Building on Building on Main Streets

by

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Author’s Declaration

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

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

Abstract

This thesis examines the problems of building on Toronto's main streets. These arterial mixed-use corridors that define much of the public face of the city, are the subject of ongoing residential intensification efforts through the Official Plan policies of the City of Toronto. The form that this new development takes can either reinforce and improve existing streetscapes and housing stock, or it might –as is already happening– replace the long-established vital urban patterns of main streets with very different, less versatile, and less diverse building forms with a diminished standard of both urban and interior living space. Part I considers main streets at the urban scale, while Part II is a discussion of housing quality and architectural aims that informs a series of proposed prototypical building designs to be located on a site on Queen Street West as an example of site conditions found on main streets in a variety of locations throughout the city.

To understand the urban implications of main street building, this study looks at the specific historical factors that have shaped Toronto's main streets, and looks at why they continue to have value and have become a focus for intensification today. It revisits key episodes in Toronto's redevelopment planning over the last four decades, particularly the St. Lawrence Neighborhood Plan, the Ataratiri Plan, and the Housing on Toronto's Main Streets Initiative. The precedent historical research points to the need for small increments of development on main streets in order to maintain the economic, social, and visual diversity that have made them such a vital and dynamic component of the city in the past. This scale of development calls for new building types to respond to the very particular site conditions of main streets. Modern building types that are typically used in these situations are ill suited to respond to these conditions, provide a limited range of unit types, and are leading to compromises of urban and interior spatial quality when applied to these sites.

The architectural discussion centers on the observation that traditional main street lot patterns, despite inherent rigidity and rationality, have nonetheless proven to be a functionally flexible urban structure that has accommodated and encouraged a remarkable diversity of uses, architectural forms, and individual interpretations over time. Comparable complexity and diversity of spatial qualities can be found in a variety of architectural design approaches, including those of Adolf Loos' 'Raumplan', Rudolf Schindler's 'Space Architecture', or Herman Hertzberger's concept of 'Polyvalent Form'. The spaces created by these architects are an architectural analogue of the dynamic, richly varied urban characteristics of Toronto's existing main streets. Both create the opportunities for individual expression and continually varied spatial experience that better reflects the complexity of both urban and domestic life. These precedents of architectural form -imbued with qualities of multiplicity, heterogeneity and reinterpretability- propose a counterpoint to the standard of functionally rigid, spatially limited and typologically predictable buildings and living spaces currently available. The proposed building designs are intended to widen the options for dwelling within the city, while offering an update and intensification of main streets that reinforces rather than replaces desirable existing urban patterns.

Acknowledgements

I would like to thank the members of my committee, John McMinn, Rick Andrighetti, Val Rynnimeri, and external examiner Mark Sterling. I would also like to thank Phillip Beesley, my M1 Studio professor who first drew my attention to main streets; R. Christopher Edey, Communications and Urban Planning Manager of the Redevelopment Office at the Centre for Addiction and Mental Health, for graciously answering all my questions about the site; and Elena Chernyshov for valuable feedback and proofreading throughout.

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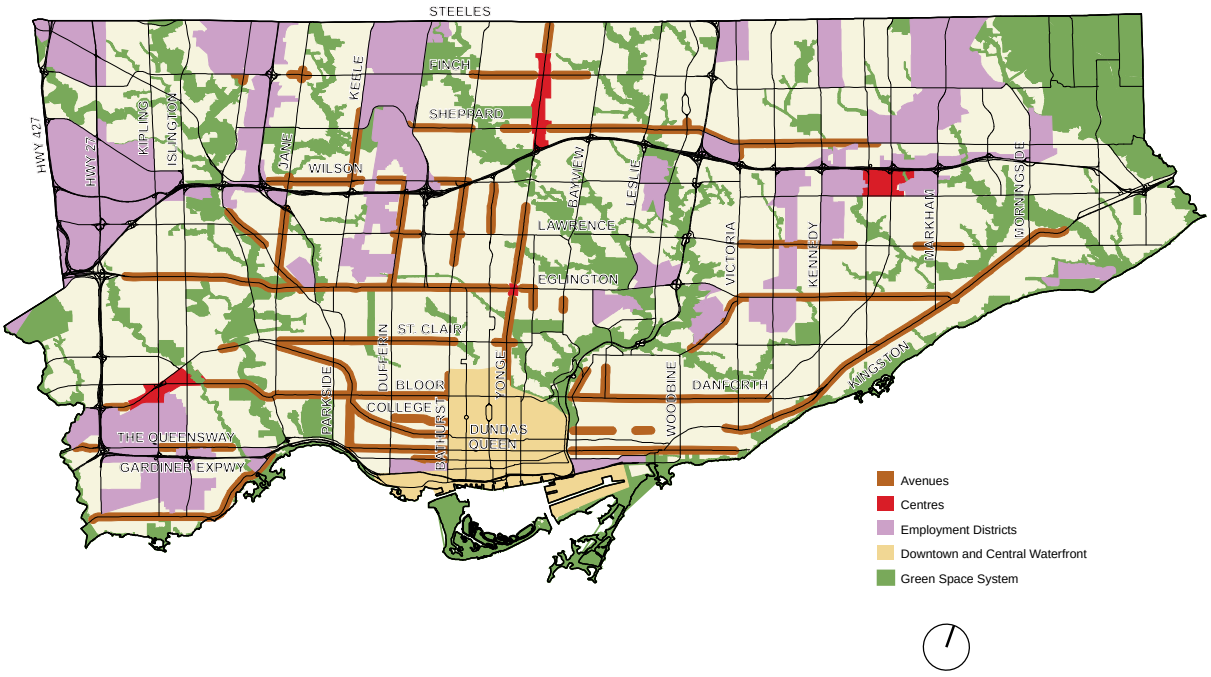
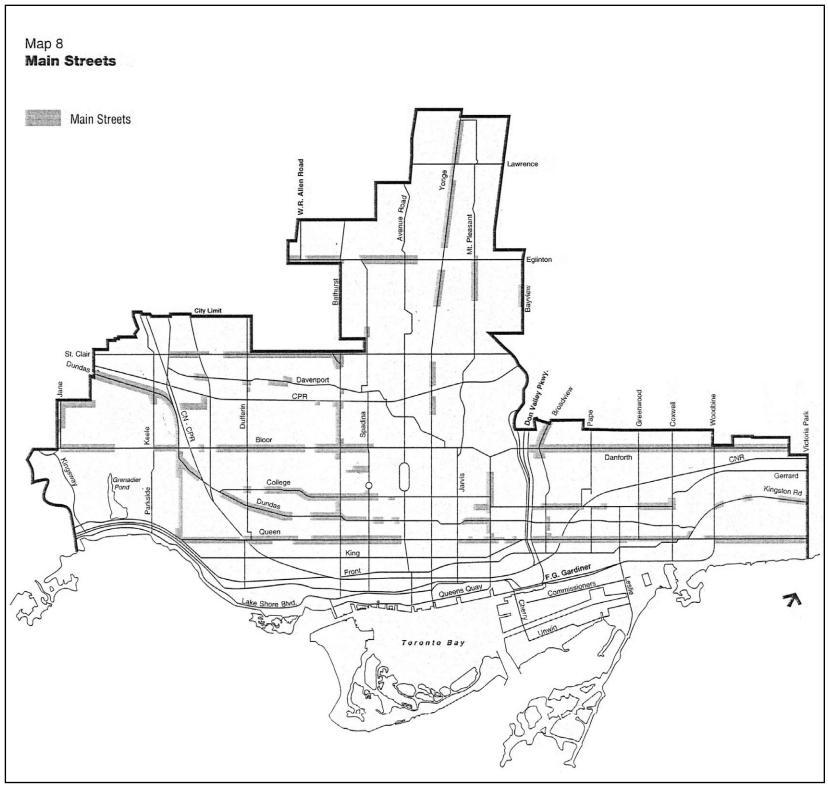




1. (above)
Illustration of urban structure, highlighting key growth areas from 2006 Official Plan for amalgamated City of Toronto
[Note 'Avenues' indicated in Brown]

2. (left)
Map of areas designated 'Main Streets' from 1993 Toronto Official Plan

Introduction

It is the current policy of the City of Toronto to concentrate its residential growth in three key areas: in the downtown and central waterfront; in the collection of four transit-oriented "Centres" across the city; and on the mixed-use arterial main streets or "Avenues."[1] The long-standing policy of preserving the stable neighborhoods of the central city is maintained by this focus on intensification of such alternative sites throughout the urban area. The last of these three growth areas, the 'Avenues', is the subject of this thesis. These streets play a key role in the identity, image and daily life of the city; their very specific qualities define much of the public face of Toronto. The new term "Avenues" has subsumed the old category of "Main Streets" in the City's Official Plan, now combining the arterial roads of the new amalgamated city with those of the older former City of Toronto into one broad category that refers to the same type of street.[2] Encouraging intensification along these mixed-use corridors that typically border the residential neighborhoods is hoped to allow a largely non-invasive form of redevelopment and an increasing of density in the built-up area of the city, adding new housing by updating the low-rise forms of old main streets and the vacant or underdeveloped sites of peripheral main streets, in the form of new mid-rise, mixed-use, multi-unit buildings. Toronto politicians, planners and architects have long recognized the potential for intensification and 'reurbanization' within these groups of buildings and sites, yet main streets remain largely underutilized given contemporary demand for housing, land and resources in the city. This goal of intensification as an alternative to continued urban sprawl, as a means to strengthen transit use, reduce automobile trips and make more efficient use of existing land and services, is taken largely as a given in the current study.

This study concerns itself with the built form of this new growth. The form this development and redevelopment takes can either reinforce and improve the existing streetscape and housing stock, or it might –as is already happening– replace the long-established vital urban patterns of main streets with very different, less versatile and less diverse building forms that instead offer architecturally and economically expedient building and dwelling types. Despite past City initiatives and extensive studies into the problems of main street building and intensification, a compelling model of main street building -both from an architectural and an urban quality standpoint- has not been widely adopted in Toronto, and shows little sign of becoming so. As a result, in the transition from traditional low-intensity forms of development on main

1 Toronto Planning and Development Dept., *Toronto Official Plan* (Toronto: City of Toronto, Planning and Development Department, 2006), 2-3.

2 Throughout the text that follows, the term 'main streets' is used to refer broadly to this category of streets, unless specifically addressing the new terminology of official planning documents.


AWTP 616
751-5555

3. (facing)
Toronto Planning Department projection of future of the 'Avenues'

streets to newer, higher-density types, much of the character of existing main street fabric stands to be lost being replaced by generic new buildings and a diminished standard of living space. Considering Toronto's contemporary housing production in the context of over a century of aspiration, struggle and research towards the improvement of urban and architectural quality, particularly in the area of multi-unit housing, the gains and improvements in residential design are being overwritten in the service of financially driven, expediently constructed forms of urban housing.

An assessment of current building production on main street sites in Toronto reveals two primary scales of building, and two accompanying kinds of profound failure. The first of these is the full-block building type, which is fundamentally out of scale with the fine-grained morphology of existing main streets fabric. This scale of building -regardless of height- represents the imposition of a suburban building type onto the existing finely-grained streetscapes. It revives the free-standing modernist high-rise slab apartment buildings common of the suburbs and urban renewal projects of Toronto in the middle decades of the last century that were developed to maximize floor-plate, corridor, elevator and parking lot efficiency, and to take advantage of economies of scale and repeatability. Mid-rise versions of this type are now frequently finding their way onto main street sites. While no longer intentionally isolated from surrounding built fabric by open space, these buildings are nonetheless isolated by virtue of their scale and divergence from existing urban patterns. They create a grain of development unlike either the older main street development or that of the adjacent residential streets. The generic and monolithic form of such full-block buildings inherently reduces the opportunities for the kinds of vital economic, social and visual diversity that have long characterized main streets in Toronto. The individual impact on the character of the street by a single project is significant, and the potential for damage much higher than with smaller scale developments. This large scale of building effectively leapfrogs any intermediate phase in the evolution of the city fabric in its transition from the traditional low-rise 'city of homes' to a city that is more uniformly intensified.[3]

4. (facing)
Traditional 'Main Street' - Queen Street West

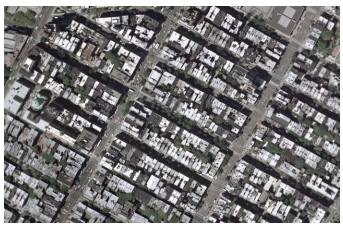
Redevelopment in Toronto must occur in the context of its existing fabric that is still largely made up of detached and semi-detached low-rise houses on residential streets, bordered by equally low-rise main street buildings. As such, Toronto remains at an early stage in its evolution as a city, in comparison with many other major urban centres in other parts of the world. A phase in this evolution of scale and density exists between the

3 Toronto as a 'city of individual homes' is a label first popularised in the early 20th century by figures like Dr. Charles Hastings, the city's Medical Officer of Health, whose campaign against tenements reinforced the prevalence of low-rise detached or semi-detached homes in the city. See chapter one for further discussion.

5.
Contemporary full-block main street development

6.
Contemporary infill scale development

Toronto



New York

Paris

Berlin

7.
Comparative levels of residential development among a selection of cities, shown at same scale

single-family home and the apartment building of many units, yet Toronto has seen the greatest quantity of housing produced at the extreme scales of low or high-rise. Moving from a pattern of buildings that contain at most a few apartments (as in the houses and main street buildings of many existing neighborhoods) to new buildings that contain hundreds of apartments, represents a major shift in the urban order. Whether or not these large buildings 'fit in' in terms of their height, use, or from an aesthetic point of view, they cannot create the same underlying conditions of diversity, and dynamism that the older smaller lot patterns and building types accomplished.

This is not to suggest that no new growth should occur, but rather to suggest that an intermediate scale of building is called for. Such a scale is beginning to occur in greater numbers on main streets today, but represents the second kind of failure referred to above. This second type of building are referred to as an 'infill' scale of building that individually occupy a small number of existing lots of a limited frontage of up to about 25 metres in total. This scale of building works well within the existing structure of the block and has the potential to continue the diverse and dynamic historic main street patterns while adding residential density. Here the failure is primarily one of quality of individual residential units. The constraints of the rationally planned Toronto grid with its characteristically narrow lots, combined with a series of other factors including specific main street zoning ordinances and building code requirements, typically leads to a predictable and poorly performing residential building form . The model that has recently begun to proliferate at this scale of development typically uses a flat concrete floor-slab construction, with a corridor on each floor, a compressed version of the 'slab' type mentioned above. On main streets, this yields a deep floor-plate building with individual apartments facing only one of two possible directions, competing for limited front or rear exposure. To maximize the number of units, individual apartments become very narrow and deep with few windows, and often, few bedrooms. The apartments are accessed on either side of a central corridor running parallel to the street, or by a compact central core, not unlike a high-rise point tower. On main street sites, such building types create poor interior conditions in terms of interior spatial variety, natural ventilation and access to daylight. They are a rational response to site conditions and economy, but not to the imperatives of amenity and quality of living space.

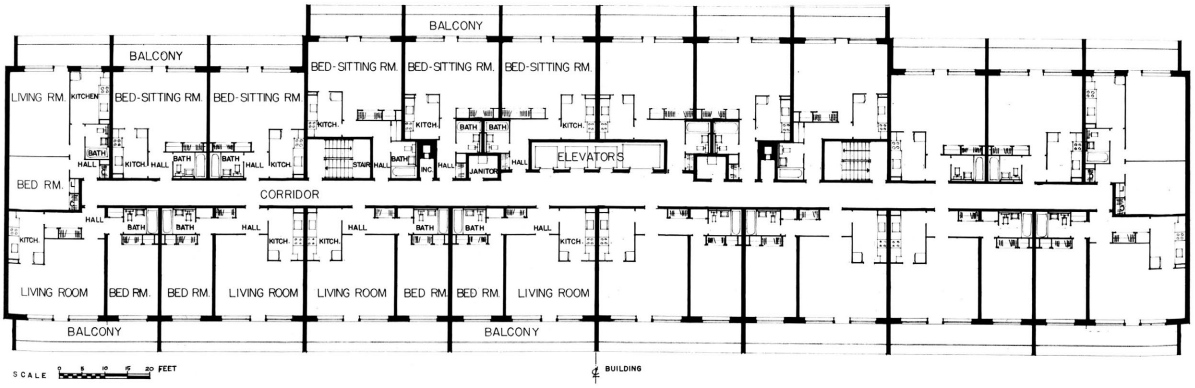
The potential for Toronto to develop its own middle-scale, mixed-use residential building types -much as other large cities worldwide have done, such as New York, Paris, or Berlin- that exploit the site conditions inherent on its main streets, remains unrealized. What is needed is high-quality new housing, from small single-bedroom to large multiple-bedroom apartments for a variety of potential residents, in buildings that maintain the fine-grained

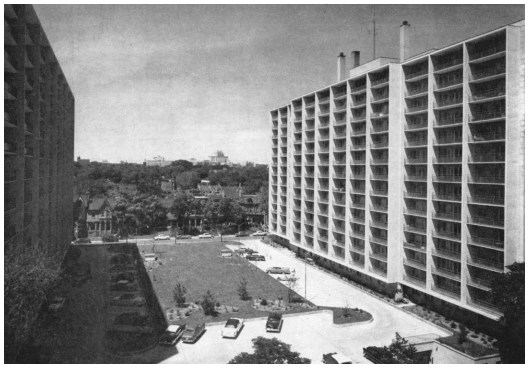
and highly diverse streetscape of existing main streets. In response to both the urban and architectural failures mentioned above, this thesis sets out to address the problem of the narrow frontage main street building.

To understand the implications of this problem, it is necessary to examine the specific historical factors that have created Toronto's main streets, and to look at why they continue to have value, and have become a focus for intensification today. It is also necessary to review precedent research into the issues of urban redevelopment in Toronto, particularly the "Housing on Toronto's Main Streets Initiative" of the early 1990s (that dealt specifically with main street building) and other attempts over the last four decades at providing new housing in keeping with the existing urban fabric. This precedent historical research establishes a rationale for proposing an appropriate new building scale of the desired streetscape quality and functioning of blocks and buildings on these streets.

As a corrective to the recent decline in urban and architectural quality of new main street buildings at both large and infill scales, a discussion of housing quality and a set of design criteria and architectural aims are proposed. In observing traditional main street lot patterns, whose inherent rigidity and rationality has nonetheless proven to be a functionally flexible urban structure that has engendered a remarkable diversity of uses, architectural forms and individual interpretations over time, a comparison can be drawn to a variety of architectural design approaches, including those of Adolf Loos' 'Raumplan', Rudolf Schindler's 'Space Architecture', or Herman Hertzberger's concept of 'Polyvalent Form'. The spaces created by these architects are spatially complex and heterogeneous. Their juxtaposition of varied spatial situations within individual dwellings create a flexible backdrop for, and the mirror of, the variety and complexity of domestic life. These spaces are the architectural analogue of the dynamic, richly varied urban characteristics of Toronto's existing main streets. Both create the opportunities for individual expression and continually varied spatial experience. The precedent of architectural form imbued with qualities of multiplicity, heterogeneity and reinterpretability that is implied in this comparison proposes a counterpoint to the standard of functionally rigid, spatially limited and typologically predictable buildings and living spaces currently on offer.

A series of prototypical building designs is then proposed in order to demonstrate the concepts and design intentions of the thesis. A site on Queen Street West is used as an example of site conditions found on main streets in a variety of locations throughout the city. The objectives underlying these design proposals are intended to contribute to the continued evolution of contemporary mixed-use residential building types specific to main streets. These types represent a widening and improvement of the options for dwelling

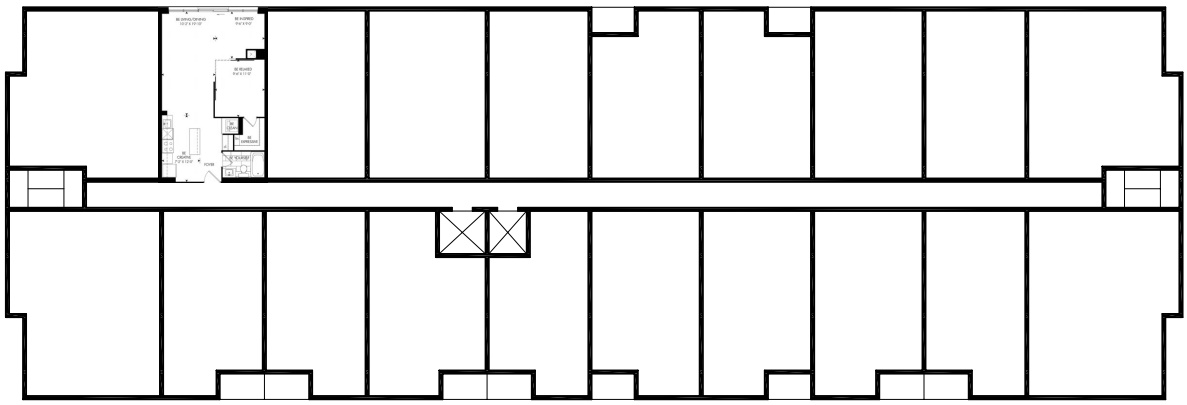




8. (top and right)
Downtown residential apartment building *City Park Apartments* at Alexander and Church Streets. (Peter Caspari Architect, 1957)

Comparison of mid-century modern Toronto apartment slab type and contemporary large scale main street building. Different exterior treatment, but fundamentally the same building typology.

9. (lower right and bottom)
Contemporary downtown Condominium building on Queen Street West (Page + Steele Architects, 2008 completion)



within the city, while offering an update and intensification of main streets that reinforces rather than replaces desirable existing urban patterns.

