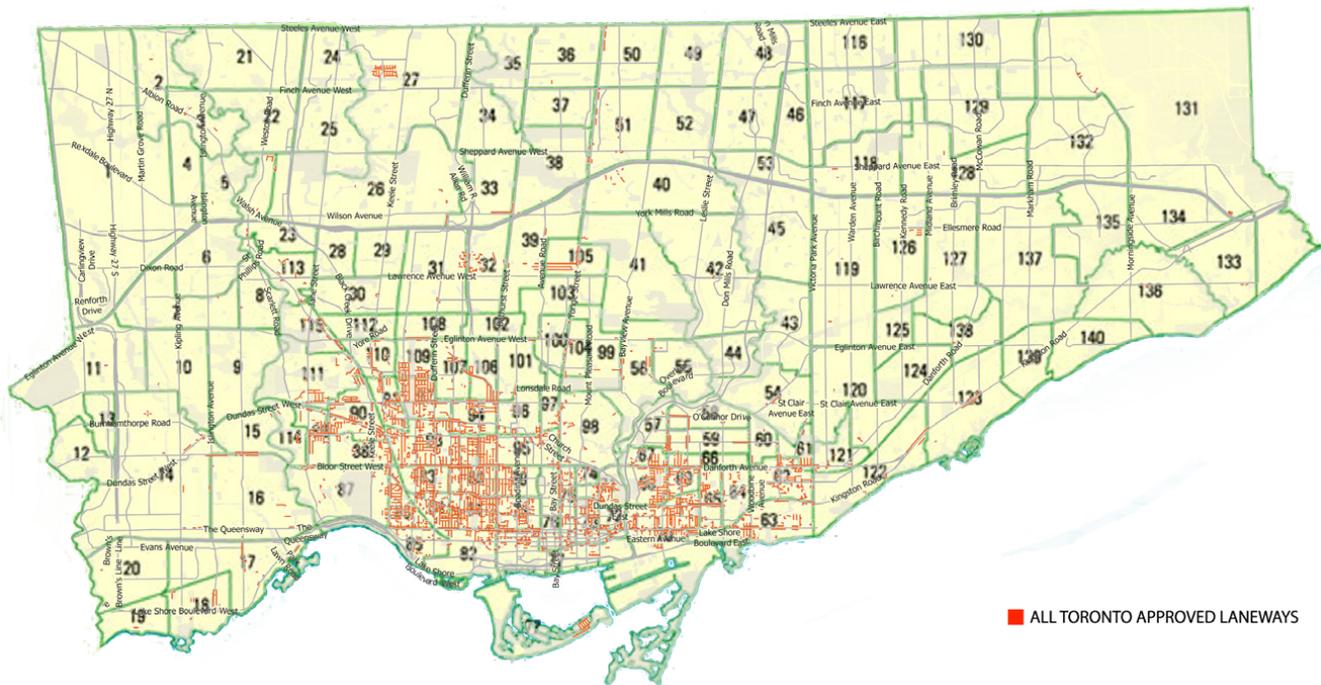
²⁶ City of Toronto, "Information & Reports", *Changing Lanes*.

²⁷ Much information mentioned in this list can be found on this official document provided for the City of Toronto - Gladki Planning Associates, *Laneway Suites Zoning By-Law Amendment Review*, October 2021.

In order to increase housing density in the City of Toronto, on June 28, 2018, the City Council approved and adopted the official plan and zoning by-law amendments permitting laneway suites in Residential zones to be built in the Toronto and East York District, and they began a monitoring program for the laneway suites²⁵. This monitoring program is a committee that constantly evaluates the viability and regulations surrounding the construction of laneway suites. Since the program was adopted four years ago, the City Council has continued to improve this program, albeit very slowly. On July 16, 2019, City Council adopted the amendments permitting Laneway Suites across the City of Toronto, opening a lot more areas for densification²⁶. This was officially titled the Changing Lanes Program, and it provides a realistic way to add more affordable housing options in the unmalleable housing fabric of Toronto.

There is an official map available on the City's website showing of all of the approved laneways in the entire city. This is overlaid with the neighbourhood numbers as identified by the City to determine which neighbourhood these laneways belonged in, which has the most and which has the least number of laneways (figure 10). This map demonstrates that thousands of possible laneway suites are available to be built in the City. It can be overlaid with other maps to analyze the neighbourhoods where home owners applied for building permits, the approved ones, rejected ones, the existing laneway suites that were built before the adoption of this Changing Lanes program, the applications that applied for minor variances, and many more²⁷. A culmination map that includes additional information is shown on figure 15 in Chapter 3.

In the Zoning By-Law amendment, in addition to the approval of the laneway suites and allowing such buildings to be constructed, there are still many regulations and by-law items that limit the size, shape and programs allowed in such a building. Section 2.2.1 shows diagrams



on the exact dimensions of building on a small lot versus a big lot, and the entire zoning by-law for laneway suites can be found in Appendix A.

Overall, the current zoning by-law regulations are too limiting and are preventing more laneway suites from being constructed. It presumes that all laneways are the same and should follow the same rules. Any exceptions must be taken to the Committee of Adjustment, which requires the home owner to spend precious time and money. Since laneway suites have been approved and the City Council is promoting it as a new building type, it hopes to proliferate in Toronto, there needs to be more incentives than barriers for more to be built. As this is a new building type, some unprecedented cases would need to be approved as a starting point for Toronto to begin populating its laneways.

Figure 10 - All Approved Laneways in Toronto overlaid with Neighbourhood Numbers - (Map by City Planning Division, "Toronto Neighbourhood Map – UReach Toronto"), modified by author.

2.2.1 Existing Zoning Regulations

In this section, there are two different hypothetical sites illustrated to demonstrate the maximum allowed dimensions and areas for a laneway suite. Even though there are many properties adjacent to laneways, some of them are too small to accommodate a decent sized laneway suite for an individual to live in. However, changes to the zoning by-law may make some of them viable options (refer to chapter 4 for design projects that explore these changes). Regardless, there are many properties with decent sized lots that can accommodate laneway suites. figure 11 shows two axonometric drawings illustrating the zoning by-law restrictions as outlined by City of Toronto (refer to Appendix A).

Figure 11 shows a relatively small site, the two laneway suites are as a result smaller in nature. However, they are still 6 metres or two storeys in height, and have around 40 square metres of gross floor area. It may be small as a house in the traditional sense, but as an apartment and an affordable laneway suite for rent or purchase, it would definitely be enough.

Figure 12 illustrates a more comprehensive list of zoning by-law restrictions due to the larger lot area. The items to note that are different from figure 11 are the clauses for building a green roof, where the height of the building can be extended an extra 1 metre, and that the maximum length of the building is limited to 10 metres.

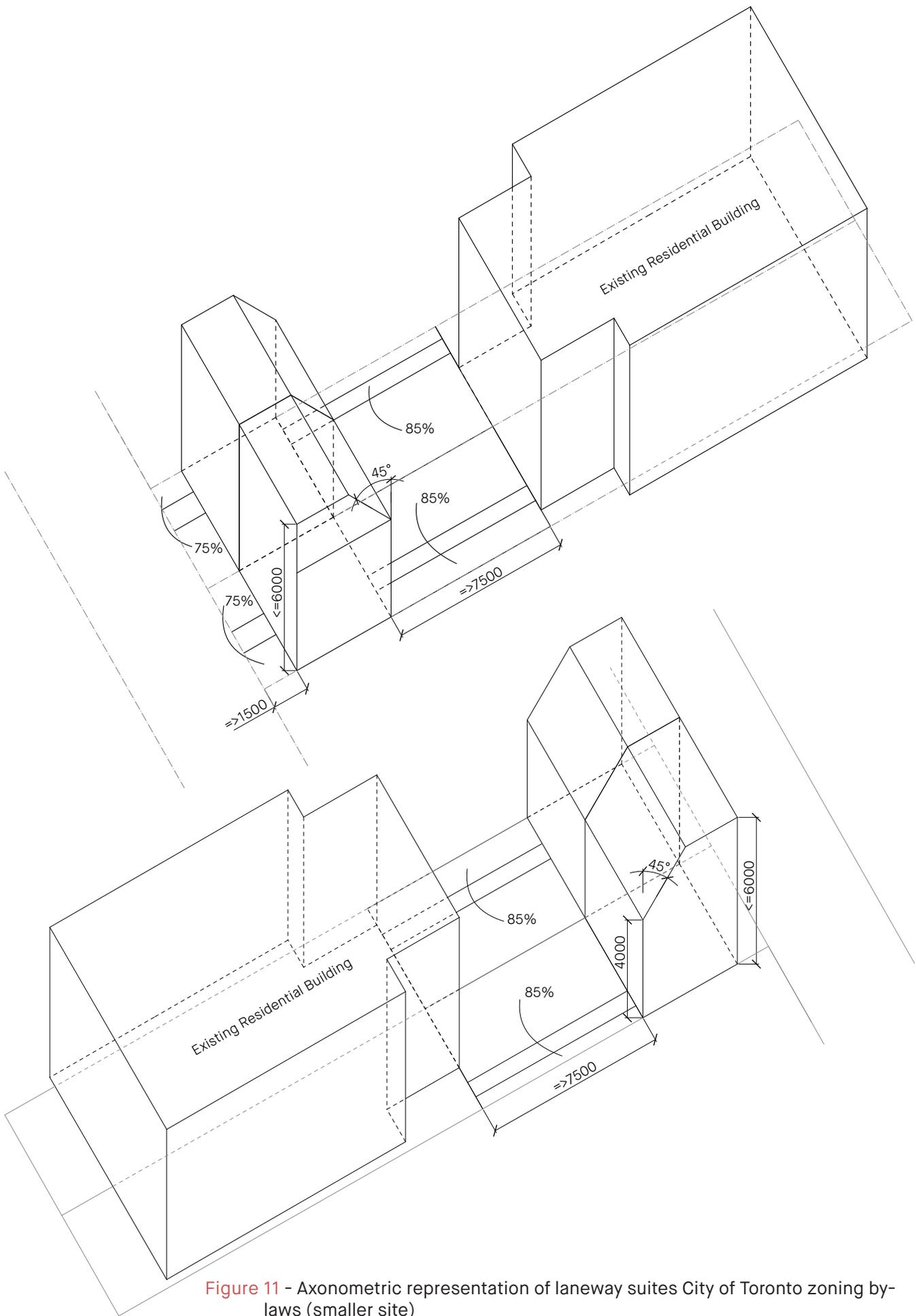


Figure 11 - Axonometric representation of laneway suites City of Toronto zoning by-laws (smaller site)

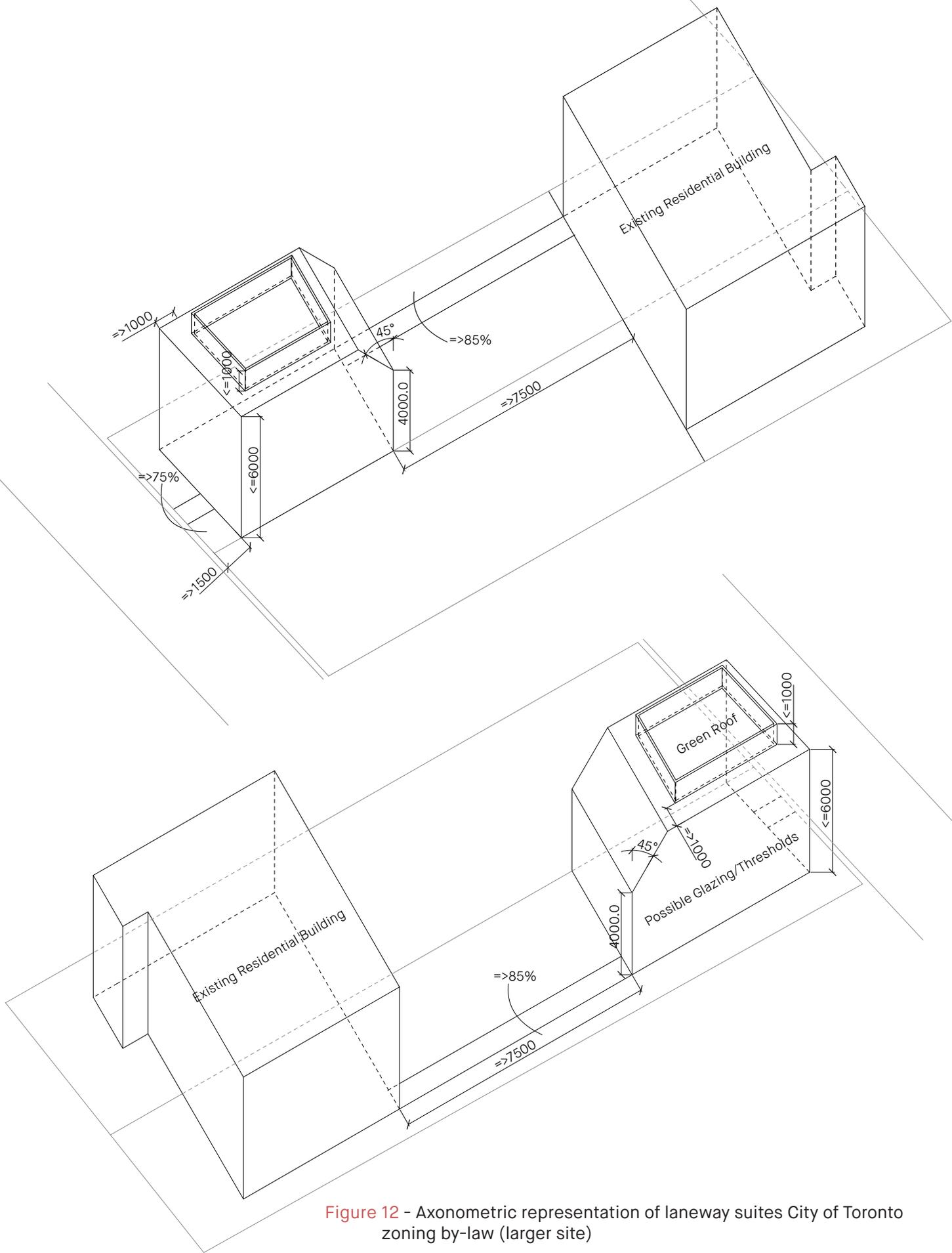


Figure 12 - Axonometric representation of laneway suites City of Toronto zoning by-law (larger site)

2.2.2 Proposed Recommended Zoning Regulations

This thesis is not the first to propose new changes and recommendations to the existing laneway suite by-laws. In October 2021, during the consultation meeting with industry professionals, there were many suggested revisions to the current zoning by-law. Some of these changes include increasing the maximum height from 6 to 6.3 metres, decreasing the front yard setback from 1.5 to 1 metre, allowing for a maximum of 2.1 metres width hardscape pathway to access the laneway house, and increasing the height from 1 to 1.5 metres for the exceptions on the roof (figures 13 & 14).

On November 25th, 2021, a public consultation meeting was held with the Planning and Housing Committee, and many neighbourhood groups opposed the increase of hardscape and height²⁸. Their argument was for the maintenance of softscape, retaining existing trees and as much natural rainwater collection as possible²⁹. In the end, these new recommendations pertaining to trees and softscaping were amended, and this item has been adopted and amended by City Council on December 15th. The amendment includes the use of permeable materials and softscaping for any new or modified construction that are adjacent to laneways.

²⁸ Hardscape and hardscaping defined as landscaping that is made of gravel, concrete, pavers and anything that has been extensively processed to create flat and smooth surfaces

²⁹ Softscape and softscaping defined as landscaping that is defined by soil, grass, trees and anything of organic nature

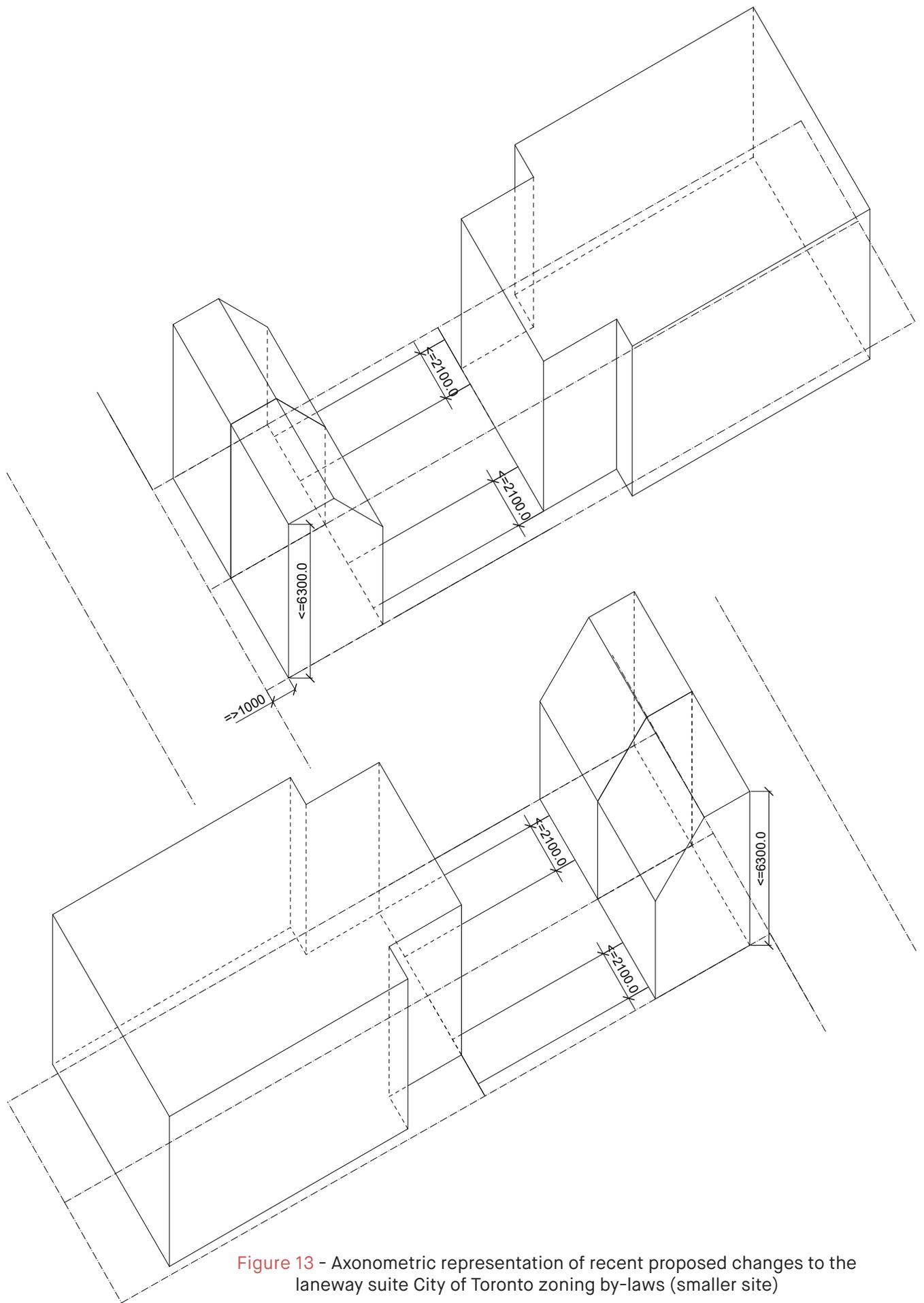


Figure 13 - Axonometric representation of recent proposed changes to the laneway suite City of Toronto zoning by-laws (smaller site)

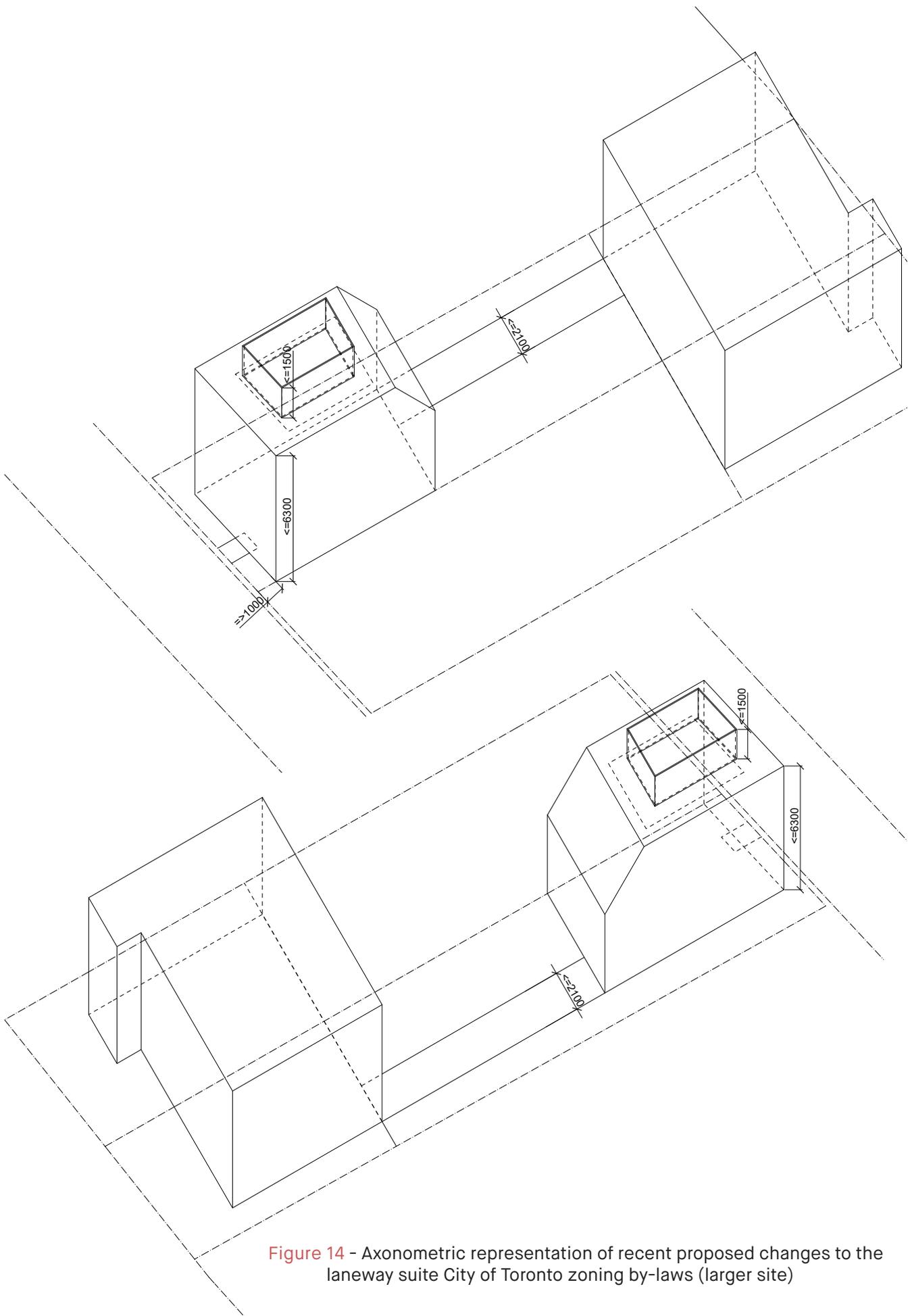


Figure 14 - Axonometric representation of recent proposed changes to the laneway suite City of Toronto zoning by-laws (larger site)

2.3 Incentives, Barriers and Potential Uses of Laneway Suites

³⁰ The Average Market Rent value is taken from the City's website - City of Toronto, Affordable Housing Administration, "Current City of Toronto Average Market Rents & Utility Allowances" (City of Toronto, ON: Affordable Housing Administration, 2017).

³¹ See this news article for an Affordable Laneway Suite Program example - Rotberg, Ethan. "This landlord is renting his two-bedroom laneway suite for \$1,661 a month." *Toronto Life*, last modified on 09-24-2021.

In addition to adopting the Laneway Suite Program in 2018, Toronto City Council has also adopted an Affordable Laneway Suite Program. The City will provide a forgivable loan of up to \$50,000 to homeowners who intend to construct and rent their laneway suite for less or equal to the City of Toronto Average Market Rent³⁰. There has been a few news articles of owners taking advantage of this program, however, this program has not been widely used by Toronto house owners³¹. The \$50,000 is a good incentive, but considering the time, money, stress and regulatory barriers that surrounds the entire development of a laneway suite, many homeowners are not incentivized to build at all.

2.3.1 Barriers to Constructing a Laneway Suite

Throughout chapters 1 and 2, there have been brief mentions of barriers that are preventing laneway suite constructions. This section explains in detail these barriers, the kind of challenges that they pose on the approval and construction of a laneway suite and a brief analysis of potential solutions. For the detailed propositions and design projects, please refer to Chapter 4.

The biggest barrier is the zoning by-law that dictates what can be build and what cannot. More specifically, the site where the house is currently located. The site refers to the ground floor plan, and existing soft and hard landscaping. So if there are any trees or shrubs on the site, the new laneway suite would need to either chop down the tree (very difficult to be approved), build around it or not at all. Similarly, with elevation changes from the front of the road to the back of the laneway, rainwater collection and flooding issues need to be considered. Drainage pipes, foundation, excavation are all different for an uneven site versus a flat site. For complex sites, the solution is to simply hire someone with building knowledge like a master builder. They are better tuned to complete complex projects and much more efficient than to schedule

and hire multiple disciplines. However, in order to make the job easier for the master builder and cheaper for the homeowner, the regulations must be changed to allow laneway suites to be built on these irregular sites.

Another barrier against laneway suite construction is the hard truth of money, time and stress that such a project can bring onto the entire household. For a small laneway suite, it can cost an average of \$350,000 to construct. Also, one of the owners must be in constant contact with the construction company. Unless they do not work, this simply adds to their responsibilities and stress at work. As for the construction time, a smaller laneway suite can take around 5 months to build, which can be quite a long time from the homeowner's perspective. However, all of these financial and opportunity costs are simply a byproduct of any building project and cannot be solved in its entirety. Still, the regulations can be changed for the homeowner to have an easier experience including but not limited to increasing the forgivable loan amount in the Affordable Laneway Suite Program, allowing more percentages of the construction costs to be tax deductible, and allowing other ways to use the newly built laneway suites.

Even though there can be governmental solutions on the site conditions and the incentives given to households, one of the biggest benefits the Toronto City Council can impose is to increase the allowed density on any particular Residential zoned lot and improve the flexibility of the zoning by-law. Currently, the regulations are very inflexible to adapt to unique situations while its size and setback restrictions are too limiting on the small sites that these laneway suites will be located. Even when a homeowner wishes to build a laneway suite, it can be too overwhelming. In order for an increased number of laneway suites to be developed throughout Toronto and in turn ameliorate the housing crisis, more agency needs to be put into the hands of the homeowners to incentivize them to start building laneway suites.

2.3.2 Potential Uses of Laneway Suites: Renting

³² See here for the complete Development Charge By-Law and Fees - City of Toronto, City Finance, "Development Charges By-Laws & Rates" (Toronto, ON: City Finance, 2017).

There are several potential uses of a laneway suite, and the most common one is renting it as an apartment suite. This is encouraged by the City as it produces an alternative to living in a condo unit. Any potential first-time buyers can rent out these units under the Affordable Laneway Suites Program, and they would most likely be rented at a cheaper price than condo units.

This can be one of the more popular options in less affluent neighbourhoods as it can bring in additional income to the household. These laneway suites would be quite small, and they would serve as the perfect affordable suites for young adults from the age of 20 to 34 working in downtown Toronto. They can rent these small laneway suites at or below the Toronto average market rent and save their money to purchase a property in the future.

2.3.3 Potential Uses of Laneway Suites: Severance

Instead of renting out their laneway suite, a homeowner can sever the lot and sell the laneway suite for a large injection of money. This is a great alternative for soon-to-be retirees who wish to sell their current house. Instead of selling them, they can build a laneway suite and sell their laneway suite to provide the money they would need to retire. For example, if the construction cost is around \$350,000, the entire selling price may be priced at \$500,000 to \$700,000. For young individuals and families, this is a very feasible housing price to buy, especially in downtown Toronto, and cost around the same as purchasing a condo unit.

However, instead of giving homeowners this option, the City has dis-incentivised them from severing their lots. Currently, on top of the severance fee from the Committee of Adjustment, there is a development charge from the City of tens of thousands of dollars³². This charge was originally for developers who are developing multi-unit condos or large areas of houses. However, it also applies to laneway

suites if the homeowner 'develops' one. Currently, there are not any concluding statement on why the laneway suites are not exempt from the development charges. Maybe it is to prevent developers from mass producing large neighbourhoods of laneway suites. However, the homeowner owns their respective properties, it is simply not something that developers can tackle.

2.3.4 Potential Uses of Laneway Suites: Multi-Generation Family Living

The second most popular use for a laneway suite is using it as a multi-generational home. Nowadays, more and more children continue to live with their parents instead of moving out because of the high housing prices. These laneway suites act as a separate unit and provide a property for the independent children. They would be able to assist their parents as well as having their own private suite.

This would provide an indirect decrease in demand on the housing market. Most likely, these young adults would be able to live in the laneway suites for a long time until they can afford their own property. If the laneway suites have everything they need, they might continue to live in the laneway suites and not move out.

2.3.5 Potential Uses of Laneway Suites: Co-op Ownership

If a young individual or family have a friend who is also looking for a property to own, the two households can purchase a house together. One household can live in the main house, and the other one can live in the laneway suite. The two households would share the cost of the down payment the mortgage payments as well as the construction cost of the laneway suite. This gives first-time homebuyers a different type of housing tenure, co-op ownership, to look into.

This is another way to increase housing density on one lot. Once the households have enough money to purchase a bigger house, one of the families may move out, but the laneway suite would permanently exist. The household that remains can then use the laneway suite as a home for their children for multi-generation living or rent it out to another potential first time homebuyer. So, a cycle can be formed. On top of all of the advantages listed, this type of development would circumvent the need to sever the lot, thus avoiding the development charges altogether.

3

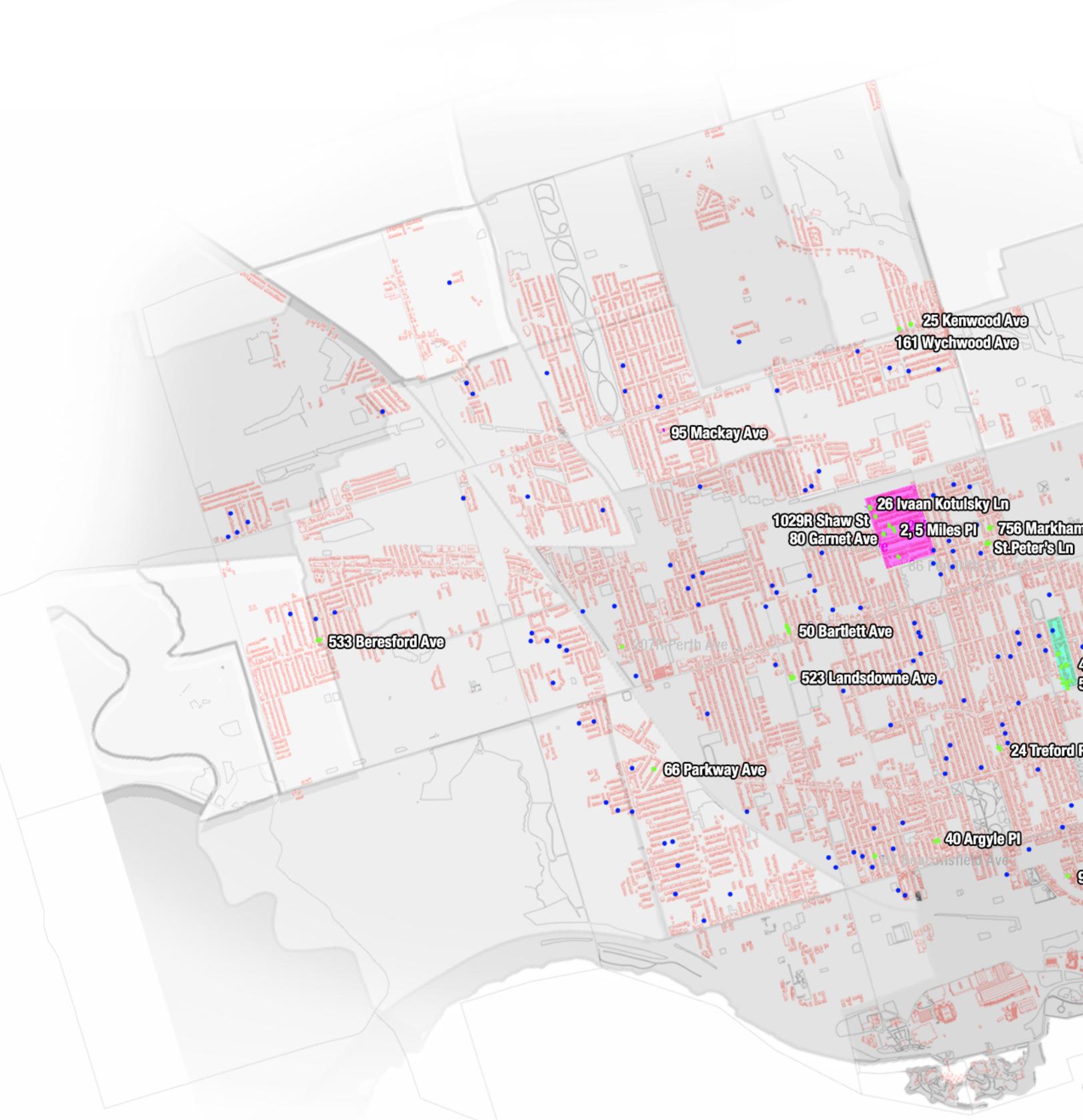
Existing Laneway Suites Successes and Challenges

Since the beginning of the Changing Lanes Program in 2018, laneway suites have begun to be constructed in various parts of Toronto. To date, a total of 306 building permits have been submitted and 183 approved³³. This number is a drop in the bucket when considering the total number of laneways in the city. There are thousands of potential spaces that can be used to build laneway suites, but there are simply too many barriers that are impacting their construction.

³³ Gladki Planning Associates, *Laneway Suites Zoning By-Law Amendment Review*, p.15.

3.1 Existing Laneway Suites - Case Studies

This chapter analyzes a selection of laneway houses that have been built in Toronto to reveal the successful execution of this housing type as well as the challenges facing its proliferation. Figure 15 illustrates the area of downtown Toronto that this thesis is focusing on as it contains most of the laneways that are identified by the City of Toronto. All of the laneway suite applications submitted to the City of Toronto are shown in blue dots. The green dots with their respective addresses identify existing laneway suites that have been successfully constructed (refer to Appendix B for photos). From all of the existing laneway suites that are identified on this map, there are a few areas that are denser with laneway suites and are identified with three individual colours. This subchapter focuses on analyzing the laneway suites that are in these areas. Refer to Appendix B for additional existing laneway suites that are not mentioned.