10.
Typical main street

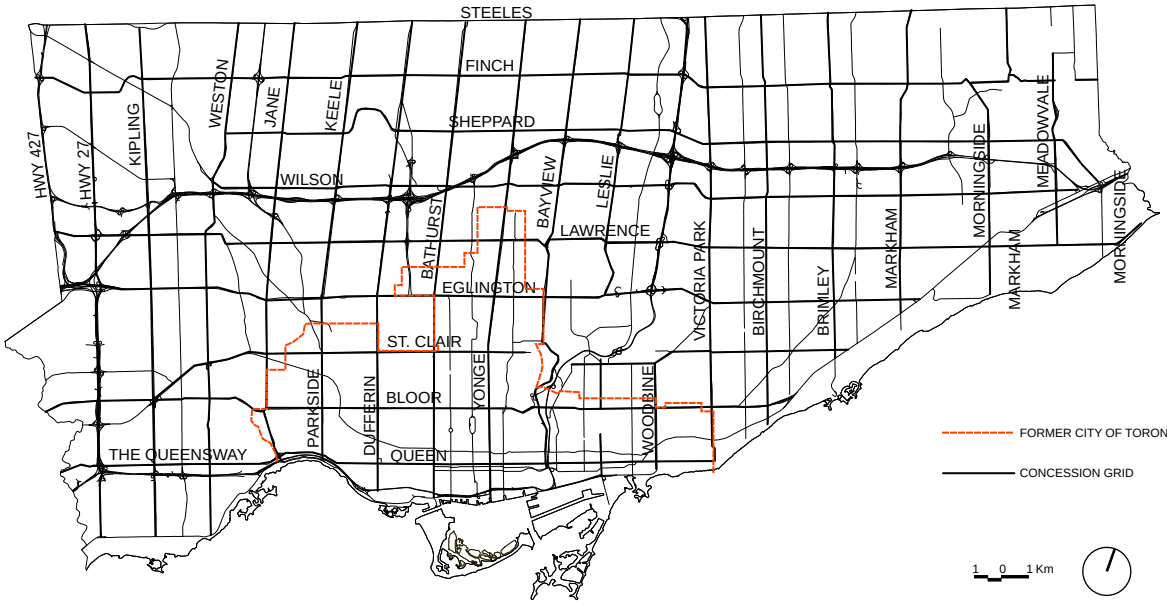
11.
Typical residential street

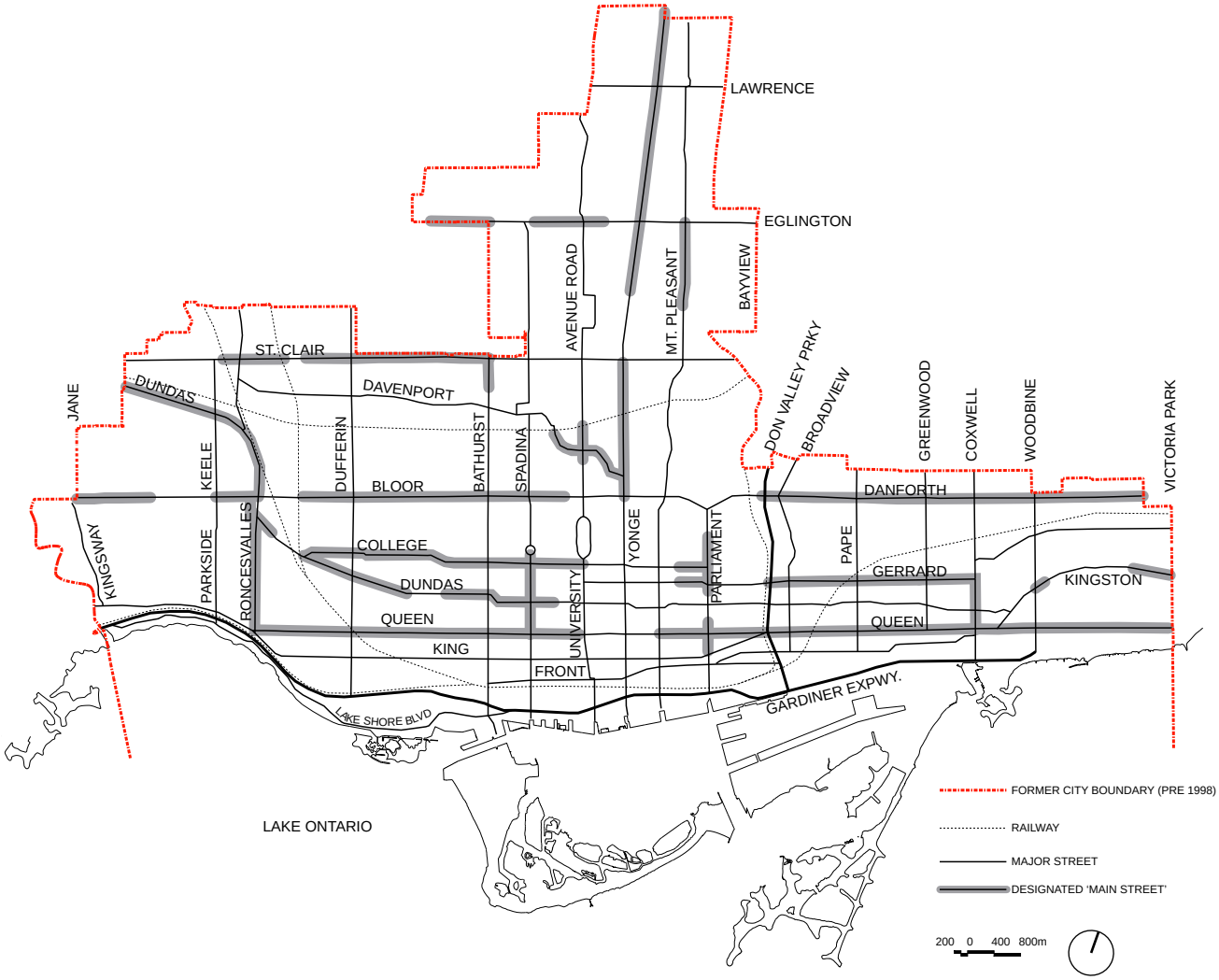
12.
2006 census data indicating dwelling units in Toronto by structure type. The greatest proportion are low or high-rise types.
(Total number of dwellings in Toronto is 979,440)

Structure Type	
Single Detached	266,880
Semi-Detached	69,465
Row/Town house	54,690
Apartment Duplex	44,105
Apartment <5 storeys	162,985
Apartment 5+ storeys	379,700
Other Single-Attached	1,345
Movable dwelling	165

13.
View of *CityPlace*, a new high-rise residential development on the former railway lands in Toronto's south downtown

PART I


STEELES
FINCH
SHEPPARD
WILSON
LAWRENCE
EGLINTON
ST. CLAIR
BLOOR
QUEEN
THE QUEENSWAY
HWY 427
HWY 27
KIPLING
WESTON
JANE
KEELE
BATHURST
BAYVIEW
LESLIE
VICTORIA PARK
BIRCHMOUNT
BRIMLEY
MARKHAM
MORNINGSIDE
MEADOWVALE
PARKSIDE
DUFFERIN
YONGE
WOODBINE
FORMER CITY OF TORONTO
CONCESSION GRID
1 0 1 Km


LAWRENCE
EGLINTON
ST. CLAIR
DAVENPORT
DUNDAS
BLOOR
COLLEGE
DUNDAS
QUEEN
KING
FRONT
GARDINER EXPWY.
LAKE SHORE BLVD
LAKE ONTARIO
JANE
KEELE
DUFFERIN
BATHURST
SPADINA
AVENUE ROAD
MT. PLEASANT
BAYVIEW
DON VALLEY PRKY
BROADVIEW
GREENWOOD
COXWELL
WOODBINE
VICTORIA PARK
DANFORTH
PAPE
GERRARD
KINGSTON
QUEEN
KINGSWAY
PARKSIDE
RONCESVALLES
YONGE
UNIVERSITY
PARLIAMENT
FORMER CITY BOUNDARY (PRE 1998)
RAILWAY
MAJOR STREET
DESIGNATED 'MAIN STREET'
200 0 400 800m

Chapter 1: Defining Main Streets

Introduction

> Toronto is not different from other cities in having main streets, but those streets are especially important here, being part of the most basic "self" of the city. The city has many selves, as we acknowledge when we speak of the neighborhoods, the downtown and the waterfront. But what holds them together is the structure of the city, the grid upon which the city is built, with the main streets occurring every so often in both directions… They provide a congenial form for the city; if they hadn't, they would have disintegrated. They would have blurred. But they remain the bones of the city and have much to do with its personality.[4]

The term 'main streets' is applied generally to the main arterial roads of Toronto that are directly served by public transit, are lined with primarily low density mixed commercial and residential buildings that define the edges of, and provide a neighborhood focus for, the low-rise residential neighborhoods that make up much of Toronto.[5] Although the term mostly refers to those streets of the original concession grid of the city which historically developed as the primary commercial and transit corridors of the city, other streets also developed along similar lines. Because of the consistent pattern of development of Toronto's non-residential streets, almost all streets that perform a similar role and display similar characteristics of built form and use could be called 'main streets'.

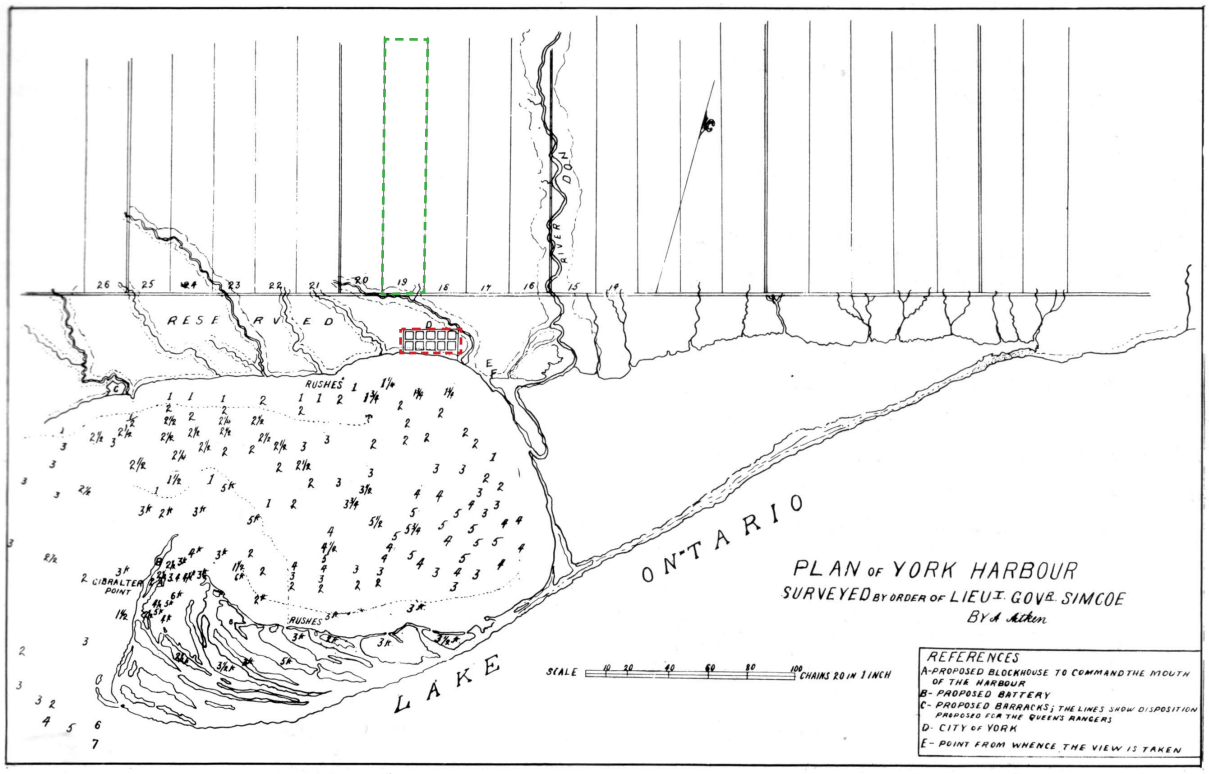
These streets have traditionally played a number of roles in the city: they are the site of the main transit lines, the primary pedestrian shopping streets, and the public face -at once connecting and defining- of the various residential neighborhoods that make up the city. They are a model of mixed use development that predates land-use controls, and have proven to be a flexible structure that supports continued evolution of changing uses, populations and architectural styles. Their ability to perform these roles has to do with the particular block structure, lot divisions, building types, uses and configurations prevalent on main streets. Each of these factors play a crucial role in their functioning as one of Toronto's most recognizable, convivial and common urban structures. Similar forms are not uncommon in many North American cities, but Toronto's mixed-use, low- to mid-rise narrow-lot pattern of main street development has a specific history in the course of the city's past and continued growth.

14. (facing top)
Map of the amalgamated City of Toronto (formerly the Municipality of Metropolitan Toronto or 'Metro Toronto'

15. (facing)
Map of the former City of Toronto, largely built-up prior to 1950, containing many of the old stable central residential neighborhoods and main streets

4 Jane Jacobs, "Putting Toronto's Best Self Forward," *Places 7*, no. 2 (Winter 1991): 51.

5 Definition given in: City of Toronto Planning and Development Department, *City of Toronto Official Plan Part 1 – Cityplan By-law 423-93* (Toronto: City of Toronto Planning and Development Department, 1993), 13.2.



Initial Town Site

Typical Park Lot

16. (above)
1793 Aitken / Simcoe Plan

17. (left)
Map of the Township of York
by John O. Browne (1851)
The larger order of the concession grid can be clearly seen in this early map.

Historical Development of Main Streets

These avenues have their origins in the oldest plans for the city. Their patterns of development are long-standing and were already established by the turn of the 19th century. The first factor to shape main streets is the land survey that followed Toronto's selection as capital of Upper Canada by Lieutenant Governor John Graves Simcoe in 1793. This survey prepared by Alexander Aitken set out the rectilinear grid that would set the pattern of development for the next two centuries in the city. In this plan, some of the better established native trails and trading routes did endure as streets (Lakeshore, Davenport and Don Trails), yet the new grid largely ignored existing natural features (ravines, lakeshore, topography). Eric Arthur in his book *Toronto: No Mean City* describes the early town structure of the Aitken plan as follows:

> It consisted of ten square 'city' blocks bounded by George, Berkeley, Adelaide, and Front Streets, with the areas from Parliament to the Don and from Peter to the Humber set aside for government and military purposes. North of the future Queen Street, Simcoe laid out a range if 100 acre lots which were to be granted as "douceurs" to the officials as compensation for having to come to York.[6]

During the early settlement of the town of York, as the city was known until its incorporation in 1834 under the name Toronto (an older name of native origin), Queen Street (then known as Lot Street) ran from Scarborough township to the Humber River, and became a baseline for dividing the lands of the city according to the Aitken/Simcoe plan. Blocks were laid out on a two kilometre grid of concession roads –the streets that define that grid remain the main arterial roads of the city today (Queen, Bloor, St. Clair, and Eglington Streets running east west, and Yonge, Bathurst, Dufferin, and Keele Streets running north-south), and remain largely what are referred to as the main streets or avenues of Toronto, although other streets also perform similar roles (King, College, Dundas, and Dupont Streets for example). The original ten square city blocks were located south of Queen Street to the lake, divided into 80m square blocks and subdivided into 20m wide by 40m deep building lots, and the downtown pattern was thus established.

The lands north of Queen Street were divided into the 32 'Park Lots' of 100 acres –long narrow lots, granted to town residents who owned town lots (the 'douceurs' for government administrators referred to above). These lots ran between Queen and Bloor Streets (Bloor was the northern boundary of the city until the 1880s) Further north, larger 'Farm Lots' were also set out within the grid, and were also eventually subdivided for urban use. As the city began to grow, the large park lots began to be subdivided and sold to private developers. The system of predominantly residential streets and lots that

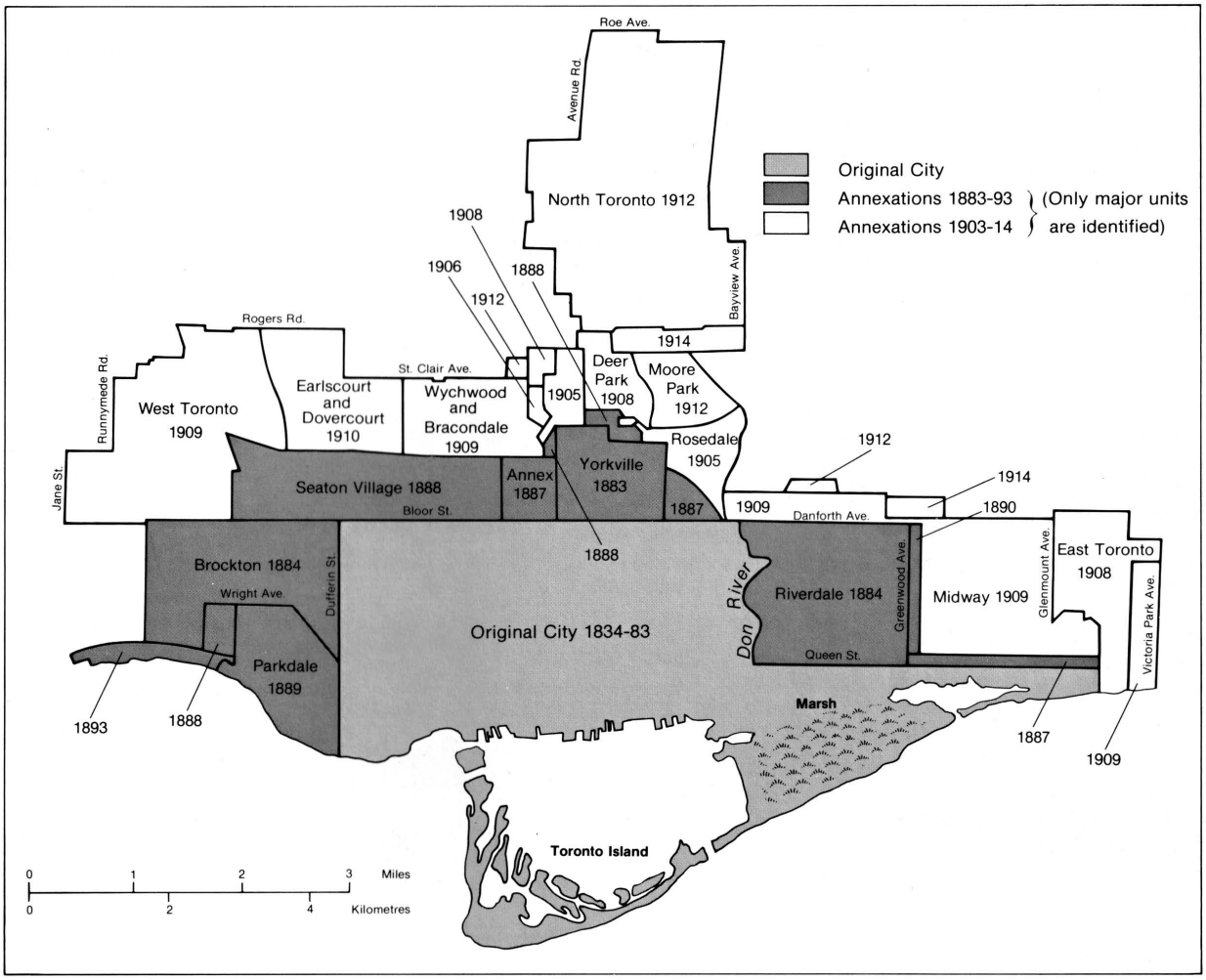
6 Eric Ross Arthur and Steven A. Otto, *Toronto: No Mean City*, 3rd ed. revised by Steven A. Otto ed. (Toronto: University of Toronto Press, 1986), 17.

ran between major concession roads was established by subsequent surveys and subdivisions as lands changed hands and were divided into smaller and smaller parcels for individual sale and development. Since the specific layout of streets between main roads was left to the individual developer (and in response to local topographical conditions), a number of unique conditions did occur: often the east west streets running between park lots do not meet, causing unusual jogs and bends, whereas north south streets tend to run straight. Meanwhile the various subdivisions remained bounded by the larger concession grid, maintaining a high order of consistency overall. Despite the largely uncoordinated development, a general pattern did emerge; one that made efficient use of available land using narrow detached or semi-detached single family houses of up to three or four storeys, arranged in long blocks, with a network of back lanes that allowed for refuse removal, carriage houses, and later garages, to occur out of sight behind the residential street. The same laneways also branched out to run parallel behind the main street commercial portion of the block. The generic form of a Toronto block resulting from the park lot heritage is a long rectangle, divided into a capital 'I' by the laneways in the centre and the two ends.[7] (See illustration p.21)

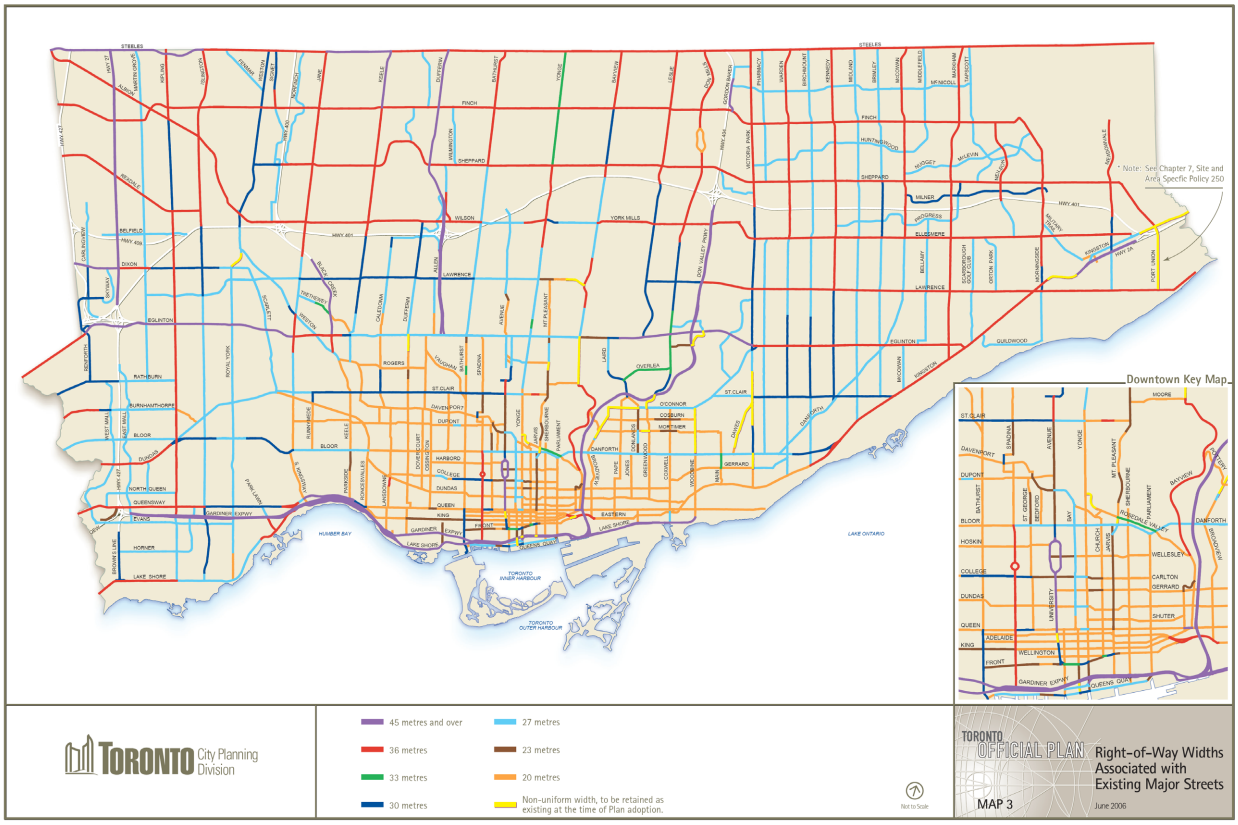
Throughout the 19th and early 20th centuries, new residential developments around Toronto –sometimes suburban villages and nearby towns (not yet part of the City of Toronto) - developed around a given stretch of a main street which served as the commercial and communal focus for that village –its 'high-street'. As the city continued to grow, numerous such villages were annexed. These villages attached their already developed residential areas, each served by a stretch of commercial strip along a main street, following the same underlying grid pattern as the rest of the city. City annexations between 1834 and 1914 (Parkdale, Riverdale, the Annex, Seaton Village, Yorkville, Davisville, Donmount and Leslieville) doubled the City's area by the year 1900.[8] This pattern of growth began to create the multi-centred, porous city of neighborhoods we still see today, based on the consistent form and hierarchy of streets.

7 Charles Waldheim, Brigitte Shim, Donald Chong, and Steffanie Adams. *Site Unseen : Laneway Architecture and Urbanism in Toronto* (Toronto: Faculty of Architecture, Landscape, and Design, University of Toronto, 2004), 15. This text provides a discussion of block, housing and laneway structure, history, and evolution.

8 Toronto Planning and Development Dept., Art Eggleton, Allan Tonks, and John Sweeney. *Housing on Toronto's Main Streets - a Design Competition. 1990*: 1990, 13. and J. M. S. Careless, Toronto to 1918: An Illustrated History (Toronto: James Lorimer & Co., 1984), 125.



18.
Map of the Toronto Annexations,
1834-1914



19.
Right-of-way widths of major roads of amalgamated City of Toronto. Central area of the former city comprised of mainly 20m R.O.Ws

20.
Table of Main Street and Main Street Lot Characteristics for the former City of Toronto

Avg. right-of-way	20m
Right-of-way range	20-40m
Avg. Lot Depth	30m
Range of Depths	30-45m
Avg. Lot Width	10m
Range of Widths	4.5-9+ m
Avg. Lot size	337m²
Avg. Lot Coverage	1.2X

Source: Toronto (Ont.). City Council., Robert E. Millward, Daniel Burns, and R. M. Bremner. *Housing on Toronto's Main Streets: Proposals Report, July 1989* , (Toronto: The Council, 1989). Figures reflect the former city of Toronto in 1989, but these remain largely accurate

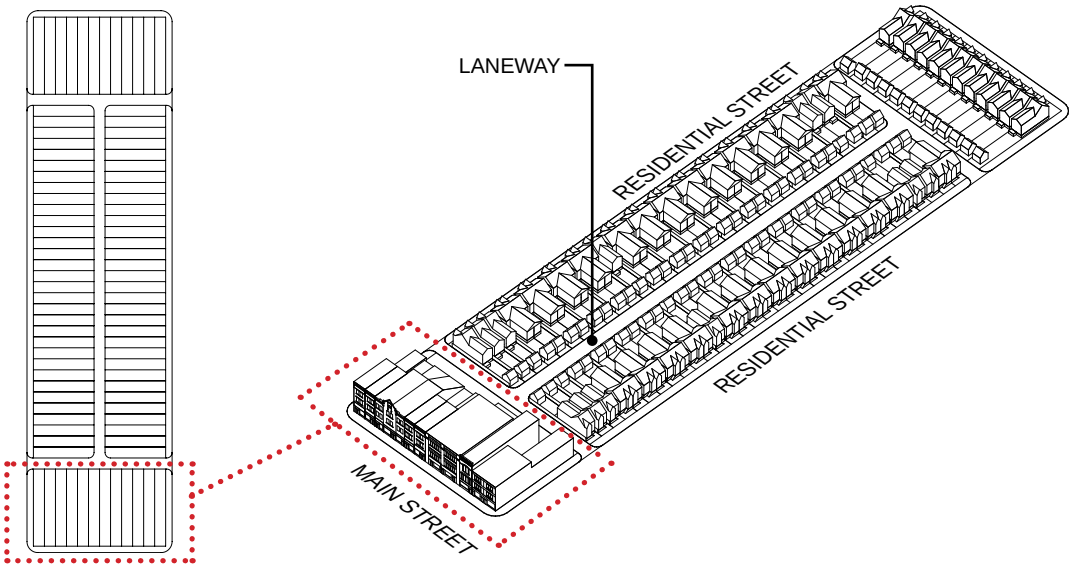
Origins of Compact Form and Block Structure

The main streets of Toronto are by no means developed consistently or continuously in the same manner. Sometimes they are little more than wider residential streets. They vary in intensity, mix of uses and building types. However, large enough portions of enough of such streets share similar traits and can be spoken of in more general terms. Despite the uneven built content of these streets, their block layout and ability to assume the role of 'main street' is quite consistent.

What perhaps most defines main streets structure and form as distinct from the residential streets, aside from their association with the original township grid of concession roads, is their fine grained sequence of typically contiguous buildings. Buildings on characteristic main streets such as Queen, Bloor and Yonge Streets, have historically been, and remain, developed in a very compact form -as is the case of much of the city's central areas. The lots on main streets, similar to the residential streets that subdivide the blocks between the main roads, are generally long and narrow, and historically have shared a similar height, and level of development with the neighborhoods of which they are part; the difference being the building types, uses and the amount of lot coverage of each building. The average of frontage width on main streets is only ten metres, with the majority of sites having a depth between thirty and forty metres. However, most of these lots range from 4.5m to 9m of frontage and the exceptions are some very wide lots, up to a full block, or exceptionally long and irregularly shaped lots.

Buildings along main streets vary widely, depending on their age, level of economic success and the character of their residential context. However, much of what makes main streets what they are is their role as retail shopping strips that mix primarily retail uses at grade level with further retail, storage, offices, or residential apartments in floors above. It should be noted that the term 'retail' on such streets often also includes personal service outlets, amusement and recreation facilities, repair outlets, and restaurants as well as shops that sell goods. The characteristic main street building is a narrow, long building of 1-4 storeys, with a shop or some other public use on the ground level –typically a storefront directly addressing the street, and a handful of residential units or office spaces on the upper floors accessed from a doorway beside the shop. Buildings are typically built right along property lines, sharing a party wall with neighboring buildings and fronting directly onto a sidewalk. They form a continuous street wall, with few interruptions, set backs, or curb cuts within blocks. Block lengths vary, but are usually interrupted by cross streets that penetrate into the residential fabric within the larger concession grid divisions.

The compactness of the development on main streets is due to the general pressures of compactness that affected nearly all the early



PLAN VIEW

21.
Generic Toronto block
The frontage on the main street is highlighted. Low-rise houses complete the block. In some cases, a similar block configuration is oriented with its long axis running east-west.

development of Toronto as a whole, and more particularly the pressures of location in the economics of retail.

The city developed initially as a pedestrian oriented city, first around the lakefront for ease of transit between places of work and places of dwelling. Most industry and shipping was concentrated around the port, and thus most employment was located here. Personal mobility was more limited than is the case currently; unpaved roads and few modes of private or public transit meant residences remained within close proximity to the places of work for ease of movement between the two. The first large expansion of main streets building, and indeed growth of the city as whole, is related to changes in mobility. The introduction of the first streetcar systems in the 19th century set the tone for the kind of building and character that main streets largely took. [9]

Streetcars are one of the foremost factors in the historical shaping of main streets. They were largely introduced along these straight, level, and wide streets. The first horse-drawn streetcar or 'horsecars' were introduced in 1861; by 1884 the system had been fully electrified.[10] The introduction of streetcars on main streets reinforced their role as the shopping streets by increasing the ease and range of access to shoppers, no longer limited only to local shopping streets (but still limited to main streets). The increased mobility allowed by streetcars did not, however, promote in the 19th century the kind of low density suburban development that is associated with later automobile use.

The street railways within Toronto were initially controlled by private companies through long-term and exclusive franchises. The Toronto Railway Company [TRC] took over the thirty-year franchise granted by the city in 1891, at a time when transit use was now well established and popular in Toronto. The TRC initially saw to the electrification and improvement of the system, but quickly took advantage of its monopoly to the detriment of transit service. The company was hesitant to increase service or to introduce new service; its strategy was to maximize profit rather than to expand or improve the system. It took a narrow view of its franchise, insisting that its agreement required it to service only the city limits of the 1891 date of its agreement despite numerous subsequent annexations of new districts by the city. The company's only competition was from a few peripheral lines that could not maintain profitability in these little populated areas not integrated

9 Berridge Lewinberg Greenberg Ltd. (Metropolitan Toronto Planning Dept.) *Study of the Reurbanisation of Metropolitan Toronto*. 1991: 1991. 8-10

10 Doucet, Michael. "Politics, Space, and Trolleys: Mass Transit in Early Twentieth-Century Toronto." In *Shaping the Urban Landscape : Aspects of the Canadian City - Building Process*, eds. Gilbert Arthur Stelter and Alan F. J. Artibise, 356-381. (Ottawa: Carleton University Press, 1982), 357, 359.

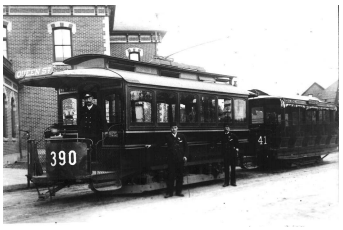
with the central system; these were often easily bought up by the TRC owners, and continued to operate as separate entities if at all.

At the turn of the century "Toronto had the lowest ratio of miles of streetcar track per capita and the most congested service of all North American cities of comparable size." [11] Richard Harris in his book, *Unplanned Suburbs: Toronto's American Tragedy, 1900 to 1950, Creating the North American Landscape* notes the role of streetcars in the compact development of turn of the century Toronto: "In the early twentieth century, Toronto was served by transit, but not well enough to promote streetcar sprawl. TRC's policy encouraged a compact pattern of settlement within and beyond the city limits."[12] Unlike many other North American cities, in which development followed the introduction of new transit lines (often railway owners were also land developers), Toronto's developers and suburban residents had to fight for new services to keep pace with development.

The obstinacy of the TRC did set the stage however for the public takeover of this and other utilities. By 1912, the city had built its own streetcar lines on Gerrard East, St. Clair and on Danforth to respond to the lack of service provided by the TRC.[13] In 1921, the franchise ended, and the railway system was transferred fully to municipal control –by then experienced in running its own streetcar lines. The establishment of the public Toronto Transportation Commission in that year saw the first significant streetcar expansions and service improvements in decades. The combinations of the growth in personal automobile ownership and improvements to public transit did however eventually begin to break down limitations on development within and outside the city limits. By the mid century, much of the impetus for compact and central urban development and mixed uses was replaced by modern planning ideals of segregated land use and automobile mobility, but not before much of Toronto's urban patterns were well established.[14]

The gradual addition of other city services such as streets, water, power, gas and sewage to new residential areas was also slow during the early years of the city's growth. By the late nineteenth century, the city was hesitant to unnecessarily provide expensive infrastructure to new subdivisions. The 1880s had seen a boom in new land subdivision, and the city rushed to

22.
Horsecar, mid 19th Century



23.
Electrified Streetcar, late 19th Century

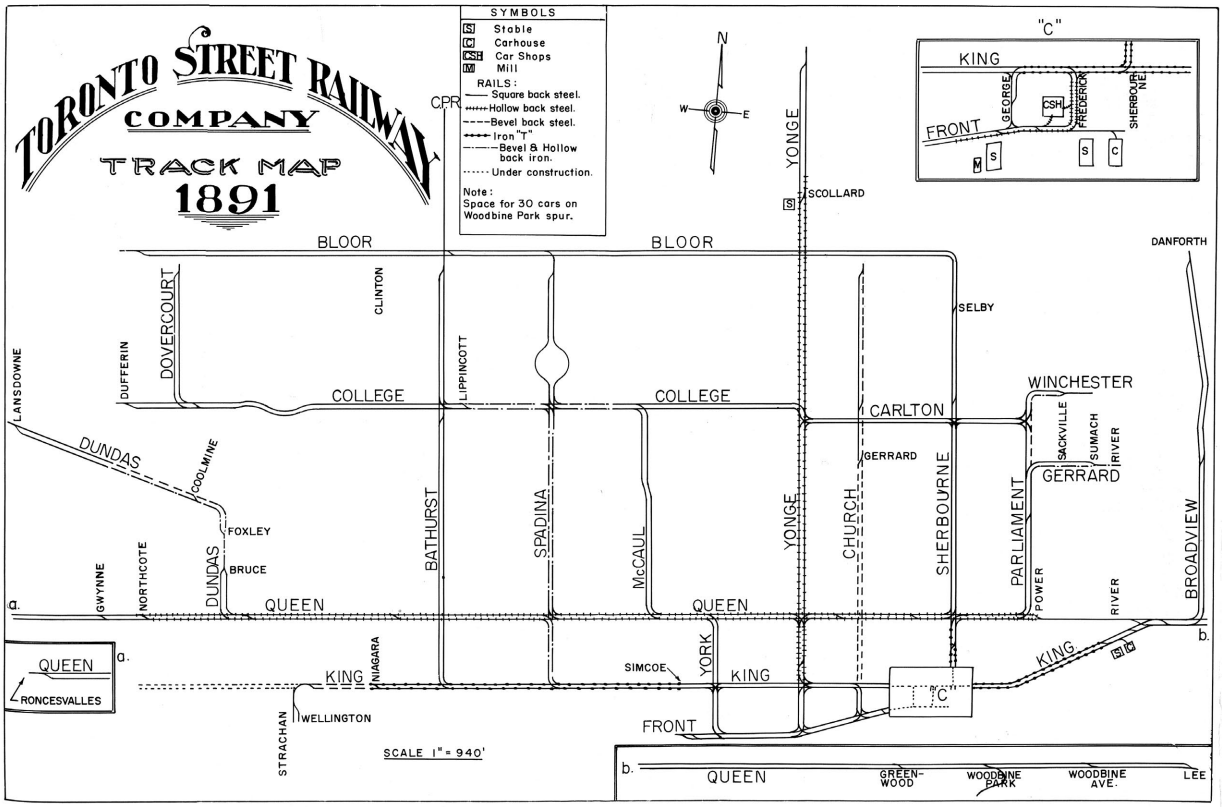
24.
Streetcar overcrowding, late 19th Century

11 Christopher Armstrong and H.V. Nelles, "Suburban Street Railway Strategies in Montreal, Toronto, and Vancouver, 1896-1930." In *Power and Place : Canadian Urban Development in the North American Context*, eds. Gilbert Arthur Stelter and Alan F. J. Artibise, 316-341. (Vancouver: University of British Columbia Press, 1986), 187. See also Doucet article.

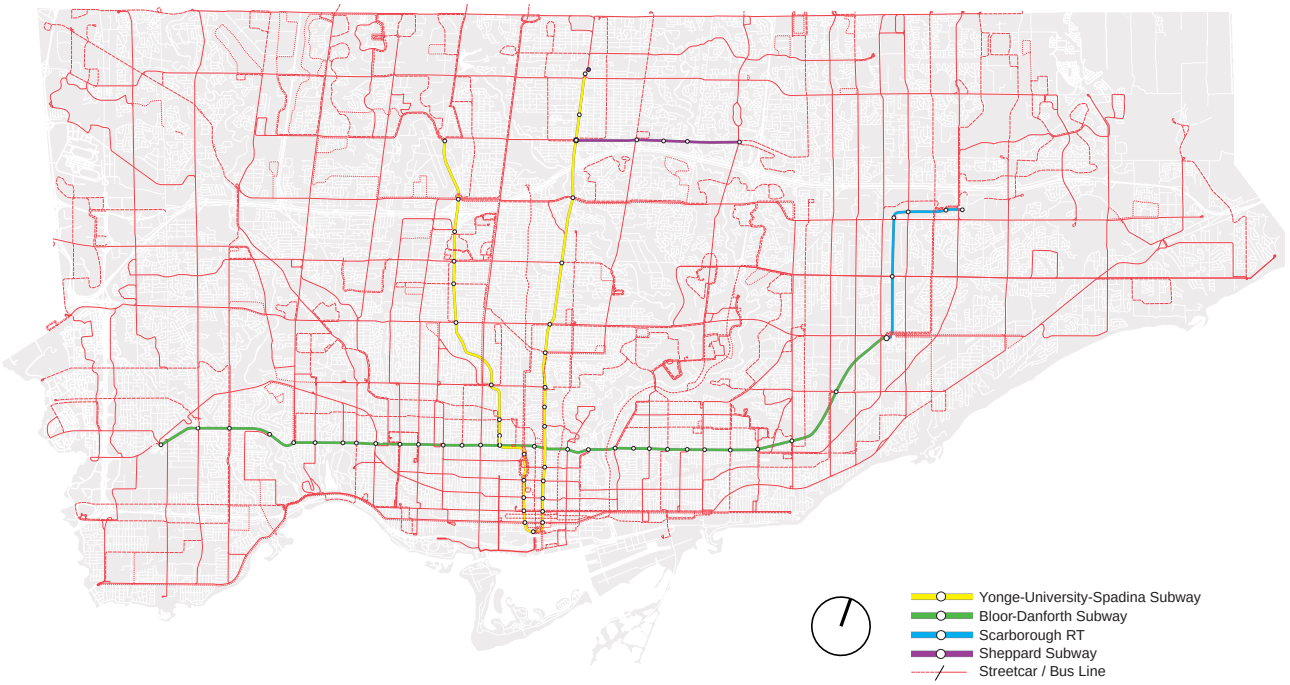
12 Richard Harris, *Unplanned Suburbs: Toronto's American Tragedy, 1900 to 1950. Creating the North American Landscape*. (Baltimore: Johns Hopkins University Press, 1996), 40.

13 Careless, *Toronto to 1918: An Illustrated History* (Toronto: James Lorimer & Co., 1984), 183.

14 Richard Harris, *Unplanned Suburbs*, 40.



25. (top)
TRC route map from 1891. Service would remain limited to the 1891 boundaries of the city for years, despite subsequent annexations.

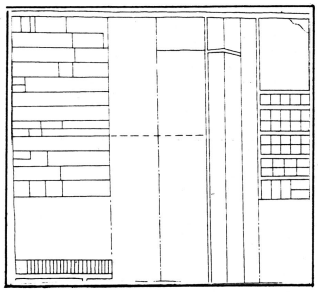


26. (bottom)
TTC route map from 2007. Routes continue to correspond to the early concession grid most of which are main streets.