- ALL LANWAY SUITE APPLICATIONS FROM 2018 (FROM CITY OF TORONTO WEBSITE)
- EXISTING LANEWAY SUITES (WITH ADDRESSES)
- EXISTING LANEWAY SUITES AREAS

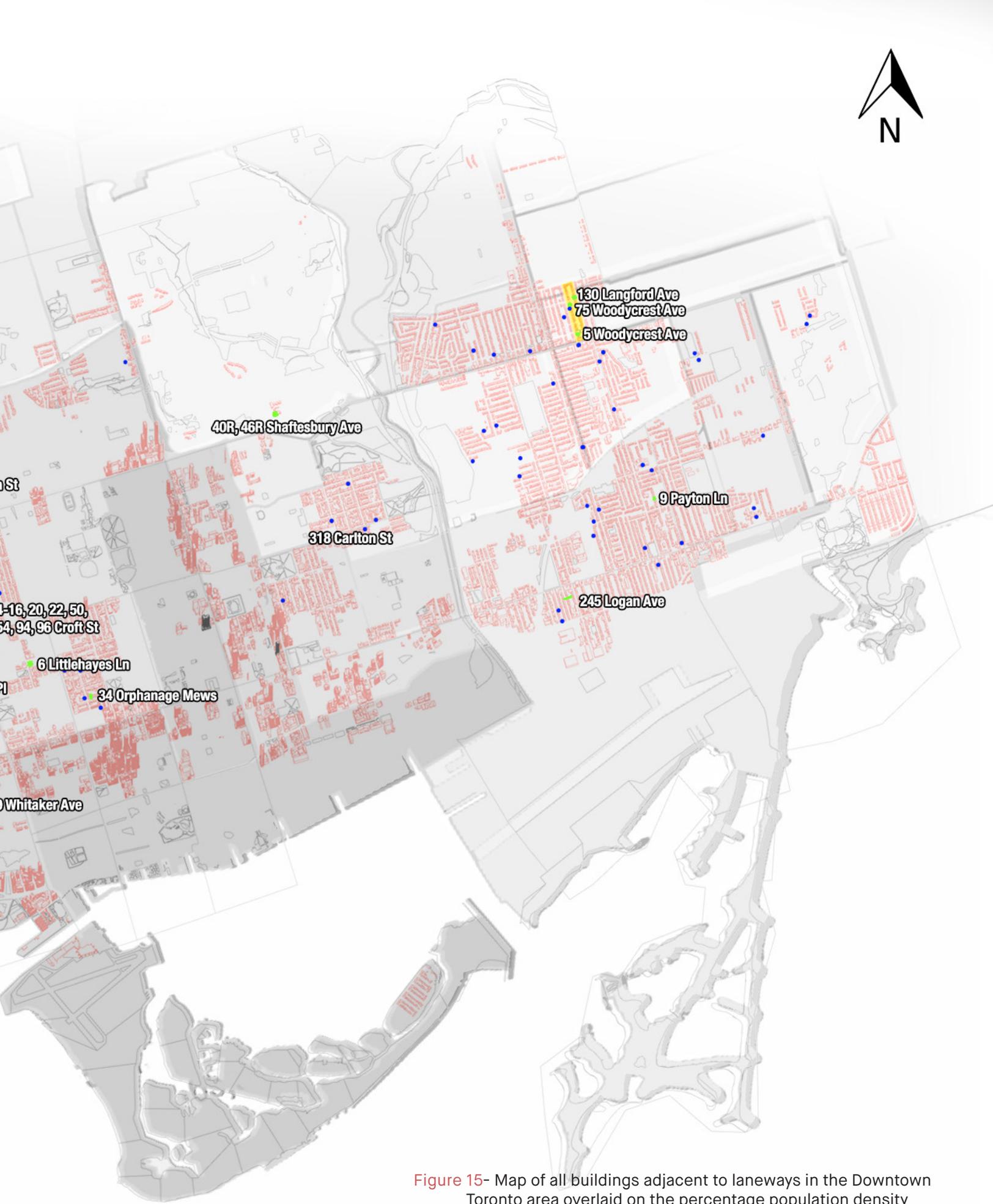


Figure 15- Map of all buildings adjacent to laneways in the Downtown Toronto area overlaid on the percentage population density map of 20-34 years old in the different neighbourhoods



ULSTER ST

LIPPINCOTT ST

VANKOUGHNET ST

BORDEN ST

COLLEGE ST

CROFT ST

CROFT ST

35

32

54

50

22

20

18

4-16

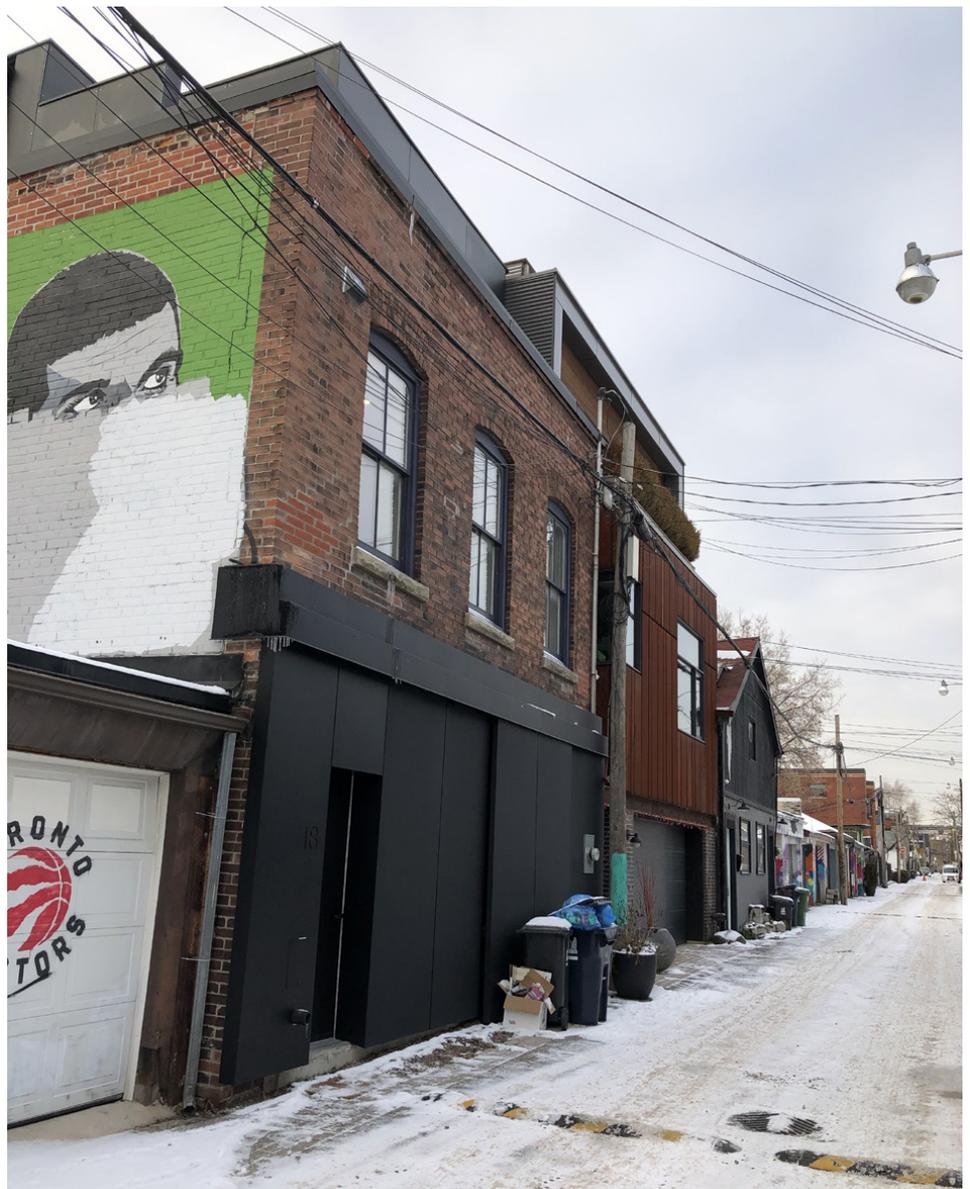
9-13

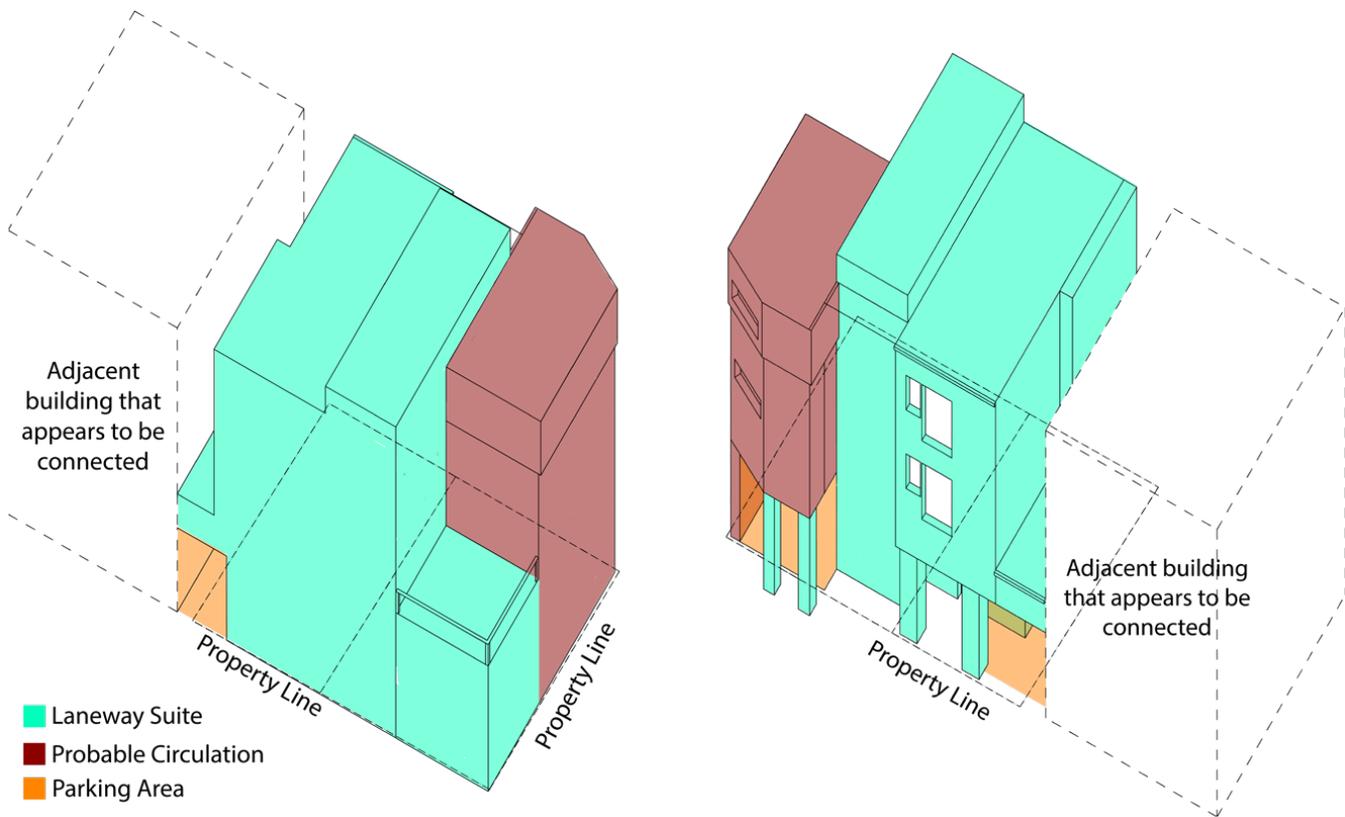
3.1.1 Croft Street Area

Figure 16 (left) - Croft Street, one of the streets in downtown Toronto that has the most existing laneway suites

Figure 17 (right) - Croft Street, looking at laneway units 18-22 Croft Street and down the laneway

Croft Street in the downtown Toronto area looks like any other laneway. However, it is one of the few laneways that has many laneway suites situated on it. It has become a more of a street and has a more comforting atmosphere than other laneways. Despite all of the density on this site, the red coloured areas on figure 16 shows potential areas adjacent to the laneway that can continue to be densified. The density currently existing on this street is mostly situated near Ulster Street, Vankoughnet Street and College Street, so more than half of the lots still have garages on them.





6 Croft Street is a semi-detached laneway suite situated on Croft Street in Toronto. It is located very close to the south entrance of Croft Street. This laneway house has 3 bedrooms, a study, and 3 bathrooms. It is also one of the few laneway suites that has a covered parking space. It is located at a corner and has a distinct exterior feature. From the exterior, the circulation is shown in dark red in figure 18.

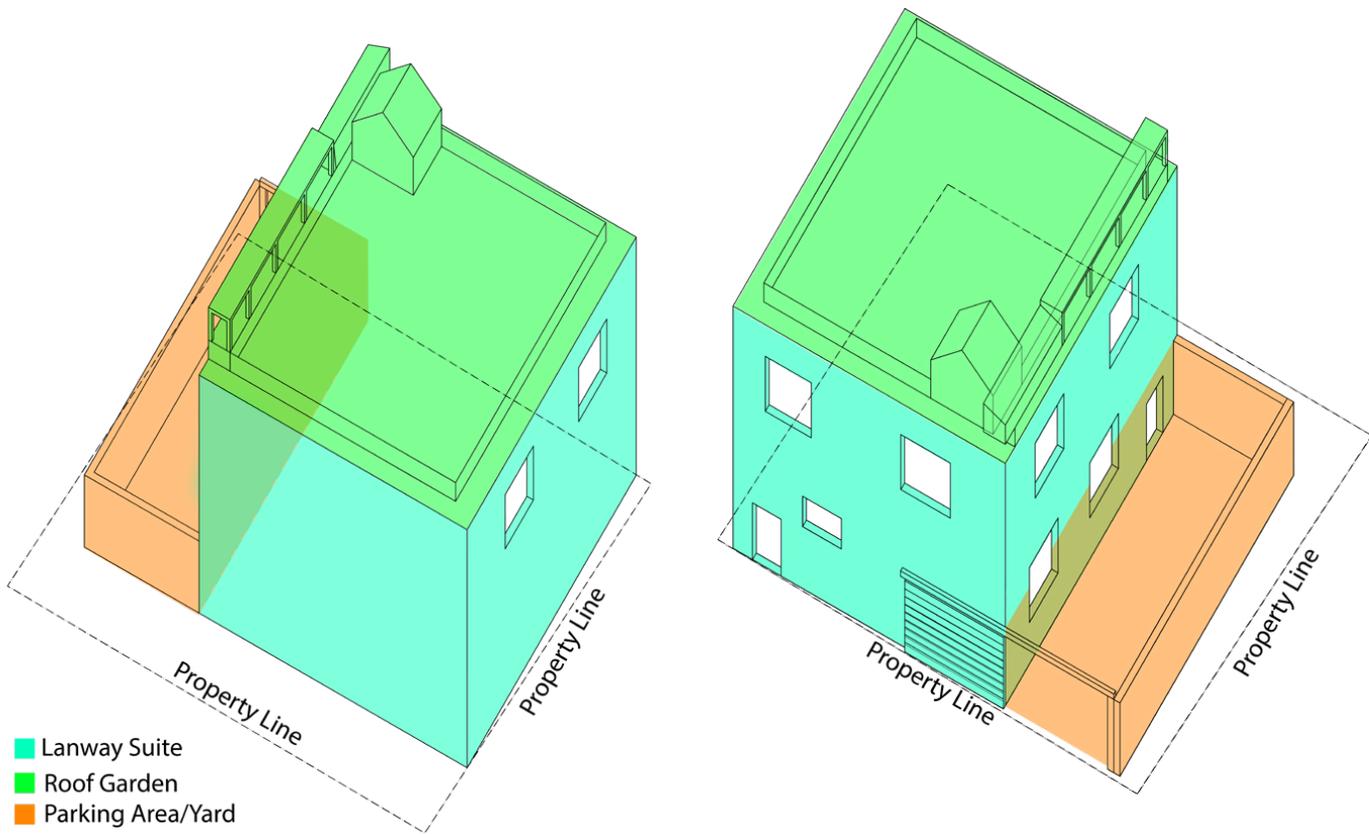
Figure 18 (left) - Program and form analysis of 6 Croft Street

This is the end unit to the townhouses of 4-16 Croft Street. The current zoning by-law states that the maximum height limit is 6 metres for laneway suites, this building defies this rule and has been approved to be built. There is a procedure to approve buildings that do not follow the zoning by-law with the Committee of Adjustment, however this process consumes both time and resources. If more affluent neighbourhoods like Croft Street can be approved for taller houses, less affluent neighbourhoods like Pendrith Street should be as well (refer to section 4.1.1 for the laneway suite design on Pendrith Street).

Figure 19 (top right) -
Front view of 6
Croft Street

Figure 20 (bottom right)
- Interior living
spaces of 6 Croft
Street, (Digital
Image from
Property.ca).





50 Croft Street is another laneway suite situated on Croft Street. It has a fairly regular form. It is a 3 bedroom and 2 bathroom house with plenty of space for storage, living spaces and a full roof garden and patio. There is space for two families, however it is only used by one³⁴. The secondary entrance on the parking area creates a potential rental unit that is separate from the rest of the house.

³⁴ Photos and basic information of the house - Delean, Susan. "50 Croft Street | Realvision," *Realvision | Real Estate Made Simple*.

The inclusion of roof gardens on this house as well as 54 Croft Street illustrates the potential to increase the height of the building without violating the clause of the maximum height of 6 metres. There are various small structures that can be included on the roof as stated in the zoning by-law. In section 4.1.2, the laneway design for 83R & 85R Ravina Crescent explores the use of the roof as an area of activity. Even though the building footprint is smaller than 50 Croft Street, roofs can be used effectively as private exterior spaces.

Figure 21 (left) - Program and form analysis of 50 Croft St

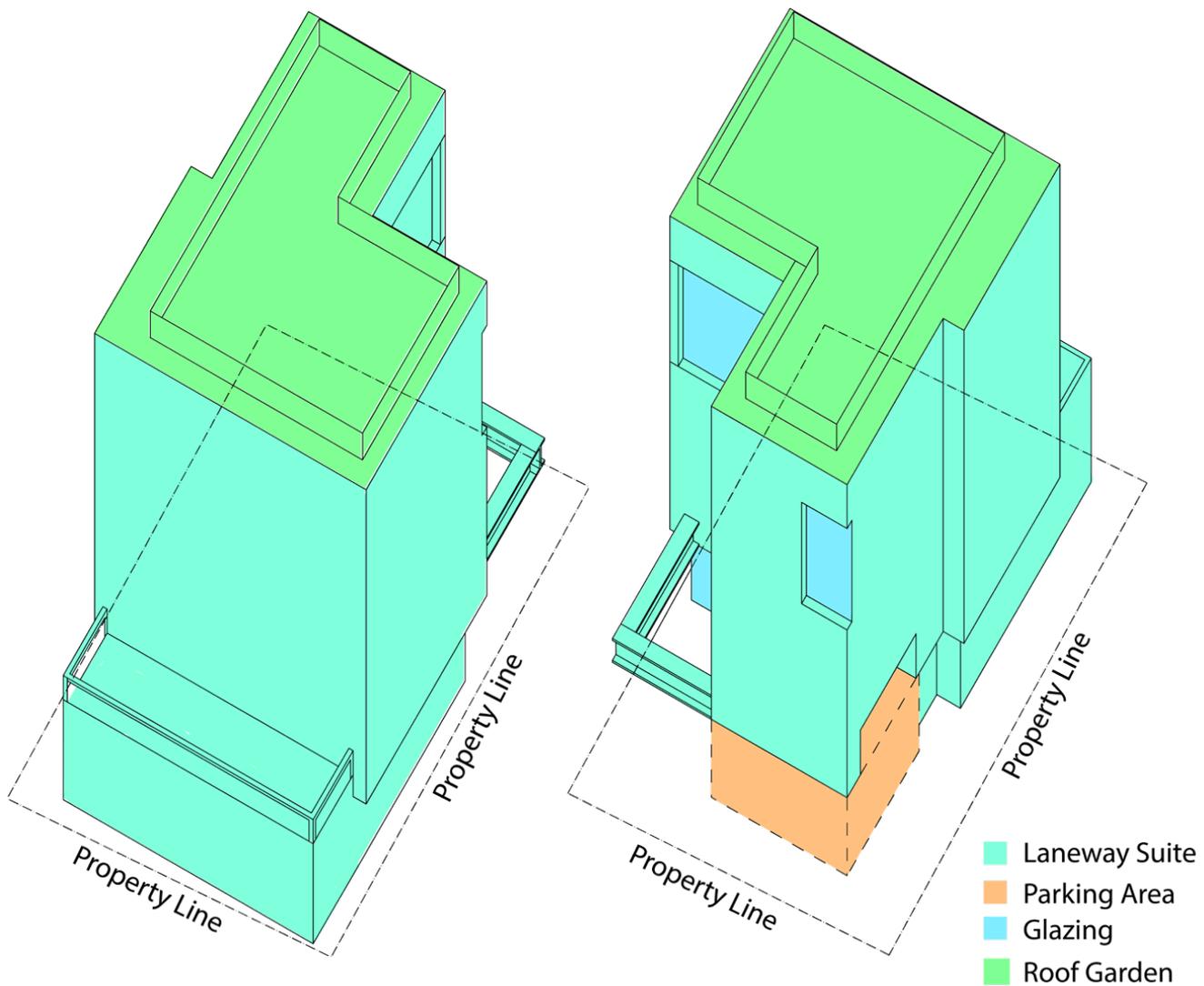
Figure 22 (top right) - Front view of 50 Croft Street

Figure 23 (middle) - Parking & side entrance view of 50 Croft Street

Figure 24 (bottom left) - Interior living spaces of 50 Croft Street, (Digital Image by Susan Delean).

Figure 25 (bottom right) - Roof garden and patio of 50 Croft Street, (Digital Image by Susan Delean).





54 Croft Street is the laneway house located adjacent to 50 Croft Street. It is a 1,300 square foot house located on a 27.76x44 feet lot of land. It was designed by Kohn Schnier Architects in the early 2000s. In 2007, this house earned the Toronto Urban Design Award and the Design Exchange Award.

³⁵ Kohn Schnier Architects, "Laneway House".

According to the description provided by Kohn Schnier Architects, this is a "modest house...remarkably designed to accommodate a family of five and their two pets³⁵." This was formerly a worker's cottage that has been transformed to this current house. When it was constructed, it may have been a modest house, however, with today's real estate prices, this house is on the current housing market for more than 3 million dollars. Despite its asking price, this house has features that can be used in the



Figure 26 (left) - Program and form analysis of 54 Croft St



Figure 27 (middle) - Southwest view of 54 Croft Street



Figure 28 (top right) - View of 50 and 54 Croft Street side by side



Figure 29 (middle right) - Roof deck & shower of 54 Croft Street, (Digital Image by Carolyn Ireland).

construction of affordable laneway suites. Specifically, the large cantilevered canopy for the car is a distinct feature of this house. It is more expensive to use long cantilevers like this, but smaller cantilevers can be used at a cheaper price while maintaining an interesting design. Parts of this concept can be seen in the two laneway units in section 4.1.2, and the bridge house in section 4.1.3.

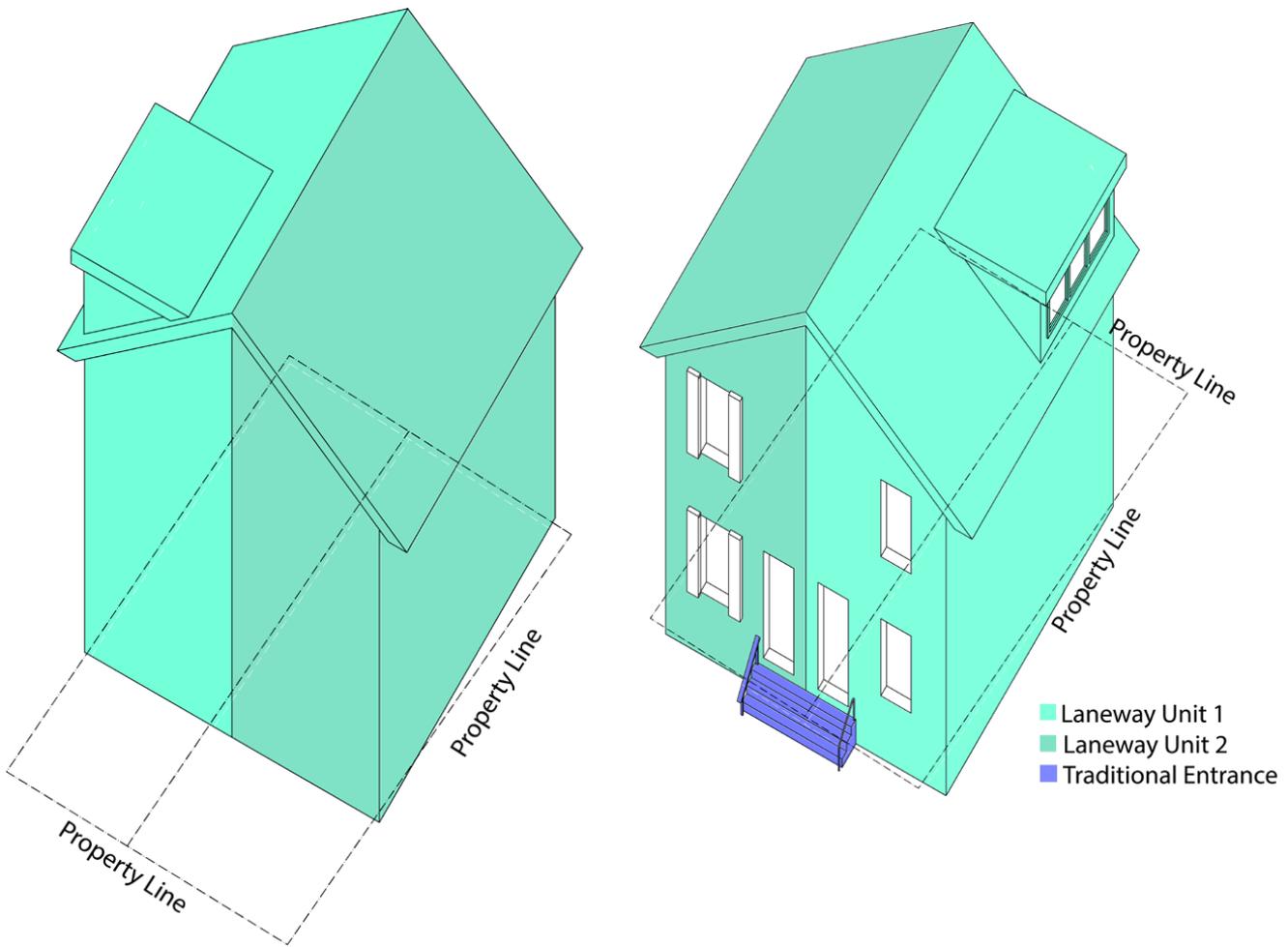


Figure 30 (left) - Program and form analysis of 94 & 96 Croft St

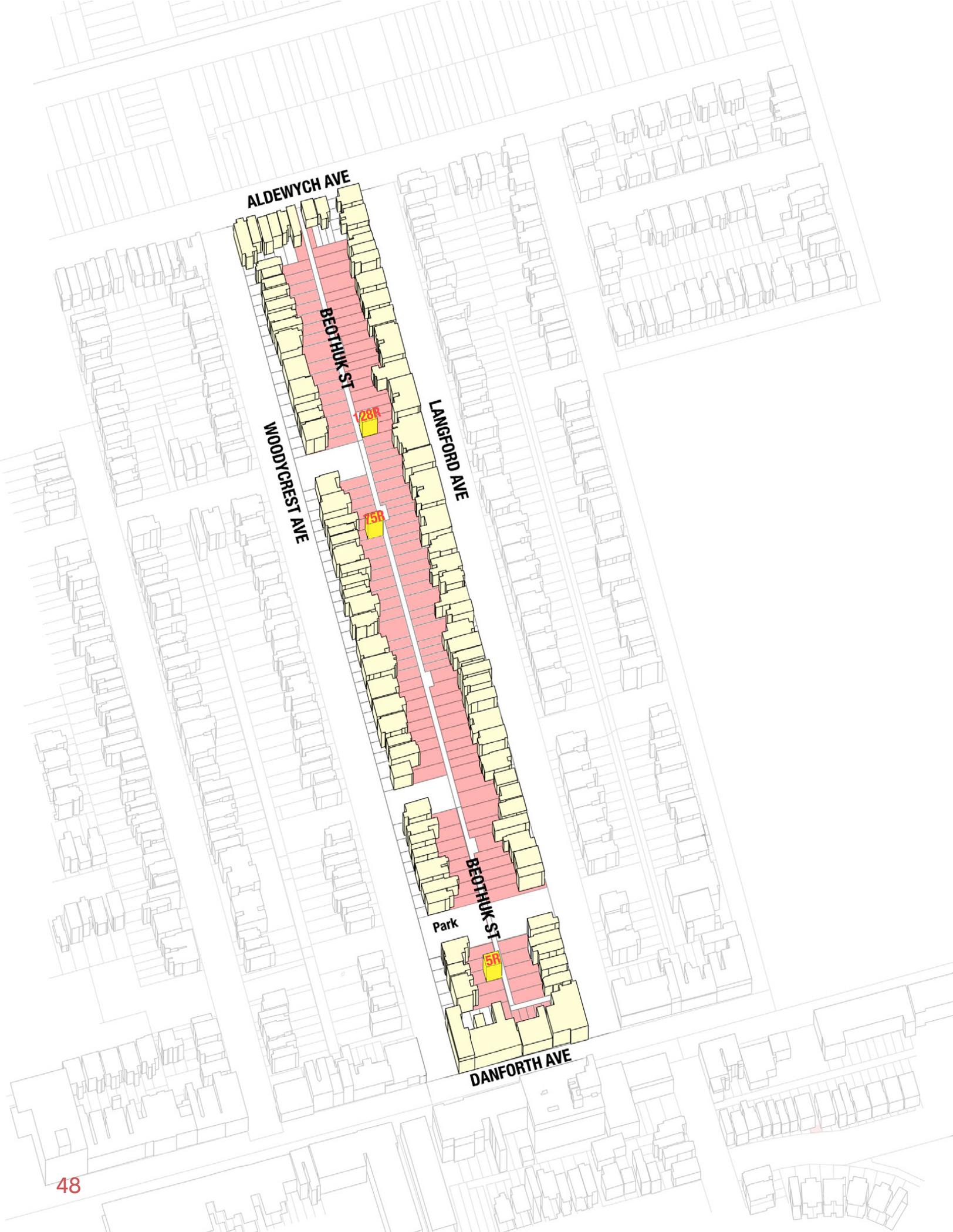
94 & 96 Croft Street is the only semi-detached laneway suite building on Croft Street. It is a unique building different from other laneway suites on this street. The main house facing Lippincott Street, is a three unit townhouse. The owners of 187 & 189 Lippincott Street would have agreed on the construction of the 94&96 Croft Street suites.

This laneway house serves as a successful example for the existence of semi-detached laneway suites. If there is not enough space on one lot, two lots can be joined together to create a semi-detached laneway house for two individual units separated by a firewall. While this building sets the precedent for semi-detached laneway houses, different types of unit division should be explored to divide the two units. In section 4.1.2, the laneway units on the laneway of Ravina Crescent explore this strategy in more detail.

Figure 31 (top right) -
Front view of 94 &
96 Croft Street

Figure 32 (bottom right) -
Side view of 94 &
96 Croft Street





ALDEWYCH AVE

BEOHUK ST

WOODYCREST AVE

LANGFORD AVE

BEOHUK ST

Park

DANFORTH AVE

28R

75R

5R

3.1.2 Beothuk Street Area

Figure 33- Beothuk Street, a laneway east of the DVP with three Laneway houses

Beothuk Street is a laneway located between Woodycrest Avenue and Langford Avenue. This street is located east of the Don Valley Parkway (DVP), in the Danforth East York neighbourhood. While there are not as many laneways as the areas west of the DVP, there is still a lot of potential for laneway suites in this neighbourhood and the surrounding neighbourhoods. The laneway suites that were built on this laneway are quite recent as all of them follow the setback regulations in the by-law (Appendix A). Unfortunately, even though there is a street name for the laneway, the laneway suites themselves do not have independent addresses. The addresses used are of the main street with the letter 'R' indicating 'rear', i.e. 75R Woodycrest Ave. Until more laneway suites are constructed in this neighbourhood and there is a requirement for addresses, these laneway suites will stay address-less.

This neighbourhood is very quiet with a small park in close vicinity that is sparsely used. With more laneway suites and increased population, it will provide a more lively atmosphere and community.

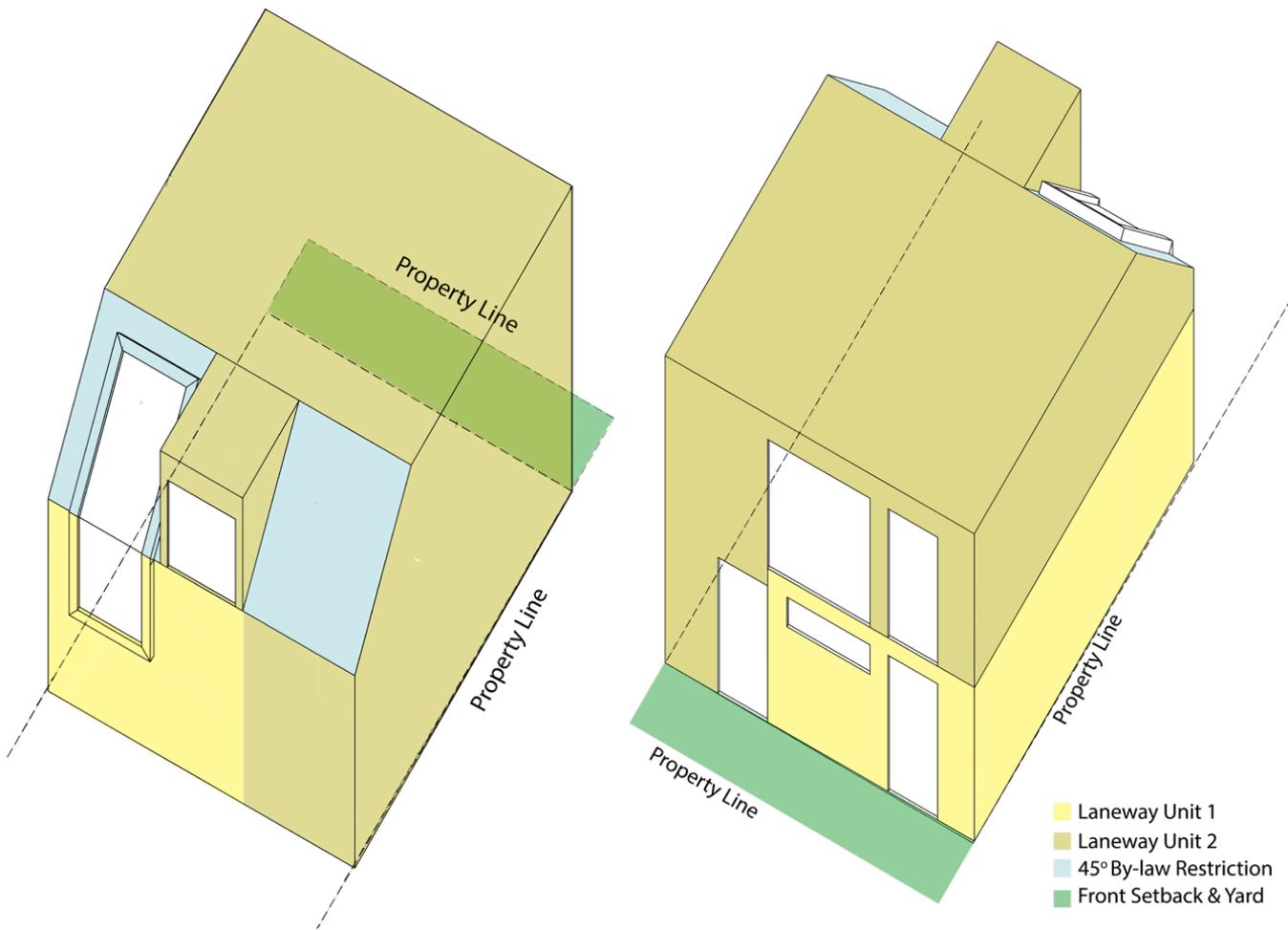


Figure 34 (left) - Program and form analysis of 5R Woodycrest Avenue

5R Woodycrest Ave has been constructed fairly recently. From its exterior material and form, it seems to have been built after the approval of laneway suites in 2018. It is of the typical laneway suite form with two storeys, a 45 degree angled rear and the louvered window. Similar to 94 & 96 Croft Street mentioned previously, two units occupy this laneway house. The two units are divided fairly evenly but the upper unit has the additional area for the staircase to access the unit.