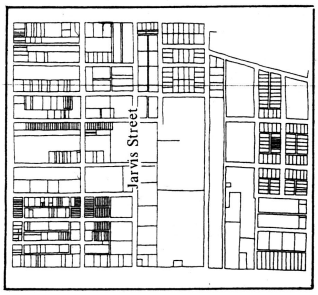
provide services to new areas, however a subsequent depression left newly serviced land undeveloped, and providing low tax revenue to offset the debt incurred by the provision of those services. The decades that followed saw a more careful approach that often lagged behind development.[15] Concerns over the costs associated with uncontrolled new development in peripheral areas, in terms of the municipal obligations to provide services, led to new regulations in the form of the City and Suburbs Plans Act of 1912. This act allowed the review of new subdivisions to ensure efficiency and coordination of street layout and servicing.[16]

As a result of such limitations on development, the history of Toronto's urban structure until the mid Twentieth-Century has been one of repeated subdivision of land to make the most of available serviced real estate: "Over two centuries, each of these big lots has been subdivided and subdivided and further subdivided, and none of the resulting properties nor even most of the roads were created or built on by government. The map of Toronto may be among the proudest expressions of 19th-century laissez-faire capitalism on the continent."[17] The characteristic fine grain of narrow frontages found on main streets today is the result of this Victorian subdivision and land speculation. The kinds of buildings that correspond to this increasingly segmented city structure of finer and finer nested grids reflect the rigidity of the original plan and the necessities of compromise with small sites and proximity of other structures. The constricted urban structure that resulted has, over the years, contributed to limiting large scale redevelopment and prevented many drastic changes. On main streets, it has ensured a lively mix of buildings, uses and occupants, and provided scope for a wide range of evolving entrepreneurial activity. The fine grain of urban subdivision "greatly broadened the range of potential buyers and builders by providing smaller, and therefore cheaper and more functionally viable units of land."[18]

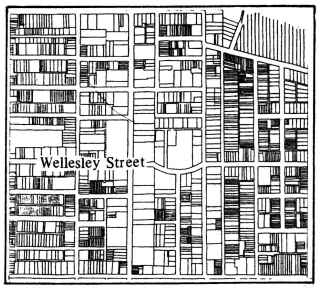
Today, the city once again finds itself constrained by limited available land for growth, not through lack of mobility, but because of recognition of the economic, social and environmental consequences of the outward



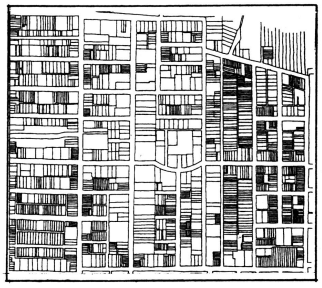
Lot Divisions, 1848



Lot Divisions, 1858



Lot Divisions, 1884



Lot Divisions, 1903

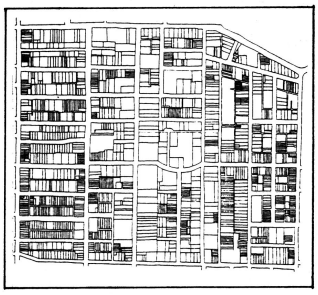
27. (above and facing centre) Study of lot divisions in the Bloor and Jarvis area of Toronto, tracing the patterns of increasing lot subdivision through the early years, and increased lot assembly in the mid 20th century, followed by a stabilization in more recent years

15 Ibid. 148-149. See also Peter W. Moore, "Public Services and Residential Development in a Toronto Neighborhood, 1880-1915," J*ournal of Urban History 9*, no. 4 (Aug, 1983), 445-471.

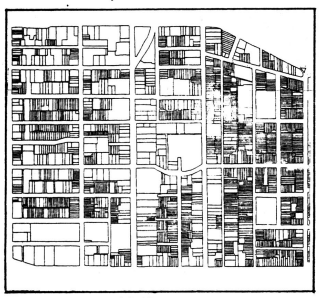
16 John David Hulchanski, *Evolution of Ontario's Early Urban Land use Planning Regulations, 1900-1920*, Land Policy Paper ; no.2. (Toronto: Centre for Urban and Community Studies, University of Toronto, 1982), 12.

17 Nancy Byrtus, Mark Fram, and Michael McClelland, eds. *East/West:A Guide to Where People Live in Downtown Toronto* (Toronto: Coach House Books [for the] Society for the Study of Architecture in Canada, 2000), 3.

18 Isobel Ganton, "The Subdivision Process in Toronto 1851-1883." In *Shaping the Urban Landscape : Aspects of the Canadian City-Building Process*, eds. Gilbert Arthur Stelter and Alan F. J. Artibise, 200-231. (Ottawa: Carleton University Press, 1982), 205.

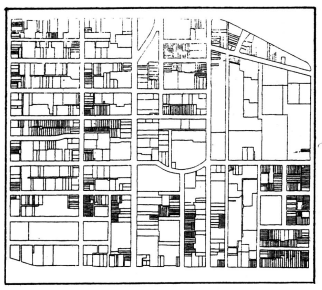


Lot Divisions, 1923

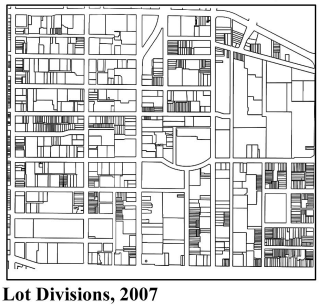


Lot Divisions, 1960

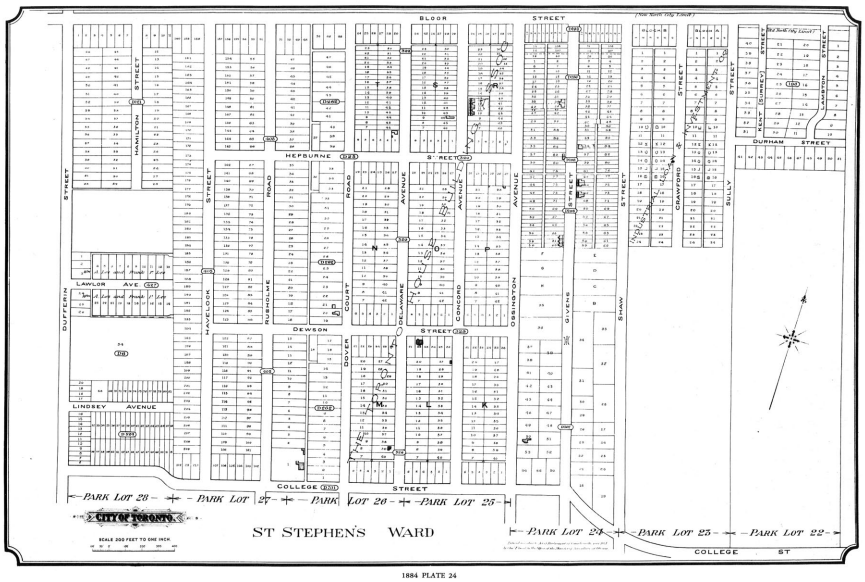
Lot Divisions, 1970



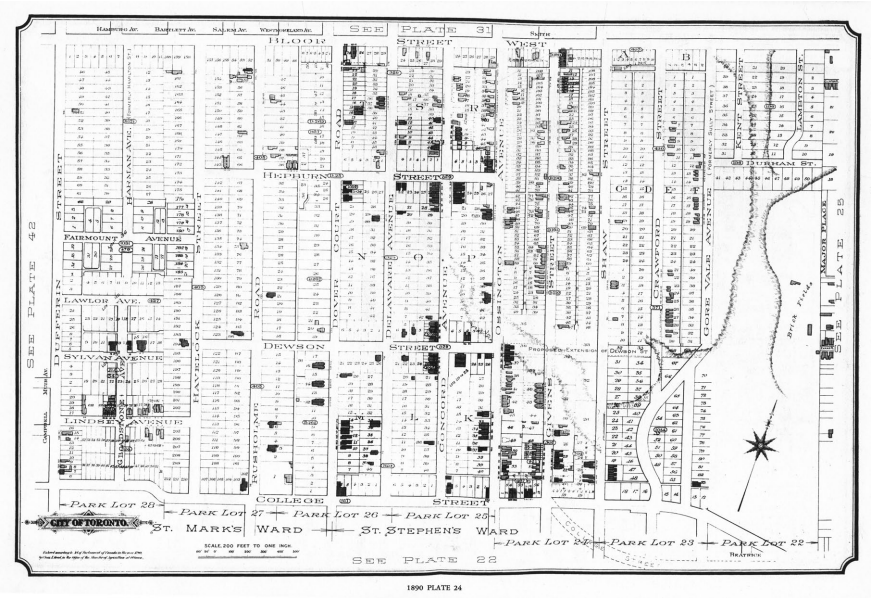
Lot Divisions, 1976



Lot Divisions, 2007



1884 PLATE 24



1890 PLATE 24

28.
Two plates from Goad's Insurance Atlas of a six year interval from 1884 to 1890 show the patterns of successive subdivisions of the original Park Lot divisions, and the corresponding block forms, lane-way systems and building forms that emerged.

suburban expansion of the latter decades of the last century. The benefits of compact development and intensification through redevelopment and infill are widely accepted as a way to meet the same need to make efficient use of available land and resources as a century ago, but now the imperative has shifted. The habit of breaking down parcels of urban land into smaller increments, however, has not been the tendency of the last half-century. Instead, the trend is towards assembly of larger parcels of land to build the automobile-oriented and economically expedient building forms. This continues to occur despite the expressed planning objectives that have evolved in Toronto since the late 1960s that advocate incremental development –the question of what increment is appropriate in a given context is very much the relevant issue for many redevelopment plans and initiatives, and is the focus of much of this study.

The Mixed Uses of Main Streets and Early Zoning Controls

> For almost a century, Toronto's main streets have had a remarkably consistent appearance and function. They have always served as focal points of the residential communities that surround them, as well as the major arteries of the city. They began as and have continued to be places where people live, shop, work, socialize and enjoy recreational activities. In some senses, our main streets have developed as linear community centres. Toronto's neighborhoods are ever changing in terms of the composition of their population and the character of the main streets changes along with them. However, the physical form of the street has remained largely intact over the years.[19]

The more visible retail function of main streets, as previously mentioned, is frequently mixed either within the same buildings or within the makeup of a block, with other primary uses, such as residential apartments, professional or personal service providers, and community, institutional, cultural and entertainment facilities. Each intermingled within the same fine grained, sequential pattern of lots and buildings. These streets stand in distinct contrast to the predominantly residential streets of detached and semi-detached homes that make up the neighborhoods they border. They constitute "a mixed-use prototype par excellence"[20]; the longevity and enduring form of which has more to do with their ability to adapt to changing needs and uses over time as with any formalized land use controls.

The mixed use character of main streets is rooted in the exigencies of mobility and costly land values, forcing uses together into close proximity, which set, early on, the pattern for the major arteries of the city. Yet, even as mobility increased and more land was added to the city, this aspect remained. When formalized building and zoning bylaws were introduced at the turn of the century, they had the effect of codifying, and reinforcing the same patterns that had already been set in place.

Until the late 19th century, no formal guidelines existed that affected the urban form of the city. Only the most basic health and safety guidelines were enforced and, even then, not extensively. "Prior to the turn of the century, municipal regulation of urban development was limited to a number of fairly specific nuisance, public health, and building bylaws... The dynamics of the land market itself provided the governing logic to the urban development process."[21]

When the first municipal bylaws were codified in 1904, once the Provincial Government had granted cities the authority to do so, the most extensive bylaw to be introduced was the Building Bylaw. These regulations

19 Toronto City Council., Robert E. Millward, Daniel Burns, and R. M. Bremner. *Housing on Toronto's Main Streets: Proposals Report, July 1989* (Toronto: The Council, 1989), 5.

20 Berridge Lewinberg Greenberg Ltd. and Steven Fong Architect, *The City of Toronto: Building on Main Streets* (Toronto: Metropolitan Toronto Planning Dept., 1991), 6.

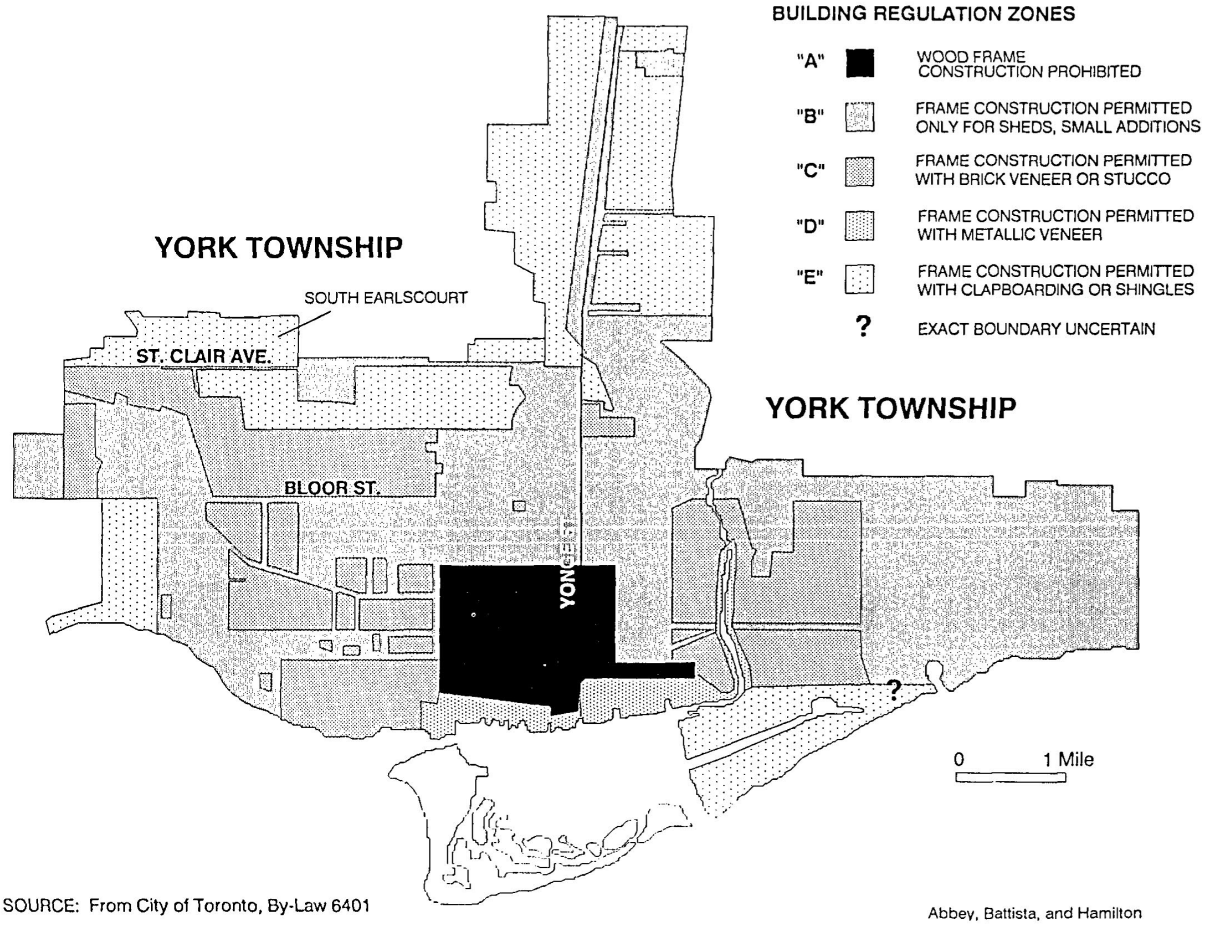
21 John David Hulchanski, *Evolution of Ontario's Early Urban Land use Planning Regulations, 1900-1920*, Land Policy Paper ; no.2 (Toronto: Centre for Urban and Community Studies, University of Toronto, 1982), 1.

divided the city into fire zones each of which required varying standards of construction with regards to fire protection. The result of this bylaw was that nearly all the zones within the city boundaries at that time now prevented wooden structures form being built, and limiting the heights of buildings based on their width and method of construction. What this bylaw accomplished in terms of city architecture, more than anything else, was to separate the city's buildings into zones of quality, with the central areas being fully fireproof brick or stone, and leaving the periphery free to build with cheaper and more flammable methods.[22] The brick and stone buildings on central main streets of the Victorian era are evidence of this kind of regulation.

Although no truly comprehensive zoning ordinance was in effect in Toronto until 1954, the introduction of the first of many separate restrictions on land use also began in 1904. These restrictions dealt first with the separation of residential and non-residential uses, and later with the kind of dwellings allowed in residential areas. A growing population, driven by a growing industrial base, by the early 20th century, was beginning to push industry and commerce into areas that had previously been primarily residential –especially those near railway yards. Worries about the effects of such encroachment on the quality of the residential environment led to a reaction from both property developers and homeowners. In response to such pressures, in 1904, Toronto City Council requested that the Ontario Legislature amend the Municipal Act. The new amendments granted allowed cities to control "the location, erection, and use of buildings for laundries, butcher shops, stores and manufactories."[23] In the years following 1904, these restrictions were applied on an area by area basis, sometimes on a street by street basis at the request of residents or developers, either in response to a proposal for such a building in an established neighborhood, or to establish a new development area with an exclusively residential character. The residential restrictions were also quickly broadened to include other undesirable uses including: stables, dog kennels, hospitals or animal infirmaries, plumber's shops, machine shops, tinsmith shops, movie theatres, private hospitals, public dance halls, undertakers' establishments, warehouses, gasoline or oil-filling stations, the sale of goods, wares and merchandise on private lands, tents, awnings and other coverings for business purposes, buildings for the housing of motor trucks or cartage apparatus, tents for human

22 Ibid., 5-6. see also Richard Harris, "The Impact of Building Controls on Residential Development in Toronto, 1900-40." *Planning Perspectives* 6, no. 3 (Sept, 1991): 269-296.

23 Ibid., 9.



29.
Map of fire zones designated in early Toronto Building By-Laws.

habitation, and the storage for sale of coal, coke or other fuel.[24]

However, because even "in those areas which were zoned predominantly residential, pockets of unrestricted land existed, and the major east-west and north-south streets were often exempted from the restrictions. This trend tended to confirm the development of Bloor, College, Dundas, Danforth and Kingston, for example, as major shopping strips. Even where desirable sites for non-residential use were restricted, there seems to have been little difficulty in obtaining exemptions, especially on major arteries such as Bloor between Sherbourne and Bathurst, King west of Dufferin, and Dundas West between Spadina and University."[25] The effect was to push many of those uses listed above, whose presence on residential streets was undesirable, but were still needed for the functioning of neighborhoods and the city as a whole, onto main street locations.

The next major set of restrictions introduced in 1912, in another amendment to the Municipal Act, gave Toronto authority to "prohibit, regulate and control the location on certain streets to be named in the by-law of apartment or tenement houses". The Act defined an apartment or tenement as any building with three or more separate dwelling units and applied not only to new construction but also to conversion of any existing house into three or more units. David Hulchanski recounts the motivations of the new restriction:

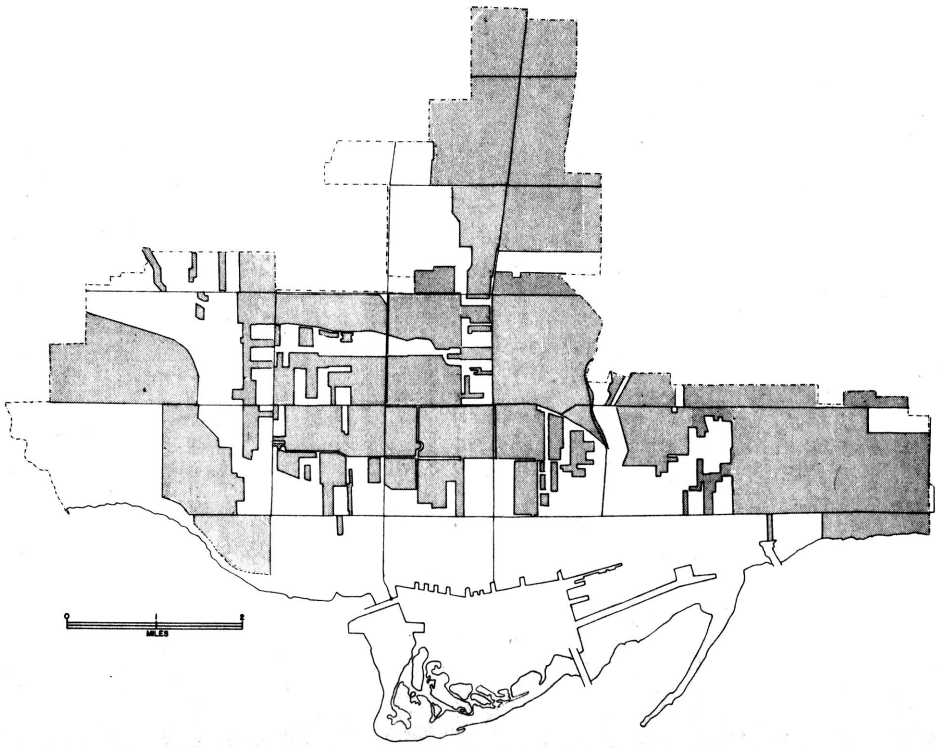
> As the pace of urban development continued at an unprecedented rate, and as the number of immigrants flooding into cities increased, a new form of threat to residential districts was identified: the apartment building, generally occupied by immigrant workers. The non-residential restrictions allowed by the 1904 amendments to the Municipal Act did not address the problem of protecting better residential areas from apartment buildings; these were, after all residential use and could also afford to pay a higher land price for residential sites. During the real estate boom years prior to the First World War, increasing numbers of apartment buildings were being built in Toronto.[26]

The result of the ban was that "effectively, apartments were to be confined to commercial streets or to sites adjacent to existing apartment buildings where they could do no damage to property values." Because of other restrictions requiring minimum open space around apartment buildings unless two faces fronted on public streets (allowing development to property lines) , corner sites on commercial streets were favoured for apartment

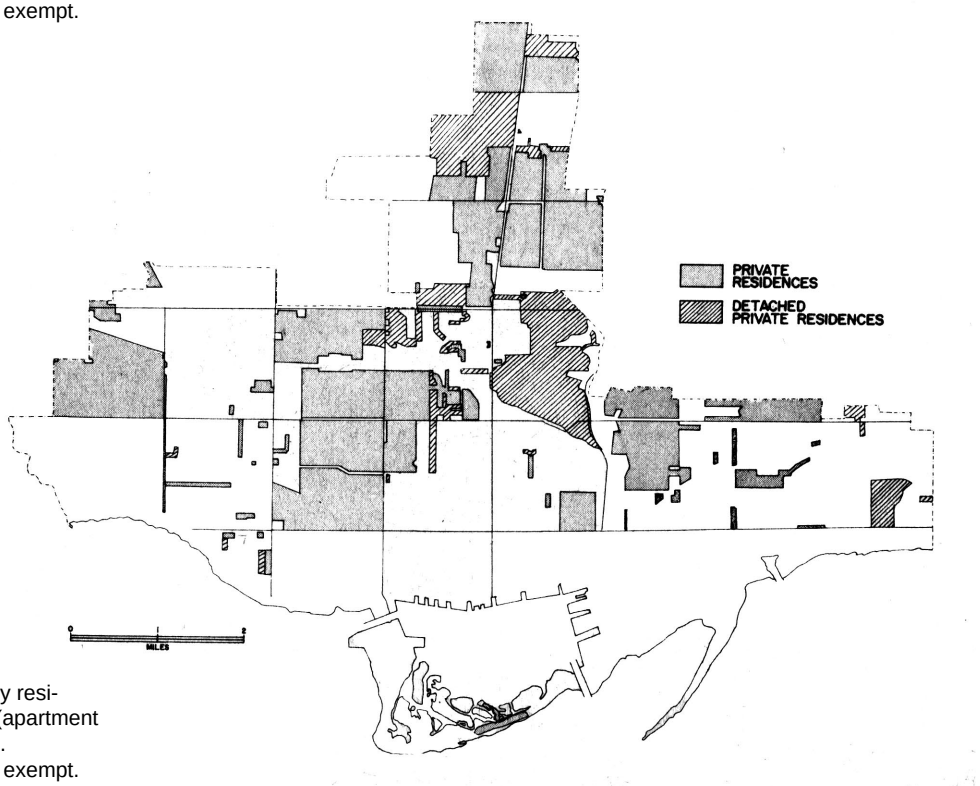
24 Peter W. Moore, "Zoning and Neighborhood Change in the Annex in Toronto, 1900-1970" (Ph. D Thesis University of Toronto, Canadian Theses on Microfiche ; no.3878. Toronto: S.N., 1978), 135.

25 Ibid., 138.

26 John David Hulchanski, *Evolution of Ontario's Early Urban Land use Planning Regulations, 1900-1920*, Land Policy Paper ; no.2. (Toronto: Centre for Urban and Community Studies, University of Toronto, 1982), 10.



30.
Map of areas covered by non residential restricitons, 1904-1954
Main streets are largely exempt.



31.
Map of areas covered by residence-only restrictions (apartment restrictions), 1921-1954.
Main streets are largely exempt.

buildings.[27] Although many exemptions were granted, this restriction set the pattern until the 1950s, when restrictions on apartment buildings were relaxed in many areas of the city to encourage development.

The apartment restrictions had many of the same motivations as the 1904 non-residential use restrictions: to preserve the character of residential areas and protect land values. In the years preceding the First World War, attitudes in Toronto (and many North American cities) towards apartment houses placed them in the same category as tenements, which were associated variously with slums, loss of property values, decay of hygiene and morals, deterioration or destruction of the family and rampant land speculation. Concerns were expressed about so called 'land sharking', in which an unscrupulous developer could purchase a plot of land in a residential area and propose a noxious use or apartment, unless local residents purchased the land back at an inflated price. It is also suggested that opposition came from apartment developers themselves, who wished to keep demand for apartments high, and thus maintain higher rents. The various motivations and results of these apartment restrictions have been well documented, and only a brief account is provided here.[28]

The crusade against tenements and apartments was advanced publicly leading up to the 1912 restrictions, by figures such as medical officer of health Dr. Charles Hastings and Sam McBride (at various times alderman, controller and mayor). "Again and again contemporaries endorsed the view, expressed most clearly in Toronto by Dr. Hastings, that 'if we are going to develop along judicious lines we must make Toronto a city of individual homes.'"[29] Despite the successive housing shortages and booms in building that followed two World Wars, continued construction of apartments on main streets, frequent individual exemptions from apartment restrictions, the conversion of single-family homes into multi-family dwellings, and the high-rise boom of the 1950's an '60s, the popular notion of a Toronto as a 'city of homes' continues to persist.

On main streets, the combination of higher-density residential and commercial uses, as reinforced by the earliest zoning restrictions, remains a consistent pattern today. Despite later developments in zoning, and the introduction of city planning agencies (first Official Plan approved in 1949),

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27 Richard Dennis, "'Zoning' before Zoning: The Regulation of Apartment Housing in Early Twentieth Century Winnipeg and Toronto" *Planning Perspectives 15*, no. 3 (July, 2000), 274-275.

28 See Richard Dennis, "'Zoning' Before Zoning" and "Interpreting the Apartment House: Modernity and Metropolitanism in Toronto, 1900-1930." *Journal of Historical Geography 20*, no. 3 (July, 1994): 305. and Richard Harris, *Unplanned Suburbs*, 91-92.

29 Richard Harris, *Unplanned Suburb*s, 91.

the aims of much of the zoning in the city has remained very much concerned with the preservation of the residential neighborhoods. Both of the early zoning controls on non-residential and apartment development prevented all but residential uses on residential streets, ensuring the mixed-use nature of main streets, and their role as a social space of meeting and entertainment, as well as of commerce. This intensity of use, access to transportation, and the built form that accommodates these are defining qualities of main streets.

1914

1986

2007

32.
The same stretch of Yonge Street, showing the gradual evolution and continued vitality of such streets. For nearly 100 years, the urban structure has remained consistent, while the individual buildings have come and gone or been renovated and reinterpreted to meet the needs of successive generations

Main Street Retail Strips

> Among North American cities Toronto is unusual in the continuing importance of traditional retail strips within the commercial structure. Despite the proliferation of shopping centres and the growth of new format retailing, these traditional commercial forms have remained, and in most cases have grown within all parts of the GTA [Greater Toronto Area]. They are particularly evident within the Inner City, where they account for 85 per cent of the floor area in commercial nodes; and where they have evolved to perform special roles within the GTA –roles that were unknown a generation ago.[30]

A study in 1997 of retail structure in the Greater Toronto Area [GTA][31] by Ryerson University's Centre for the Study of Commercial Activity, examined retail strips in comparison to other types of retail (shopping centres, malls, and new format or "big-box" retail). It identified 256 active retail strips (the study omitted smaller strips that generated less than 3000 square metres of floor space) that together amounted to almost four million square metres of commercial floor space within just under 26 000 stores. Most of this space was located in the Inner City –the areas of the GTA built before the 1950's.). The study states that in general "the retail strips provide for the most varied commercial environments in the urban environment" in terms of number and type of retail outlets, and jobs generated by retail strips. It also points out the unique ability of retail strips to provide opportunities to new entrepreneurs, and to accommodate businesses and "activities oriented to a particular ethnic market, or providing goods and services from a particular ethnic source." This ethnic specialization is often associated with the particular identity of a neighborhood, such as 'Old Chinatown' (Spadina Avenue), 'Little Italy' (College Street), 'Greektown' (Danforth Avenue) or 'The India Bazaar' (Gerrard Street); an identity that finds its expression in the kinds of shops and services found on main street retail strips.[32]

A follow-up study ten years later reiterated the findings of the previous report. It noted the relative stability of retail strips overall, despite a continued shift in the type of retail towards service businesses. Both found that the makeup of retail strips is ever changing and growing: "the retail strips in the GTA have done very well over the last two decades, despite the competition from shopping centres and new format retailing." The increases in retail strip activity are related to overall growth in the GTA, growth of income, and the "ability to reposition retail strips to serve overall shifts in consumption patterns (toward services), as well as particular ethnic and lifestyle markets."[33]

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30 James W. Simmons, Dan Montgomery, and Sara Simmons. *Retail Structure of the Greater Toronto Area 1997*. (Toronto: Centre for the Study of Commercial Activity, Ryerson Polytechnic University, 1998), 46.

31 The Greater Toronto Area contains the City of Toronto and the regional municipalities of Halton, Peel, York and Durham that surround Toronto.

32 Ibid., 47-50.

33 Ibid., 60.

33.
Image of some representative main streets across the city.

The flexibility and dynamism of main streets in terms of their commercial function, related to the small scale of traditional shops and buildings is emphasized in both studies:

> "One of the strengths of retail strips has been their flexibility to grow or decline easily in response to market shifts and to develop functional and market-oriented specializations to reflect new needs. They have absorbed the rapid growth of service activities that are shunned by the larger shopping centres, and they serve the rapidly growing immigrant communities, as well as specialized income and lifestyle neighborhoods. The challenge will be to maintain this flexibility."[34]

That flexibility in the past has been related directly to the traditional pattern of retail strips in which, "except where recent land assembly has occurred, a typical block along a retail strip tends to be subdivided into a large number of narrow lots, each one owned by a different individual."[35]

Their ability to adapt has allowed retail strips to continue to grow in Toronto over the last several decades despite major shifts in the city's retail

34 Ibid., 63.

35 Toronto Planning Board. T*oronto's Retail Strips : A Discussion Paper on the Viability and Future of Strip Retailing in the City* (Toronto: Planning Board, 1976), 5.

sector towards other forms of retail. Strips have continued to be a haven for small independent business, even resisting the presence of chain stores to some extent: "Simply, while [chain retailers] are present, the strips remain the domain of the independent trader (the 'shopkeeper')."[36] Through their continued success and ability to attract shoppers and even tourists, main street retail strips have begun to attract other retail formats to the strips themselves. "The new formats tended to avoid many of the strips, with their smaller lots and more pedestrian-oriented form. As the non-strip market areas have become almost 'saturated' with the new formats, however, they are now turning their attention more and more to the strips."[37]

Suburban forms of automobile-oriented strip retail have also evolved on many main streets, especially in those areas developed after the 1950s. These developments take the form of a strip plaza. By placing parking directly in front of the buildings, between the street and the storefronts, these forms do not have the same pedestrian amenity of traditional arrangements, and tend to attract a higher proportion of chain retailers. They do however maintain some of the diversity of traditional inner city main streets. Urban affairs journalist John Lorinc points out this aspect of both newer and older strip retail on main streets:

> Such retail developments have an organic, self-correcting tenant mix that's typical of retail streets but very uncommon in commercial shopping centres. Why? Because in many such plazas the individual units have different landlords – sometimes the merchant, in other cases offshore investors.
> They tend not to be owned by the huge institutions and real-estate investment trusts that control large malls. In shopping centres, the mall management closely manages the assortment of tenants, focusing on high-end chains and imposing their owners' investment expectations on a commercial environment. Mega-malls are not "free markets." Strip plazas are. [38]

This characteristic of retail premises that are under the control of single ownership is pointed out in City reports even in the 1970s: "Quite apart from the question of the shopping centre's ability to provide suitable sites for small businesses is the fact that its tenant selection policies discriminate against them. The shopping centre developer usually has to demonstrate that he has a sufficiently large guaranteed rental income from tenants with high credit ratings to cover the cost of debt charges, taxes, and operating expenses before he can secure financing to build his centre. The tenants

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36 Tony Hernandez, Jim Helik, Philip Moore, and Ryerson University. Centre for the Study of Commercial Activity, *The Changing Character of Retail Strips in the City of Toronto, 1996-2005*. Research Report. Vol. 2006-07. (Toronto: Ryerson University, Centre for the Study of Commercial Activity, 2006), 33.

37 Ibid., 38.

38 John Lorinc, "Stripping Away Stereotypes: Toronto's Retail Plazas." In *UTOpia : Towards a New Toronto* (Toronto: Coach House Books, 2005), 137.

34.
Typical pedestrian oriented main street storefronts, 1916.

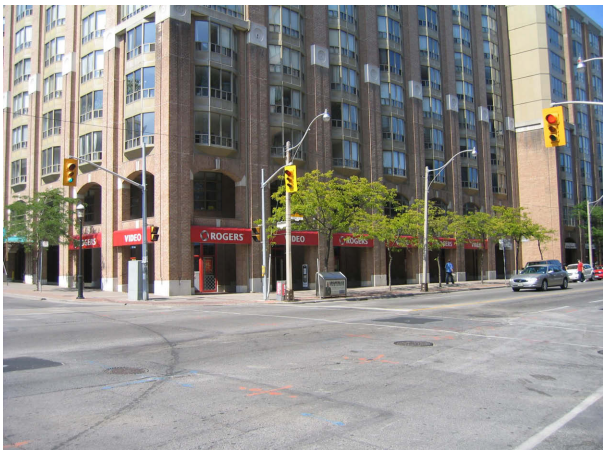
35.
Typical automobile oriented retail strip, 1960s.

with the highest credit ratings tend to be members of established chains and departments stores since these store types are lower-risk ventures than are independent operators."[39]

This is not unlike the situation for large scale developers of new residential and commercial mixed-use developments on main streets. As increasingly large sections of main streets are developed by single developers and the commercial space of the strips are controlled by fewer interests, be they the developer themselves or through other forms of property management, the diversity of ownership that has been responsible for the quantity of small independent businesses on main streets is reduced. The preference of large developers for pre-leasing of retail space to low-risk tenants, which usually include larger retail operators and established chains and fewer independent, higher turnover operators, would cause a change in the retail makeup and character of main streets were they to be developed extensively in this way.[40] Part of what makes main streets historically so diverse is their fine grained mix of independent, specialty and area-specific shops.

39 Toronto Planning Board, *Toronto's Retail Strips : A Discussion Paper on the Viability and Future of Strip Retailing in the City* (Toronto: Planning Board, 1976), 17.

40 Baird/Sampson Urban Design Inc and Hemson Consulting Ltd. *Economic Feasibility Study, Housing on Toronto's Main Streets* (Toronto: Hemson Consulting, 1990), 21.

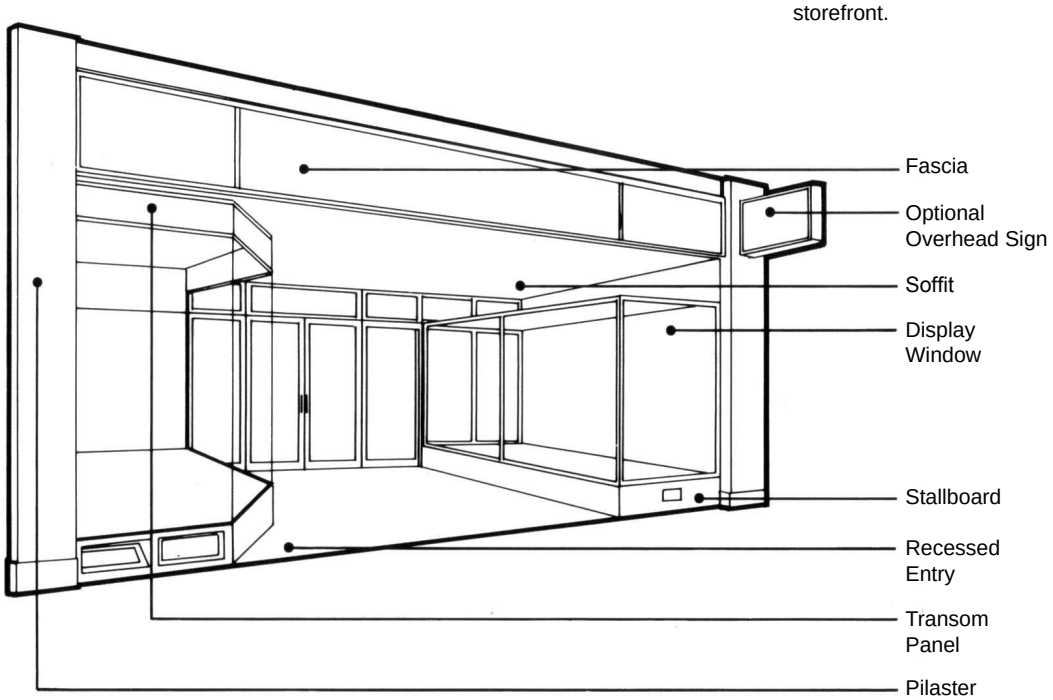


36. (above)
Large-scale main street mixed-use buildings that incorporate very few independent retailers. The intensity of sidewalk use and visual diversity are considerably less than a similar block of individual mixed-use buildings.

37. (right)
A main street block that incorporates a large-format retailer next to a series of small-scale storefronts illustrates the contrast in potential pedestrian engagement between the two scales of frontage.

38. (top)
Early 20th century storefronts that display the typical elements of traditional main street architecture. The image at left shows the store owner and his family who are also the residential tenant above.

39. (bottom)
Architectural elements of the storefront.



Built Vernacular of Main Streets

> Despite their differences, all of Toronto's commercial streets have one component in common –the storefront. In terms of the scale of the urban landscape, the individual storefront is relatively insignificant, but in terms of the vitality of the street, its contribution is invaluable.[41]

The consistent scale of storefronts on existing main streets –narrow, sequential, highly varied from one to the next – has evolved over the last two centuries, but has until recently maintained its ability to allow individual stores and buildings to differentiate themselves visually, and more fundamentally in terms of ownership. The storefront is the basic unit of main street built-form. Architect with the Toronto Planning and Development office, Lorne Cappe, described the unique effect of main street structure on an aesthetic and experiential level:

> The narrowness of individual shops adds variety to the streetscape. Every 15 to 25 feet, another storefront provides a new adventure for the senses. Stores with recessed entrances offer added protection from the elements, and the chance to explore interesting nooks and crannies. Without these breaks in the street "wall", the pedestrian would be faced with an uninviting row of uninterrupted facades.[42]

Underlying this visual diversity and allowing it to happen, has first to do with the particular pattern of property ownership and lot division within a given block, and then to do with the architectural design of the storefronts themselves.

The typical main street buildings of 1-4 storeys, with shops below and walk-up dwellings or offices above tend to have been built in times of economic booms, and each generation of building evolved the type to some degree. Before the 1880s, when shopkeepers largely lived above their own shops, the shop and living quarters were often designed as a coherent unit, the storefront was emphasized by projecting the storefront beyond the plane of the façade above, and the roof and cornice lines tended to be more ornate than in later periods. There was a strong vertical aspect to these arrangements of store and dwellings to indicate ownership, even when a series of narrowly proportioned buildings were connected to form a terrace block, each vertical unit remained discrete from the next visually. Each increment reflects potentially different ownership, and each can obey different rules regarding signage, colour, window display, and individual design choice.

Corner buildings are typically treated differently to buildings within the block. They are often taller; they have access to two aspects and thus more window area, and tended to be developed for more unique and prominent buildings such as schools, churches and firehalls. When retail and

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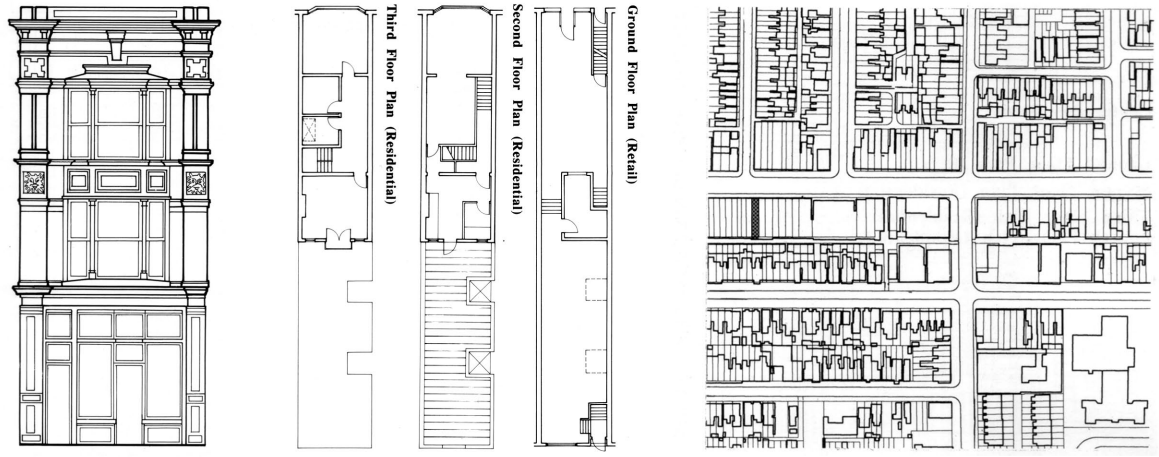
41 Toronto Planning and Development Dept. (Lorne Cappe), *Window on Toronto* (Toronto: Dept. of the City Clerk, Information and Communication Services Division, 1986), 2.

42 Ibid., 21.



40.
Typical late19th century main street building

41.
Typical early 20th century main street building

42.
19th century streetscape

43.
Typical close-grained streetscape

44.
Special corner treatment

45.
Residential uses above and shops articulated independently

46.
Main street automobile plaza. Storefronts pushed behind parking

residential buildings were built on the corners, they often have corner-facing shop entrances and residential entries located on the side street.

By the turn of the century, patterns of ownership began to change. Business owners increasingly became tenants rather than building owners, and did not necessarily live directly above their own shops. Accompanying this change in ownership, the division in the architectural expression of ground floor commercial uses and upper level uses became more pronounced. Bay windows above a strong cornice line separated the two layers of function, allowing the storefront to more clearly identify itself apart from the residential character above. Signage, awnings and projecting and receding elements allowed shops to both better distinguish themselves and provided pedestrian shelter and visual interest.