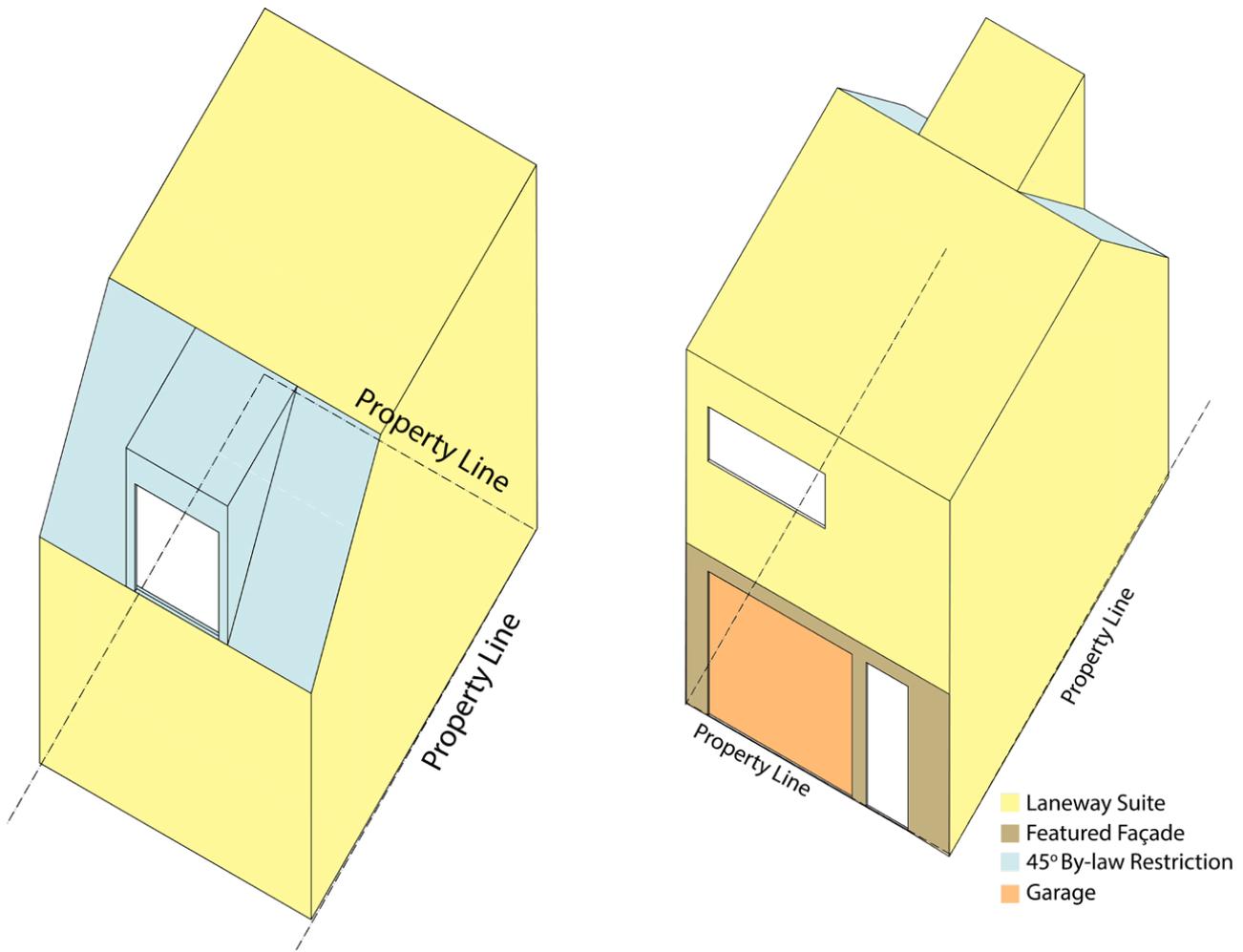
This laneway house, along with 94 & 96 Croft Street, have provided the foundation for the designs projects in section 4.1.2. Specifically, this laneway house, with its unique division of the two units, provided inspirations for the 37R & 39R Ravina Crescent laneway suite.

Figure 35 (top right) -
Front view of 5R
Woodycrest Avenue



Figure 36 (bottom right)
- Side view of 5R
Woodycrest Avenue





75R Woodycrest Avenue is a more typical laneway suite with a garage on the ground floor, and the living spaces on the second floor. Speculatively, this is a one bedroom one bathroom unit that is closer to a floor plan of a condo unit. The garage on the ground floor provides the necessary space for a car.

Figure 37 (left) - Program and form analysis of 75R Woodycrest Avenue

The typical massing of this laneway suite, along with other laneway suites in similar forms, have provided the foundation for the pre-fabricated laneway suites discussed in section 4.1.3. There are various parts of this house that can be pre-fabricated and mass produced. Section 4.1.3 explores the pre-fabricated construction method while creating aesthetically unique laneway suites.

Figure 38 (top right) -
Northwest View of
75R Woodycrest
Avenue

Figure 39 (bottom right)
- Southwest View
of 75R Woodycrest
Avenue



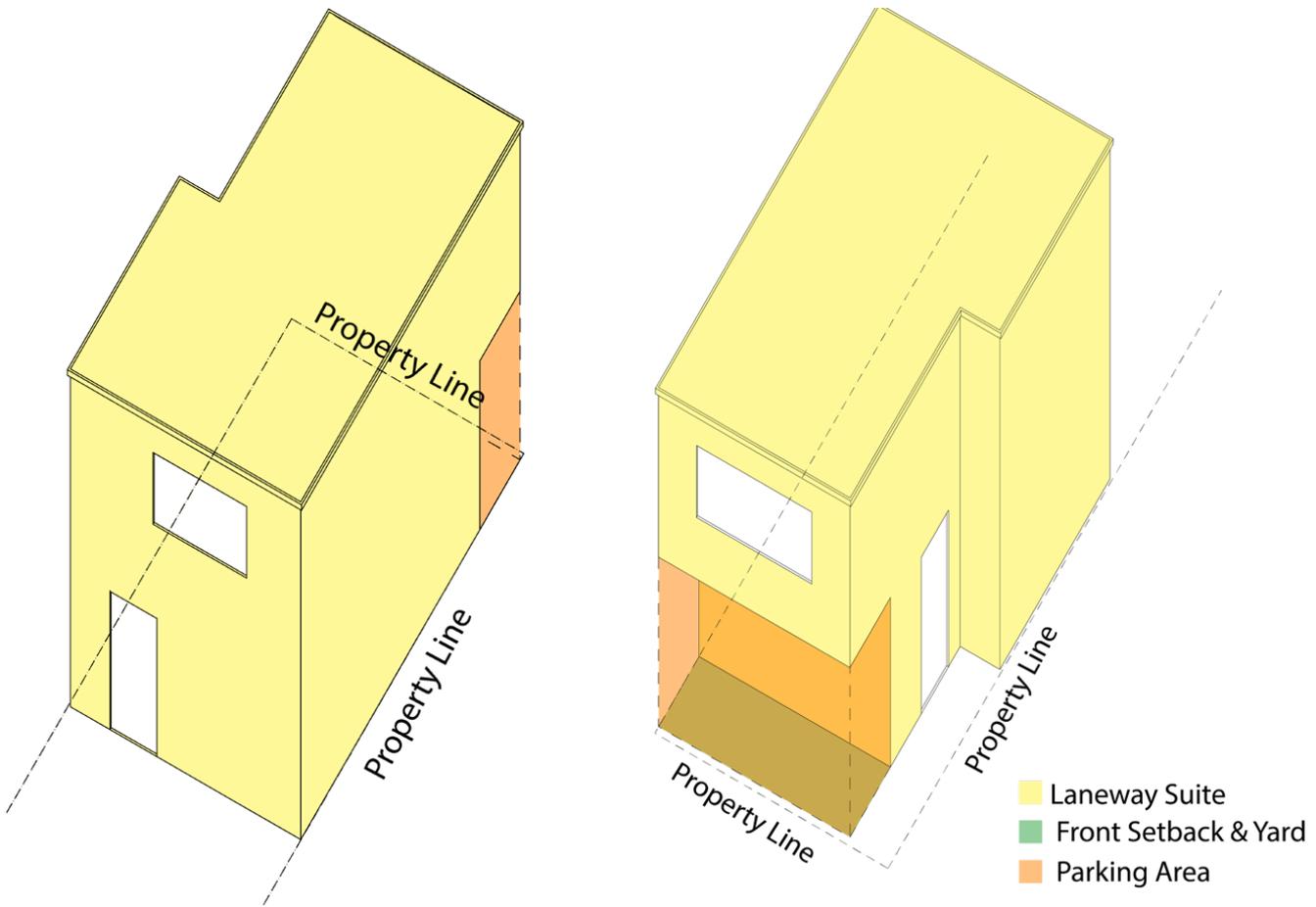


Figure 40 (left) - Program and form analysis of 128R Langford Avenue

The laneway suite at 128R Langford Ave displays two distinct features. Firstly, the main entrance is seen on the side of the suite, creating some much needed space in an otherwise very tight space. Secondly, the extra setback distance at the front on the ground floor creates a small cantilever on the second floor. This extra space is designed for 2 bicycle parking spots as required in the zoning by-law, but unofficially, it can be used to park a car (figure 41).

Instead of using the cantilevered space as a parking area, section 4.1.2 explores the use of this type of space as a front yard for vegetation and/or a porch. It may be difficult at this laneway suite because of the hardscaping, but it can be a fairly pleasant space with more fauna and vegetation.

Figure 41 (top right) -
South View of 128R
Langford Avenue
with car parked in
front

Figure 42 (bottom right) -
Front view of 128R
Langford Avenue





Dupont St

26

Melville Ave

Yarmouth St

80

5
2
St Melis Pl

Garnet Ave

St Melis

Christie St

Essex St

86

Pendrith St

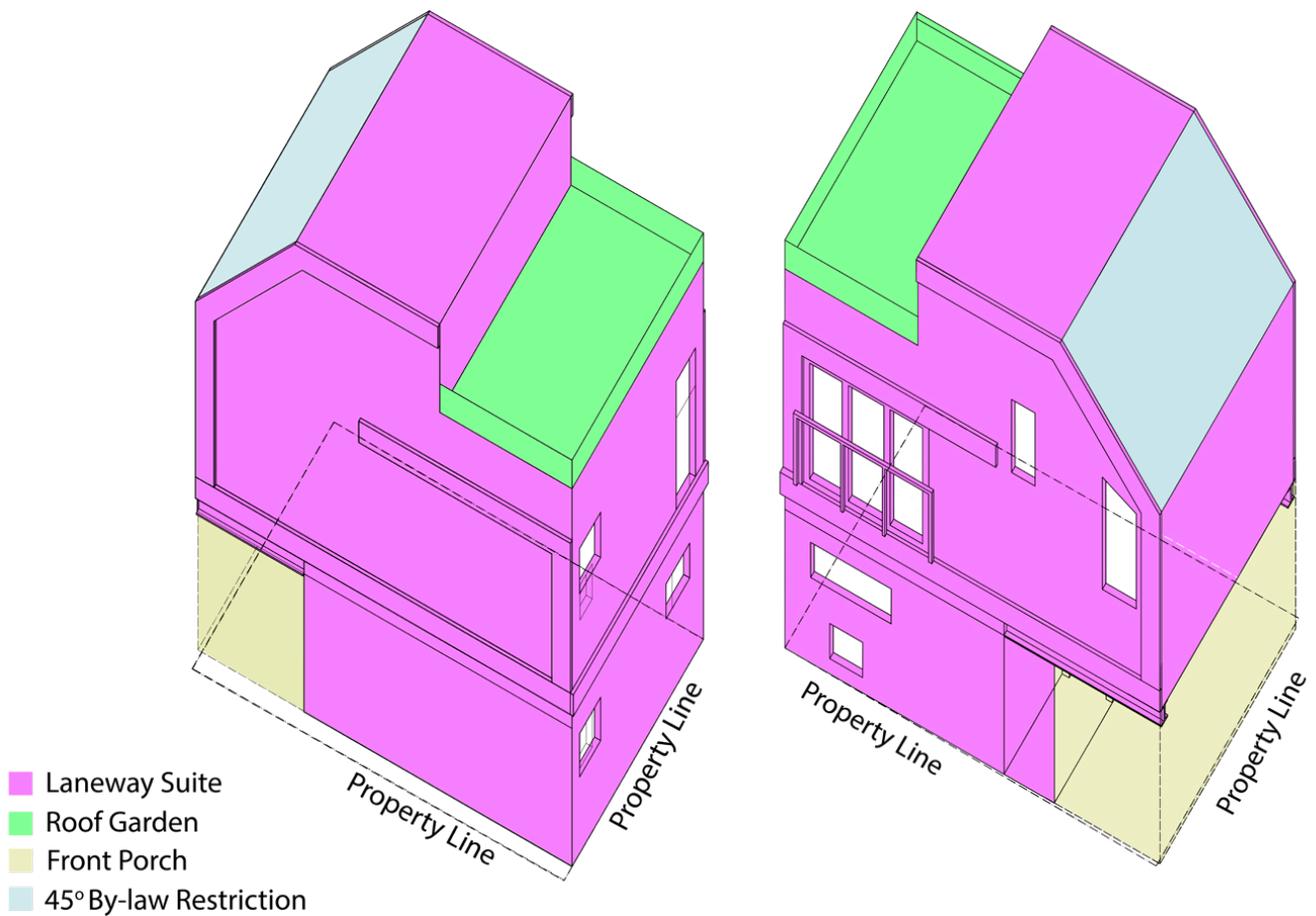
3.1.3 Central Downtown Toronto Area

Figure 43 - A central area in downtown Toronto with many existing and proposed laneway suites

This neighbourhood envelopes a larger area from north at Dupont Street, south at Pendrith Street, east at Christie Street and west at Shaw Street. This is a neighbourhood central to downtown Toronto, and it is one of the hotspots like Croft Street that is seeing more laneway suite construction.

In terms of amenities, Dupont Street is a major street with restaurants, grocery stores and other necessities needed on a regular basis. This is a 5 minutes' walk from any of the existing laneway suites shown on figure 43. Bloor Street to the south, a major street in downtown Toronto, would be approximately a 15 minute walk. It is a farther, but still very walkable.

One of the most important reasons that families with children rent or buy a house in a neighbourhood is the proximity and quality of the schools. At the centre of this area are two public schools, one Catholic du Sacre-coeur elementary school and Essex Junior and Senior public school. There are daycare services at the Essex public school as well. The potential increase in density provided by the laneway suites will have a positive impact on the whole neighbourhood as more children begin to attend the schools, indirectly bringing more revenue into its local businesses.



2 Miles Place is a laneway house that was presumably built in the late 2000s or early 2010s. Despite having a 45 degree roof like other laneway houses on Beothuk Street that were built more recently, this laneway house is much taller. There is a double height interior space combined with the exit to the roof garden (figures 46 & 47).

This is a 2 bedroom and 2 bathroom house located on a 17.68' x 35.21' lot, and it is taller than a typical laneway suite. However, it has successfully integrated into the neighbouring garages despite its building height.

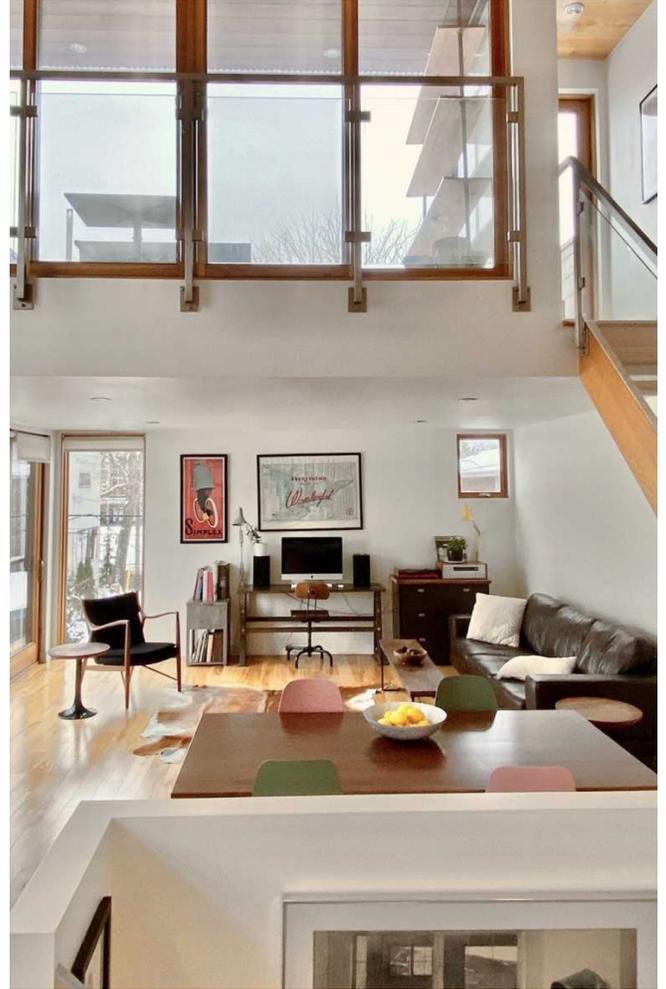


Figure 44 (left) - Program and form analysis of 2 Mile Place

Figure 45 (middle) - Northeast view of 2 Miles Place

Figure 46 (top right)- Living spaces view of 2 Miles Place. (Digital Image from the Mash).

Figure 47 (bottom right)- Loft view of 2 Miles Place. (Digital Image from the Mash).





5 Miles Place was constructed in 2005 by Goldenhammer Renovations³⁶. It is among the earliest laneway houses to be built in Toronto. This is a 2 bedroom and 1 bathroom house and was constructed as an addition to the main house. Despite the very complicated process of having this house approved in 2005, the owner went through all of the documentation and Committee of Adjustment to get this approval. The owner had to connect independent plumbing and electrical systems to this laneway house, which took a lot of money and time³⁶. Also, it appears that the exterior cladding had been replaced over the years.³⁷

³⁶ Joseph Savué, Discussion of the construction of 5 Miles Place with author, November 26, 2021.

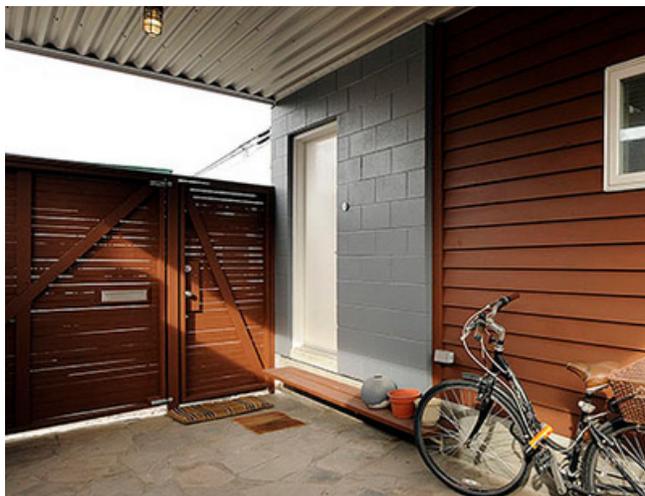
³⁷ The exterior cladding of this laneway suite on Google Streetview is different from its current conditions.

Figure 48 (left) - Program and form analysis of 5 Miles Place

Figure 49 (top right) - Southeast view of 5 Miles Place

Figure 50 (middle left) - Main entrance of 5 Miles Place, (Digital Image from the Mash).

Figure 51 (middle right) - Interior living spaces of 5 Miles Place, (Digital Image from the Mash).



This is a fairly modest house with a standard 2 storeys. Even though it violates a few clauses in the zoning by-law such as the 1.5 metres setbacks, the laneway is wide enough and the space does not feel claustrophobic. In addition, according to the current zoning by-laws, corner lots like this need to have a 1.5 metres setback along both sides that are adjacent to the laneway. This rule would reduce an already small area to an even smaller area.



26 Ivaan Kotulsky Lane is also known by the address 1067R Shaw Street. It is a 1-bedroom laneway suite, used for an individual or a couple. The gross floor area of this laneway suite is 547 square feet or 51 square metres³⁸. This laneway suite is presumably aimed at the young individual or couple, which is the focus of this thesis.

³⁸ Merete Lewis Toronto Realtor. "1067 Shaw St."

As for the forms and programs of this laneway suite, there is a single car garage on the ground floor, similar to the 75R Woodycrest Avenue laneway suite previously analyzed. The 45 degree angled roof is perfect to fit a bed underneath it. The permitted dormer window right next to the bed is the perfect spot for a bench to look outside. While the zoning by-law allows for a dormer window that is maximum 30% of the width of the laneway suite, there



Figure 52 (left) - Program and form analysis of 26 Ivaan Kotulsky Lane

Figure 53 (top middle) - Front view of 26 Ivaan Kotulsky Lane, (Digital Image by Ainsley Smith).

Figure 54 (top right) - Back view of 26 Ivaan Kotulsky Lane, (Digital Image by Ainsley Smith).

Figure 55 (middle right)- Interior dormer window view, (Digital Image by Ainsley Smith).



is a potential for percentage to increase to 40%, 50% or even 60%. Even though the 45 degree slant rule is set for shadow prevention and for the house to appear shorter, 30% may not be the limit to which this dormer would pose a problem for the main house.

3.2 The Zoning By-Law as a Challenge to Overcome

The existing laneway suites that have been built all followed the zoning by-laws or underwent a long wait for a minor variance application with the Committee of Adjustment. While these are some of the successfully built laneway suites, many of laneway suite applications have been rejected due to various reasons. Some of these reasons include the 85% soft landscaping, the 1.5 metres front yard setback, 45 degree angular plane and the front yard landscape buffer and the maximum height³⁹. These items are site dependent as it may be approved on one site and rejected on another. While this process has existed for a long time for the approval of regular houses, the larger range of different conditions in a laneway, in addition to the nature of the smaller lot sizes, would result in very few laneway suites actually meeting the zoning by-law.

Being a new building type, the approval process of new laneway suites needs to be more flexible. Currently, many of the laneway suite applications are undergoing minor variance applications. This would, in the majority of cases, end in a favourable result. However, this process significantly slows down the application process and the construction of these laneway suites. A more streamlined approach is needed to include as many different laneway conditions as possible, and leave the Committee of Adjustment to the few rare cases that lay outside of the streamlined approach. The zoning by-law need to assist in increasing housing density in Toronto, and not act as a challenge that needs to be overcome. This thesis proposes a critical look at potential improvements to the current by-laws, and paths that the laneway suites can be developed in the future.

³⁹ Gladki Planning Associates, *Laneway Suites Zoning By-Law Amendment Review*, p.28-30.

4

The Future of Laneway Suites to Increase Housing Density

As mentioned in previous chapters, the main cause and solution to increase housing density is the zoning by-law and how to improve the zoning by-law so more laneway suites can be built in Toronto. In this chapter, several recommendations are given in the form of architectural design projects as well as suggestions for governmental bodies to provide incentives and tentative solutions to the construction barriers as identified in section 2.3.1.

4.1 Proposed Future Designs for Laneway Suites

In this subchapter, three different sites are analyzed in the east, west and central areas of downtown Toronto. The east and west sites are located in areas with slightly lower property values that do not have many young people. With the inclusion of affordable laneway suites, the younger generation will be attracted to these areas. The central site is a unique and more difficult site that provides unique design opportunities that is unconventional yet viable as a laneway suite to live in.

Throughout this subchapter, the argument continues that not all laneways are the same, and that the zoning by-law is an over-generalization and the incorrect way to incentivize laneway suite construction. These three sites are designed to explore the limits of the zoning by-law, and critically analyze and explore the zoning by-laws to make laneway suites easier and cheaper to build. While these design projects on the three sites are speculative, they provide several directions of development so that many more laneway suites can be erected in the future.

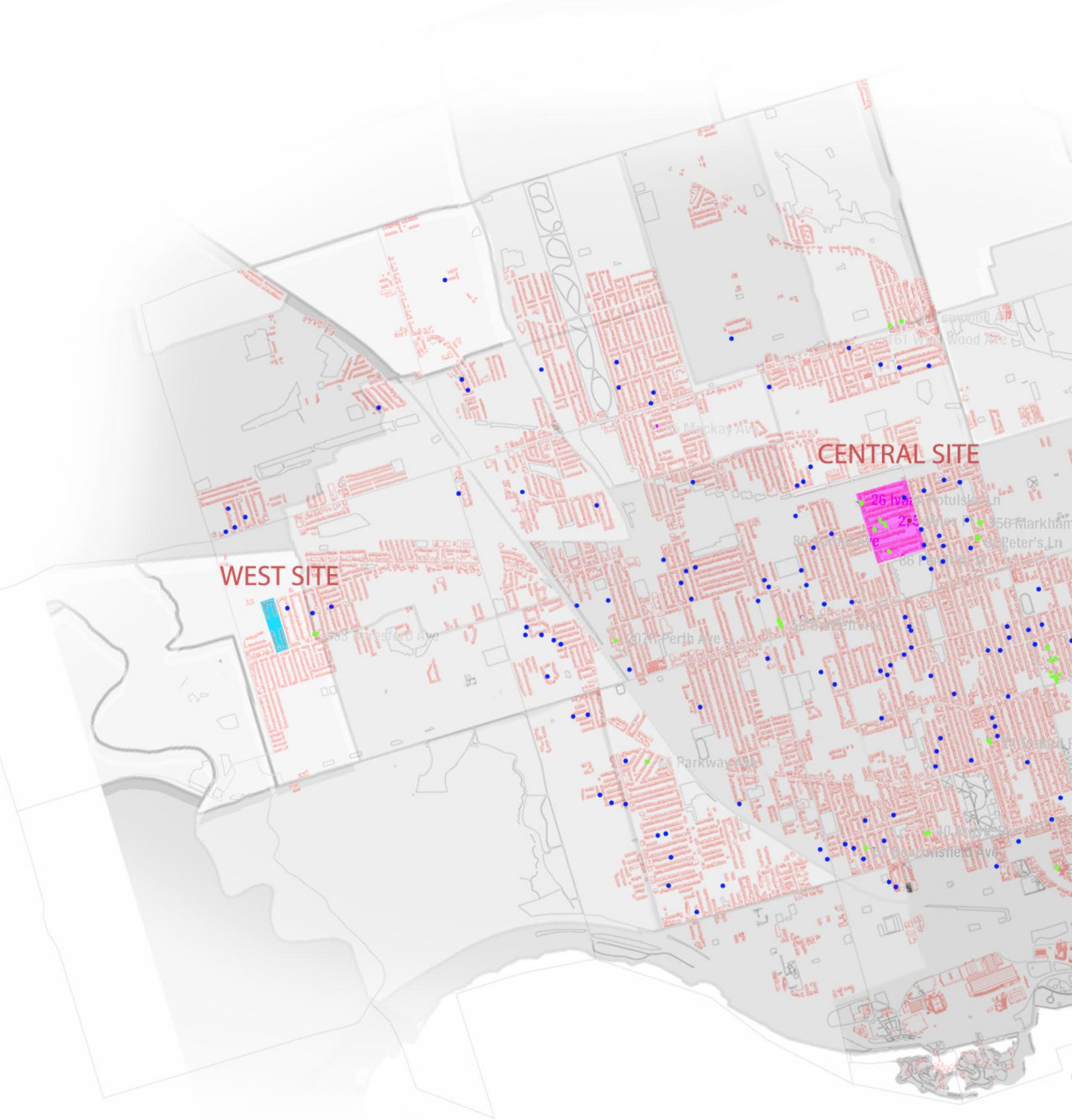
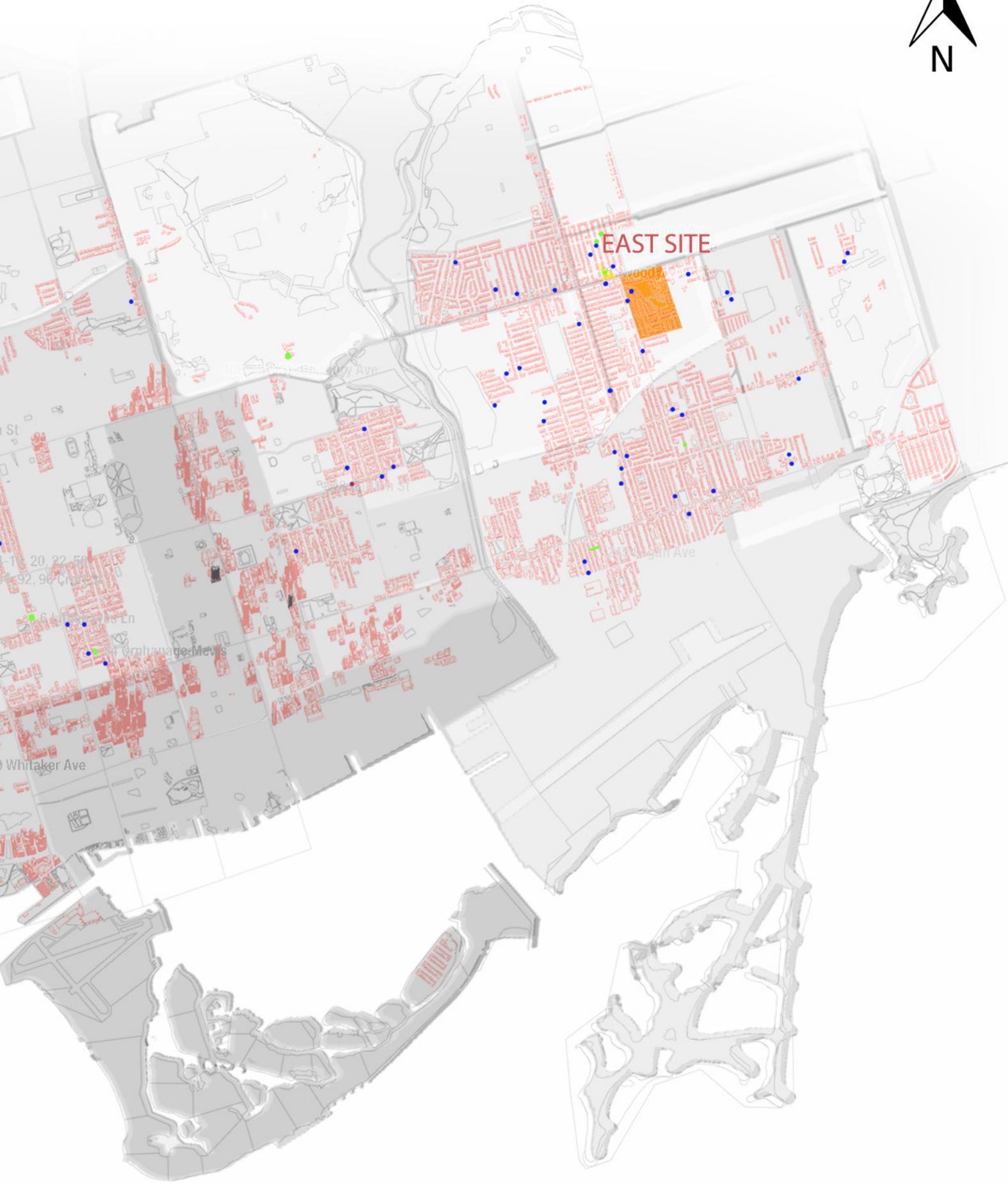


Figure 56 - The three proposed site locations of the design projects in this chapter (East, Central and West sites)



EAST SITE

St

1, 20, 22, 50
74, 92, 96, 98

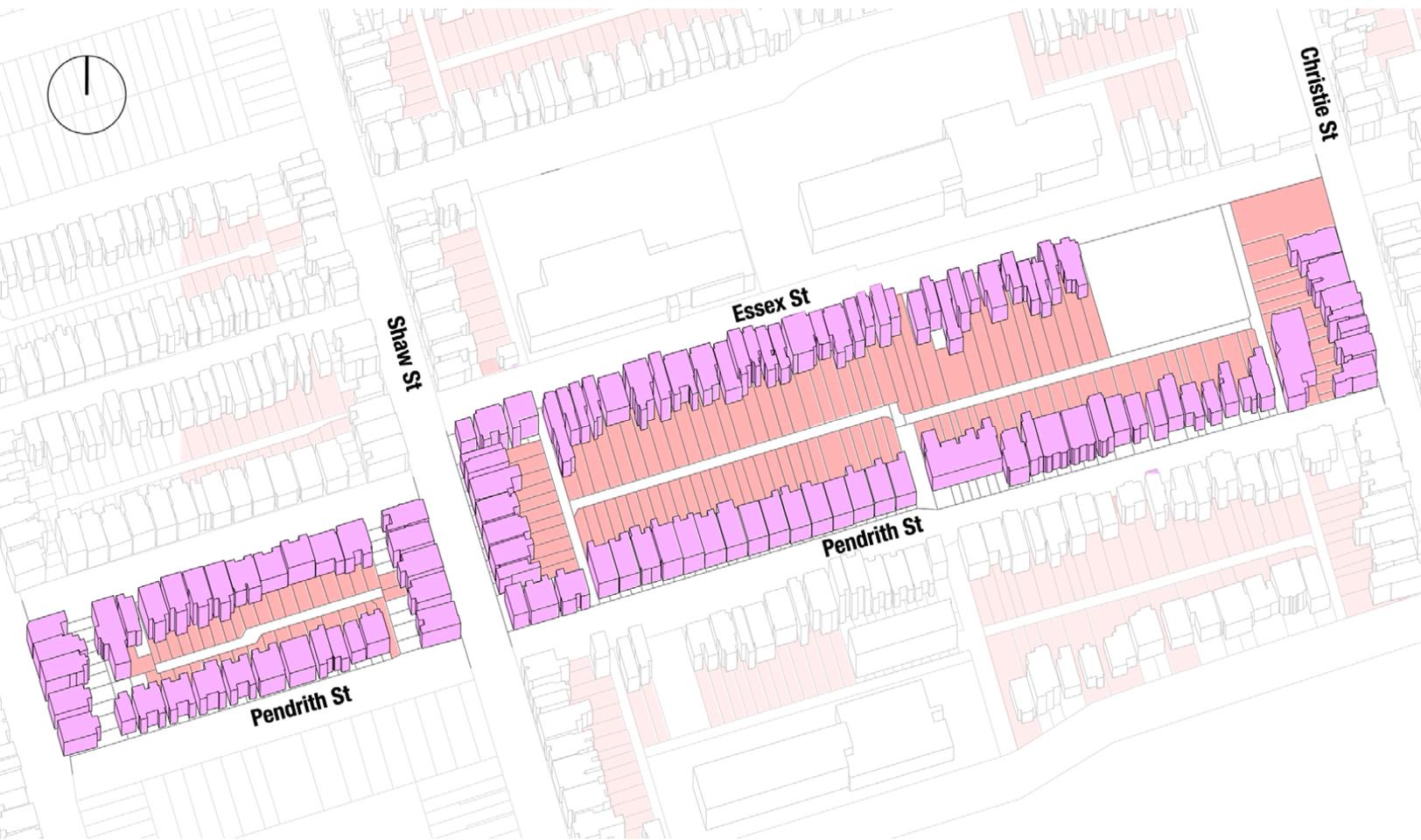
Whittaker Ave

Whitaker Ave

Whittaker Ave

Whittaker Ave

4.1.1 Central Site - Pendrith Street Small Building Areas



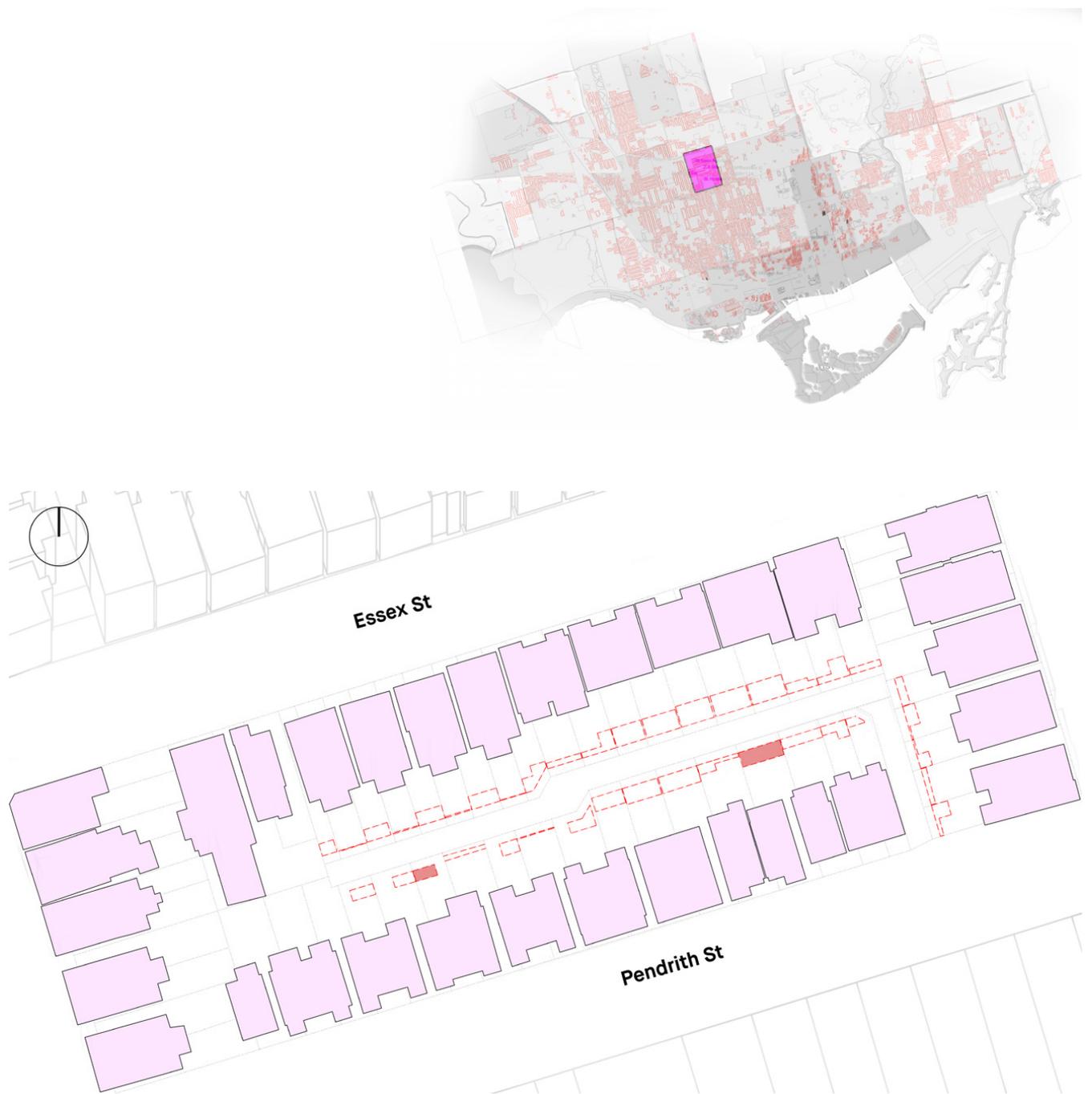
The 'central site' is a unique site that provides interesting and challenging opportunities that is very different to the existing cookie cutter laneway suites under the currently zoning by-law. As the laneway at the back is around half a meter lower than the front, it provides an interesting opportunity for the potential of multiple floors in the basement. As illustrated in figure 57, the site being analyzed is between Essex Street and Pendrith Street with Shaw Street to the east. The current zoning by-law restrictions are quite restricting in terms of building area, and unfortunately, this also translates to floor areas of other floors above and below ground (figure 59). So with the current zoning by-laws of 6m building height, the laneway suites would have building footprints too small for basic living conditions.

With that in mind, the possibility for more laneway suites

Figure 57 (left) - Pendrith Street site plan, a unique site with a significant elevation change between the front street and the laneway

Figure 58 (top right) - location of the proposed central site in Toronto

Figure 59 (middle Right) - Allowed setbacks according to current zoning by-law regulations for the proposed site



to be built on this site can only be done through increased building area, increased height, or both. Since this site is situated in the central area of downtown Toronto, it is more suitable to increase the height limit from the current 6 metres allowed in the zoning by-law to 15 metres. This change would only apply for this site. Other sites in the surrounding neighbourhoods might have different building areas that need different zoning by-law changes.



Figure 60 (top left) - Current conditions of entrance to Pendrith Street laneway



Figure 61 (bottom left) - Current conditions of 160R Pendrith Street

The current conditions in the laneway is not very pleasant as shown in figures 60 and 62. The fences and garage doors are walls that exclude the laneway as a part of the houses. The laneway is simply used as a pathway to access the garage and nothing more. Even though the laneways were built as an infrastructure to serve the family vehicle and the garage at the back of the house, they can be revitalized to be a vibrant neighbourhood.

Since the height limit for this site has been increased to 15 metres and the building areas are kept as is, this has resulted in these tall, narrow buildings. In order to

Figure 62 (top right) -
Current conditions
of Pendrith Street
laneway



Figure 63 (bottom right) -
Current conditions
of 180R Pendrith
Street



traverse the different floors, some type of vertical circulation is needed. The most common form that is used in most typical houses is the stairs, but with a smaller floor area, other types of vertical circulation might be required to save precious floor space. In figure 64, multiple types of vertical circulation are explored, including the dog-legged staircase, the full flight staircase, the vertical moving platform, the elevator, the spiral staircase, the ship's ladder staircase and the ladder. While some of these ideas may be unconventional, they are not impractical. The detailed designs serve as recommendations for a new type of housing on small lots.

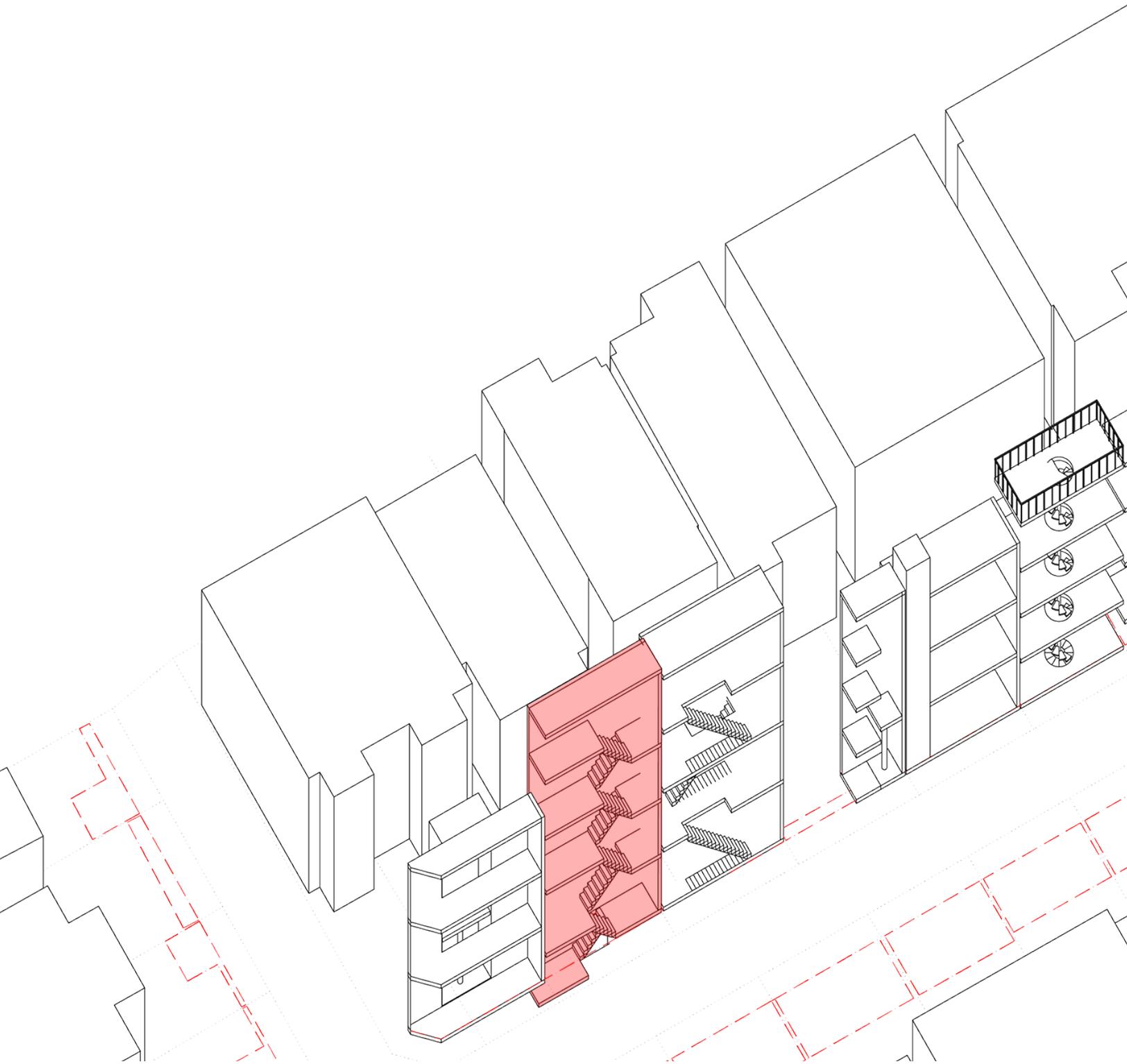


Figure 64 - Exploration of different vertical circulation designs, shaded red are two buildings designed in detail



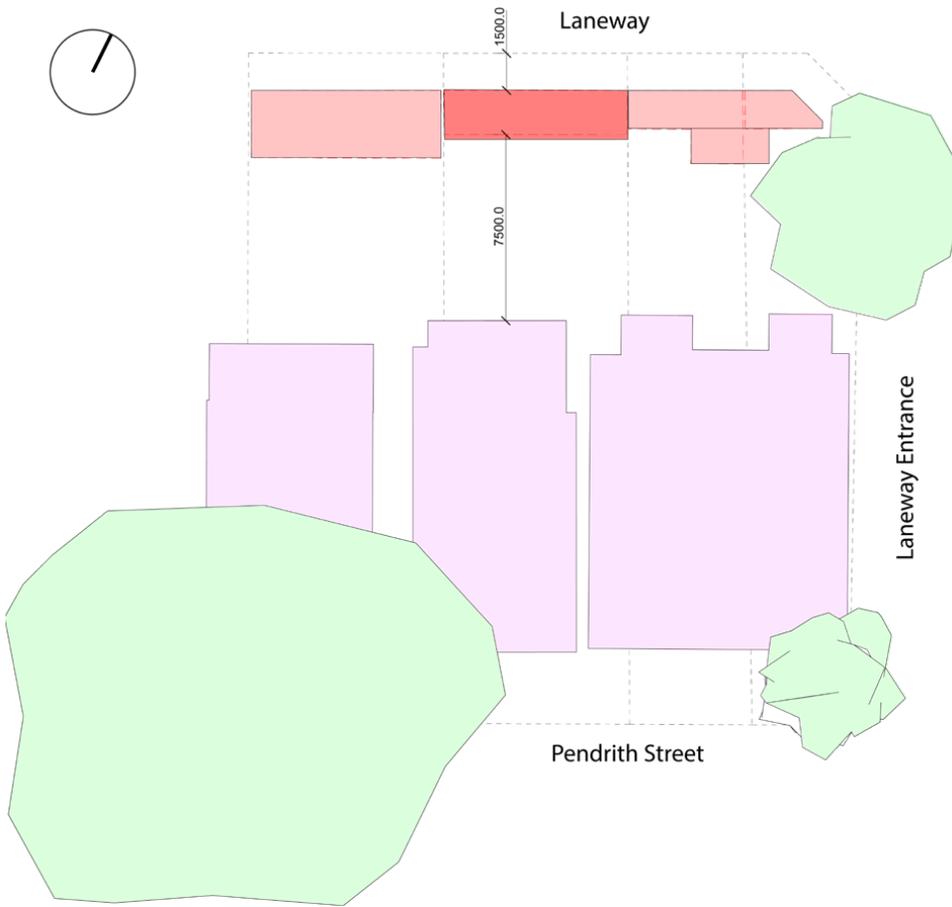
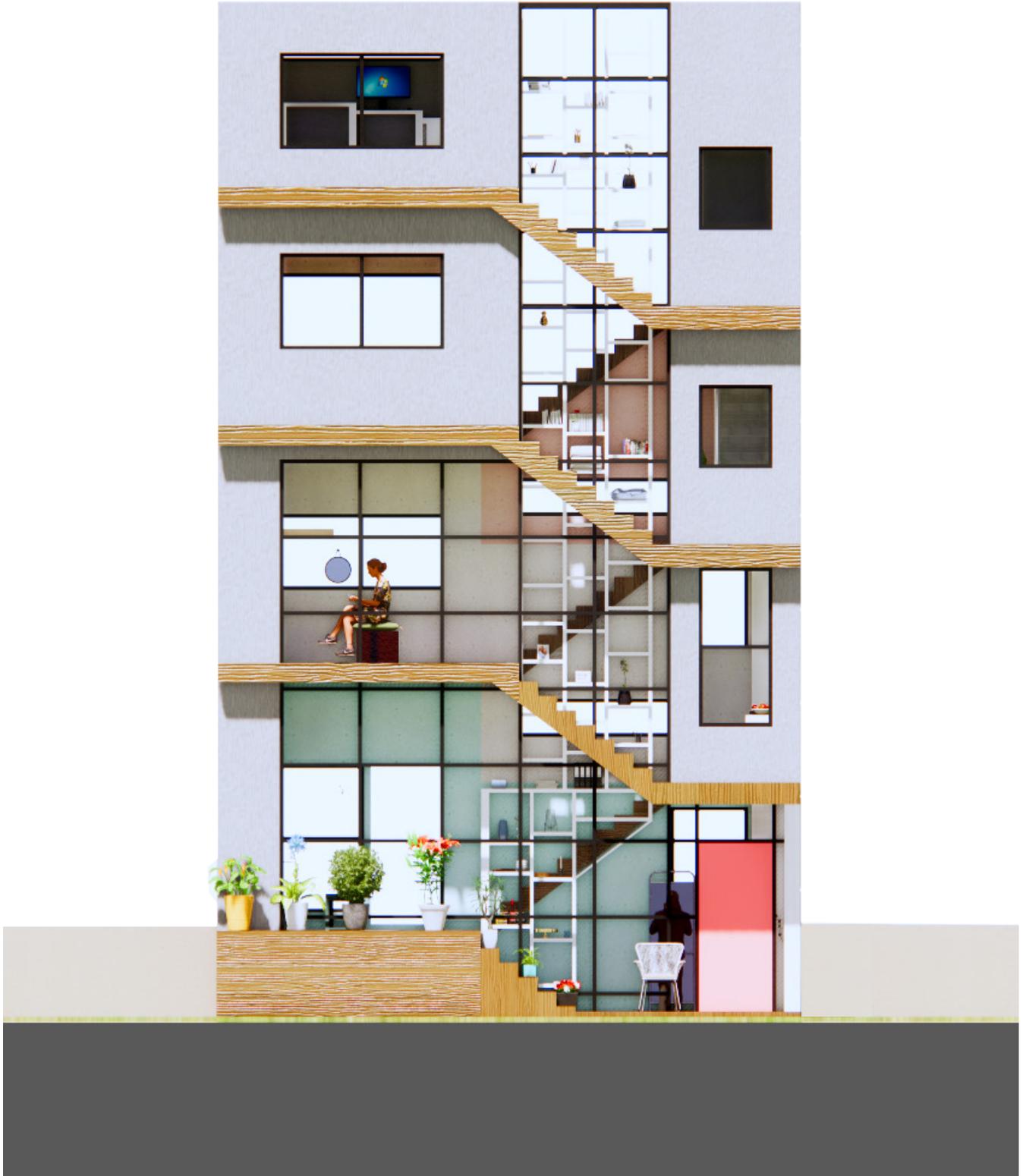


Figure 65 (left) - Site Plan of 160R Pendrith Street with dimensions

Figure 66 (right) - Front elevation of 160R Pendrith Street

As for the detailed designs, two lots on this site are analyzed in more detail and expanded on. One is at 160R Pendrith Street and the other at 180R Pendrith Street. More context for these two lots can be seen in figures 59 and 64, and the current conditions can be seen in figures 61 and 63. These two buildings are designed with constructability in mind.

160R Pendrith Street is very close to the laneway entrance, and it serves as a great fire route access. As indicated in figure 65, the distance between the back of the house and the back of the laneway suite is 7.5 metres, and the front yard setback is 1.5 metres. As mentioned previously, this results in a tall and narrow building. Still, on this lot, there is plenty of space horizontally to provide for a staircase. Thus, a dog-legged staircase was used as the centre piece of the building, and the landings were



extended to become the floor space for the various programs commonly found in a house.

Figure 67 shows the building as a whole. The façade design highlights the staircase and the floor plates, representing them as protruding out of the façade. The stairs and the more open spaces such as the living and cooking spaces are glazed to give a more open feeling to the spaces. This would allow the spaces to feel bigger than they actually are.

Delving into the interior of this laneway suite, it is a 4 storeys building with 1 basement floor. However, including the half floors, it has 10 floors for three multipurpose spaces, a kitchen, a dining space, a living space, a bedroom, a shower room and a washroom (figure 68). The house is organized with one floor housing one program in mind. The larger floors contain the more important spaces (working space, bedroom, living space, kitchen) while the smaller floors contain the less important spaces (washroom, shower, dining space, entrance and storage).

There is only 49.9m² in the entire house despite it having four storeys. Therefore, this laneway suite would not be function normally with normal sized furniture. Custom space saving furniture would be needed for this building to appear organized⁴⁰. The main space saving strategy, and the main aesthetic piece of furniture, used in this house is the large shelving unit that extends from the basement all the way to the underside of the roof. Alongside the practical use of being a shelving unit, this is also the centre piece of the house along with the staircase surrounding it. Not only does it serve its purpose as a very convenient shelving unit for every single space in the house, but it can be observed from the exterior, serving as an iconic element that defines the house.

Other than the iconic shelving unit, there are additional furniture that save space in this laneway suite. Looking at it closer from figures 69 to 71 and bottom to up, there is the bottom floor with a shelf storage unit. It provides

⁴⁰ Inspirations for space saving strategies
- Avi Friedman, *Homes within Reach* (Hoboken, NJ: John Wiley & Sons, 2005), p.88-94;
Michael Muller, *Borge Mogensen Simplicity and Function* (Berlin, Germany: Hatje Cantz Verlag GmbH, 2016), p.55, 72, 73 & 143.



Figure 67 - 160R Pendrith
Street design

secondary storage capacities to the central shelving. Ascending half a floor, there is a multipurpose area with a foldable chair and a foldable table. The central shelving here would store books and stationery for a working space or games and movies for a play space. The next floor is the entrance and would simply have a mirror and hooks for coats and jackets. The central shelving would serve as the shelving for keys, wallets, etc. that would normally be stored near the entrance. As the kitchen is the next floor up, various bowls, plates and kitchen utensils can also be found on the central shelving here. There is a foldable chair and shelving unit in the kitchen for optional sitting and more platforms to maneuver around. The next floor is the dining space with a foldable chair and a foldable dining table. The central shelving on this floor would have cups, mugs, plates and bowls, storing similar things as the kitchen. Ascending to the next floor, there is the living



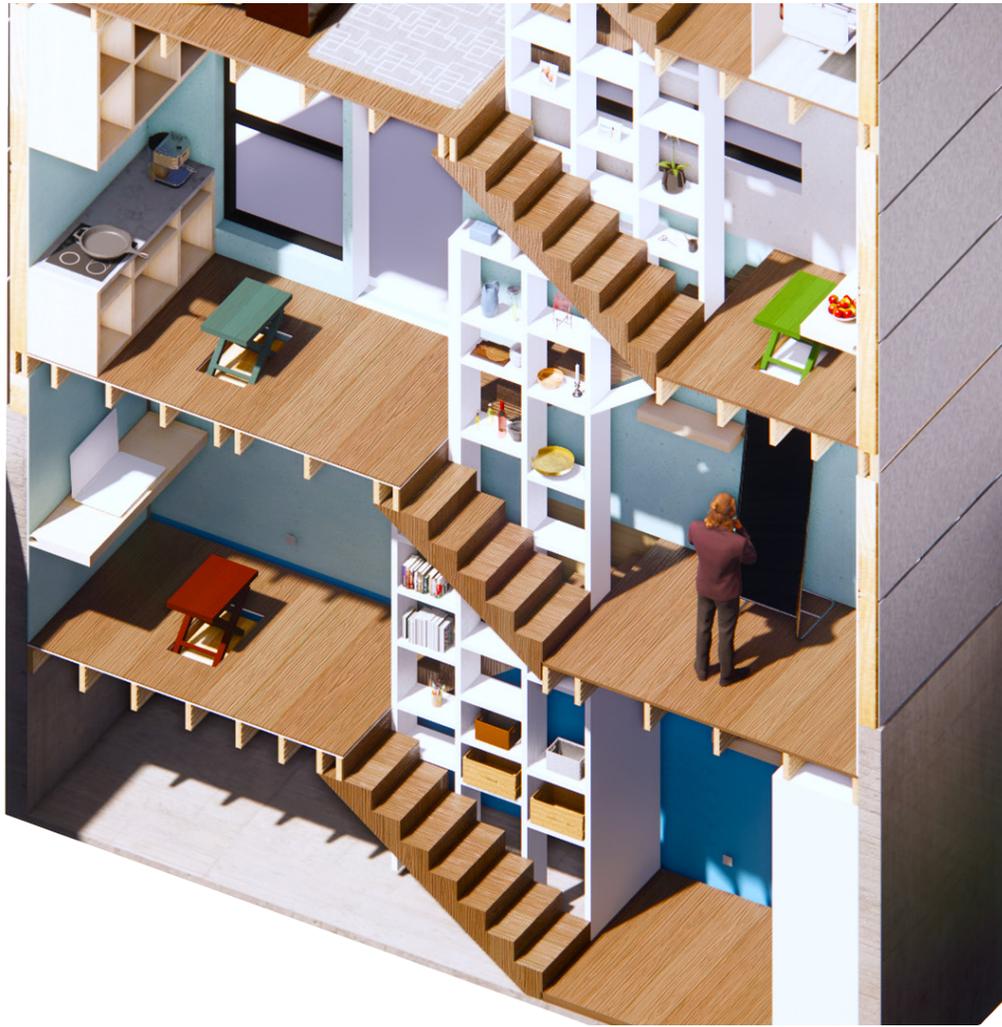


Figure 68 (left) - 160R
Pendrieth Street -
Interior design and
layout

Figure 69 (right) - 160R
Pendrieth Street -
bottom floors close-
up

space. Similar to a normal living room, it has a television, a television storage unit and a sofa to relax on. The sofa can be rotated and pushed to the side wall to save some space for other activities if needed.

The last four floors of this laneway suite are more private. The washroom is located half a floor above the living space, having only the sink and toilet. The shower room is located directed above the washroom for plumbing conveniences. There is a possibility to exclude the wall and door separating the washroom and the shower room from the rest of the house. Since this laneway suite is targeted for individuals and at most a couple.

As for the bedroom and the multipurpose space directed above the bedroom, the Murphy bed is chosen for this space saving strategy. The central shelving would have



sheets and blankets related to the bedroom and/or wash-room related items stored. The top multipurpose floor has an extendable desk and a foldable chair, showing a work space (figure 71). However, this space can be easily substituted for a second bedroom with a Murphy bed. These design choices would be made closer to construction completion as they are furniture only changes.

Figure 70 (left) - 160R
Pendrith Street -
middle floors close-
up

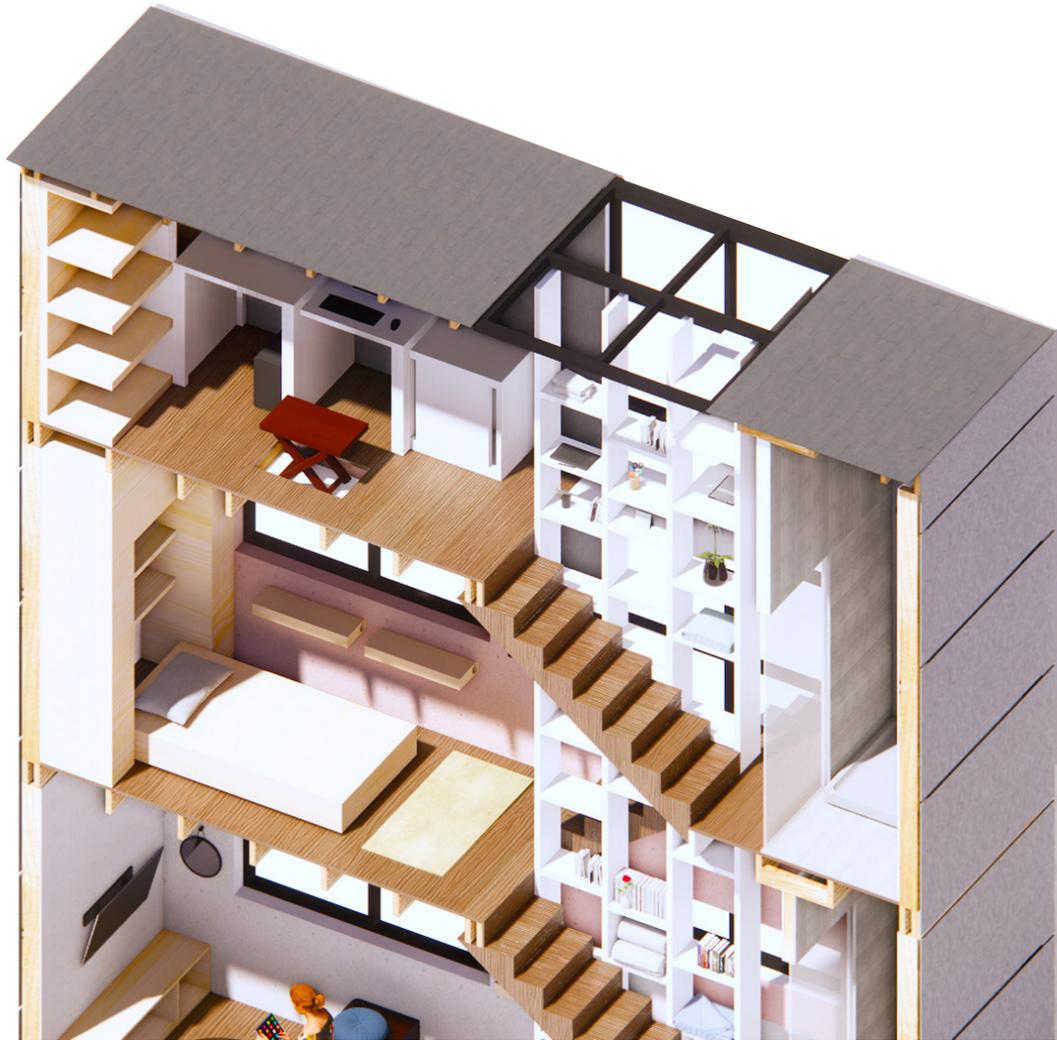


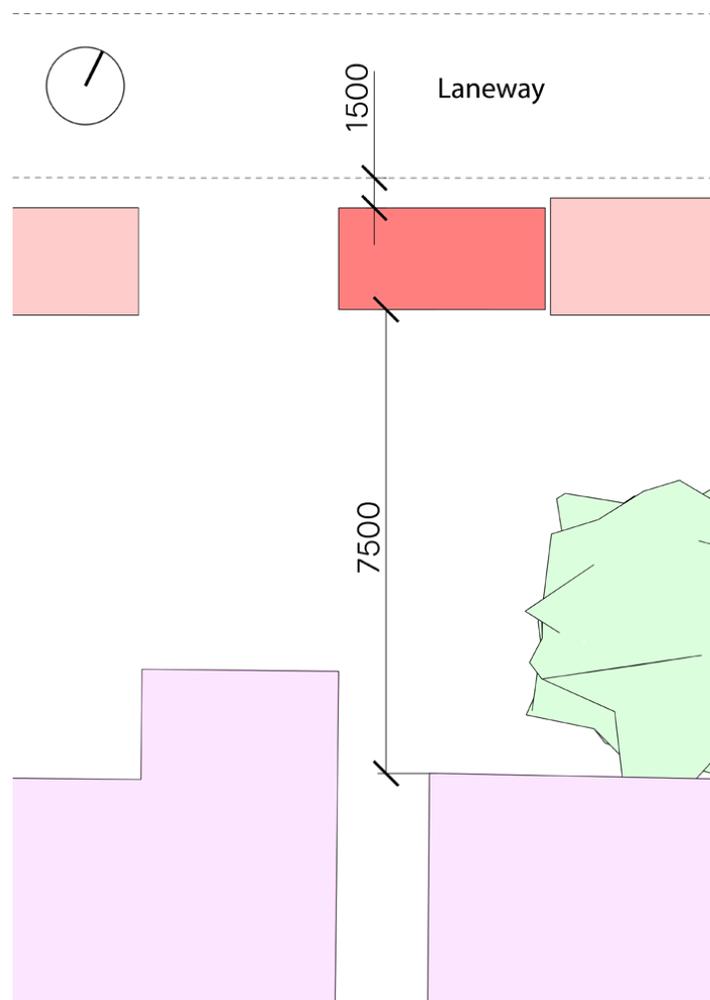
Figure 71 (right) - 160R
Pendrieth Street -
top floors close-up

In addition to designing this laneway suite, Figure 72 shows a physical model of the building with its movable furniture and different space saving strategies. This physical model is exploring in more detail the intricacies of movable furniture, and how to integrate this furniture into the structure of the house.



Figure 72 (left) - Physical model to explore all of the moving furniture and different ways to save space in this small laneway suite

Figure 73 (right) - Site Plan of 180R Pendrith Street with dimensions



The second lot on the Pendrith Street site (central site) is the 180R Pendrith Street laneway suite. This is a four storeys laneway suite and has a building area of only 8.8m², even smaller than 160R Pendrith Street. So, it is only targeting individuals who are looking to rent or purchase a small house in Toronto. It can be quite a cozy and technologically advanced house for any young individual interested in technology. The main vertical circulation used in this building is an electrically powered lift, a very technologically advanced vertical circulation for a laneway suite. The vertical glazing on the exterior façade indicates the location of the lift. Similar to 160R, this house embodies the idea of looking onto the laneway from the living space and the kitchen. The bathroom and bedroom are on the top two floors, thus needing more privacy.

Looking at the interior, there is a similar shelving unit that extends from the bottom floor all the way to the



underside of the roof (figure 76). This is a very efficient way to use space to provide enough storage for any individual, even in this small laneway suite. While serving as the vertical circulation, the lift also acts as a moving platform to reach the shelves on the west wall. As this house is designed to serve only one individual, that person should be moving with the lift. So along with all other benefits of a lift, it also serves to be extra floor space, and extension to the individual floors.