The early 1920s brought another economic and building boom combined with growth in automobile mobility, causing further changes to main street architecture. The rapid pace of development over broader geographic reach brought with it more expedient, less expensive building forms, and less ornamentation. Later in the century, the "post war automobile lifestyle also altered the building form with prime corner sites being demolished for service stations and more recently, the development of automobile-oriented, one-storey plazas for fast foods, convenience stores and the like."[43] The automobile continues to affect main streets today as retail strips must compete with more automobile-oriented retail formats. Requirements for the provision of on-street and on-site parking for new main street development also play an important role in the design and regulation of new buildings on these streets.

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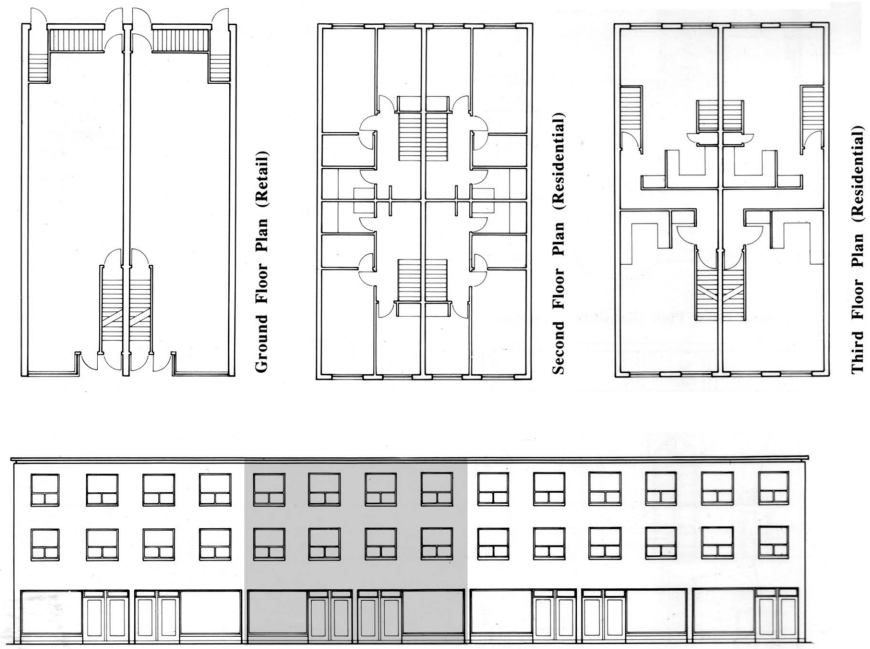
43 Toronto City Council., Robert E. Millward, Daniel Burns, and R. M. Bremner, *Housing on Toronto's Main Streets : Proposals Report, July 1989*, (Toronto: The Council, 1989), 5. Also, see Toronto Planning and Development Dept. (Lorne Cappe), *Window on Toronto*, (Toronto: Dept. of the City Clerk, Information and Communication Services Division, 1986), and Toronto Planning and Development Dept., Art Eggleton, Allan Tonks, and John Sweeney. *Housing on Toronto's Main Streets - a Design Competition. 1990* (1990), all three recount the same history of vernacular types, that appears to be originally authored by Lorne Cappe in the *Window on Toronto* document.

In order to perpetuate the patterns of retail at grade with other uses located on floors above, and to maximize allowable site-density that combines commercial and residential density, new buildings typically incorporate storefronts into the ground floor (sometimes the first two storeys). The trend towards standardized and modular construction systems, such as aluminium window-wall and storefront display glazing and entry systems reduces the distinctiveness of the individual storefront. Architectural elements such as inset shop entries, awnings and generous fascia for signage that added pedestrian amenity and visual interest to the street are increasingly rare. Even if conditions of ownership or tenancy allowed for alteration to the storefront, the newer construction systems and design decisions allow little opportunity to alter and distinguish an individual shop from its neighbours.

The flexibility, dynamism and diversity of main streets is related to the very specific historical factors of physical structure (lots, building and block form), developments in transportation and service infrastructure and land-use zoning, and to the patterns of ownership, tenancy and business types that have been described so far. In redeveloping main streets today, the question of what effect the introduction of new building and retail formats, and new patterns of ownership will have on the character of these streets is of some concern. Whether main streets can continue to absorb these new forms while still maintaining their current role, identity and character remains to be seen.

47.
Typical 1930s main street building



48.
Typical 1960s main street building

Chapter 2: Urban Planning Context

Introduction

Current Toronto city planning policies regarding development on main streets, which are aimed at preserving stable residential neighborhoods through residential intensification in key areas like arterial roads, are rooted in ideas about urban planning and development that emerged in Toronto in the late 1960s and 1970s. This period saw a dramatic shift in attitudes towards urban redevelopment and its effects on the historic fabric of the city. Urban planning reform at that time manifested in municipal politics through a reformulation of official city planning from an aggressively pro-development stance towards a more cautious, consultative approach spurred by citizen activism, strong and vocal neighborhood associations, and changing attitudes towards the existing city among design professionals and a number of the politicians on council.

The period from the early 1970s to the early 1990s produced a series of plans, studies and initiatives that sought to stabilize the central area residential neighborhoods, provide new affordable urban housing, and encourage transit-oriented, contextually and environmentally sensitive infill style redevelopment. These policies were developed through certain key projects and initiatives over the proceeding decades; some of these, such as the St. Lawrence Neighborhood, the Ataratiri Neighborhood, and the Housing on Toronto's Main Streets Initiative are the subject of the following chapter. These projects illustrate the shift in attitude towards the city at that time, and some of their findings, particularly regarding appropriate scale, fit and urban qualities of new buildings, are relevant to the problems of building on main streets today. A brief discussion of contemporary planning policy is also offered to bring the narrative of Toronto's planning into the present, and to explain the current imperative to intensify main streets.

The current pro-development climate that has returned to the city, and some of the large-scale redevelopment projects that are underway (the waterfront and Railway Lands for example) are reminiscent of the kind of development that reform-era planning was reacting against. While the counter-reaction to development in the reform era might be said to have gone too far in protecting built-form, and to have prevented to some extent certain forms of desirable city-growth in the decades that followed, the current retreat of appreciation and understanding of existing city forms, and the pursuit of economy and reinvestment over the pursuit of a better built environment is worthy of another look.

The Reform of Planning in Toronto

> In Toronto, politicians and planners had a special reason for trepidation. Living among them, and already a good friend to several of them, was the most famous analyst of gigantic urban mistakes, Jane Jacobs. She moved to Toronto from New York in the late 1960s, and her presence in the city was a nagging reminder that intelligent, well-meaning people can get everything horribly wrong.[1]

It is not surprising to find Jane Jacobs on the jury for the city's 1990 'Housing on Toronto's Main Streets' international architectural design competition. The noted author and urbanist had resided in Toronto since the late 1960s and had exerted a considerable influence on the tone of discussion around planning and urban affairs in Toronto, first through her seminal 1961 book *The Death and Life of Great American Cities*, and then through her direct and indirect involvement in urban issues. Her critique of modern planning practices deeply affected the citizen activists and municipal 'reform' councils of the 1960s and 1970s that initiated a re-evaluation of planning in the city, and brought a new post-modern orthodoxy to planning in Toronto. This is not to suggest that Jacobs was the sole instigator of this reform –the damage caused by the expropriation and redevelopment of urban renewal in this period was more than enough to trigger resistance and action among the public, however, her book's analysis of cities, and its critique of modern planning practice remains relevant today, and whether directly influential or not, many of the ideas it contains have become common within the rhetoric of Toronto's official urban planning.

The core of *The Death and Life of Great American Cities* is its analysis of the vitality of cities. It identifies those conditions, systems and structures that must be in place to create and maintain urban settings capable of sustaining and regenerating economic and social vitality. It studies the existing city to understand its complex and interdependent structures and systems. This complex order is contrasted with modern practices of functional segregation, rationalization and cataclysmic and simplistic reordering and refashioning of urban form. She observes the failure of modern urban renewal projects to generate the kind of complexity, diversity, safety and vitality of much of the historic city. Her approach considers the existing city, but not for its surface effects, or in reverence to the appearance of pre-modern, traditional or vernacular forms only for their historic, stylistic, or symbolic dimensions. The concern is rather for the functional performance and behaviour of specific scales, forms, uses, and combinations of buildings and their effect on the character of the street and the makeup of the urban scene in terms of economic, social and visual content.

According to Jacobs, to "generate exuberant diversity in a city's streets and districts, four conditions are indispensable":

1. The district, and indeed as many of its internal parts as possible, must serve

1 Robert Fulford, "Ballet of the Streets" in *Accidental City : The Transformation of Toronto* (Toronto: Macfarlane, Walter & Ross, 1995), 75.

more than one primary function; preferably more than two. These must insure the presence of people who go outdoors on different schedules and are in the place for different purposes, but who are able to use many facilities in common.

2. Most blocks must be short; that is, streets and opportunities to turn corners must be frequent.

3. The district must mingle buildings that vary in age and condition, including a good portion of old ones so that they vary in the economic yield they must produce. This mingling must be fairly close grained.

4. There must be a sufficiently dense concentration of people, for whatever purposes they may be there. This includes dense concentration in the case of people who are there because of residence.

Jacobs suggests that the "necessity for these four conditions is the most important point this book has to make. In combination, these conditions create effective economic pools of use. All four in combination are necessary to generate city diversity; the absence of any one of the four frustrates a district's potential."[2]

A prime example of this kind of city diversity in Toronto is found on its existing main streets. At their best they satisfy each of these criteria, and much of their vitality and continued success as a form of city building stems from just those factors. They mix primary uses, offer amenable pedestrian sidewalks with frequent opportunities to change direction, they have accommodated an incredible range of buildings in terms of age, style and use over time, and the combination of the main street residential apartments, the residential neighborhoods they border, with their retail and services functions, provide a concentration of people whose presence at different times of the day, activates these public spaces of the city.

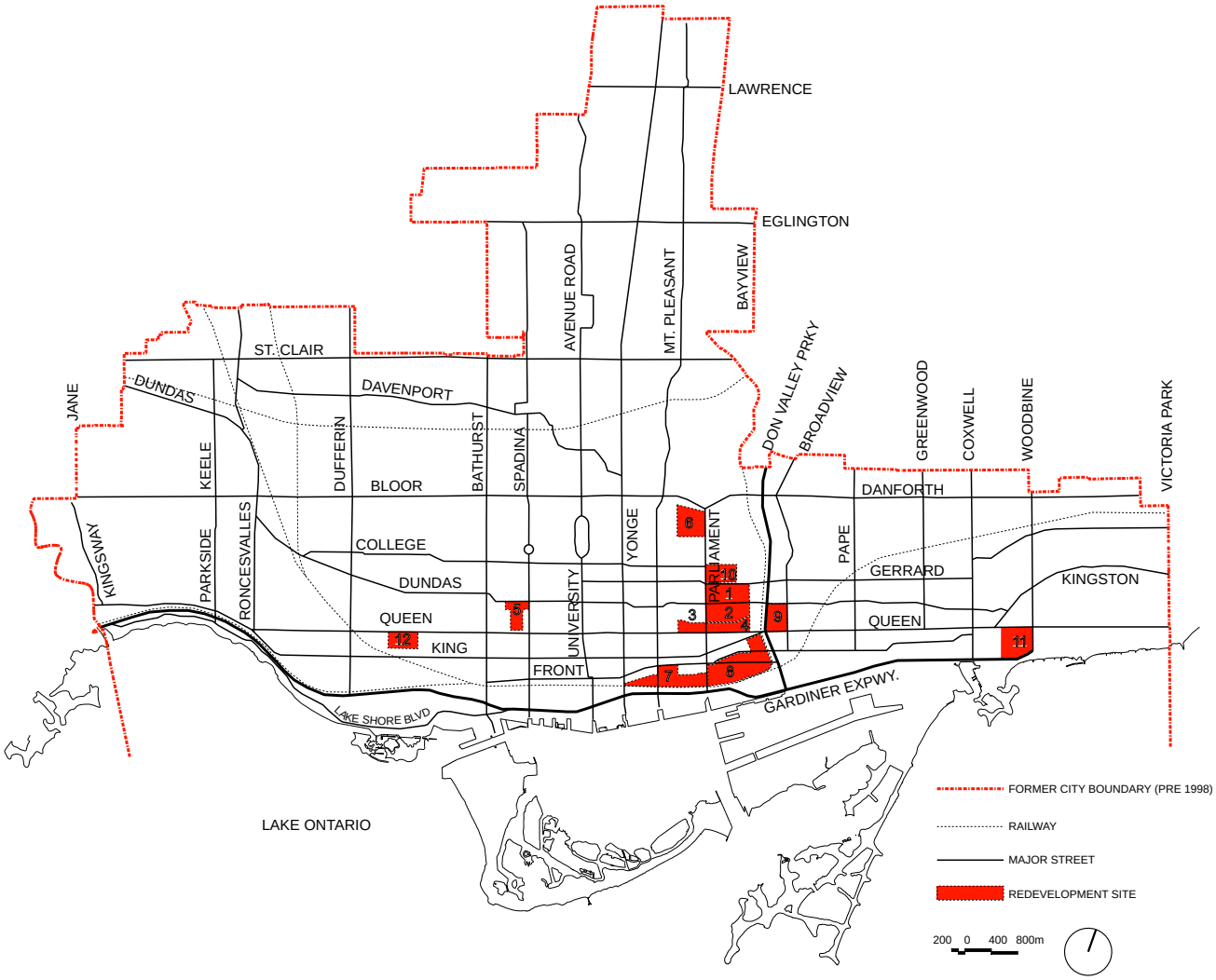
In Toronto in the 1960s and 1970s, the currents of post-modern planning, and the critique of modernism began to take hold. The period saw a renewed interest, on the part of the public and the design community, in the existing neighborhoods and structures of the city in order to understand its patterns and successes, and to preserve and perpetuate them. Concerned groups of homeowners and activists responded to both urban and environmental concerns, to specific redevelopment projects, and the protection of neighborhoods and historical buildings. This period followed the 1940s and 1950s era of civic boosterism, characterized by very positive municipal government and, to a large extent, public opinion towards new development.[3] As Peter Moore puts it:

> Following the long construction drought of the depression and the war, the high-rise apartment boom came to Toronto. These buildings

2 Jane Jacobs, *The Death and Life of Great American Cities*, (New York: The Modern Library, 1993), 197.

3 Pierre Filion,. "Rupture Or Continuity? Modern and Postmodern Planning in Toronto." *International Journal of Urban and Regional Research 23*, no. 3 (September, 1999), 438.

49.
Map of some key large-scale re-development schemes of the past 60 years



1. Regent Park North
2. Regent Park South
3. Moss Park
4. Trefann Court
5. Alexandra Park
6. St. James Town
7. St. Lawrence
8. Ataratiri / West Donlands
9. Don Mount
10. Don Vale
11. Greenwood/Woodbine Redevelopment
12. Centre for Addiction and Mental Health (CAMH)

> were a visible sign of growth and progress, and a source of increased assessment revenues. For both symbolic and fiscal reasons, City Council promoted high-rise development, even if it overrode the interests of neighborhoods.[4]

This was the period of major public works and urban renewal projects (both public and private) such as the construction of the Don Valley Parkway, the Gardiner Expressway, the subway system, and a number of public and private high-density urban housing projects such as Regent Park North and South, Moss Park, and Alexandra Park. Old 'blighted' neighborhoods were labelled slums in Official Plans up to 1969, and were being demolished (or planned to be demolished) to make way for these high-rise suburbs of apartment buildings especially concentrated around nodes of public transit throughout the city. Zoning laws were changed to encourage these forms of development, and the City helped land developers assemble larger parcels of land through expropriation. Plans were also in place to introduce a number of further expressways to connect the downtown with the highways and burgeoning residential suburbs surrounding the city. The modernist planning principles of functional separation of traffic and pedestrian and between land uses, and concentrated density with large amounts of open space and discontinuous street systems represented by such projects, were often at odds with the traditional city fabric: "consistent with modernism's anti-traditionalism, planning visions of the period turned their back on the prewar urban form, depicted as ill-suited to prevailing preferences and needs because of traffic congestion, inadequate parking, deteriorating housing conditions and insufficient green space."[5]

By the end of the 1960s, the urban renewal strategies of the previous decades that were the subject of Jacobs' critique were meeting with serious opposition in Toronto at the level of citizen activism and, ultimately, on city council:

> From 1969 onwards, protest against prevalent planning and urban development found expression in a 'reform' bloc on City of Toronto Council committed to social equity, public participation and environmentalism. A greater readiness to impose control on development represents the chief distinction between members of the reform bloc and other councillors.[6]

John Sewell, a city councillor of the reform bloc, activist and later mayor of Toronto, documents the shift away from modern planning practices in the city in his book *The Shape of the City: Toronto Struggles with Modern*

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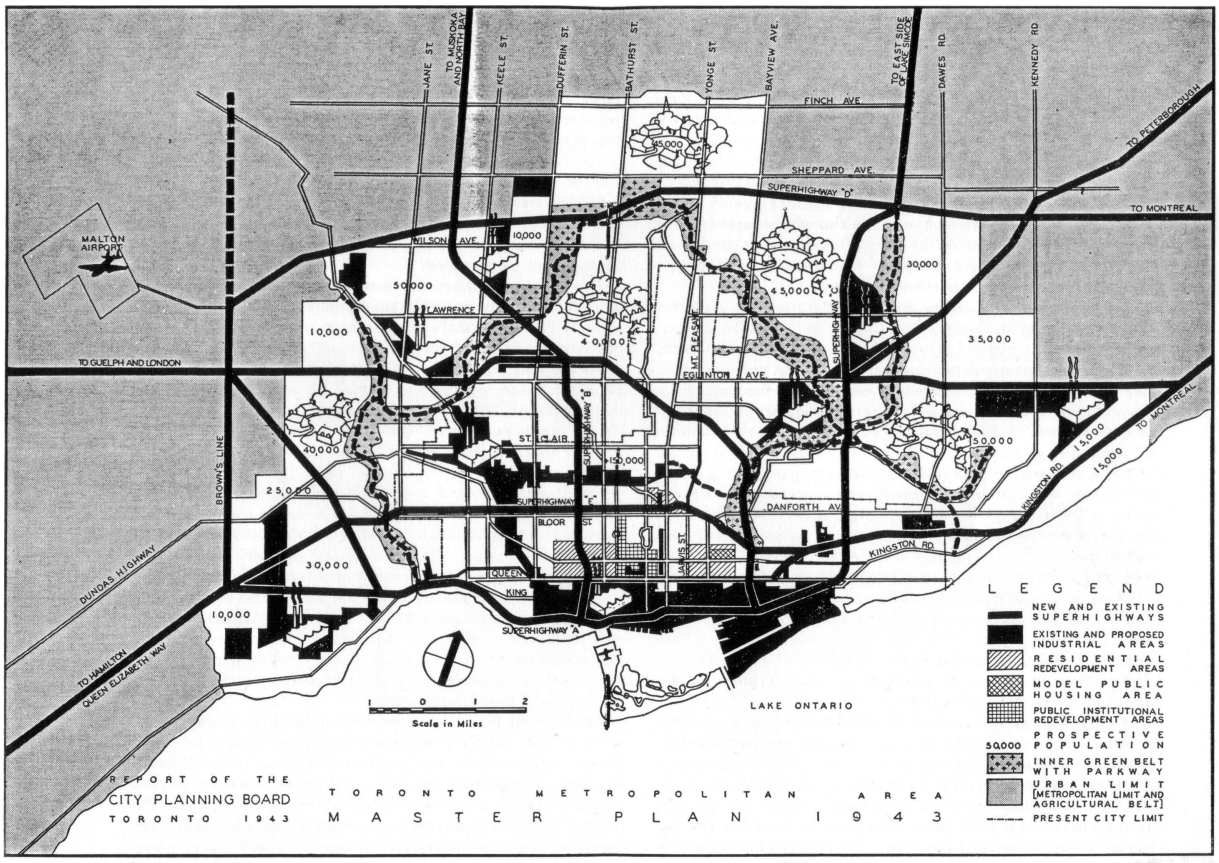
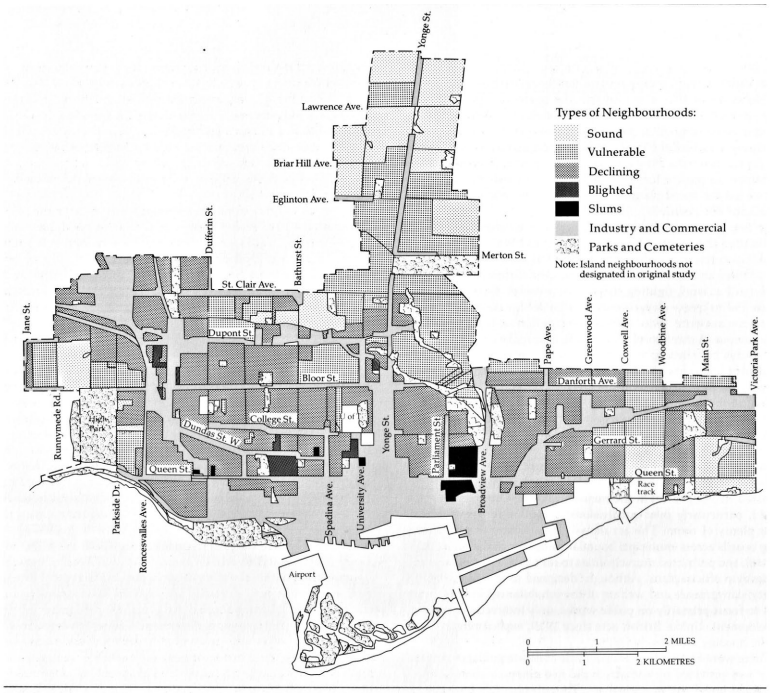
4 Peter W. Moore, "Zoning and Planning: The Toronto Experience 1904-1970" In *Usable Urban Past : Planning and Politics in the Modern Canadian City*, eds. Gilbert Arthur Stelter and Alan F. J. Artibise, 316-341. (Toronto: Macmillan of Canada in Association With the Institute of Canadian Studies, 1979), 335.