Despite the use of the moving platform, there is the concern of a fire. How can an individual escape the building in the case of a fire? First of all, since the location of

Figure 74 (left) - 180R Pendrith Street design

Figure 75 (right)- 180R Pendrith Street interior design and layout (Axonometric 1)



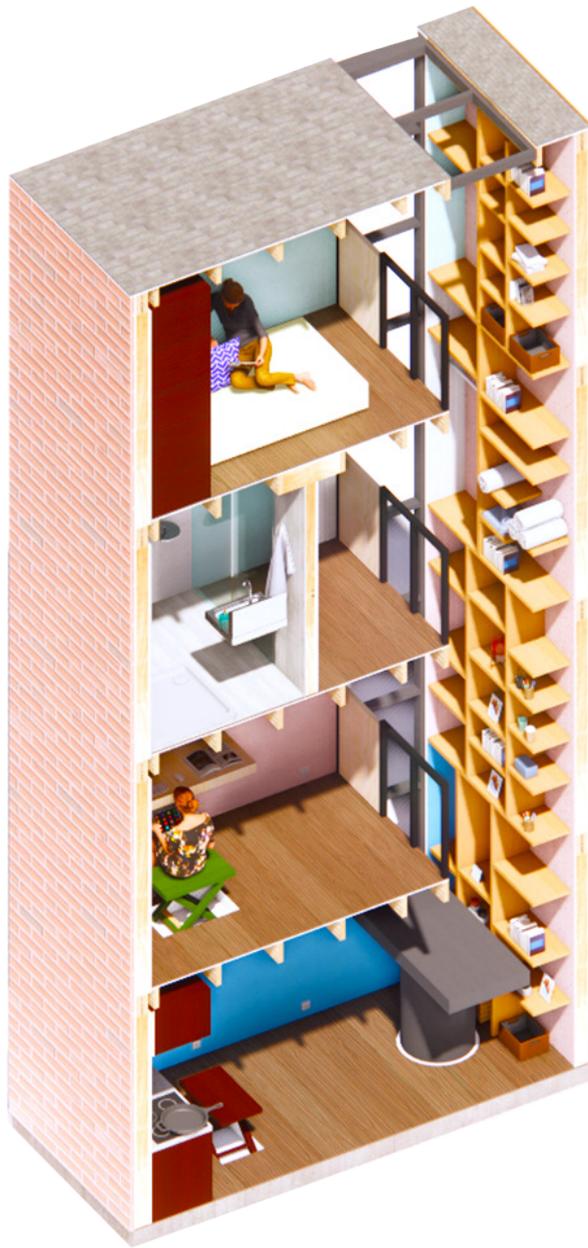
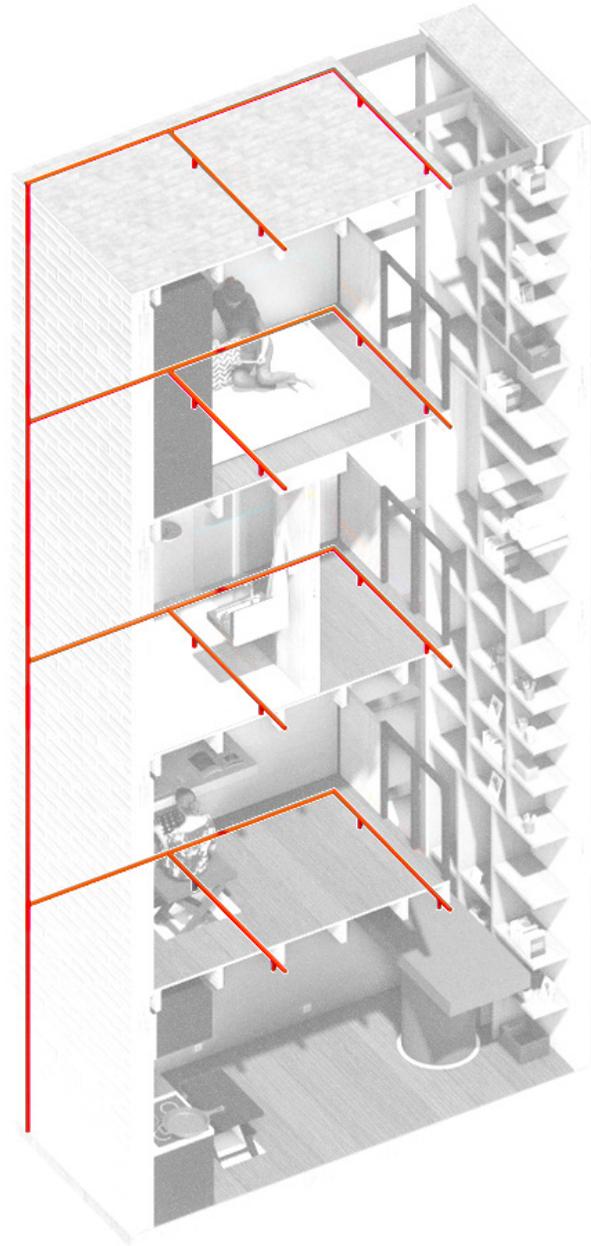


Figure 76 (left) - 180R
Pendrith Street
interior design and
layout (Axonometric
2)

this lot is in the deeper part of the laneway and cannot be accessed by a fire truck, a fire hydrant can be planned to be installed in the laneway for an easier access of water (figure 73). Obviously, this infrastructure would be provided by the municipal government. An additional fire prevention strategy is to install a sprinkler system (figure 77). While it would cost extra to install the sprinkler system, this would provide a housing opportunity that otherwise would not exist.

Figure 77 (right) - 180R
Pendrith Street
proposed interior
sprinkler system



This 'central site' has provided an interesting opportunity for different designs than the conventional house. The increased limit on the building height has made these otherwise infeasible lots for laneway suites feasible houses. These designs provide the possibility for laneway suites to be built in laneway lots that are too small for a laneway suite under the current zoning by-law. While on this 'central site', the height limitations are being explored, in the next section, on a different site, different setback parameters are being explored for a different type of laneway suite design.

4.1.2 East Site - Ravina Crescent Irregular Lots & Property Lines



Figure 78 (left) - Site Plan of the east site - the highlighted red areas indicate all possible locations to build laneway suites

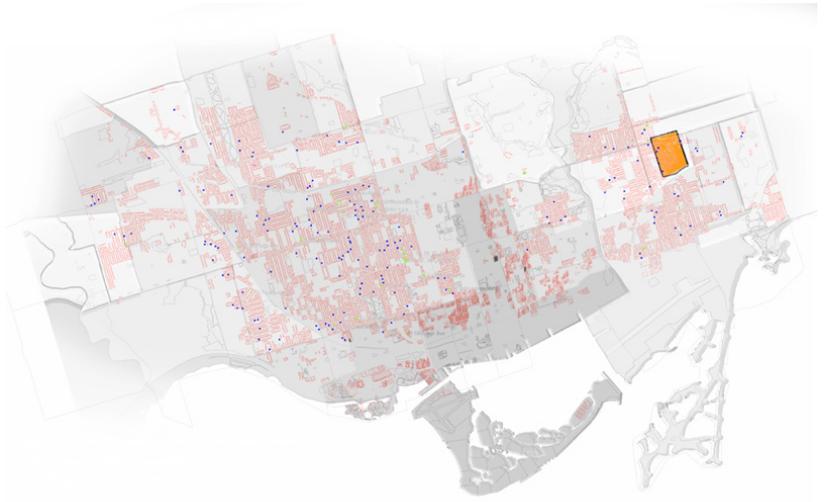


Figure 79 (top right) - Location of the proposed east site in Toronto

Figure 80 (middle right) - View 1 - current conditions of laneway

Figure 81 (bottom right)- View 2 - current conditions of laneway looking at the Sesquicentennial Museum and Archives of the Toronto District School Board



The 'east site' is located in the east part of the downtown Toronto area with slightly lower property values, and that the addition of more affordable laneway suites targeting young individuals and couples would provide the necessary housing units in Toronto, and diversify the neighbourhood community.

The main properties facing the Ravina Crescent are semi-detached houses that form a winding street. The laneway at the back follow the street in the front and creates many irregularly shaped property lots. This site is chosen for this particular reason, and also that the laneway fronts onto an open field, which is public property and a part of the Sesquicentennial Museum and Archives of the Toronto District School Board. This site provides laneway suite design insights for neighbourhoods that are more restricted by the restrictive property lines, and explore different ways to change these property lines to increase the floor area of the laneway suites but are also fair to their respective owners.

The current conditions of the site is fairly bleak. The laneway's only purpose is for family sized vehicles to pass through one-way to access the garages (figure 80). This is a perfect opportunity to develop a new street façade fronting the grass field. Unlike other laneways that are between two rows of houses, these laneway suites can be seen from a long distance away, even from the other side of the field. Also, the existing chain-linked fence is an optional construction to separate the activities on the field to the activities in the garages. If laneway suites are constructed facing the open field, this fence should be removed and the whole field would act as the front yard for the laneway suites.

While there is great potential for a very interesting street façade, developing it can be difficult. The laneway suites not only need to have a similar atmosphere as other neighbourhoods, but they also need to be fairly distinctive from one another when viewed from afar. This would create an organic community that has grown with time.

Figure 82 (top) - Site Plan - the red dotted lines indicate the maximum building footprint with a 7.5 metres setback from the back of the main house to the back of the laneway suite. This is the allowed setbacks according to current zoning by-law regulations

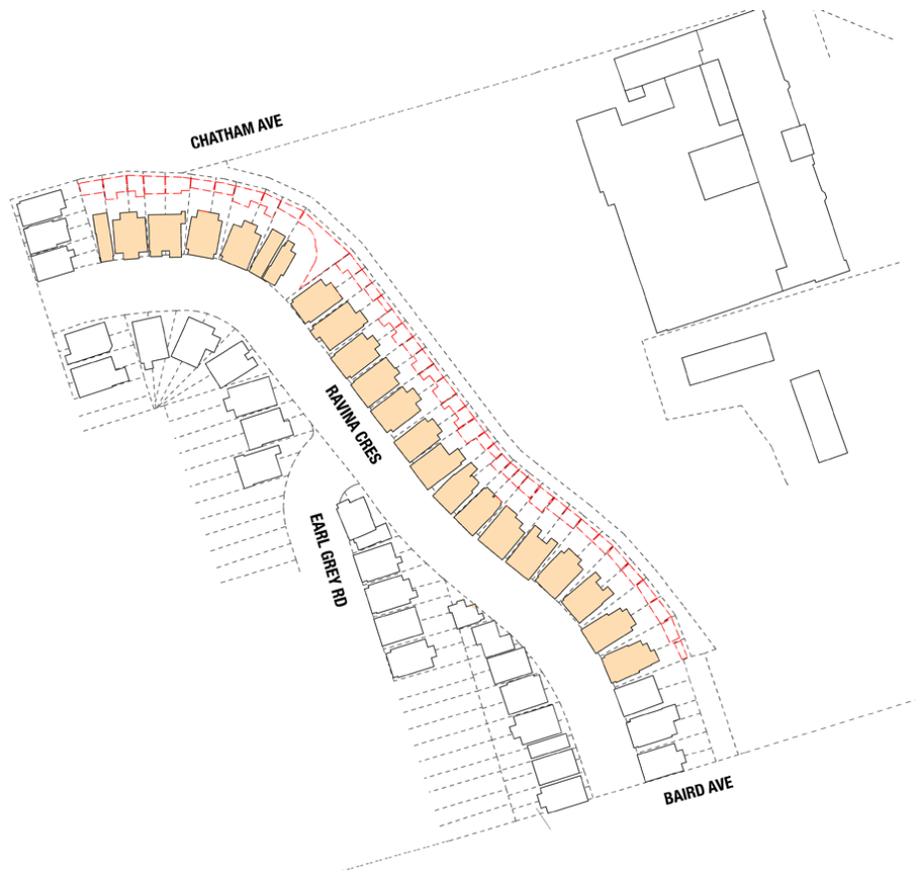
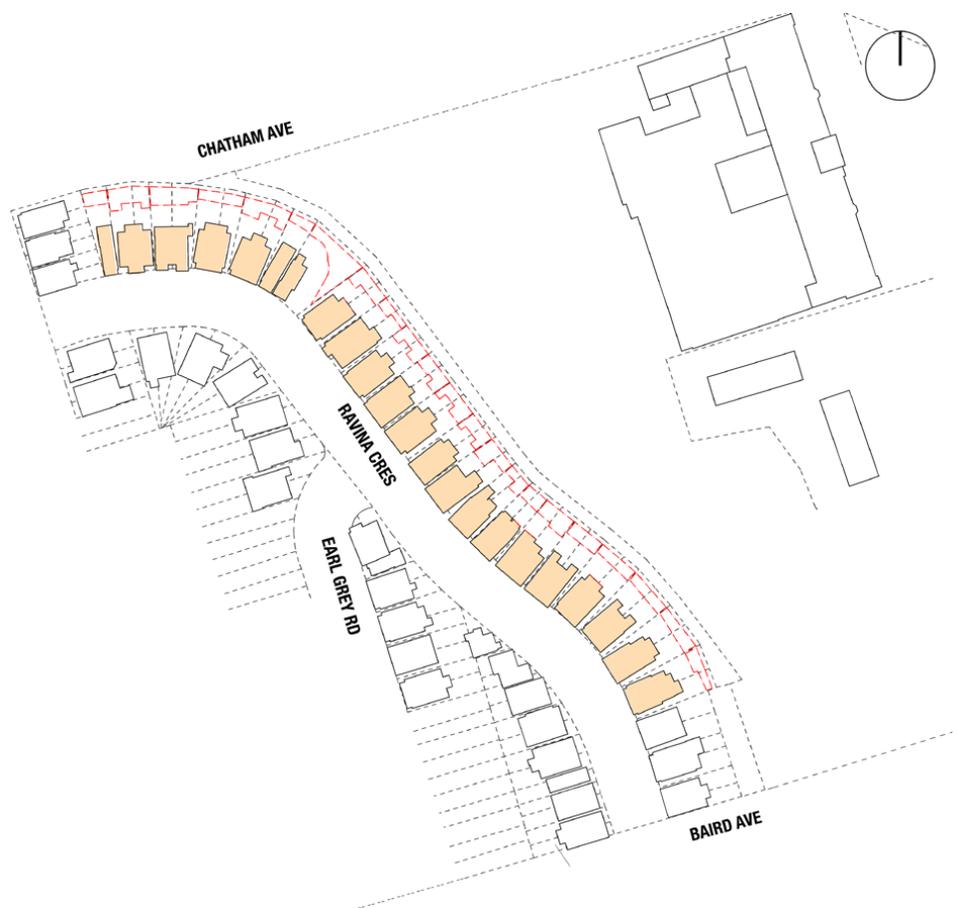
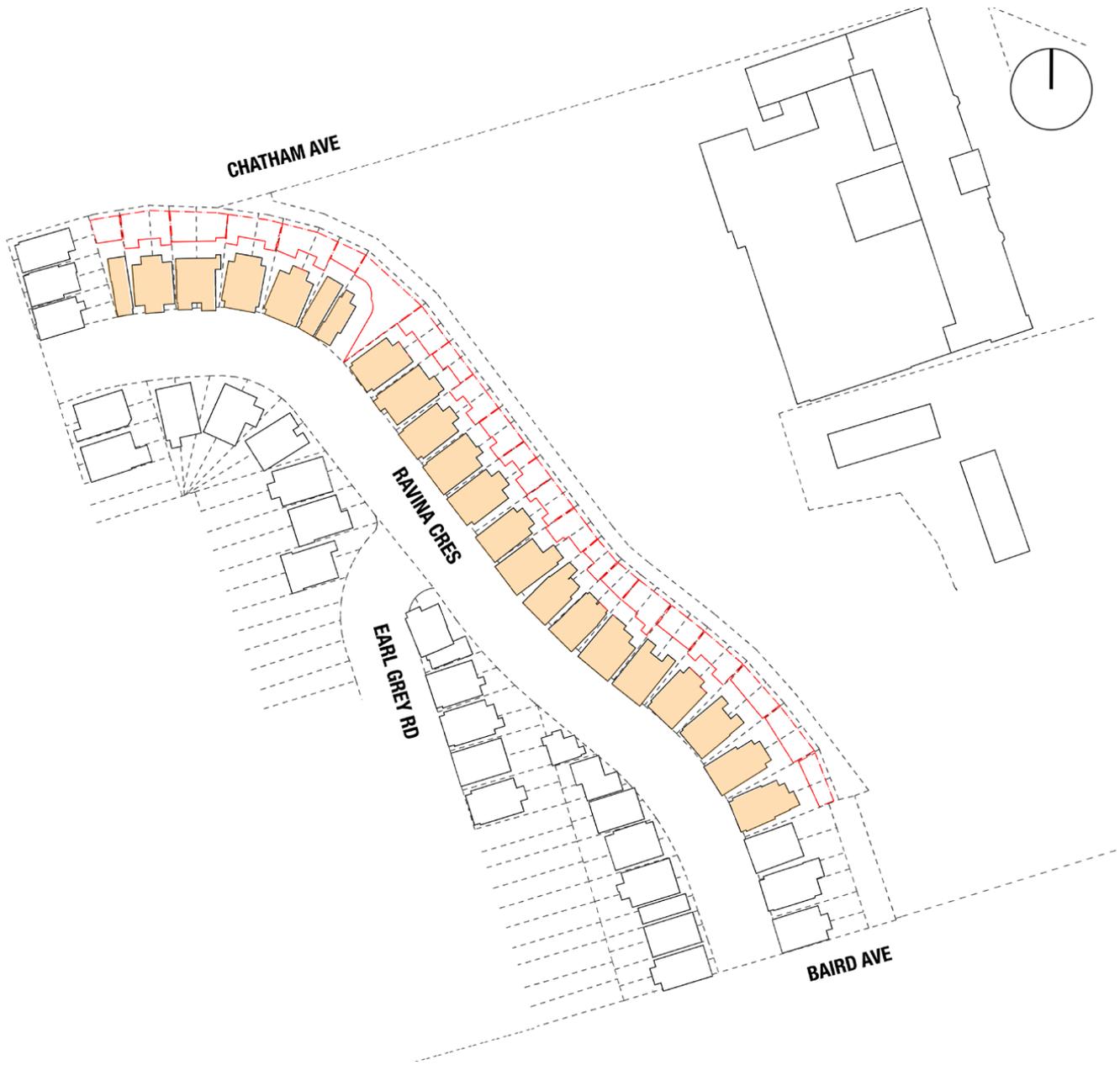


Figure 83 (bottom) - Site Plan - the red dotted lines indicate the maximum building footprint with a 7.5 metres setback from the back of the main house to the back of the laneway suite, but the setbacks are joined for each adjacent semi-detached building





Also, this 'east site' explores a different area of the zoning by-law. The current by-laws for the distance between the back façade of the main house to the back façade of the laneway suite has a minimum distance of 7.5 metres. As seen in figure 82, the resulting maximum building footprint on most of the lots would be very small. There are two options for these lots to obtain enough building area for livable laneway suites, height and area. In the previous section, the height limit was explored, and in this section, the area limit is explored, and the height limit is



Figure 84 (left) - Site Plan - the red dotted lines indicate the maximum building footprint with a 5 metres setback from the back of the main house to the back of the laneway suite

Figure 85 (top right) - Street façade view from open field of the neighbourhood



Figure 86 (bottom right) - View from the newly designed laneway from a close distance

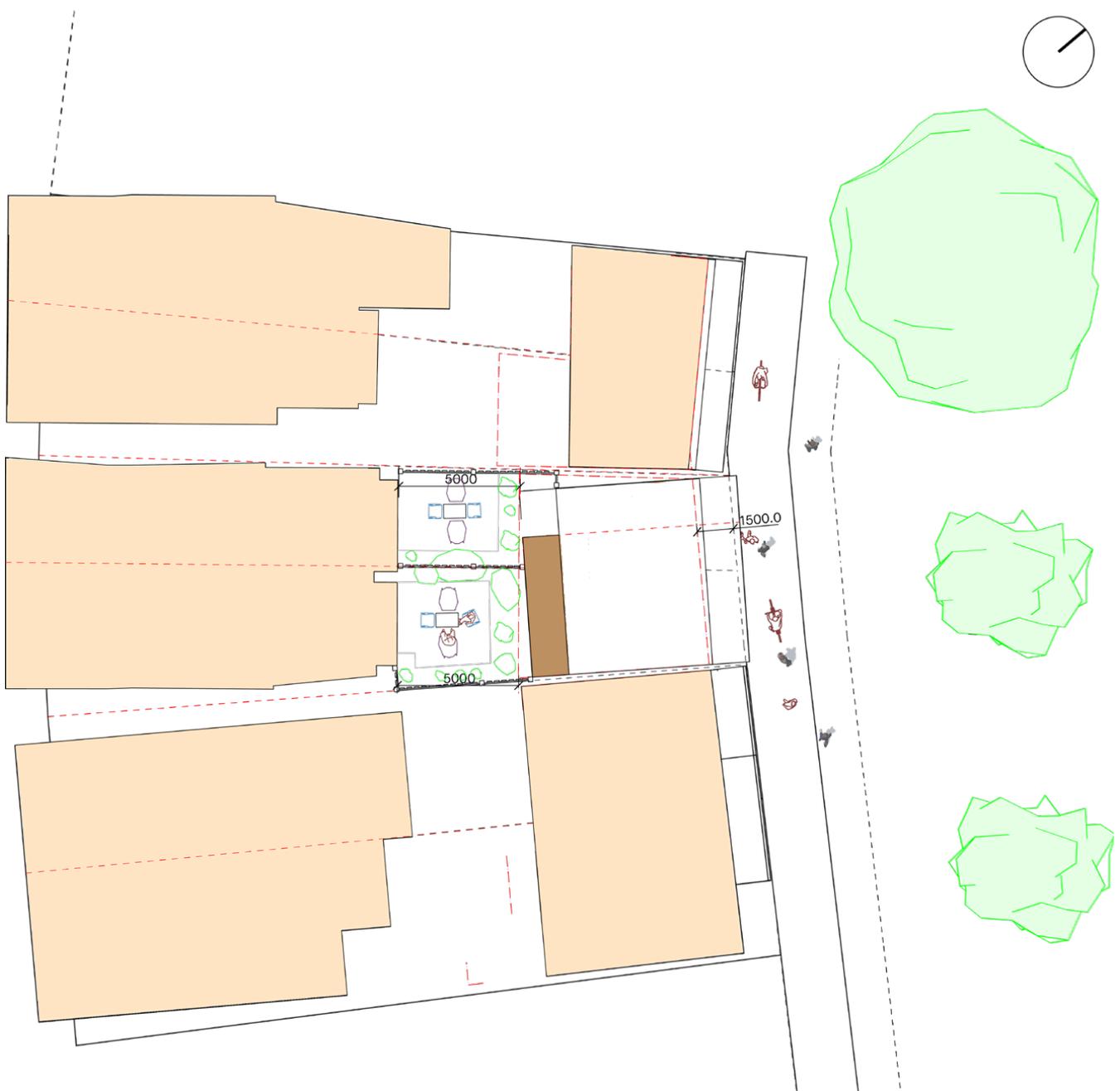
kept at 6 metres according to the zoning by-law. Since the main houses fronting Ravina Crescent are semi-detached houses, the same strategy can be employed for these laneway suites. So, the two adjacent lots of a semi-detached house are joined to create one larger lot that would have two laneway units (figure 83). However, this would not provide enough space for all of the necessary program in a conventional home. Therefore, the 7.5 metres setback was reduced to 5 metres to provide more space inside

the laneway suites (figure 84). On top of everything mentioned so far, the conventional way to divide two units straight down the middle is dismissed. Instead, horizontal divisions are used in conjunction to the vertical divisions. This strategy has created larger horizontal spaces that can be used more efficiently. With the variety of the different lots and many different ways to divide a building into two relatively same sized units, an interesting street façade can be formed (figure 85). Any laneway unit would have their distinct charm on this street. When looked at from a closer distance, each individual laneway unit is designed for the human scale (figure 86). In other words, perfect for human interactions between homeowners, passersby or people from the neighbouring museum.

Two different lots are developed further to understand the diversity and the different possibilities to design a semi-detached laneway house on this site.

The first house is located at 37R & 39R Ravina Crescent. This is one of the smaller lots located on this site. If divided straight in the middle, the spaces created would be very narrow and unpleasant. However, with this right angle divide, the spaces are more open and fairly sized (figure 88). Also, in figure 88, the two units are clearly divided, showing the bottom floor belonging to the bottom unit, and the top floor along with the narrow corridor on the side for the upper unit. As shown on figure 87, an agreement needs to be made between the two owners to shift the existing property line. The distance offset on the ground floor would be compensated for on the second floor.

Figure 87 - Site plan of the building area and immediate context of 37 & 39 Ravina Crescent



⁴¹ livable area is the space that is attributed to everyday activity excluding any common areas or vertical circulation

⁴² Inspiration of this design - Ilka Ruby et al., *MVRDV Buildings* (Amsterdam, Netherlands: Marcel Witvoet, nai010 publishers, 2015). p.60-67.

In figure 88, it appears that the upper laneway unit is larger in area than the bottom unit. However, the overall livable areas are similar in size⁴¹. The stairs leading to the unit on the upper floor provides some auxiliary space, but it is fairly limited (figures 89 & 90)⁴². Apart from the horizontal division of the two units, the interiors are rather similar. Both units include one bedroom, one open kitchen and living space and one bathroom. It would be too clustered to include more rooms and the units would not be comfortable to live in. One can imagine the plans would not function well if the units are divided right down the middle.

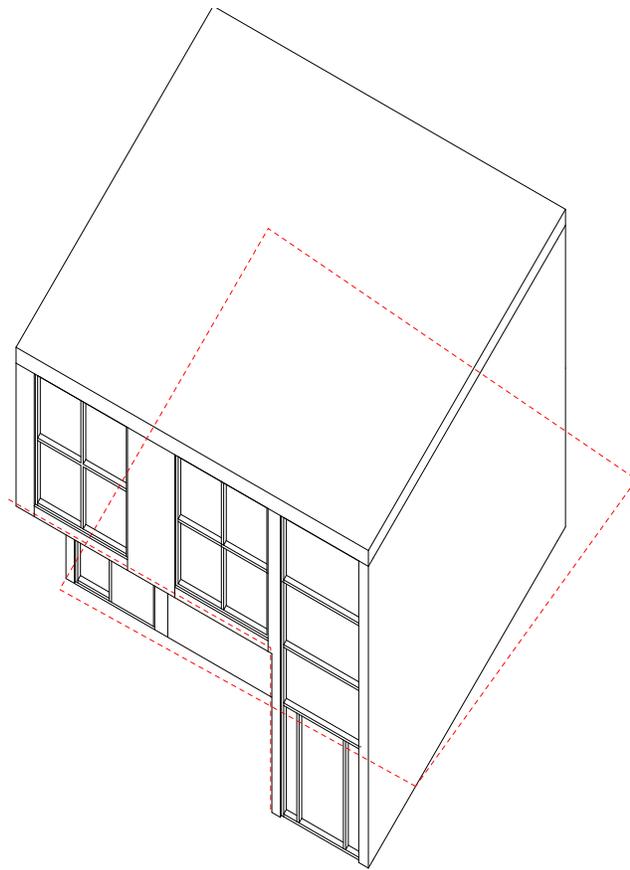
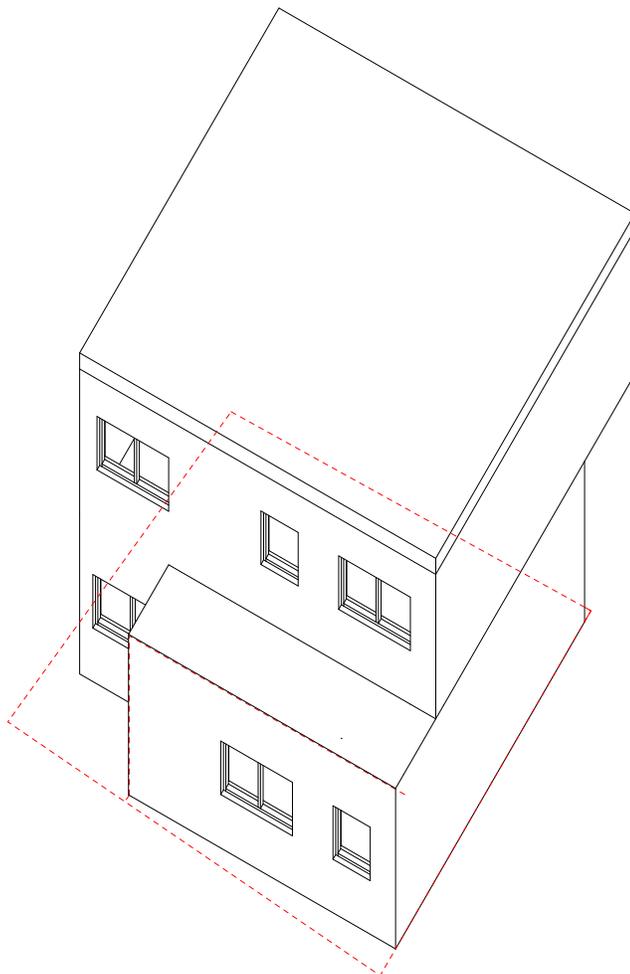
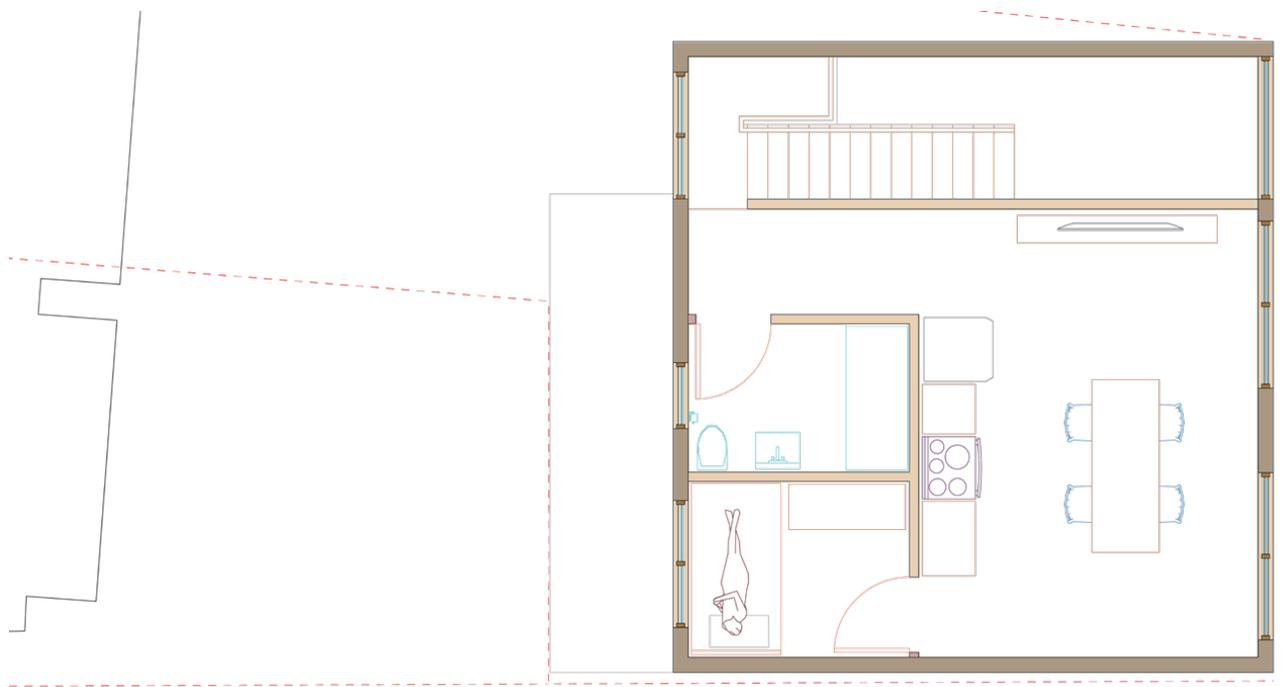
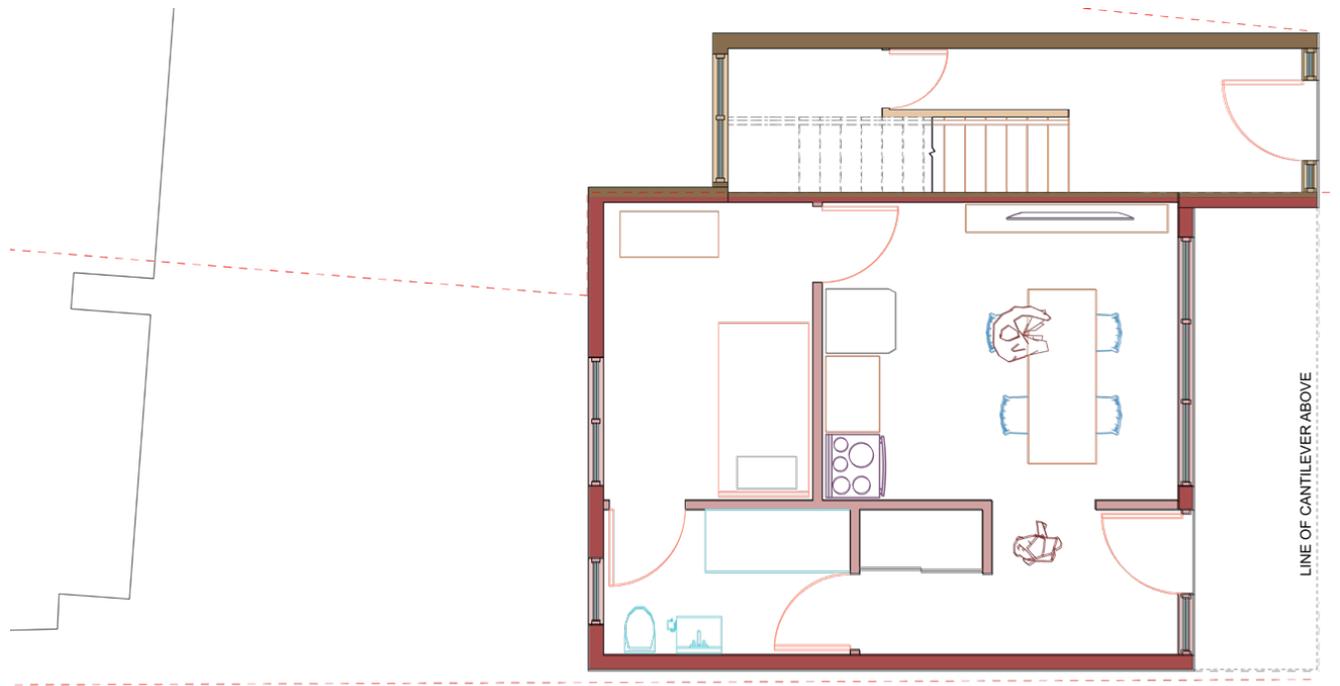


Figure 88 (left) - Front & back axonometric drawings of 37R & 39R Ravina Crescent, red dashed lines indicate the building area and the division between the two units

Figure 89 (top right) - Ground floor plan of 37R & 39R Ravina Crescent, red dashed lines indicate the property line separation

Figure 90 (bottom right) - Second floor plan of 37R & 39R Ravina Crescent, red dashed lines indicate the property line separation







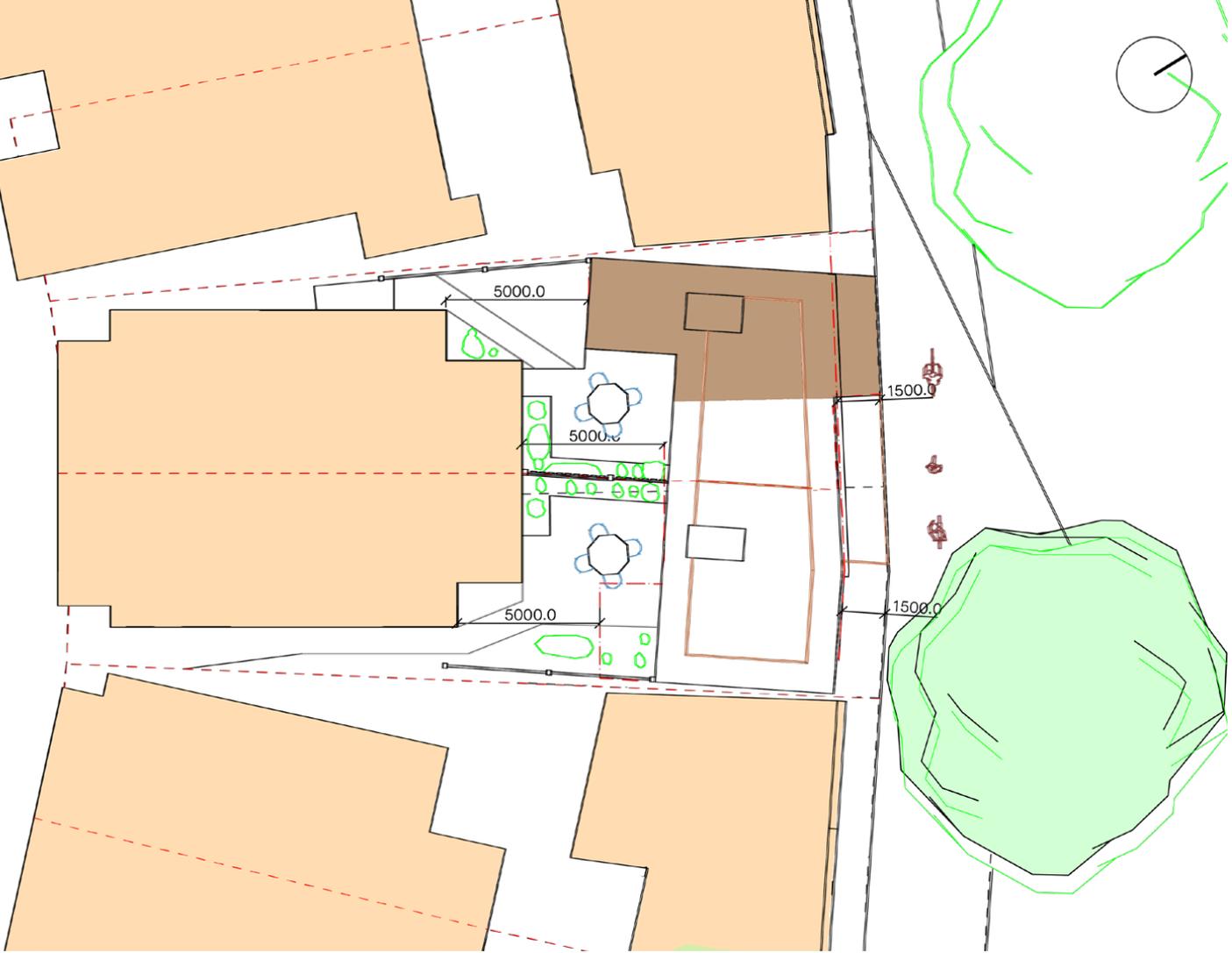
While the plans for this building fairly standard, the uniqueness of the building can be seen in the exterior cladding and front yard space usage. In figure 91, the bottom unit is shown to have a brick façade because it appears to be a heavier material, while the upper unit has a wood façade, appearing to be lighter. The adjacent laneway units have similar materials with brick, stone and wood, but from the change in the types of openings, the division lines and the colours, they would create different units that are unique from one another.

Figure 91 (left) - Front view of the 37R & 39R Ravina Crescent laneway suite



Figure 92 (right) -
Backyard of 37
Ravina Crescent
looking at the
laneway units on
37R & 39R Ravina
Crescent

How would the change from 7.5 metres to 5 metres affect the backyard of the main house? Are there any issues with shadows? Since the laneway units are fronting onto an open field that acts as their front yard, the backyard would be part of the main house. The laneway units would not use the backyard at all. As seen in figure 92, the wooden fence shows the property line of the main houses, and thus butts against the bottom laneway unit wall. Also, the backyard space is large enough for a table, four chairs, and extra space for some gardening activities if desired. There may be some shadow issues in the early morning and late evenings. It is a 10 o'clock sun in the summer time in figure 92, and half of the backyard is still in sunlight. The advantage to the position of the laneway suite is that it is located to the northeast of the main house. During most time of the day, the laneway house would not cast any shadow onto the backyard.



The other laneway building designed in more detail is located at 83R & 85R Ravina Crescent. The building footprint on this lot is much larger than the one on 37R & 39R, giving more design choices and opportunities for a unique building. In addition, part of the building protrudes into the front yard setback to create the clear division between the two units (figure 93). Also, the roof garden provides additional exterior private spaces for the two units in this building.

The lot is unconventionally shaped and thus creates an angled façade to the building. The form of the building attempts to use as much of the available lot space as possible, and this angle is used as a division point for the two units. They are divided relatively evenly in the middle. However, the offset horizontal division creates a balcony for one unit and a canopied area for the other (figure 95). While being more of an interesting design



Figure 93 (left) - Site plan of the building area and immediate context at 83 & 85 Ravina Crescent

Figure 94 (right) - Front view of 83R & 85R Ravina Crescent Laneway Suite

than a division at the middle of the building, this is also a practical strategy to increase the available floor space for activities.

Similarly to the 37R & 39R laneway building, this laneway building uses material usually used in standard houses, brick and wood. While being the same two materials, a change in the colour scheme can change the atmosphere created by the building and differentiate it from the other laneway buildings on this site. The sizes and position of the windows and doors offer variability and informs the onlooker the type of program behind those windows. Floor to ceiling windows indicate a more public program like the living room, dining room and kitchen, while smaller windows indicate private rooms such as the bedroom or bathroom.

Unlike the difference in the colours and materials on the façade, the windows would also dictate the floor plans of the two units. In figures 96 & 97, the spaces facing the laneway are more open and the residents can experience the natural sunlight and trees outside. Similar to the laneway building at 37R & 39R, the backyard space is

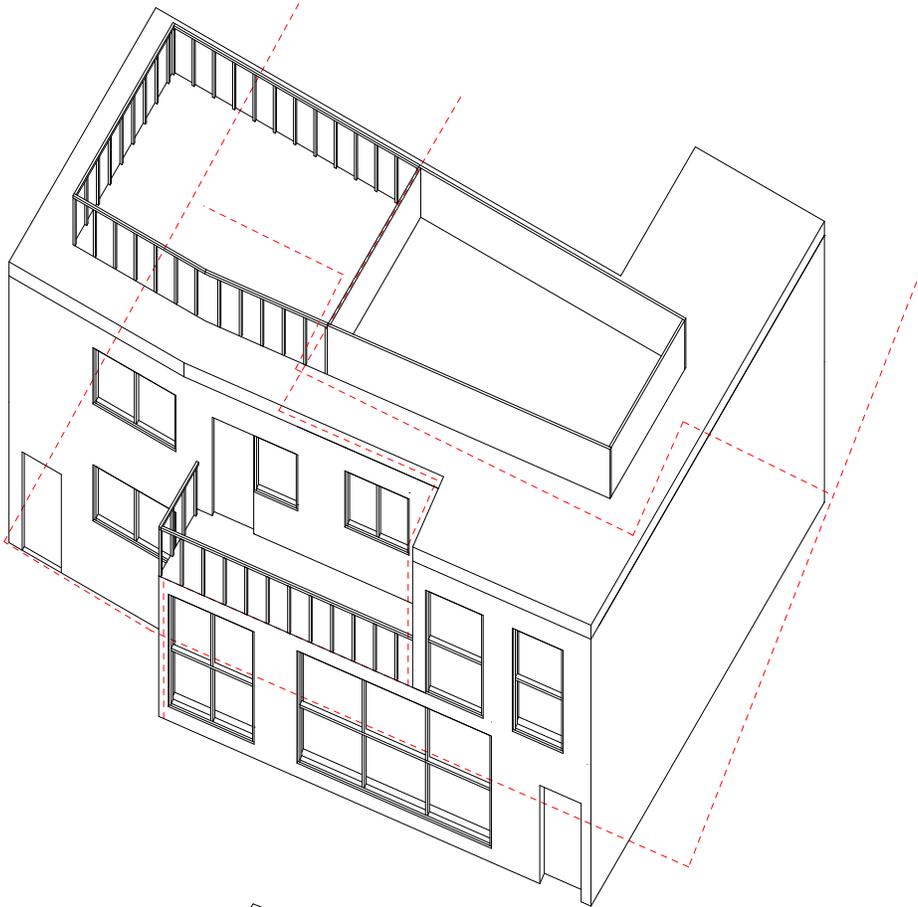
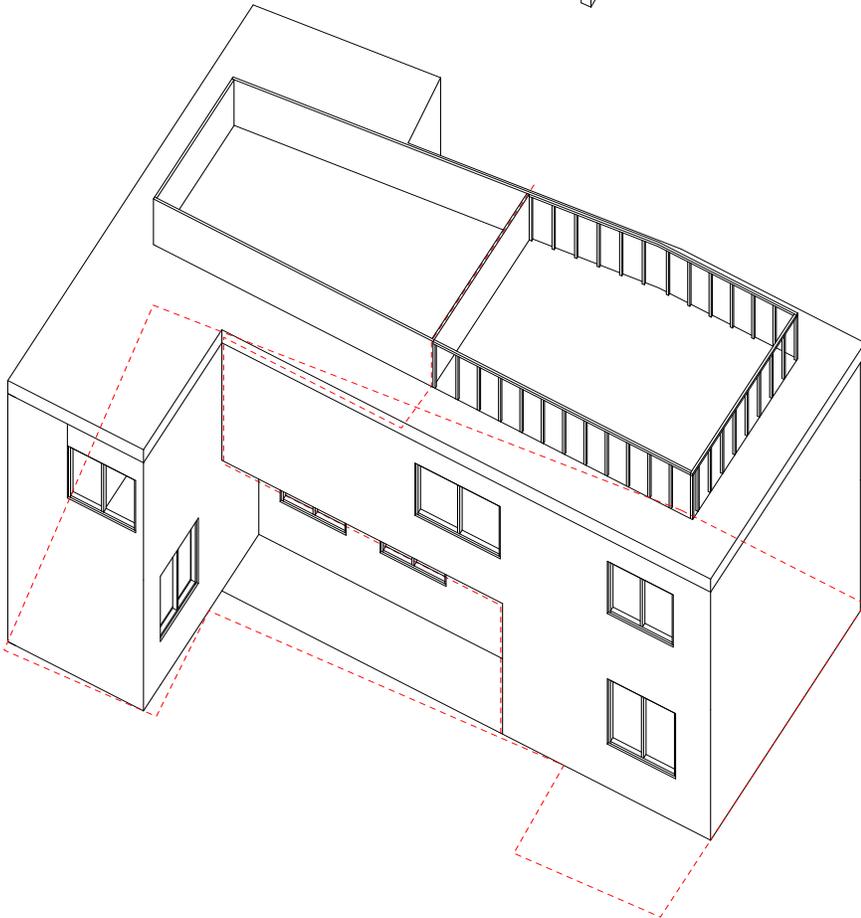


Figure 95 (left) - front & back axonometric drawings of 83R & 85R Ravina Crescent, red dashed lines indicate the building area and the division between the two units

Figure 96(right) - Ground Floor Plan of 83R & 85R Ravina Crescent laneway suite, red dashed lines indicate the property line separation







allocated for the residents of the main house. Thus, the private rooms with smaller windows are located adjacent to this wall to maintain privacy.

Despite its relatively larger lot size compared to the lot on 37R & 39R, a regular staircase leading to the roof would cut into the living space of the units. Instead of a normal staircase, a foldable ladder is used to access the roof garden. A small structure is erected surrounding the opening to act as the primary barrier against the weather. The opening to the roof would also need to be waterproof and insulated. Even though it can be more difficult to access the roof area using a ladder, this would only be

Figure 97 (left) - Second floor plan of 83R & 85R Ravina Crescent laneway suite

Figure 98 (right) - Roof plan of 83R & 85R Ravina Crescent laneway suite

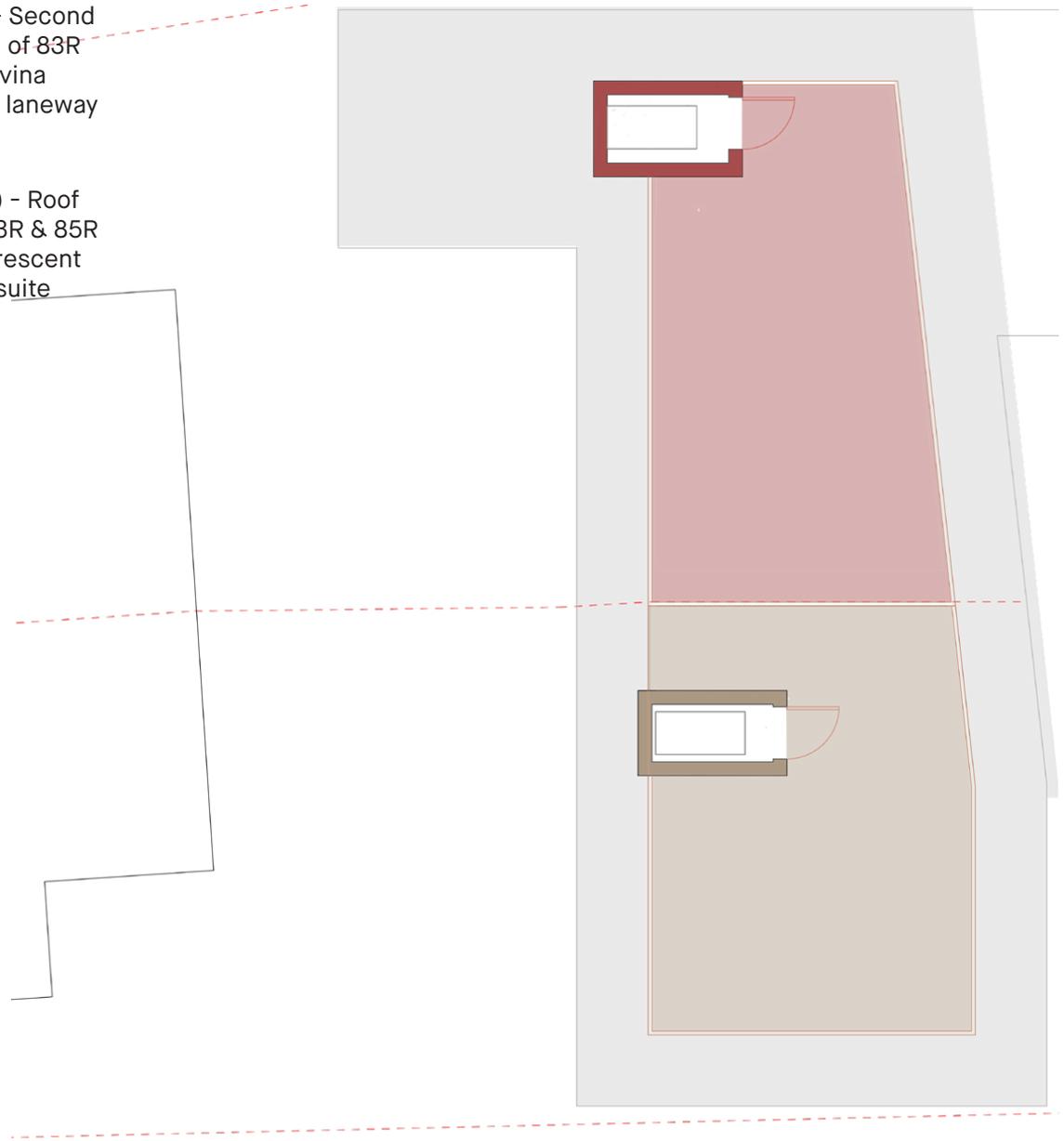




Figure 99 - View of backyard between the 85 and 85R Ravina Crescent

accessed occasionally. During about half of the year in the Canadian season, the roof garden would probably be too cold to stay in. It may be only used during the summer for barbeques and parties. This is not a space that would be used on a regular basis.

As mentioned previously, the backyard is allocated only for the residents of the main house. Similarly, the size and the shadow of the space needs to be designed as well for it to be an enjoyable space for the residents when the laneway building is built. In figure 99, the wooden fence is shown separating the two properties, indicating the property line of the main house. Also, this backyard space is larger than the backyard at the 37 & 39 house, and there is more than enough space for a table, four chairs, and other activities if needed. From the site plan, figure 93, the laneway building would be located north of the main house. So similarly to the laneway building at 37R & 39R, shadows from the laneway building would not be cast onto the backyard. Furthermore, the main house is only 2 storeys that its shadows are minimally impacting the backyard.

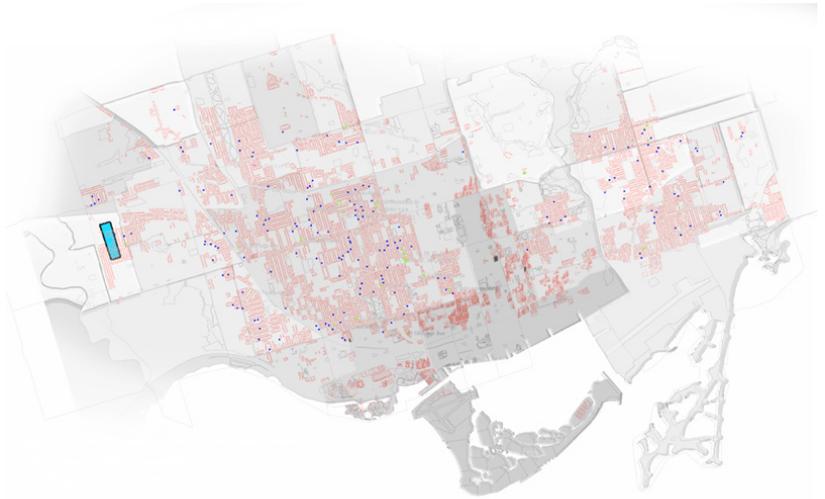
The 'east site', the laneway behind Ravina Crescent, provides interesting opportunities for laneway suite constructions. While being limited at the 6 metres building height, these laneway suites take advantage of the front yard and backyard spaces to create feasible houses. Contrary to the belief that construction of these laneway suites would negatively affect the residents of the main houses, rendering in figures 92 and 99 prove that these residents would be minimally affected. As more laneway suites begin to be constructed and occupied by the younger generation, this would become a livelier and more invigorated community.

4.1.3 West Site - Exploring the Potential of Future Laneway Communities



Figure 100 (left) - Site plan of the west site - the highlighted red areas indicate all possible locations to build laneway suites

Figure 101 (right) - Location of the proposed west site in Toronto



The 'west site', similar to the east site, is located in an area with slightly lower property values that do not have many young residents. With the addition of more affordable laneway suites, more young individuals will be attracted to this neighbourhood. This site is chosen as a standard site with a laneway in the back of two single-family houses. There is more than enough space in the backyard of these houses for laneway suites.

In addition to the property value advantages, the 'west site' is located in close proximity to a public school. While both laneways north and south of the school are great opportunities to develop laneway suites, in this section, the south laneway is explored in more detail. However, this design and construction strategy can be used for the north laneway as well. If possible, the design strategy in this section can be applied to many standard laneways in Toronto. It is a possible strategy that can proliferate throughout Toronto's laneways and increase housing density.

Unlike the previous two sites, the design strategy for this site is more standardized. The maximum building footprints of all laneway suites shown in figure 104 are similarly sized, and thus a hybrid prefabricated design can be used for these designs. If there is enough area to build laneway suites following the zoning by-laws, this type of prefabricated laneway suite can be employed in other neighbourhoods in Toronto. However, there is a common



Figure 102 (Top Left) - Current conditions of laneway looking at school

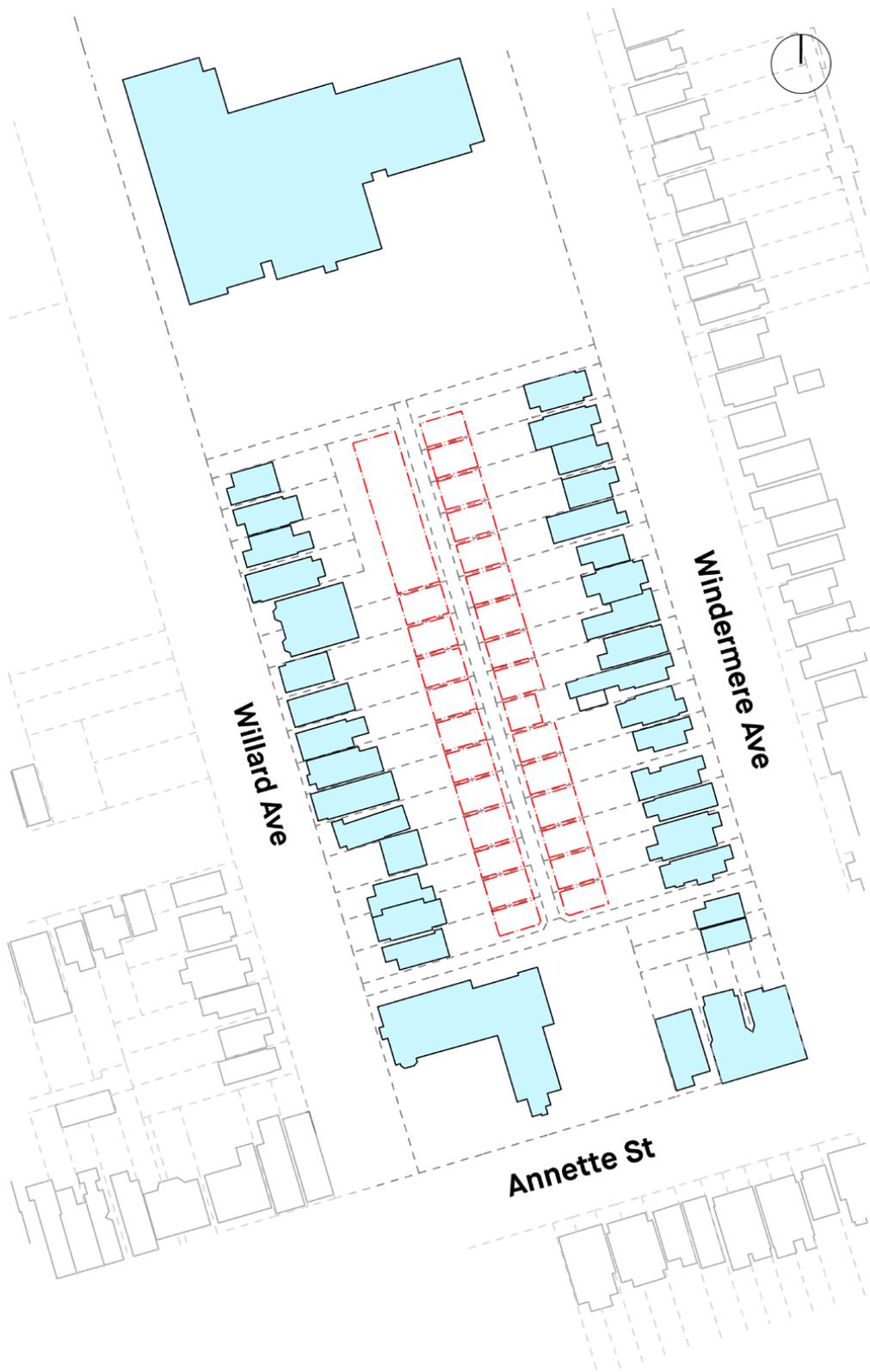
Figure 103 (Bottom Left) - Current conditions of Laneway looking at farmer's market

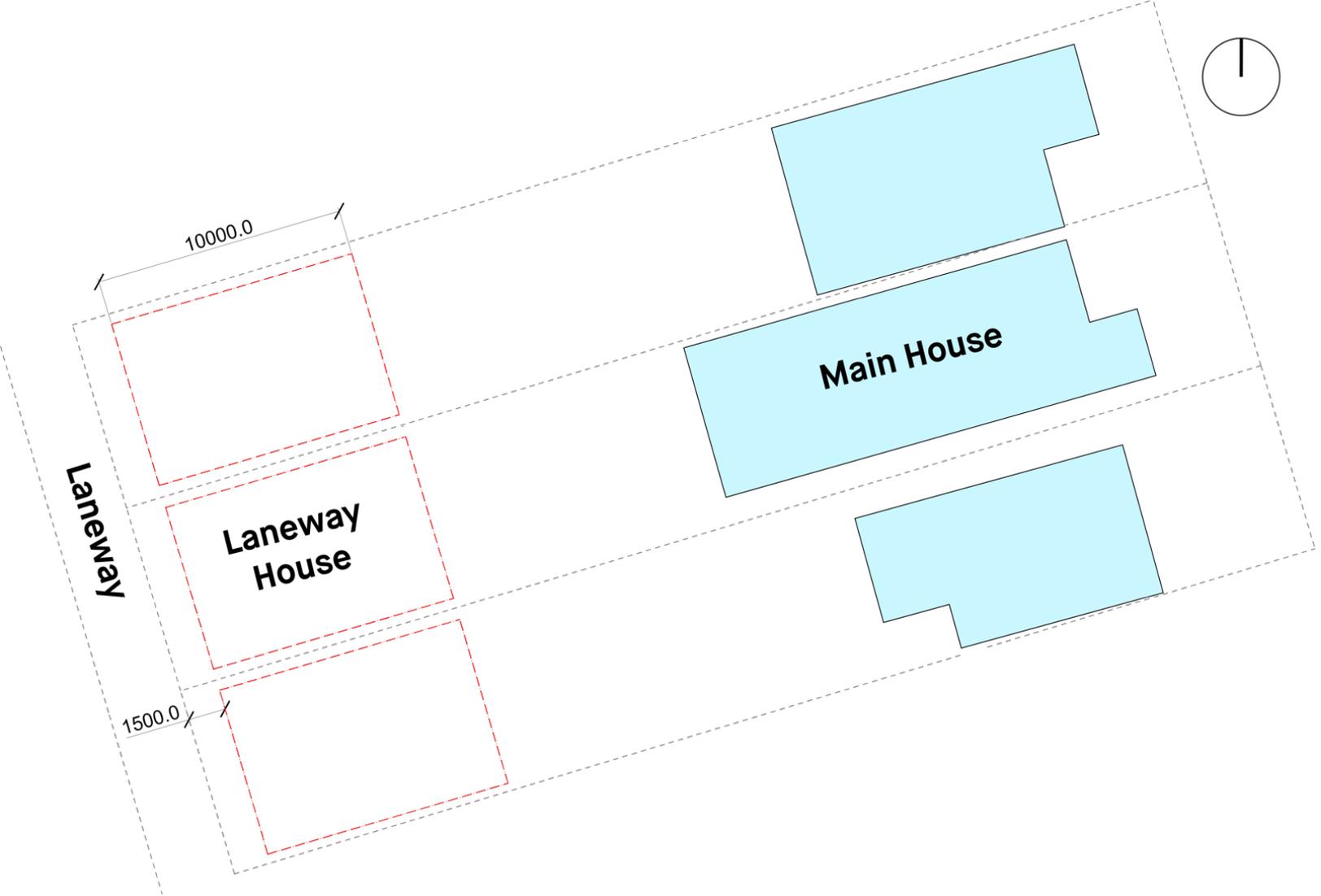
Figure 104 (Right) - Allowed setbacks according to current zoning by-law regulations - red dotted lines indicate the maximum building footprint allowed on each lot



belief within the architecture and builder community that prefabrication dictates standardized and uninspiring buildings. Hopefully, through the designs on this site, that opinion can be changed.

As seen in figures 102 and 103, the current condition of the laneway is used solely as an access to the garages. Even during the Christmas break, there are barely any human activities in it. Very occasionally, someone would walk into the laneway to access their house from the garage. Presumably, the addition of new laneway





suites would introduce more human connections in this community.

Figure 105 shows a site plan of one of the lots on this site. According to the zoning by-law, there is a 1.5 metre front yard setback, and the maximum length of the laneway suite is 10 metres. Of course, there is enough space on this site that neither increasing the building height nor the building area are necessary. However, small 'violations' to the zoning by-law such as protrusions on the façade and the size of the dormer in the back are explored on this site to provide more options for future laneway suite designs.

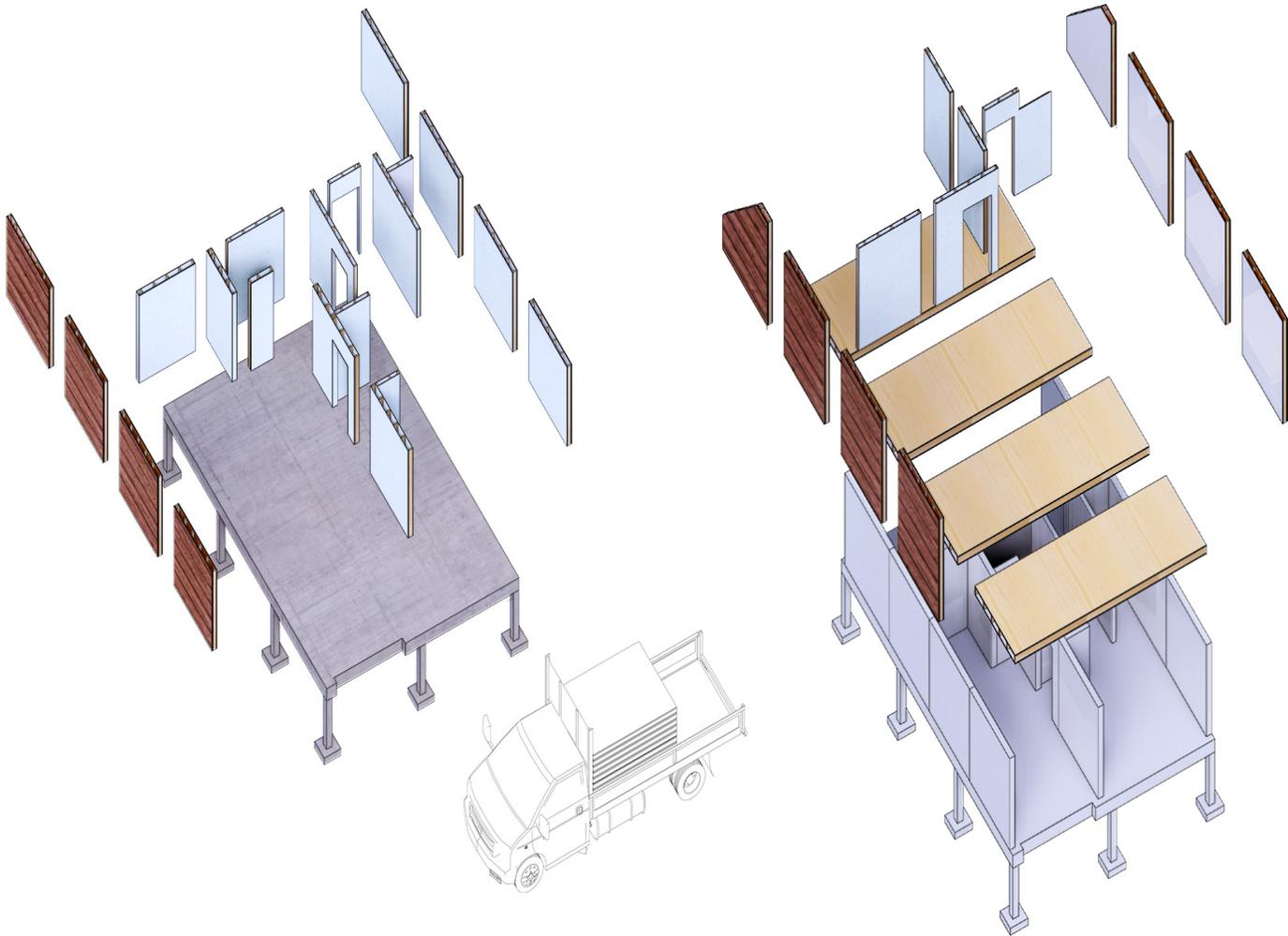
The overall form of the laneway suite in figure 106 is quite similar to the laneway suites 5R Woodycrest Avenue, 75R Woodycrest Avenue, and 26 Ivaan Kotulsky Lane in sections 3.1.2 and 3.1.3. If all allowed volumes are being used, and the laneway suite follows the zoning by-law, this form would be the result. So which part of the building



Figure 105 (left) - The standard site plan showing setbacks and dimensions of one potential laneway suite

Figure 106 (right) - Front view of a standard pre-fabricated laneway suite

can be separated into prefabricated panels, and which part cannot or should be custom made to add character to the suite? Apart from the dormer, the front and back façades, everything else can be panelized and prefabricated. The fenestrations may alter the floor plans and change the interior wall panel sizes, but there would be a few different façades to select from. Even if any façades need to be custom designed for a unique laneway suite, the design changes would be fairly limited since these suites are relatively the same size. These designs are targeting the general homeowner in Toronto, and being limited in choices is fairly good. Not many people can afford to hire an Architect to design their personalized laneway suite. By being limited to only customizing the façades and possibly even limiting the choices on the façade to a few, the general homeowner can choose their desired aesthetics of the laneway suite while keeping the cost affordable.



In figures 107 to 109, all of the panels are illustrated from the foundation to the roof. Figure 110 shows all of the panels assembled into a laneway suite. All of the walls, exterior and interior, are divided into 8' x 8' or 2.4m x 2.4m panels or smaller sizes for ease of transportation and installation. The trucks that would be used for transportation is shown in figure 107 as a size comparison. The second floor panels and the roof panels are longer to span between the exterior loadbearing walls. On this site, they are around 6.5 metres or 21.3 feet. The laneway is wide enough for a 24 feet flatbed truck to deliver the panels, and a small crane to hoist the panels into position (figure 110).