5 Pierre Filion,. "Rupture Or Continuity? Modern and Postmodern Planning in Toronto." *International Journal of Urban and Regional Research 23*, no. 3 (September, 1999), 428.

6 Ibid., 432.





50. (top)
City planning board master plan of 1943, indicating key strategies that would eventually be incorporated into Official Plans of the next two decades. A system of express-ways, suburban communities and extensive inner city redevelopment are envisioned

51. (left)
City planning board Neighborhood Classifications. A 1944 assess-ment of central neighbourhoods that would inform urban renewal schemes until the 1970s. It identifies only a very few 'sound' residential areas

Planning. He points to two key projects that constitute the turning point for planning in the city, these were the plans for the Spadina Expressway and the Trefann Court Urban Renewal area.

The first highly publicized debate was over the proposed William R. Allen Expressway (popularly know as the Spadina Expressway); this issue brought the debate around planning policy to the wider public as an election issue that ushered in the reform council of the 1970s:

> "The Spadina expressway proposed to cut through neighborhoods to the north and west of the University of Toronto, winding south from Highway 401 through ravines and residential areas, finally ending on Spadina Avenue within shouting distance of the central downtown. It promised demolition of close to one thousand houses, and total disruption of the community patterns in the west central part of the city. It became the focus of the city's most serious fight yet between the modern and the traditional planning visions."[7]

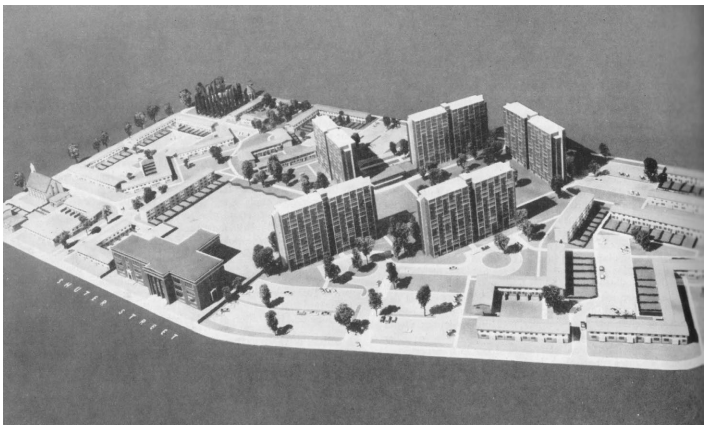
In 1971, the anti-expressway forces were able to have the plans thrown out. The period that followed saw a new attitude to development at the municipal level. This fight to stop the first of a planned succession of expressways that were planned to cut across the city, through established residential areas, in the mould of the Gardiner Expressway, became highly political as many of the neighborhoods affected were home to many affluent professionals who were able to mount an organized, articulate and effective opposition to City Hall.

The second major debate concerned urban renewal plans in the city –particularly the succession of the controversial Don Vale, Don Mount and Trefann Court urban renewal schemes. The practice of expropriation and clearance of existing homes for replacement with public housing such as at Regent Park, Moss Park and Alexandra Park was to proceed in these next three cases. The Don Vale and Don Mount projects saw increasingly strong and organized opposition to the plans, but were unable to stop the projects. This opposition came to a head with the Trefann Court scheme. The original urban renewal plan of 1966 called for expropriation and demolition of all the homes in the area and replacement by new social housing and a new industrial facility. Here the scheme was met with organized and sustained community protest over the period from 1966 to the ultimate adoption of a new plan in 1972. For the fist time, the City was compelled to take a new approach. This was the first project in which municipal authorities undertook extensive local community consultation (homeowners, tenants and businesspeople) in preparing a renewal plan. The resulting plan "was ordinary in every sense of the word: it strengthened and extended the existing street system, and it encouraged new housing on empty lots or to replace structures in very poor

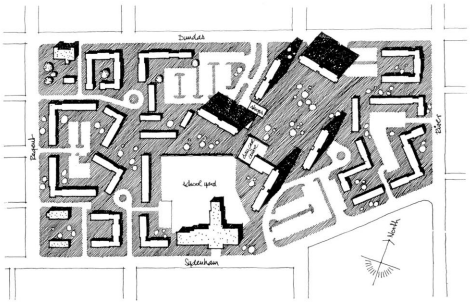
7 John Sewell, *The Shape of the City: Toronto Struggles with Modern Planning* (Toronto: UofT Press, 1993), 178.

52.
St. James Town

53.
1960s High-rise apartment redevel-
opment in the High Park area.

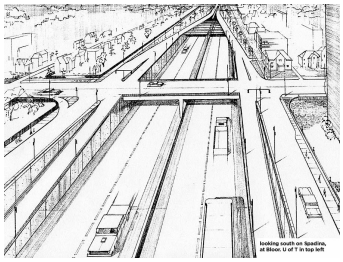


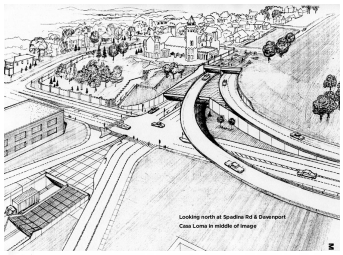
54.
Regent Park South

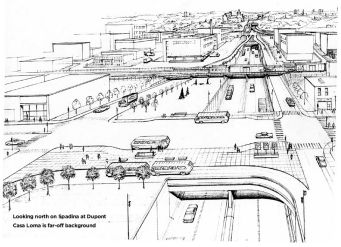


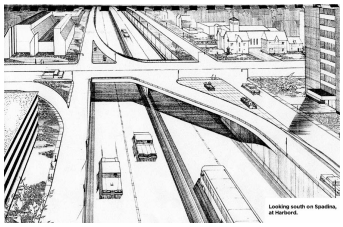
55.
Community opposition to the Spadina Expressway plan.

56. (below)
Images of the envisioned Spadina Expressway: a vision of the modern, functionally segregated city.









57.
Moss Park. High-rise urban renewal scheme of the 1960s using the 'superblock' model.

58.
Public opposition to the Don Vale urban renewal plan.

condition, housing that had front and back yards, and buildings that faced directly onto public streets. The new found its place among the old rather than trying to obliterate or displace it."[8] This highly particular product was the result of the unique process –a working committee formed of a planner working with local community representatives and city councillors, to work out the plan through an extensive collaboration. The debate, controversy and community outcry surrounding the original Trefann Court urban renewal scheme reached to provincial and federal levels of government and contributed to the re-evaluation and ultimately the dismantling of the federally funded urban renewal program nationally.[9] In Toronto, Trefann Court began a trend (particularly for new public housing projects) of contextually sensitive, small-scale redevelopment where existing neighborhoods were involved. A new planning process was adopted, involving public consultation based on the model of the working committee developed at Trefann court, and an overall reworking of development policies occurred throughout the 1970s and 1980s.

The sources of the popular shift in attitude towards planning were quite diverse, and the change was by no means complete; a large pro-development faction remained on council and much large-scale building especially in the central business area and waterfront continued to be allowed and encouraged. Jon Caulfield of York University suggests that: "Four sets of attitudes in particular, were at the roots of reformism. They arose in the contexts of: traditional popular outlooks toward city building in Toronto; changing values in planning and related professions; the growth of the city's young adult population affiliated with marginal political and cultural groupings; and the increasing number of middle class households settling in the inner city."[10] These four categories of interests reflect a wide range of social, political and economic groupings within the city, and their combined opposition to various aspects of policy and practice of city building at that time all contributed to the shift towards a more cautious and consultative approach to planning.

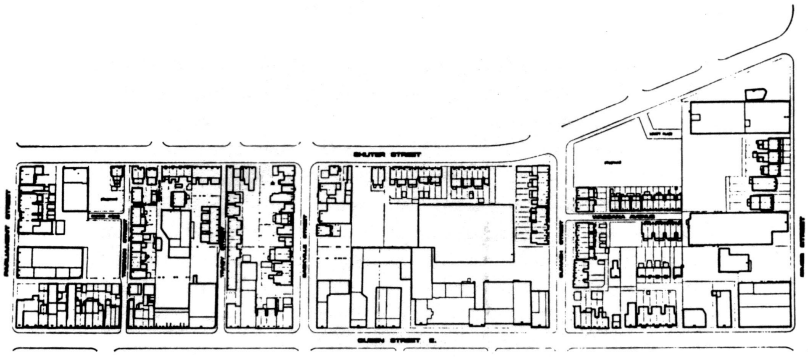
Each of these four groupings identified by Caulfield had a stake in the shape of the city, and was concerned with the direction of growth and its effects on quality of life and land values. The traditional, established social elite "who in the past had customarily taken a fairly cautious outlook toward urban change", despite their support of commercial expansion and the rising importance of Toronto, were uncomfortable with the "style and apparent

8 Ibid., 162.

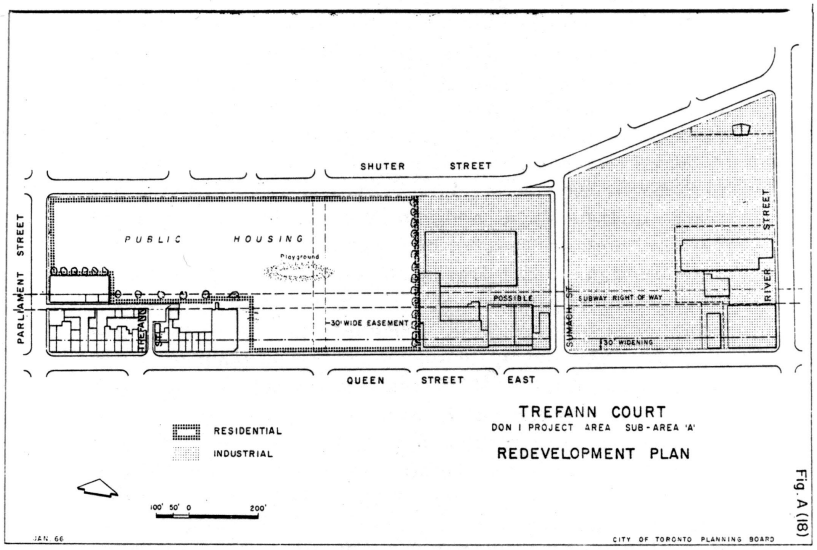
9 See also Graham Fraser, *Fighting Back: Urban Renewal in Trefann Court* (Toronto: Hakkert, 1972).

10 Jon Caulfield, *City Form and Everyday Life : Toronto's Gentrification and Critical Social Practice* (Toronto: University of Toronto Press, 1994), 67.

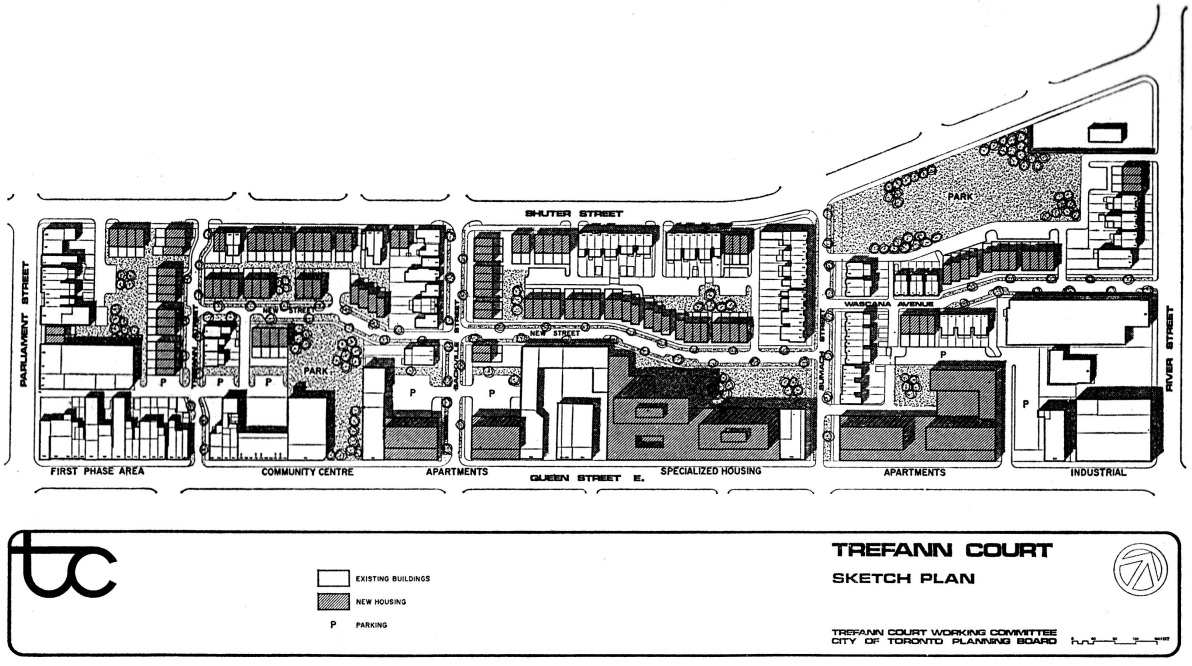
59.
The Trefann Court redevelopment area c.1964



60.
The 1966 Trefann Court Redevelopment Plan.



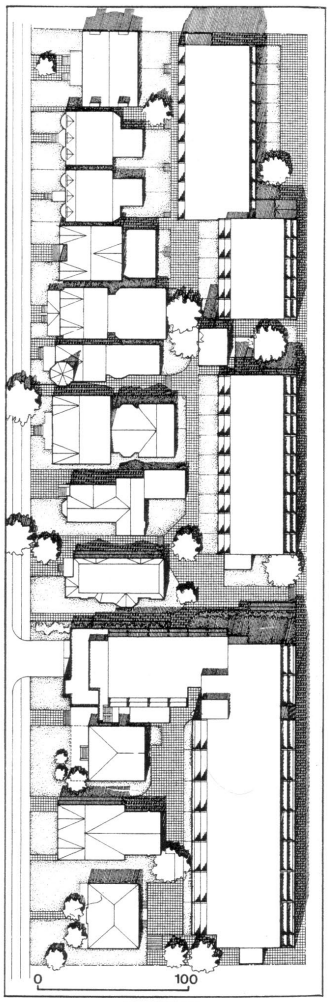
61. (below)
The 1972 Trefann Court Redevelopment Plan developed by the community based Working Committee.

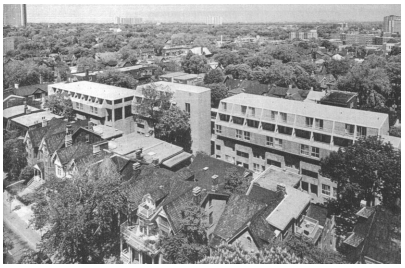


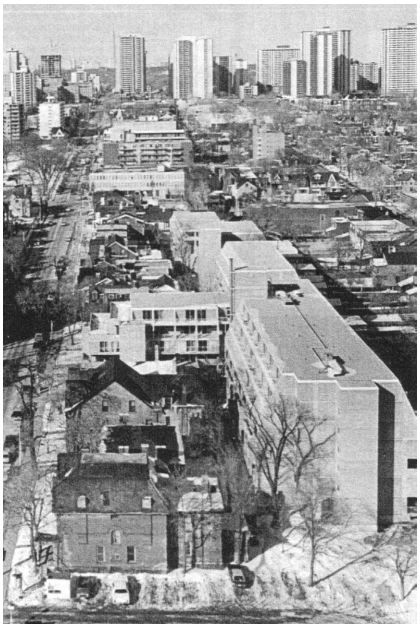
headlong pace of change in the city." This attitude was also echoed by a growing urban middle class that, unlike in many other North American cities, had never completely abandoned the inner city or were beginning to re-inhabit and invest in old neighborhoods. Working class communities also had long established attachments to their neighborhoods, which were most likely to be singled out for clearance and redevelopment. All were growing increasingly concerned about the vulnerability of their homes and neighborhoods in the face of urban renewal and expressway plans.

City planners too, at this time contributed to the emergence of new attitudes. This new generation of planners who began to work at city hall at this time, had been "educated in the midst of an attack on urban modernism centred around writers like Jane Jacobs, Lewis Mumford, and Robert Venturi, and the ideas of these critics of modernist form exerted a powerful influence on the young planners' views of downtown neighborhoods." This group was an important factor working within the decision making structure of city hall, and "the planners' ideas were often strongly endorsed by spokespersons from related professions – architecture, social services, urban social science – who provided briefs and studies supportive of reformist objectives. Overall there had been a major upheaval in the way that urban 'experts' perceived and theorized inner-city neighborhoods."[11] The architectural community in

11 Ibid., 67-69.







62. (above and left) Sherbourne Lanes, non-profit housing. (Diamond and Myers, 1977)
One of the first infill projects in Toronto. This scheme came about after citizen opposition to another scheme to clear the site and erect high-rise buildings. The City's newly formed public housing corporation undertook this low-rise, high-density project that incorporated a mix of unit types for varying household type and size, with an emphasis on limited income households and families. Where possible, existing houses on the site were rehabilitated and converted to apartments.
This project sits in marked contrast to the high-rise apartment projects of St. James Town seen in the background.

Toronto also became deeply involved in the reform movement in the form of studies prepared for revision to the Official Plan and by pioneering of a number of new approaches to city building, such as urban rehabilitation and infill building.

The St. Lawrence Neighbourhood

The shift in approach to city planning of the reform movement found expression in the large redevelopment plans of the 1970s. Both private and public sector projects began to incorporate, with varying degrees of success, many of the principles of mixed-uses, respect for historic buildings, existing urban patterns and established neighborhoods. In Toronto, a number of the conditions and principles identified by critics like Jane Jacobs began to influence planning and policy decisions -if not truly in practice, at least in rhetoric. The St. Lawrence Neighborhood project, begun in 1974 (final phase complete 1998) applied many of these principles and has become a touchstone of discussion on urban design in Toronto. It was located on a disused, forty-four acre former industrial area south east of the central downtown. It was to be a completely new community to accommodate 3500 new residential units for a mix of income groups. It was to be a municipally planned and developed, high-density socially mixed new neighborhood. Even calling it a 'neighborhood' rather than a 'project' was part of the new rhetoric of this scheme.

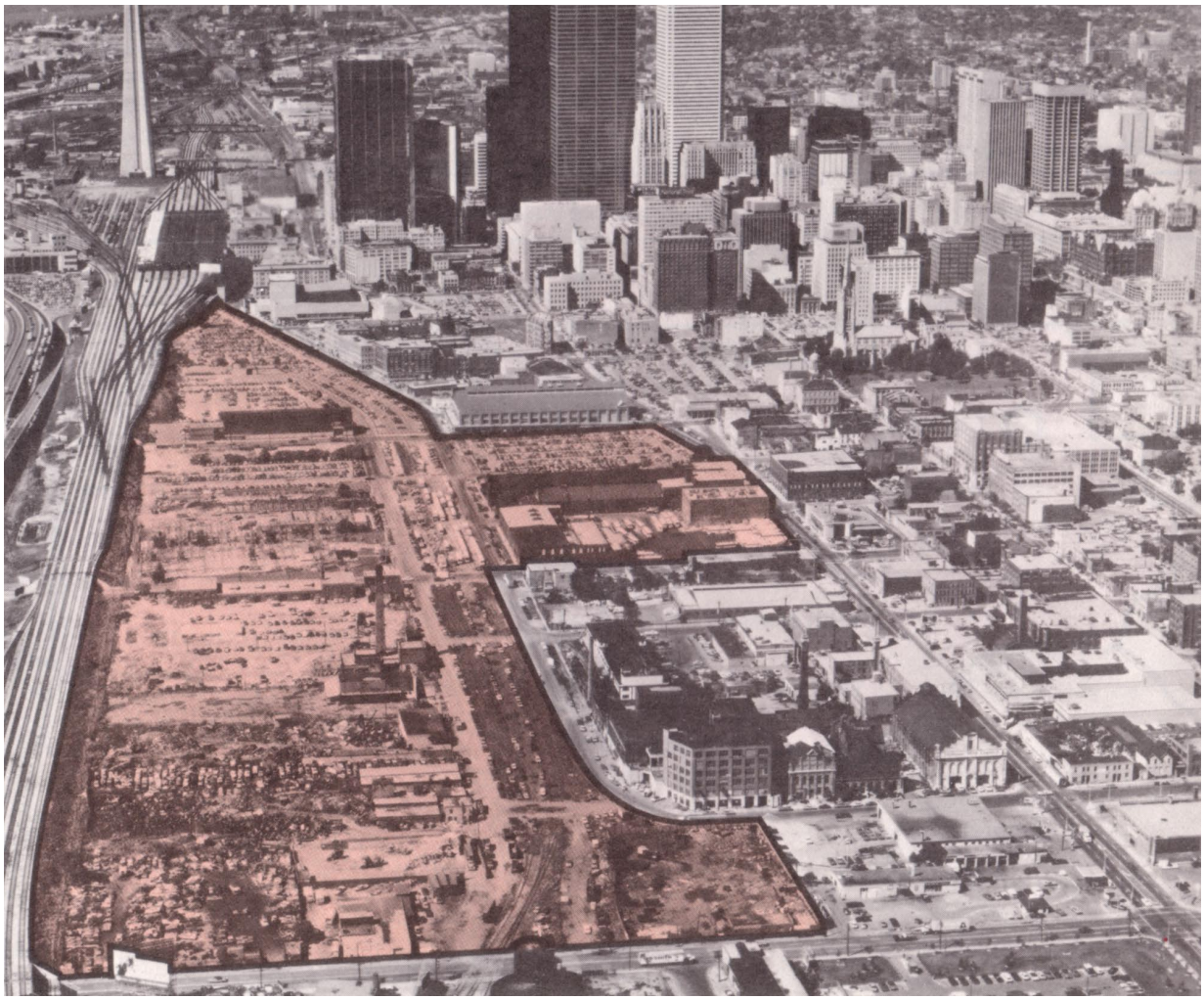
63. (facing)
The site of the St. Lawrence Neighbourhood Project before redevelopment.