Figure 107 (left) - foundation with prefabricated exterior walls and ground floor interior walls - ("Mini Flatbed Truck", Digital Image from Tank's)

Figure 108 (middle left) - second floor prefabricated wall and floor panels

Figure 109 (middle right) - prefabricated roof panels are installed

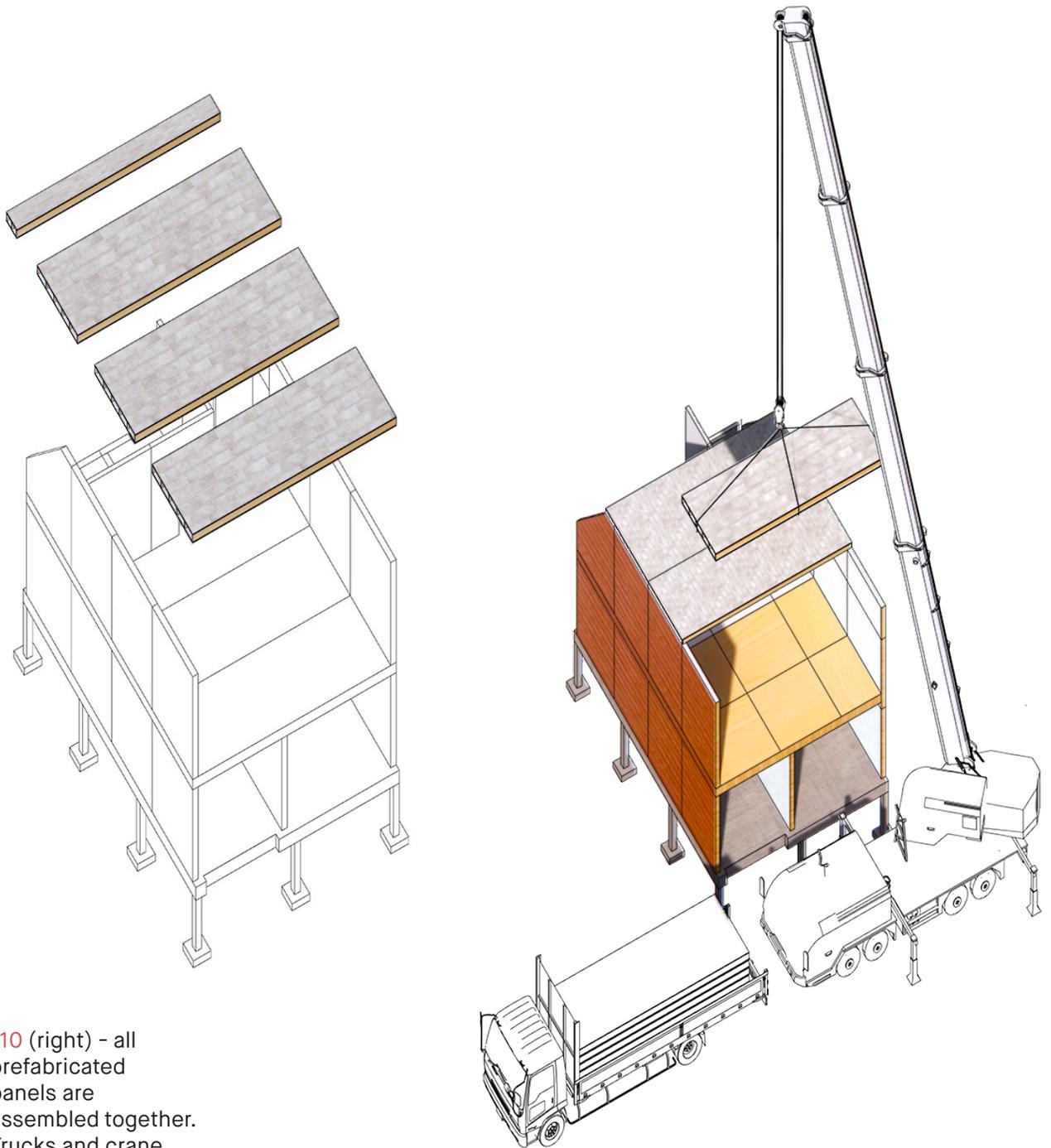


Figure 110 (right) - all prefabricated panels are assembled together. Trucks and crane used in this figure - ("Flatbed medium-duty rental trucks", Digital Image from Penske Truck Rental); "Anatomy of a Microcrane", Digital Image from Microcranes The Original).

So, all of these panel sizes would be the same throughout all laneway suites on the site, with some exceptions as noted earlier.

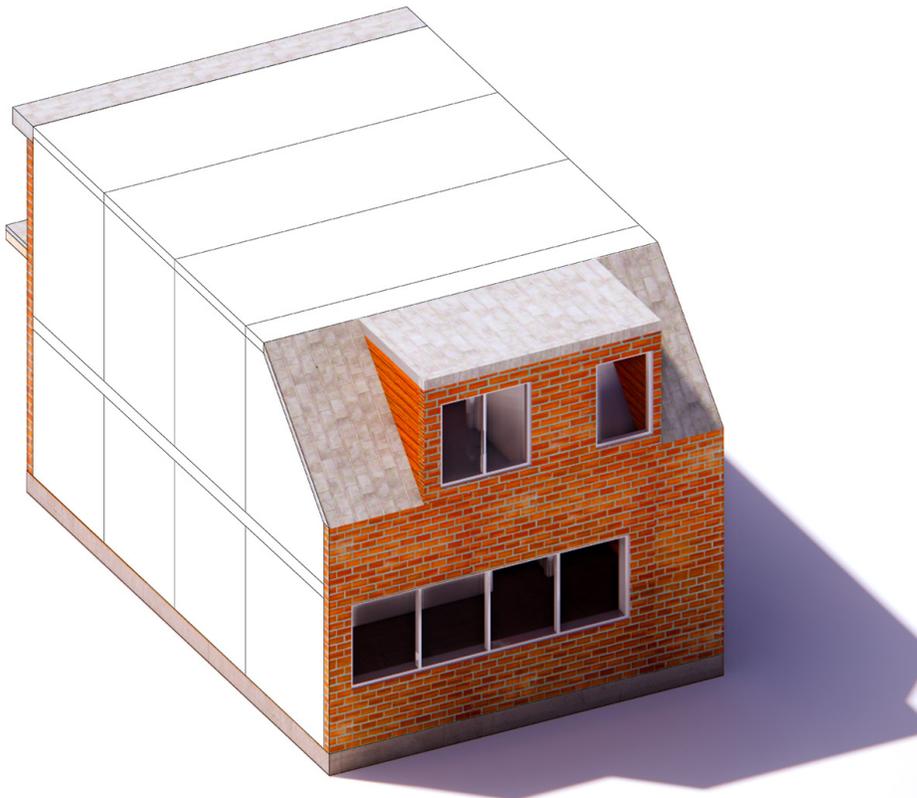
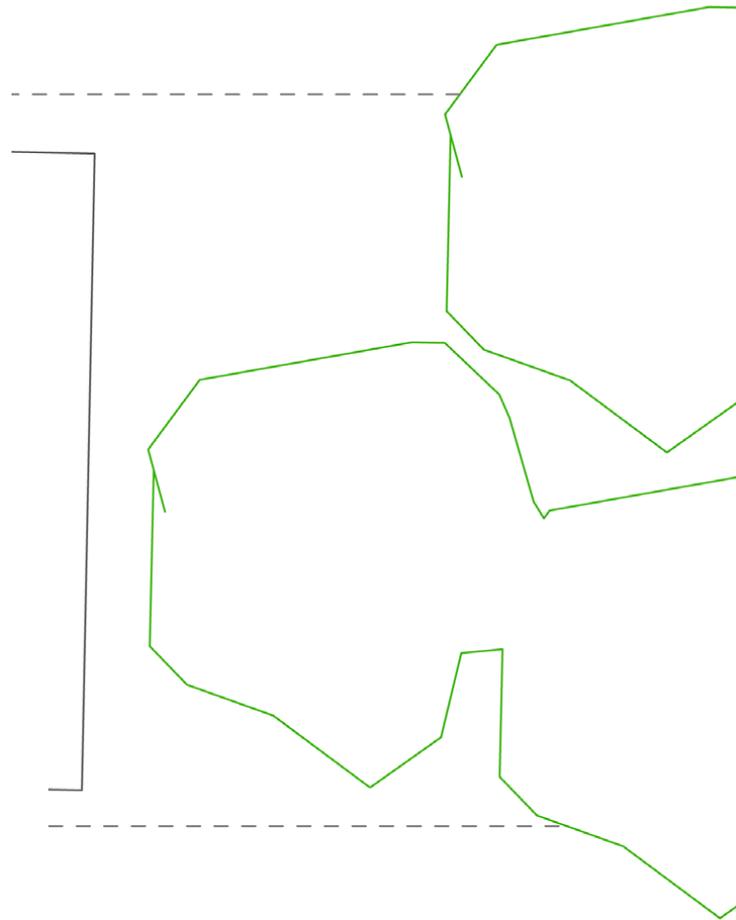
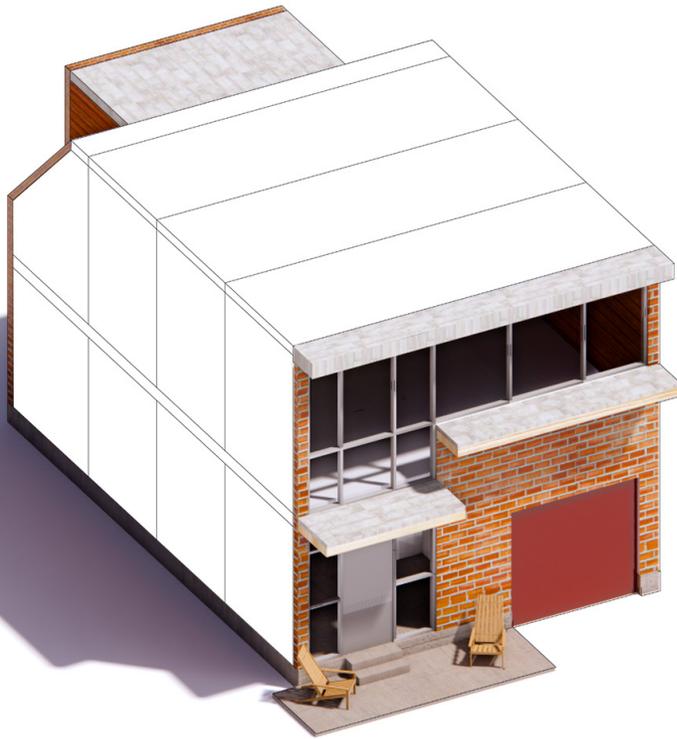


Figure 111 (top left) - one of the many different custom façade designs that can be built

Figure 112 (bottom left) - the back façade of this design iteration

Figure 113 (right) - The iteration of floor plans for the prefabricated laneway suite in accordance with the façade

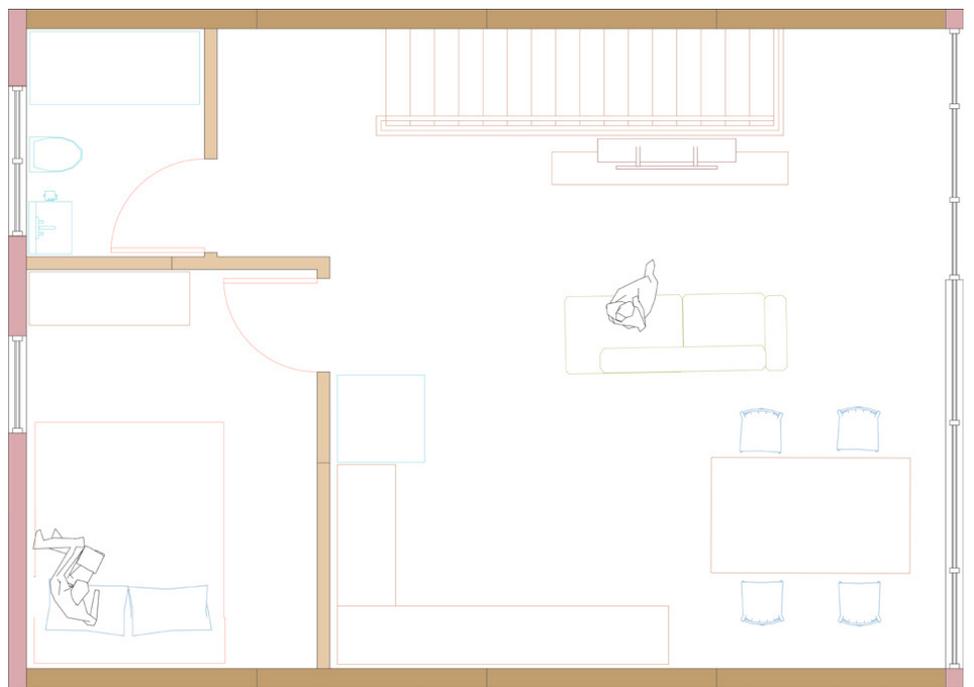
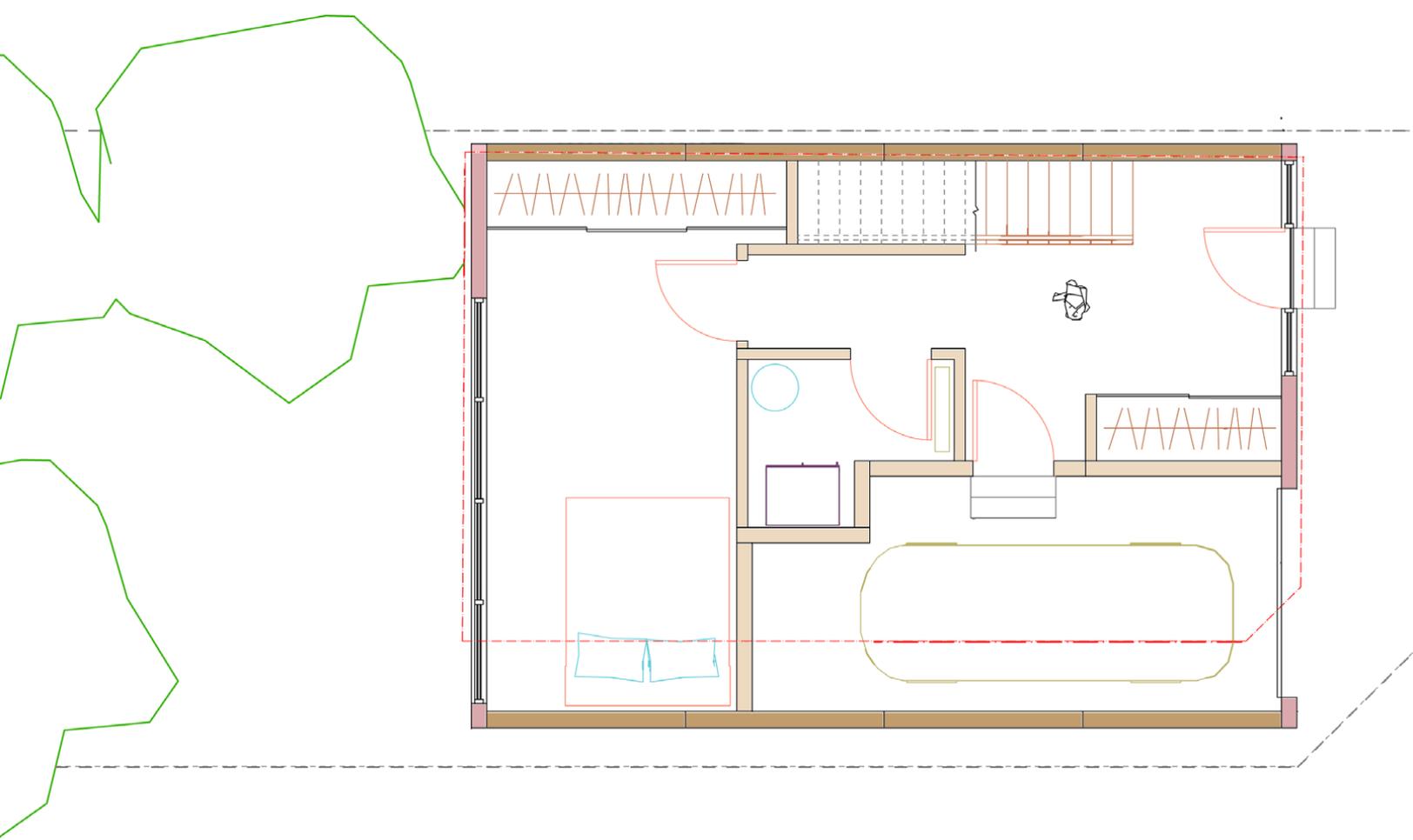
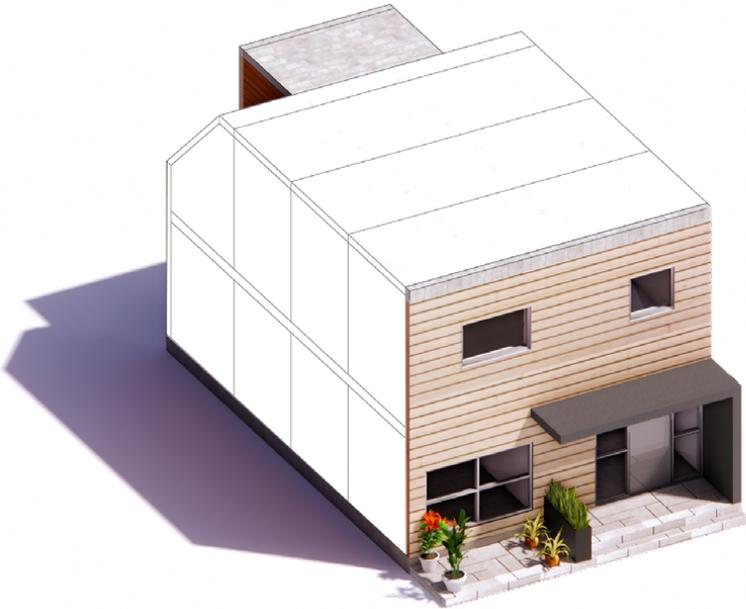


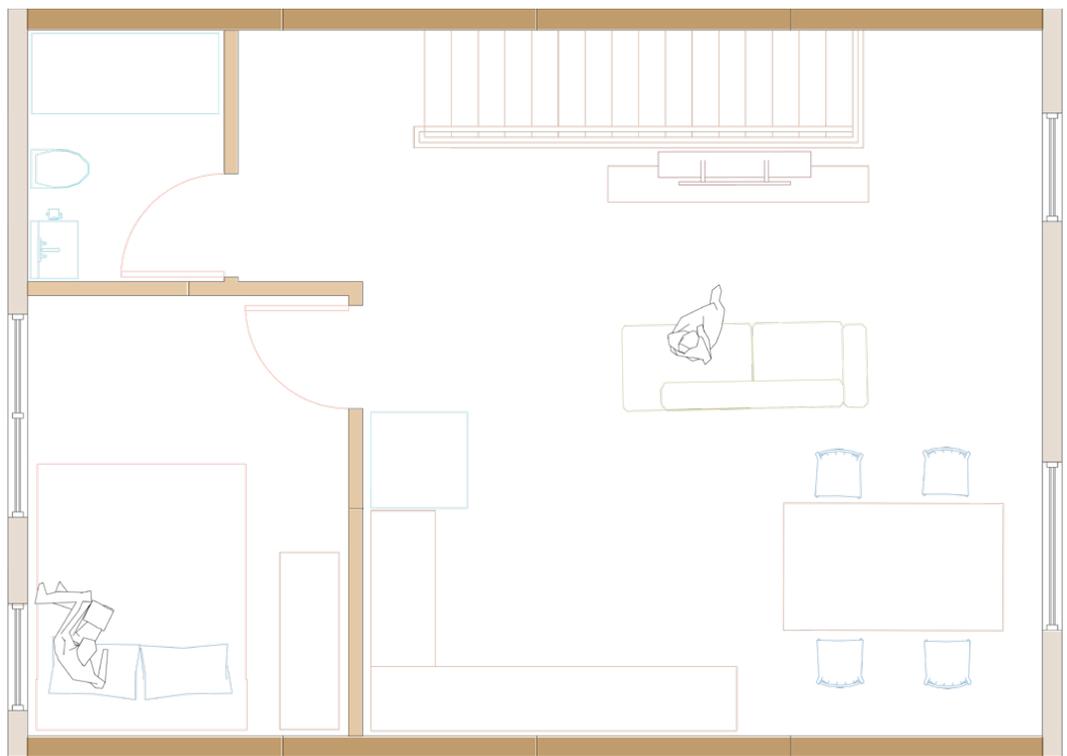
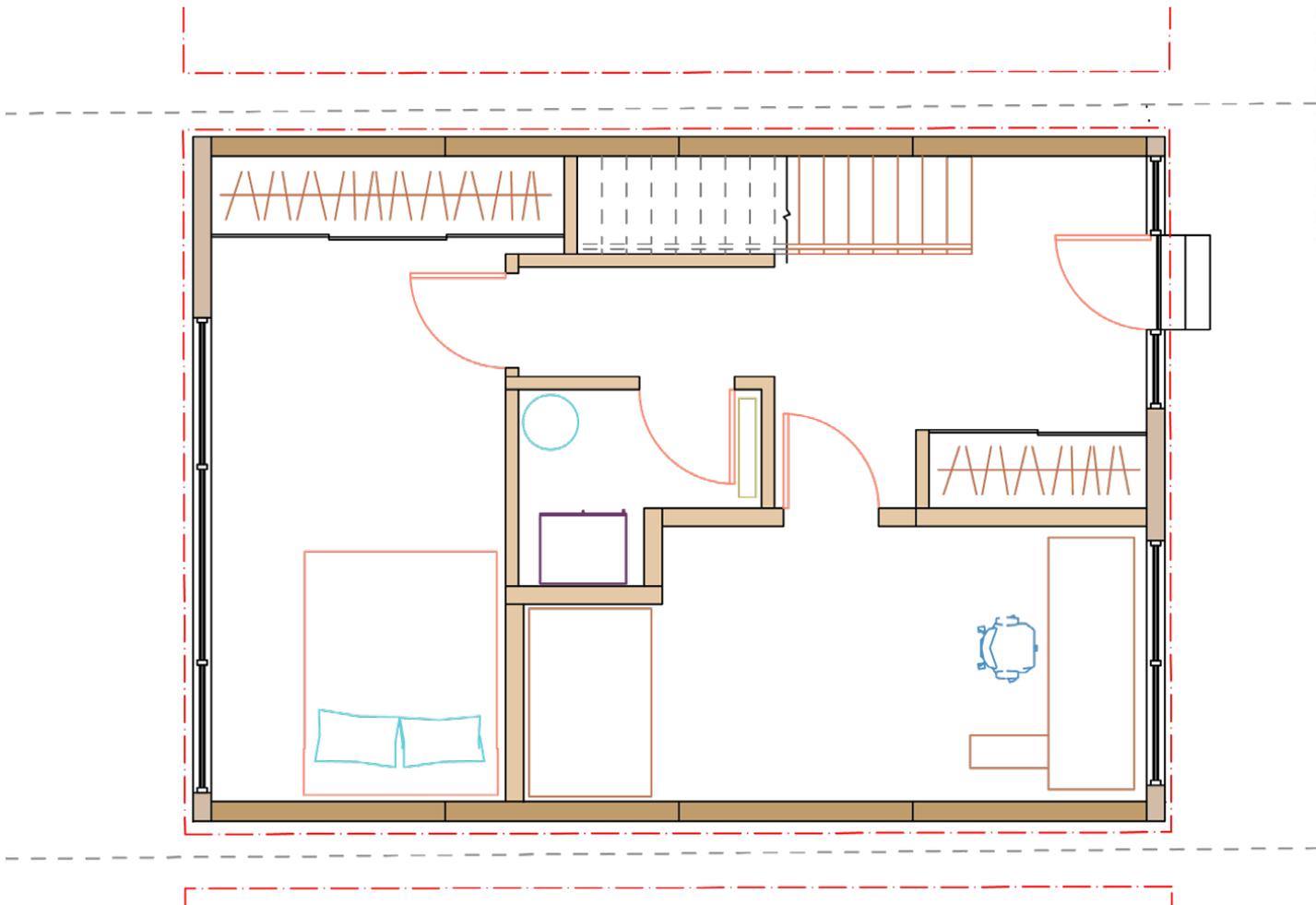
Figure 114 (top left) - The second façade design iteration

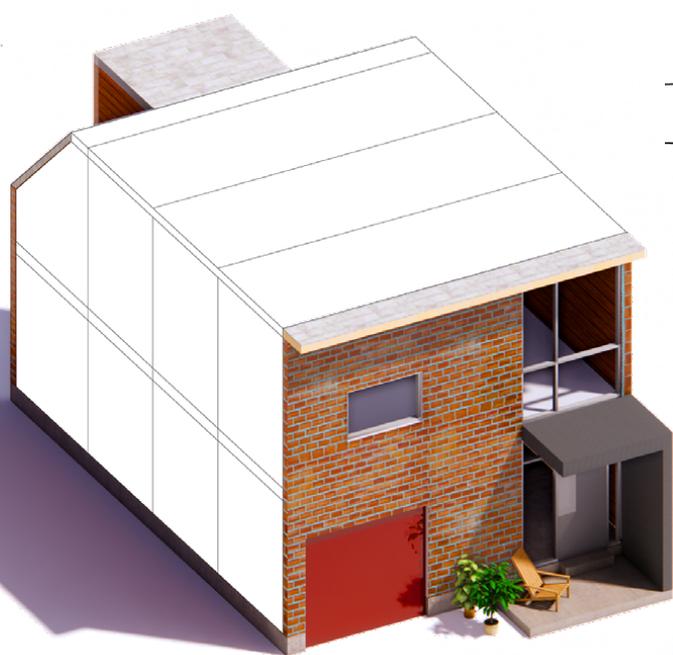
Figure 115 (middle left) - A change in the façade material from brick to wood siding

Figure 116 (bottom left) - The back façade of this second design iteration

Figure 117 (right) - The second iteration of floor plans for the prefabricated laneway suite according to the façade, other designs are possible







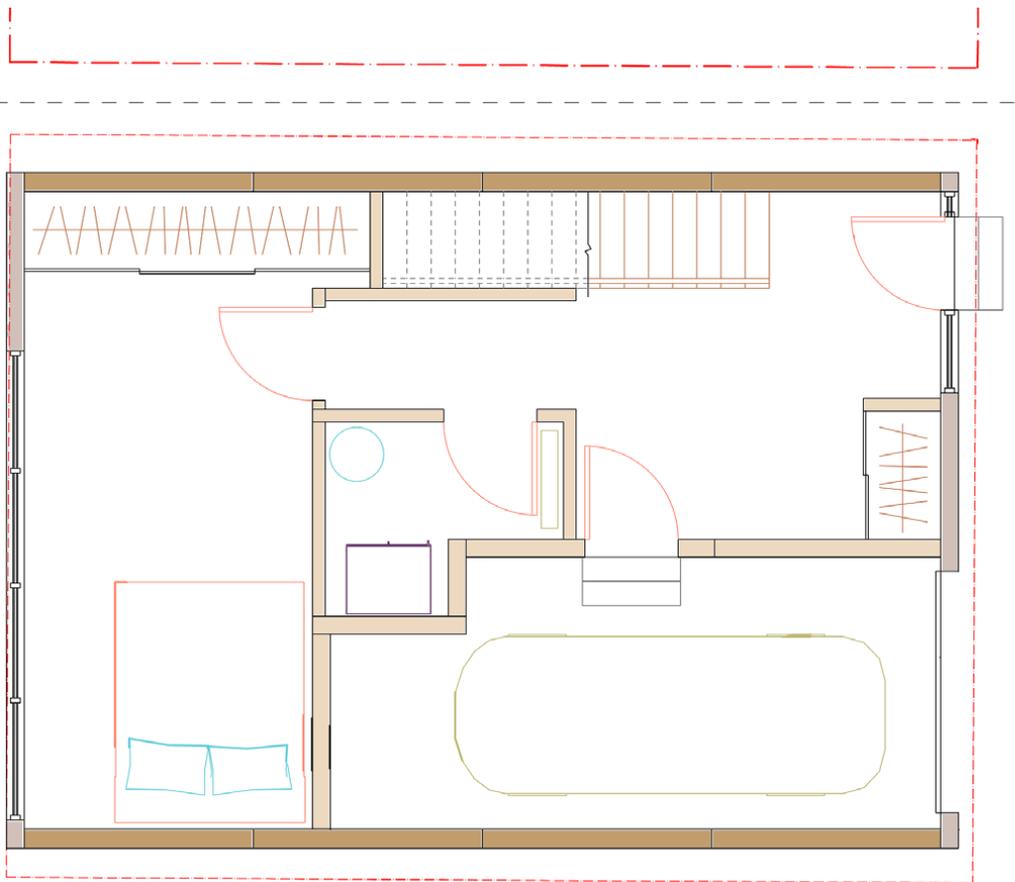
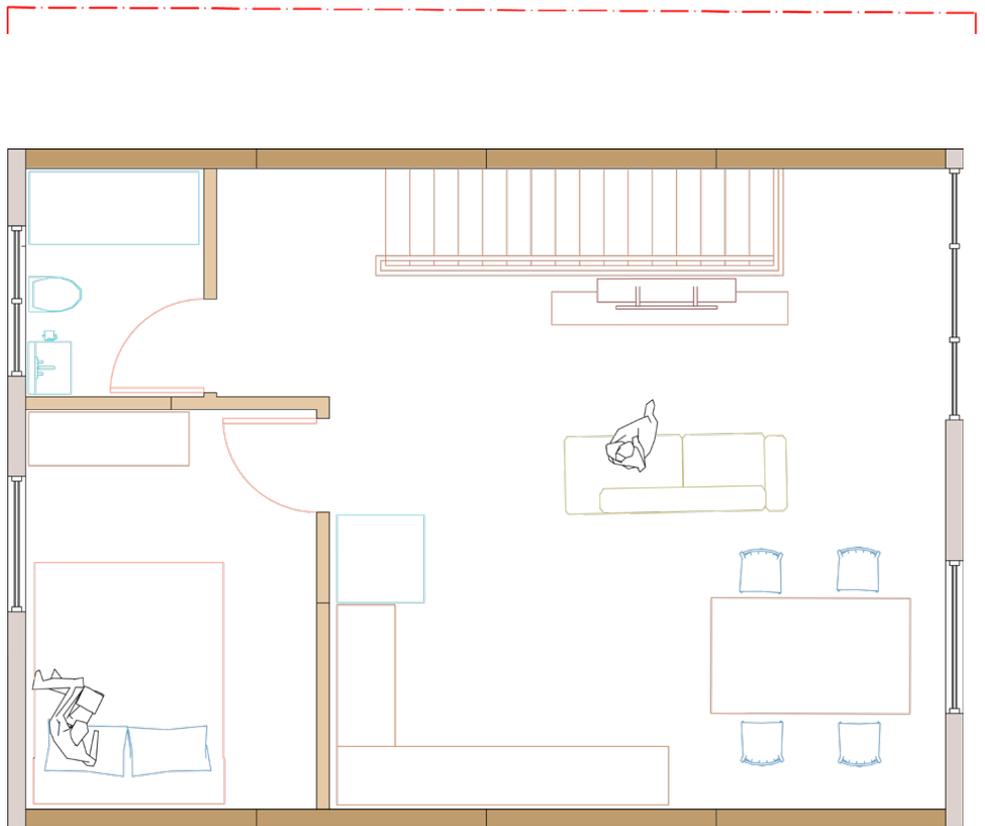


Figure 118 (top left) - The third façade design iteration

Figure 119 (middle left) - A change in the façade material from brick to stone

Figure 120 (bottom left) - The back façade of this third design iteration

Figure 121 (right) - The third iteration of floor plans for the prefabricated laneway suite according to the façade, other designs are possible



After all of the prefabricated panels are installed, the façades would be built on site by a builder. As previously stated, these façades can be custom designs according to the preference of the owners. 113 to 121 illustrate several different possibilities for designing the façade. These larger changes to the façade would result in changes to the floor plans (113, 117 & 121). This can range from changes to the foundation height and interior finishes (comparison between figures 113 and 117), to interior wall panel sizes and layout of rooms (comparison between figures 113 & 121). However, a material change would not impact the floor plans, thus making it a more affordable option. Figure 115 shows a wood siding, a variation of the brick façade in figure 114. Figure 119, on the other hand, shows a stone façade, a variation of the brick façade in figure 118. While vinyl sidings can be a more affordable option, the damages of plastic to the global climate change is too great. It should not be proliferated throughout the laneway suites in Toronto.

However, cars are considered by some to be an essential part of their lives even though it also attributes to climate change. Even in affordable laneway suites, garages may be needed for residents to park their vehicles. This is offered as an optional space. If it is not needed, the space can be allocated as a work area or another bedroom (figure 117). Overall, these typical laneway suites would have 2 bedrooms, 1 bathroom and the optional of a garage, study or third bedroom. The overall living area can range from 60m² to 70m², the most standard size of all three sites explored in this subchapter.

The back façade would also be custom designed. While the window sizes and positions would probably stay the same throughout the laneway suites, the difference may come from the dormer. Three different dormer designs are shown in figures 112, 116 and 120. Figure 120 is a typical design that is aligned with the current zoning by-law. Figure 116 shows a dormer that is 45% of the total width of the laneway suite, while figure 112 pushes this limit to 60%. As the dormer becomes wider, it would encompass more

rooms on the second floor of the laneway suite. Windows would be needed in these rooms. This is a change that can influence the second floor plan through the openings in the dormer.



Figure 122 - Laneway view, the laneway atmosphere after the construction of the laneway suite

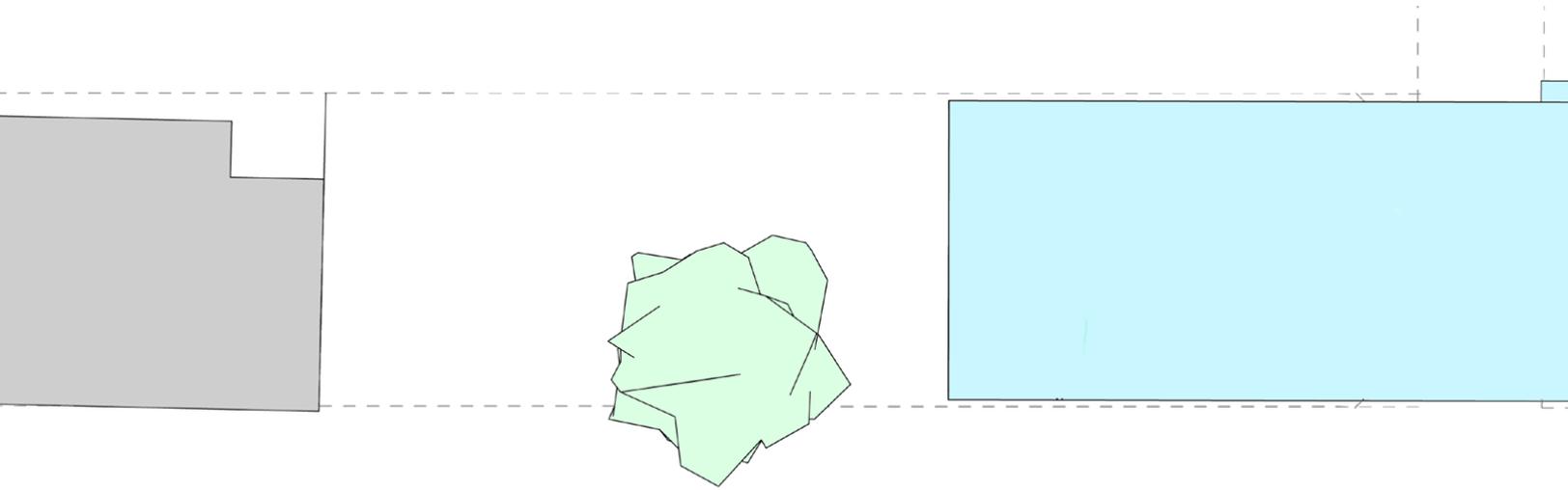


Figure 123 - Site plan of the bridge house and the prefabricated laneway suite as a whole



Figure 124 - Elevation of the bridge house and the prefabricated laneway suite

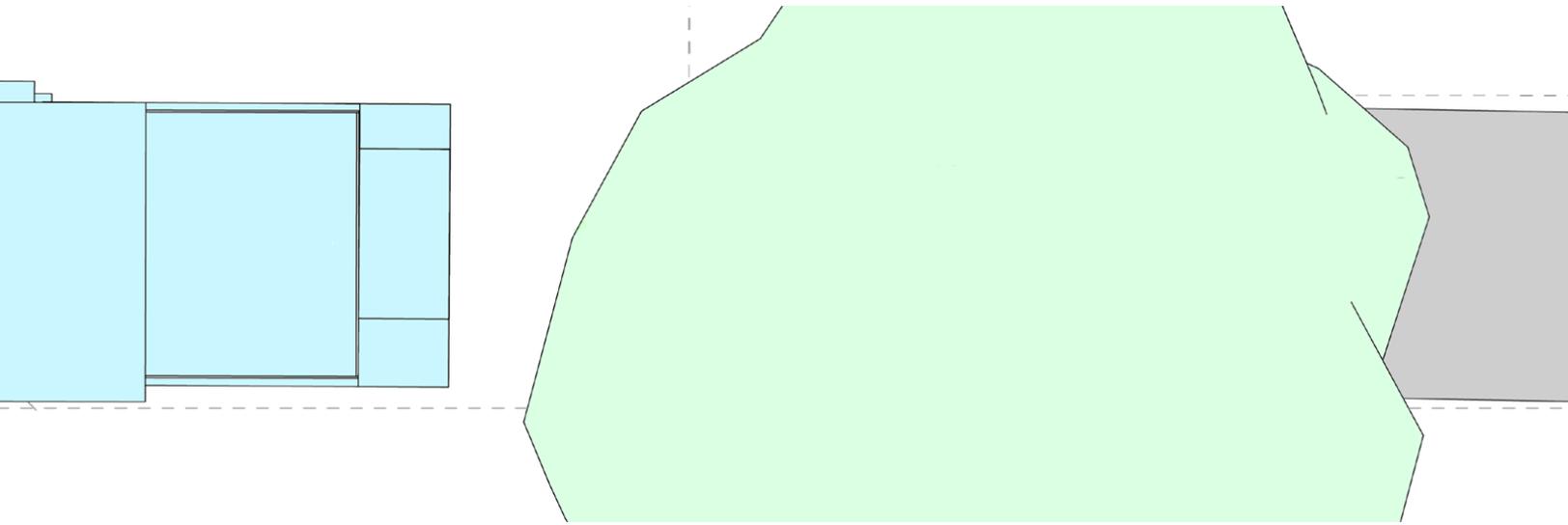
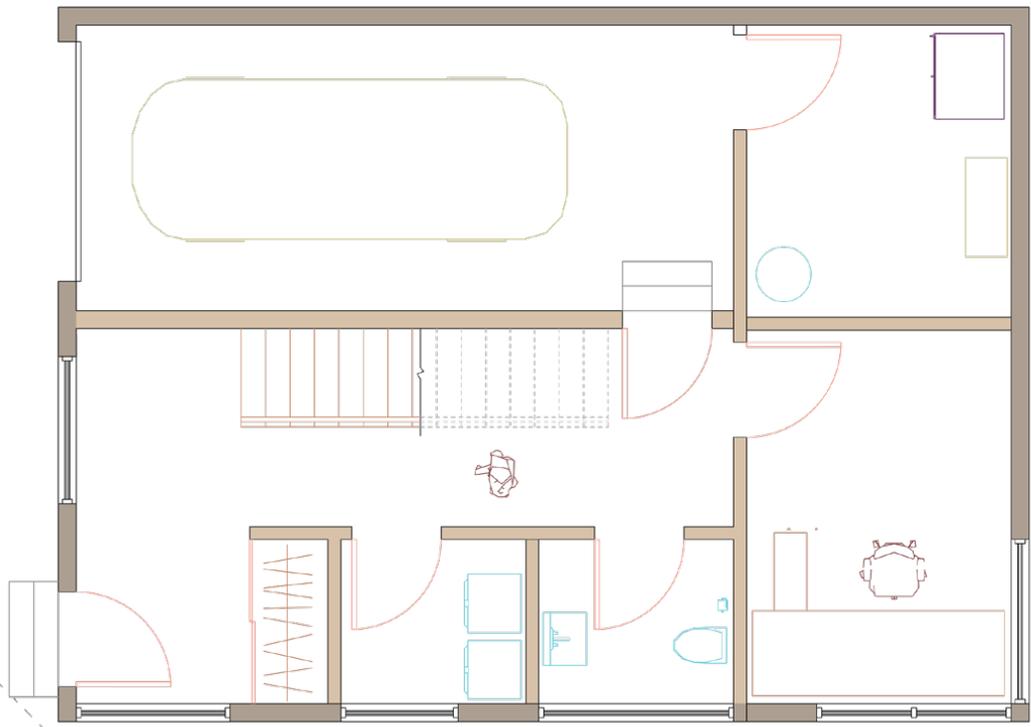




Figure 125 - Front view of bridge laneway house forming the gateway into the neighbourhood



LANEWAY



LANEWAY

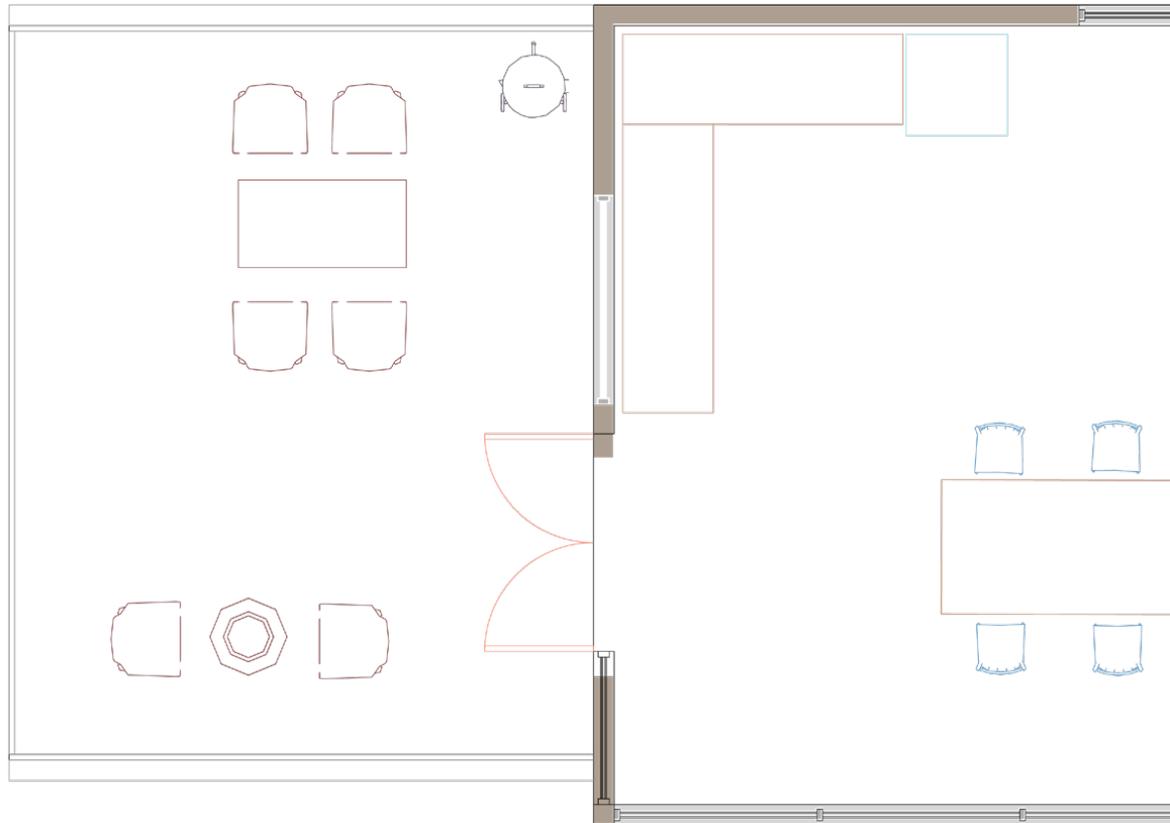
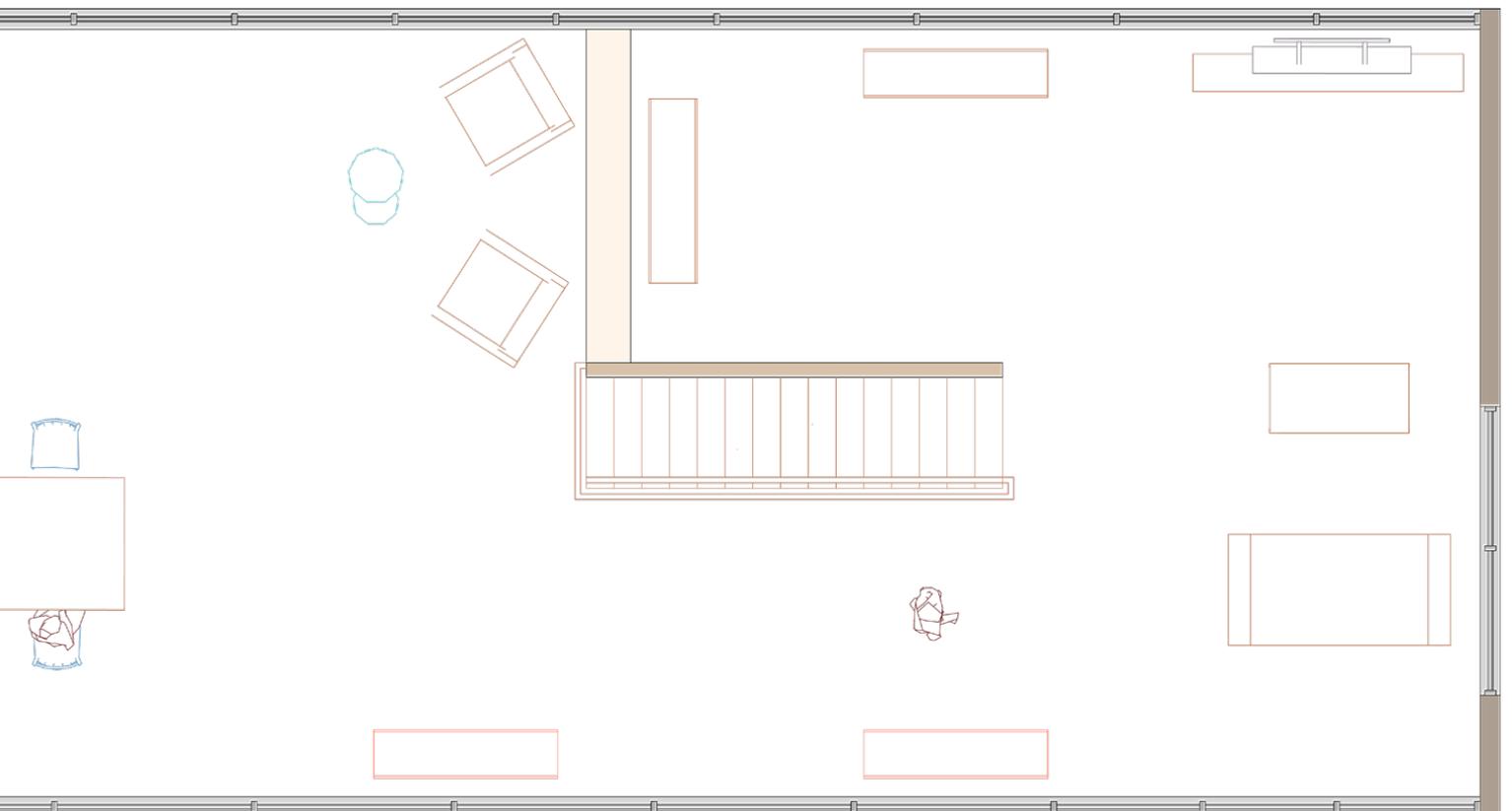
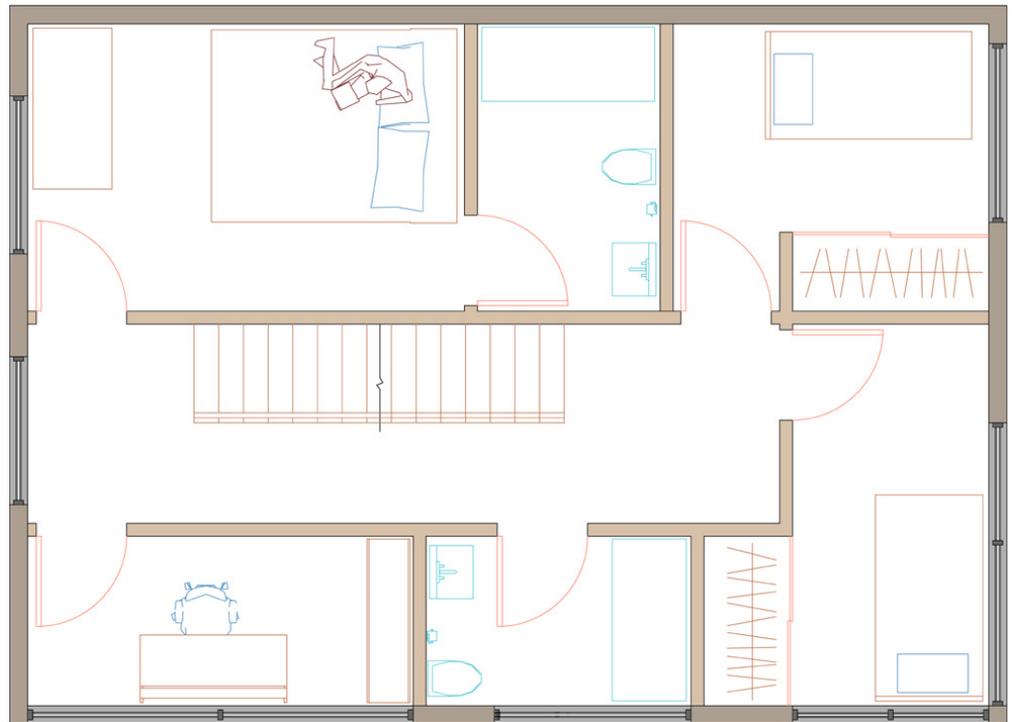


Figure 126 (left) -
ground floor
plan of bridge
house

Figure 127 (right) -
second floor
plan of bridge
house

Figure 128 (bottom) -
third floor plan
of bridge house



Alongside the custom façade designs that gives this neighbourhood character, there are two gateway houses that form thresholds at the two entrances to the laneway. The two laneway suites, referred to as 'bridge houses', are three storey buildings and bridge onto the laneway suite on the other side (figure 128). There are only two of them on this site, one for each entrance. By extending onto the neighbouring laneway suite, the threshold is formed. This creates a unique entrance to the laneway that is not commonly seen in other neighbourhoods in Toronto. However, negotiation would need to be made between the two laneway suite owners as the bridge house does intrude onto the neighbouring lot. It is a unique design that captures the character of the neighbourhood and paints prefabricated laneway suites in a different light.

The construction of these bridge houses would need to be more on site construction and less prefabrication. Some walls and floors can be prefabricated, but they are quite different from the typical laneway suite on this site. These bridge houses have 3 bedrooms, 2 bathrooms and an office, similar to a full size house (figure 127 & 128). Of course, the main feature of this house is the third floor, the 'bridge'. This floor has floor to ceiling glazing on the entire wall looking onto the school or the farmer's market. This is the location of the kitchen, dining room and living room, more public spaces that benefit from the natural sunlight and the open view (figure 129).

Linking directly with the kitchen space is the roof garden (figure 129). In warmer weather, residents have easy access to the roof garden after preparing their food in the kitchen. The laneway suite that this roof garden rests on needs to be specially reinforced to hold the force of human activities. Thus, these roofs cannot be prefabricated.

4.2 Recommendations and Visions for the Future

In subchapter 4.1, architectural design solutions are explored in three different sites with different conditions that prove the shortcomings of the current laneway suite zoning by-laws. This subchapter gives several non-architectural recommendations that governmental bodies can enforce to incentivize more laneway suite constructions.

Previously mentioned in section 2.3.1, a homeowner may lack money, time or the mental capacity to follow the construction of a laneway suite for several months. The best solution for the homeowners would be to make the laneway suites easier to build. Not only in terms of construction, but the design, application and approval process as well. Many perspectives might need to be analyzed to approve relaxing these rules and regulations, but they do need to be changed for more laneway suites to be built.

Another change that the Toronto City Council can impose is to increase the allowed Floor Space Index (FSI) on the Residential zoned lots. Even if laneway suites cannot be built due to various reasons, the homeowners can renovate or add to their existing houses. This is beyond the scope of laneway suites, but the increased housing density would be greatly appreciated in today's Toronto housing market.

A third option is to promote the different uses of a laneway suite. Laneway suites are currently being promoted mostly as a rentable suite. However, other ways to use the laneway suite, discussed in subchapter 2.3, can also be promoted to give homeowners different incentives to build their laneway suite. Even though the laneway suites might not enter the real estate market or the rental market, they would create more housing opportunities overall, and thus indirectly ameliorate the current housing crisis.

Conclusion

Throughout this thesis, several issues have been identified to have caused the recent drastic increase in the housing prices. Especially in the last few years, the COVID-19 pandemic acted as a catalyst to substantially inflate Canada's economy. While the pandemic is the catalyst, the direct causes for the housing crisis have been the lack of available housing in Toronto. Currently, first-time homebuyers, those people that do not own any existing assets, cannot afford average priced houses in Toronto.

Several direct and indirect causes are analyzed to have induced this increase in demand. These causes include the North American housing ownership framework, the migration to urban areas, the unaffordable rental market, and most importantly, the zoning by-law regulations posed by the municipal government.

43 City of Toronto, City Planning Division, *Changing Lanes: Laneway Suites in the City of Toronto* (2018).

This zoning by-law regulation is limiting housing growth. It acts as restrictions that have created a Missing Middle housing issue in Toronto, and this unmalleable Toronto urban fabric is causing less of these mid rises to be built. As an alternative, Toronto City Council has adopted the 'Changing Lanes Program' to potentially provide more housing density to the existing fabric. This program allowed the construction of laneway houses in the backyards of houses that are adjacent to laneways⁴³.

This thesis, through the design of the three selected sites discussed in Chapter 4, has proposed improvements on the 'Changing Lanes Program'. It provides alternatives to the zoning by-law, firefighting and other infrastructural services. The ultimate goal is to provide additional housing opportunities, and to turn Toronto's laneways into lively communities. This can be achieved by diversifying the uses of laneway suites. This includes renting the suite, severing the lot, multi-generational living, and multi-family property ownership. All of these strategies can provide financial incentives for both the main house residents as well as the laneway suite residents.

The existing zoning by-laws require revisions to increase opportunities to build laneway houses. Not all of the laneways are the same, and the over-generalization of the zoning by-law is too restrictive in regulating the design of laneway suites. The three sites designed in this thesis critique the current zoning by-laws, and explores potential directions to improve it.

The 'central site' is designed to explore the concept of verticality. With clever use of different types of vertical circulation and space-saving furniture, the vertical laneway suite can be achieved despite being restricted by the setbacks. The 'east site' explores the potential of semi-detached laneway houses and horizontal property lines to divide two units. The 'west site' is a fairly regular site that provides a prototype for the most common laneway neighbourhood throughout Toronto. This site explores the potential of a hybrid pre-fabricated and

on-site construction methods, creating affordable laneway suites with character.

This thesis has provided several neighbourhood densification strategies for the laneways of Toronto. It aims to incite discussion on the topic of unaffordable housing and encourage policy makers to revise existing regulations in order to provide first-time homebuyers an opportunity to live in the city of Toronto.

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Appendix A - City of Toronto Zoning By-Law on Laneway Suites

This is Chapter 150.8 of the City of Toronto Zoning By-Law on Laneway Suites. This is comprehensive as of the writing of this thesis, but it may be subject to change by City of Toronto.

Citation Information:

City of Toronto. City Clerk. *City of Toronto Zoning By-Law 569-2013, as Amended (Office Consolidation)*. Toronto, ON: City Planning Division, 2021. https://www.toronto.ca/zoning/bylaw_amendments/ZBL_NewProvision_Chapter150_8.htm.

150.8 Laneway Suites

150.8.1 General

(1) Application of this Section

The regulations of Section 150.8 apply to laneway suites. [By-law: 810-2018]

150.8.20 Use Requirements

150.8.20.1 General

(1) Laneway Suite – Permitted Uses

(A) Despite regulation 10.5.60.1(2), an ancillary building may be used for living accommodation in one laneway suite.

(B) Despite regulation 10.5.60.1(3), an ancillary building may have both food preparation facilities and sanitary facilities in a laneway suite.

(C) Despite regulation 150.5.60.1(1) a home occupation is permitted in a laneway suite if the laneway suite is exclusively and separately occupied as a principal residence, applying the regulations of Section 150.5 as if it is a dwelling unit; and

(D) Despite regulation 150.13.20.1(1) a short-term rental is permitted in an ancillary building if it is in a laneway suite that is exclusively and separately occupied as a principal residence. [By-law: 810-2018]

(2) Laneway Suite – Use Restriction

A maximum of one ancillary building containing a laneway suite is permitted on a lot. [By-law: 810-2018]

(3) Laneway Suites – Location Restriction

A laneway suite is not permitted in the area bounded by Avenue Road, the Canadian Pacific (CP) Limited rail corridor, Yonge Street, Rosedale Valley Road, Sherbourne Street, Bloor Street East and Bloor Street West. [By-law: 1210-2019]

150.8.30 Lot Requirements

150.8.30.20 Lot Line

(1) Minimum Lot Line on a Lane

A laneway suite must be on a lot with a rear lot line or side lot line abutting a lane for at least 3.5 metres. [By-law: 810-2018]

150.8.50 Yards

150.8.50.10 Landscaping

(1) Landscaping Requirements for a Laneway Suite

Despite regulation 10.5.50.10 (3), for a lot with a residential building and an ancillary building containing a laneway suite:

(A) with a lot frontage of 6.0 metres or less, a minimum of 60 percent of the area between the rear main wall of the residential building and the front main wall of the ancillary building containing a laneway suite must be for soft landscaping;

(B) with a lot frontage of greater than 6.0 metres, a minimum of 85 percent of the area between the rear main wall of the residential building and the front main wall of the ancillary building containing a laneway suite must be for soft landscaping; and

(C) the area between the ancillary building containing a laneway suite and the lot line abutting a lane, excluding a permitted driveway, must be landscaping, of which a minimum of 75 percent must be soft landscaping. [By-law: 810-2018]

150.8.60 Ancillary Building Requirements When Containing a Laneway Suite

150.8.60.20 Setbacks

(1) Parts of a Laneway Suite to which a Required Building Setback Applies

The required minimum ancillary building setbacks apply to all parts of an ancillary building containing a laneway suite above-ground and below-ground, excluding footings. [By-law: 810-2018]

(2) Laneway Suite - Rear Yard Setback

Despite regulations 10.5.60.20(2) and (5) and regulation 10.10.60.20(1), the required minimum rear yard setback for an ancillary building containing a laneway suite is:

(A) if the rear lot line does not abut a street or lane and there are no openings such as vehicle access, doors or windows in the rear main wall of the ancillary building, 0.0 metres; and

(B) in all other cases, 1.5 metres. [By-law: 810-2018]

(3) Laneway Suite – Side Yard Setback

Despite regulations 10.5.60.20(3) and (6) and regulation 10.10.60.20(1), the required minimum side yard setback for an ancillary building containing a laneway suite is:

- (A) if the side lot line does not abut a street or lane and there are no openings such as vehicle access, doors or windows in the side main wall of the ancillary building, 0.0 metres;
- (B) if the side lot line abuts a street, the required minimum side yard setback for the residential building on the lot; and
- (C) in all other cases, 1.5 metres. [By-law: 810-2018]

150.8.60.21 Setback Exemptions

(1) Permitted Setbacks for Lawfully Existing Ancillary Buildings

If the lawful building setback of a lawfully existing ancillary building is less than the required minimum building setback for an ancillary building containing a laneway suite required by Clause 150.8.60.20, the required minimum building setback for a laneway suite in that lawfully existing ancillary building is:

- (A) the minimum rear yard setback for that lawfully existing ancillary building; or
- (B) the minimum side yard setback for that lawfully existing ancillary building. [By-law: 1210-2019]

150.8.60.30 Separation and Dimensions

(1) Minimum Separation between a Residential Building and the Ancillary Building

Despite regulation 10.5.60.30(1) an ancillary building containing a laneway suite must be:

- (A) no less than 5.0 metres from a residential building on the same lot if the height of the ancillary building is no greater than 4.0 metres; and
- (B) no less than 7.5 metres from a residential building on the same lot if the height of the ancillary building is greater than 4.0 metres. [By-law: 810-2018]

(2) Angular Plane

No part of an ancillary building containing a laneway suite may penetrate a 45 degree angular plane projected towards the rear lot line beginning from a height of 4.0 metres at a distance of 7.5 metres from rear main wall of the residential building on the same lot. [By-law: 1210-2019]

(3) Permitted Projections into a Required Angular Plane

Despite regulation 150.8.60.30(2), a dormer or a vertical extension of the front main wall of an ancillary building containing a laneway suite may project into the required angular plane if it occupies no more than 30 percent of the total width of the ancillary building's front main wall. [By-law: 1210-2019]

(4) Skylights and Windows in a Roof

Despite regulation 150.8.60.30(2), windows or skylights may project into the required angular plane a maximum of 0.3 metres. [By-law: 1210-2019]

(5) Maximum Length of a Laneway Suite

The permitted maximum building length for an ancillary building containing a laneway suite is 10.0 metres. [By-law: 1210-2019]

(6) Maximum Width of a Laneway Suite

The permitted maximum building width of an ancillary building containing a laneway suite is 8.0 metres, measured perpendicular to the lot centreline. [By-law: 1210-2019]

150.8.60.31 Separation Exemptions

(1) Minimum Separation Between a Lawfully Existing Residential Building and a Lawfully Existing Ancillary Building

If the separation between a lawfully existing ancillary building and a lawfully existing residential building on the same lot is less than the required minimum separation between an ancillary building containing a laneway suite and a residential building required by Clause 150.8.60.30, the required minimum separation between the lawfully existing residential building and the lawfully existing ancillary building is the separation that exists between the lawfully existing ancillary building and the lawfully existing residential building. [By-law: 1210-2019]

150.8.60.40 Height

(1) Maximum Height of a Laneway Suite

Despite regulation 10.5.60.40(2)(B), the permitted maximum height of an ancillary building containing a laneway suite is:

- (A) if the ancillary building containing a laneway suite is located a minimum of 5.0 metres to less than 7.5 metres from the residential building on the lot, 4.0 metres; and
- (B) if the ancillary building containing a laneway suite is located 7.5 metres or more from the residential building on the lot, 6.0 metres. [By-law: 810-2018]

(2) Maximum Storeys for Laneway Suites

Despite regulation 10.5.60.40(3), an ancillary building or structure containing a laneway suite may have a maximum of two storeys, subject to (1) above. [By-law: 810-2018]

(3) Height of Specific Structures on a Laneway Suite

The following structures on the roof of an ancillary building containing a laneway suite may exceed the permitted maximum height for that building by 1.0 metres:

- (A) antennae;
- (B) flagpoles;
- (C) parapets for a green roof, if they are no closer than 1.0 metres to the main walls of the ancillary building;
- (D) satellite dishes; and
- (E) weather vanes. [By-law: 810-2018]

(4) Height of Elements for Functional Operation of a Building

The following equipment and structures on the roof of an ancillary building containing a laneway suite may exceed the permitted maximum height for that building by 1.0 metres, subject to (5) below:

(A) equipment used for the functional operation of the ancillary building containing a laneway suite, such as electrical, utility, mechanical and ventilation equipment;

(B) structures or parts of the ancillary building containing a laneway suite used for the functional operation of the building, such as enclosed stairwells, roof access, maintenance equipment storage, chimneys, vents, and water supply facilities; and

(C) structures that enclose, screen or cover the elements listed in (A) and (B) above. [By-law: 810-2018]

(5) Height - Horizontal Limits on Elements for Functional Operation of a Building

Equipment, structures or parts of a building permitted in (4) above must not:

(A) cover more than 30 percent of the area of the roof, measured horizontally; and

(B) be located closer than 1.0 metres to the main walls of the ancillary building. [By-law: 810-2018]

(6) Height of Laneway Suite Entrance

Regulation 10.5.60.40(4) does not apply to an ancillary building containing a laneway suite. [By-law: 810-2018]

150.8.60.50 Floor Area

(1) Exclusion from Floor Space Index

The gross floor area an ancillary building containing a laneway suite is not included for the purpose of calculating the total gross floor area and floor space index for a lot. [By-law: 810-2018]

(2) Laneway Suite – Interior Floor Area

The interior floor area of an ancillary building containing a laneway suite must be less than the gross floor area of the residential building on a lot. [By-law: 810-2018]

(3) Exemption from Maximum Floor Area for an Ancillary Building

Regulation 10.5.60.50(2) does not apply to an ancillary building containing a laneway suite. [By-law: 1210-2019]

150.8.60.60 Decks, Platforms and Amenities, and Permitted Encroachments

(1) Interpretation of Platform Walls

The exterior sides of a platform, such as a deck, porch, balcony or similar structure, attached to or within 0.3 metres of an ancillary building containing a laneway suite, are

not main walls if at least 50 percent of the exterior sides above the floor are open to the outside. [By-law: 810-2018]

(2) Platform Restrictions

Despite regulation 10.5.60.20(11) a platform without main walls in accordance with (1) above, is permitted, if:

- (A) the area of the platform, other than a green roof, is less than 10 percent of the interior floor area of the laneway suite;
- (B) the platform complies with the required minimum building setbacks, separation distances and angular planes for the ancillary building containing a laneway suite; and
- (C) the exterior sides of a platform adjacent to a side yard must be visually screened from an abutting lot by an opaque barrier with a vertical dimension of no less than 1.5 metres.

[By-law: 810-2018]

(3) Platform Height

Despite regulation 10.5.60.40(5)(B), the level of the floor of a platform permitted in accordance with (2) above, other than a green roof, must be:

- (A) no higher than 0.2 metres above the level of the floor of the storey from which it gains access; and
- (B) no higher than 4.0 metres above average grade unless it is attached to or within 0.3 metres of a main wall facing a lane. [By-law: 810-2018]

(4) Permitted Encroachments for Platforms

Despite (2)(B) above, a platform without main walls in accordance with (1) above, together with stairs or ramps leading to the platform, may encroach into the distance separation required in regulation 150.8.60.30(1) a maximum of 1.5 metres from the front main wall of the ancillary building if the platform is no higher than 0.3 metres above the average elevation of the ground measured along the front main wall of the ancillary building. [By-law: 810-2018]

(5) Permitted Encroachments for Canopies and Awnings

A canopy, awning or similar structure, with or without structural support, or a roof over a platform which complies with (4) above, may encroach into a required separation distance or building setback, subject to the following:

- (A) the maximum height of the roof, canopy, awning or similar structure is 4.0 metres above the average elevation of the ground measured along the abutting main wall of the ancillary building;
- (B) a canopy, awning or similar structure may encroach into the distance separation required in regulation 150.8.60.30(1) a maximum of 1.5 metres from the front main wall of

the ancillary building; and

(C) between a lane and the ancillary building containing a laneway suite, a canopy, awning or similar structure may encroach into the ancillary building setbacks required in Clause 150.8.60.20 a maximum of 0.75 metres from the ancillary building's main wall facing the lane. [By-law: 810-2018]

(6) Architectural Features

Architectural features on an ancillary building containing a laneway suite must comply with the following:

- (A) a pilaster, decorative column, cornice, sill, belt course or other similar architectural feature may encroach into a building setback required in Clause 150.8.60.20 or into the distance separation required in regulation 150.8.60.30(1) a maximum of 0.6 metres; and
- (B) a chimney breast may encroach into a building setback required in Clause 150.8.60.20 or into the distance separation required in regulation 150.8.60.30(1) a maximum of 0.6 metres, if it is no wider than 2.0 metres. [By-law: 810-2018]

(7) Equipment

Wall mounted equipment on an ancillary building containing a laneway suite, such as vents, pipes, utility equipment, satellite dishes, antennae or air conditioners, may encroach a maximum of 0.6 metres into:

- (A) on a main wall of the ancillary building facing a lane, the minimum building setbacks abutting the lane required in Clause 150.8.60.20; and
- (B) on the front main wall of the ancillary building, the distance separation required in regulation 150.8.60.30(1). [By-law: 810-2018]

150.8.60.70 Lot Coverage

(1) Lot Coverage Requirement for a Lot with a Laneway Suite

Despite regulations 10.5.60.70(1) and 10.10.60.70(1), if a lot has an ancillary building containing a laneway suite:

- (A) the ancillary building containing a laneway suite it is not included in the overall calculation of lot coverage; and
- (B) the area of the lot covered by all ancillary buildings combined, including the ancillary building containing a laneway suite, may not exceed 30 percent of the lot area. [By-law: 1210-2019]

150.8.80 Parking and Bicycle Parking

150.8.80.1 General

(1) Parking Space Requirement for a Lot with a Laneway Suite

Despite the parking space requirements in regulation 200.5.10.1(1):

(A) if a lot has an ancillary building containing a laneway suite, no parking spaces are required for any dwelling units and secondary suites in a detached house, semi-detached house, townhouse, duplex, triplex, or fourplex on the same lot; and

(B) no parking space is required for a laneway suite. [By-law: 810-2018]

(2) Bicycle Parking Space Requirement for a Laneway Suite

An ancillary building containing a laneway suite must have two bicycle parking spaces within the laneway suite or within any required yard setback. [By-law: 810-2018]

APPENDIX B - Existing Laneway Suites IN Toronto

In this appendix, there are ten existing laneway suites shown additional to subchapter 3.1. There are many other existing laneway suites that are not included, and new ones are being constructed every day. These ten laneway suites are a few ones that have been confirmed on-site to be currently existing, and their addresses can be found in their respective figure descriptions.



Figure 129 (top) - View of the Laneway of 80R Garnet Avenue

Figure 130 (bottom)- Front view of 80R Garnet Avenue

Figure 131 - Laneway suite at
9 Peyton Lane





Figure 132 - Laneway suite at
9R Whitaker Ave

Figure 133 - Laneway suite at 24 Treford Place





Figure 134 - Laneway suite at 34 Orphanage Mews

Figure 135 - Laneway suite at 40 Argyle Place





Figure 136 - Laneway suite at 227R Wallace Avenue

Figure 137 - Laneway suite at 523R Lansdowne Avenue





Figure 138 - Laneway suite at 756R Markham Street



Figure 139 - Karma Co-op Food Store located in the laneway, 739 Palmerston Ave