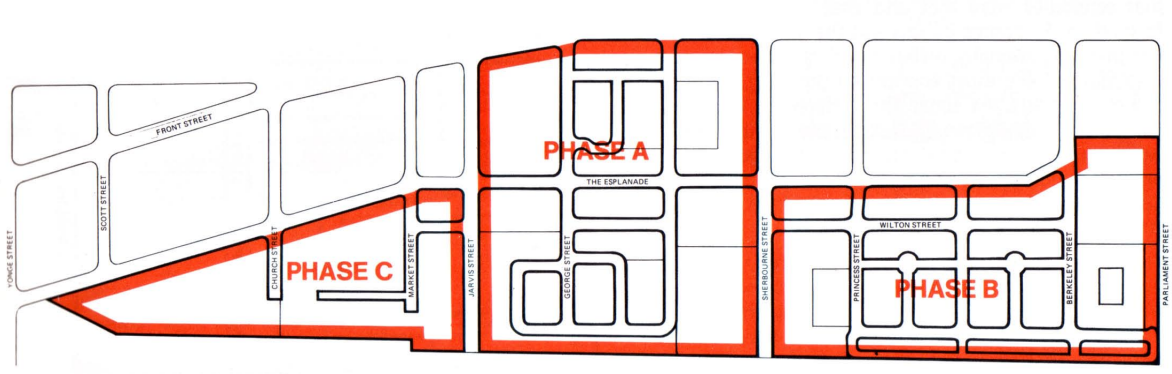
The influence of the observations and principles described in *The Death and Life of Great American Cities* is pervasive in planning of the St. Lawrence scheme. Journalist and critic Robert Fulford recounts Jane Jacobs' direct involvement in urban affairs and city politics "from public demonstrations to hearings of the Ontario Municipal Board, and sometimes she affected crucial decisions –as she did in the leadership of the St. Lawrence Neighborhood." Fulford explains that the planning specifications for the project were written by an architect suggested by Jacobs, and that she was peripherally involved in numerous discussions and decisions about its planning.[12] The recent local example of the Trefann Court neighborhood plan –a plan developed through a working committee of local residents, tenants and business people working closely with a planner and local municipal politicians- was also undoubtedly of great influence on St. Lawrence at both levels of the planning process and physical product.

64. (facing)
St. Lawrence Neighbourhood Block Plan and phasing diagram.

The first attribute that set St. Lawrence apart from other urban renewal plans was the decision to maintain the street grid. Keeping the street grid at St. Lawrence "was a clear philosophical rejection of 'modernist' approaches to urban design and architecture. This rejection was a common theme in the early 1970s of the urban reform movement in general. Almost all urban renewal projects and all the public housing projects of the 1950s and 1960s used the 'superblock' design concept, obliterating existing street patterns and buildings in favour of a strict separation of vehicles and pedestrians and imposing a new non-grid layout for traffic, pedestrians and

12 Robert Fulford, "Ballet of the Streets" in *Accidental City : The Transformation of Toronto* (Toronto: Macfarlane, Walter & Ross, 1995), 76.




PHASE A
PHASE B
PHASE C
FRONT STREET
SCOTT STREET
YONGE STREET
CHURCH STREET
MARKET STREET
JARVIS STREET
THE ESPLANADE
GEORGE STREET
RICHMOND STREET
WILTON STREET
PRINCES STREET
BERKELEY STREET
PARLIAMENT STREET

buildings "[13] Maintenance of the historic grid of streets (and some of the old buildings) has become a core first principle in nearly all subsequent large scale Toronto redevelopment plans, yet at the time of the St. Lawrence planning, this was a unique and precedent-setting decision. Unlike the 'superblock' model employed in other projects, the continuous streets provided direct access to sidewalks and a clear address for each for the buildings, allowed the watchful eye of traffic and police within the district, and blurred the borders of the neighborhood by knitting it in with surrounding districts. The site was then divided into development parcels, ensuring that there would be a number of different developers and architects, each adding their own interpretations to the built character of the project.

Following the experience of the Trefann Court project, the planning process itself was unique in its openness and community consultation. In addition to the professional planners and architects working on the scheme, council members, who were the ultimate decision makers, were actively involved in the process throughout the project. This project also saw the creation of a new municipal Housing Department to oversee the implementation of housing policy. According to John Sewell, "council established a committee that eschewed professional planning advice and prized ordinary citizen input. The committee consisted of representatives from neighborhood groups, public housing projects, nonprofit cooperative housing, and the private development industry, as well as members of council from the wards affected."[14] The interaction of city officials, professional planners, and community organizations was a very different approach to city building. "It permitted the development of a unique large project which violated many of the traditional approaches professional planners were using at the time to plan large scale residential projects. The St. Lawrence planning process was different. As a result, the product was different compared to most new neighborhoods developed prior to the 1970s."[15]

Both physical planning and social planning were integral to the St. Lawrence project. The intention to create a diverse, heterogeneous and thus 'normal' neighborhood involved ensuring mixed use, tenure and building type. As planner Frank Lewinberg describes: "The final key principle was mandating mix, again a condition found in most neighborhoods and never in projects. Mix in St. Lawrence became almost a fetish. Development

13 John David Hulchanski, "Planning New Urban Neighborhoods : Lessons from Toronto's St. Lawrence Neighborhood", *U.B.C. Planning Papers. Canadian Planning Issues*, no. 28, (Vancouver: School of Community and Regional Planning, University of British Columbia, 1990), 8.

14 Sewell, *Shape of the City: Toronto Struggles with Modern Planning*, 194.

15 Hulchanski, "Planning New Urban Neighborhoods : Lessons from Toronto's St. Lawrence Neighborhood", 3.

was to be mixed in housing type, housing tenure, income group, land use, and even developer. The neighborhood was developed with a mix of non-profit, co-operative, and private owners, and among each there were many different developers."[16] The mix of housing types within the neighborhood is predominantly townhouses and large, 10-12 storey apartment blocks, containing a variety of unit types. The mix of tenure types includes market condominium, non-profit co-operatives, as well as private and non-profit rental apartments.

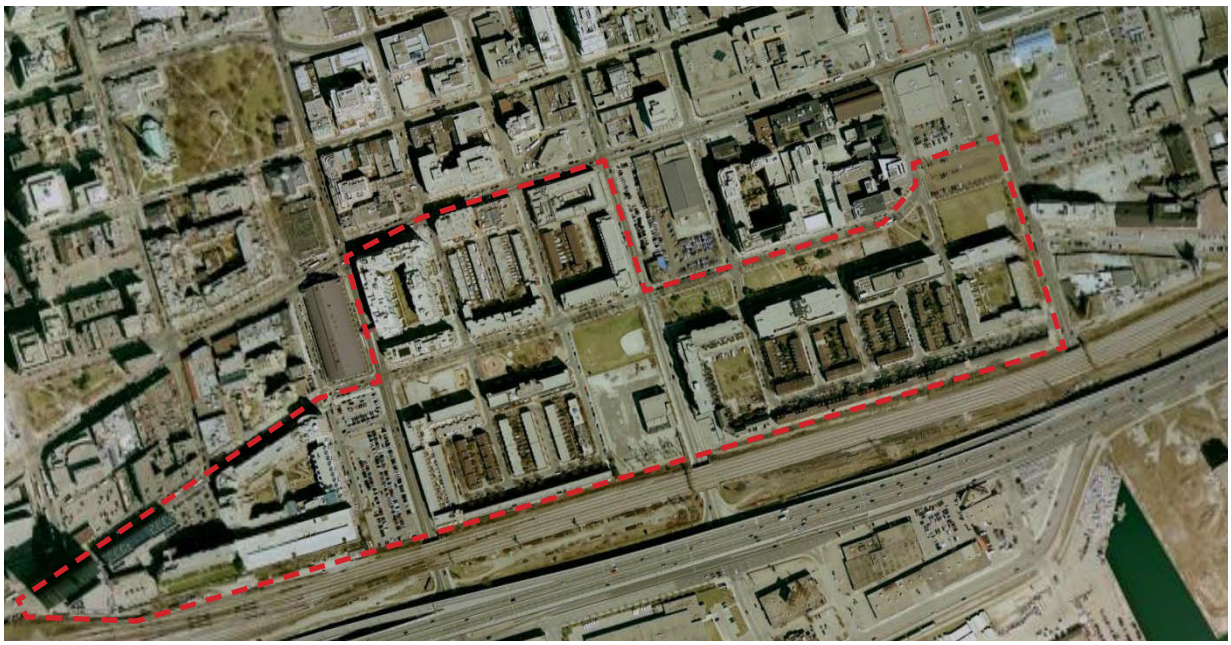
This mix of housing types and tenures contributes to the long-term stability of the neighborhood by being better able to "accommodate changing life styles and life cycles. Residents have a choice of staying within their area as their requirements change."[17] Housing was intended to be fundamentally inclusive, targeted at a wide range of occupants in terms of age, household size and type (including families with children), and income. Supporting the residential aspect were integrated retail spaces and other community services such as recreation facilities, a school, and a major central park were included within the scheme –not as a hermetic community, but integrated with the rest of the city.

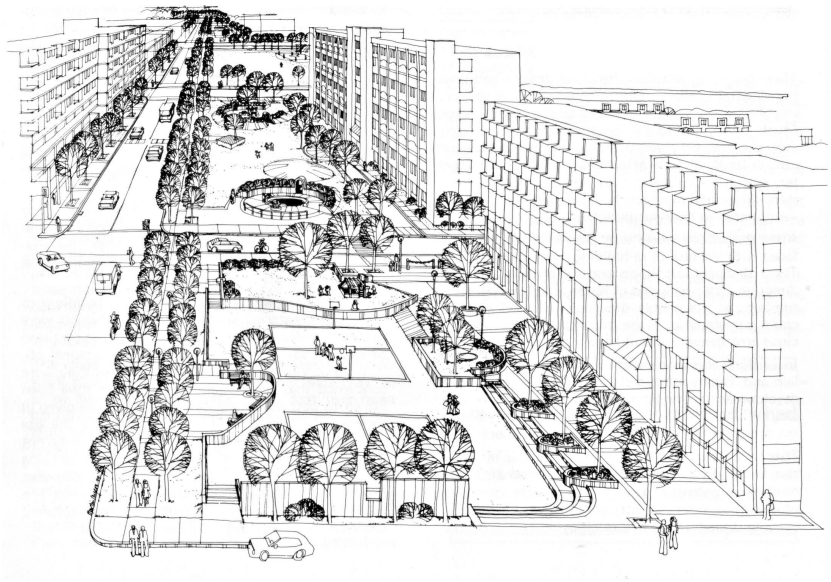
The result was a piece of the city that had some of the same

16 Frank Lewinberg, "The St Lawrence Neighborhood: A Lesson for the Future" in Nancy Byrtus, Mark Fram, and Michael McClelland, eds. *East/West: A Guide to Where People Live in Downtown Toronto* (Toronto: Coach House Books [for the] Society for the Study of Architecture in Canada, 2000), 69-70.

17 Hulchanski, "Planning New Urban Neighborhoods : Lessons from Toronto's St. Lawrence Neighborhood", 15.

65.
St. Lawrence Neighbourhood today





66.
Image of Crombie Park that forms the central focus of the St. Lawrence Neighbourhood scheme. The park is bordered by large mixed-residential blocks.

67. (above)
Crombie Park in 2007

68. (left)
One of the low-rise townhouse residential streets behind the large apartment buildings in the St. Lawrence neighbourhood

heterogeneity of form and population of the rest of Toronto. The district's boundaries are nearly imperceptible. Its residential turnover is low, and it has done away with much of the social and physical isolation associated with public housing schemes of the previous decades that had the effect of segregating people based on income. It is considered a triumph of the new post-modern urbanism, and remains a key reference for nearly all subsequent redevelopment plans in Toronto.[18]

The St. Lawrence Neighborhood provides a local model for new urban redevelopments in that it succeeds in its social and economic mix, its open planning process and to some extent in its architecture. The project represents an infill development approach to even a large-scale redevelopment site: it elaborated on the existing street grid, and parcelled out smaller lots for individual buildings, that could be built by different developers and architects, and owned by different interests- thus it has the potential for some incremental change, and acts to some degree like the historical city and is better able to respond to specialized interests and changing needs. However, its architecture remains largely out of scale with much of the traditional residential fabric of the city. Its particular site conditions -vacant lots and larger industrial buildings- were specific to this location. The lot dimensions and the building types that make up St. Lawrence are of a different order than those found on main and residential streets throughout the neighborhoods of the city. Its high proportion of housing, lack of a true main street, and unusual central park represent a new kind of neighborhood, albeit one that is informed by surrounding models.

The project established the value of mixed forms of development (mixed land uses, building and unit types, incomes and tenure) and it signalled the shift in policy towards forms of development that favoured infill, low- and mid-rise intensification, contextual consideration and neighborhood stabilization and protection that became the basis for subsequent city planning initiatives like the Ataratiri Neighborhood project and the Housing on Toronto's Main Streets Initiative that followed, and would have begun to refine the formula of St. Lawrence.

18 See *Regent Park Revitalization Study : Summary Report on Action Plan and Implementation Strategy : Submitted to the Toronto Community Housing Corporation*. (Toronto: Regent Park Collaborative Team, 2003). Especially the section "Lessons from St. Lawrence", that examines St. Lawrence for direction in the new plan.

The Ataratiri Neighbourhood Project

The construction of the St. Lawrence Neighborhood proceeded through the 1980s, but its successes were already apparent. It inspired another large scale housing project that was intended to be planned along similar lines on another large adjacent site. This project was called 'Ataratiri'. It was to be located on an eighty acre site on the eastern edge of downtown Toronto on what was largely industrial land of warehouses, railway yards, factories and scrap yards. The land was purchased by the City with help from the Province. Like the St. Lawrence Neighborhood, this was to be a municipally planned and developed district intended to "increase the supply of affordable housing", "offer a full spectrum of services geared to the present and future needs of its residents" and create a "stable industrial and commercial employment base in the area."[19] It was also intended to rehabilitate a large area of environmentally degraded and flood-prone urban land, but it was the costs of this remediation that is largely attributed as the cause of the abandonment of plans for the area. Despite the demise of the project by March of 1992, four years of planning and study had been done towards the realization of this plan.

Both the Ataratiri and St. Lawrence plans adhere to the post-modern or 'neo-traditionalist' strategies of maintaining the normalcy of the city grid, and establishing mixed use, type and tenure of buildings and dwellings. Physical form was to reflect as much as possible the character of traditional city residential neighborhoods. However, the St. Lawrence plan had contained a significant physical feature that was a departure from the Toronto tradition: "it was proposed that the design provide a site with a 'major neighborhood focus' such as a city square, something not commonly found in Toronto neighborhoods."[20] The result was the eight-acre Crombie Park that runs six blocks through the centre of the neighborhood. While public open space and parks figured into the Ataratiri plan, it was not designed around such a central park, but rather around a main street. In Ataratiri, Front Street East was to be re-established with business and community services to "reinforce Front Street East as the neighborhood's social and retail focus."[21] Planners noted that "traditional Toronto neighborhoods have developed around main streets, which provide important retail and service functions and impart a certain character on their residential environs. As a typical neighborhood, therefore, Ataratiri should have a main street that serves local shopping needs, links the community together and provides it with a lively social focus."[22]

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19 Toronto Planning and Development Dept., Robert E. Millward, and Daniel Burns, *Ataratiri : Principles, Directions and Strategies* (Toronto: Produced for the Housing Department by the Dept. of the City Clerk, Information and Communication Services Division, 1990), 2.

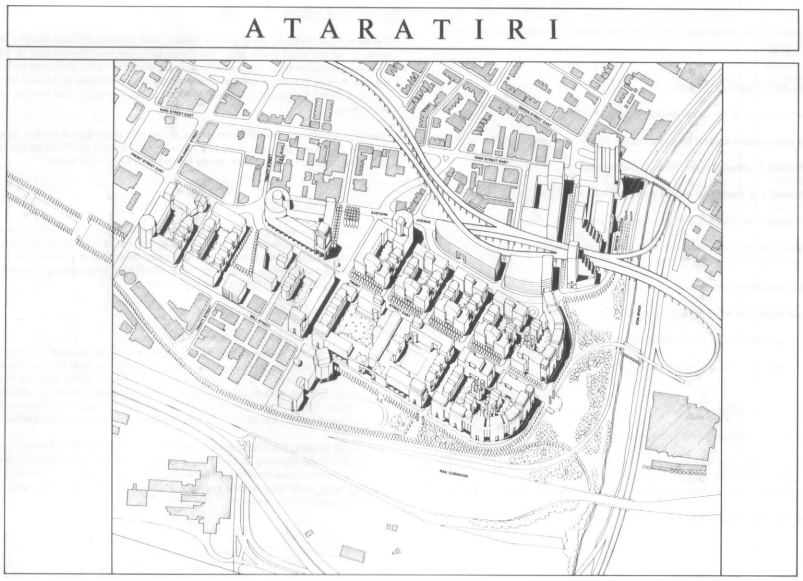
20 Hulchanski, "Planning New Urban Neighborhoods : Lessons from Toronto's St. Lawrence Neighborhood", 7.

21 Toronto Planning and Development Dept., *Ataratiri : Principles, Directions and Strategies*, 5.

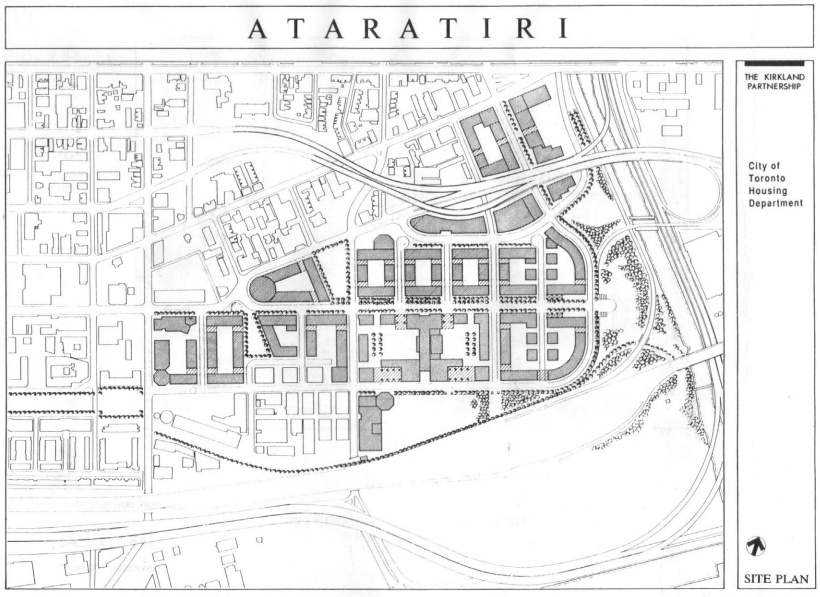
22 Ibid., 73.

This is an acknowledgement of the role of Toronto's historic main streets as primary public open spaces that have developed in this specific historical, social, and climatic milieu. Rather than attempt to impose outside typologies of physical layout, such as irregular streets, a public square or central park, Ataratiri recognized a fundamental aspect of Toronto's past urban development.

69.
Rendering of Front Street, the focus of the Ataratiri neighbourhood scheme. (Brown and Storey Architects)

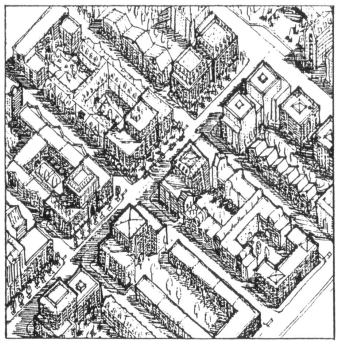


70.
Ataratiri Site Massing Plan. (Kirkland Partnership).



71.
Ataratiri Site Plan. (Kirkland Partnership)

Buildings and Blocks in Ataratiri



72.
Ataratiri Concept sketch from the Spaziani and Fong *Ataratiri: Building and Block Study*, envisioning a fine-grained mix of building types and scales

> We believe that St. Lawrence is one of the most livable, new neighborhoods and therefore successful urban projects in North America. However, its lasting contributions to the discipline of urban design lack complementary and equivalent levels of architectural achievement. The opportunity presented by the development of a master plan for Ataratiri is one which recognizes balance between the systems analysis of operational planning and the actual development of urban form together with the experiential perceptions such urban form engenders.[23]

Among the many studies and reports that were undertaken in the planning of the Ataratiri project, and of particular relevance to the topic of main street building, are the *Ataratiri: Building and Block Study* prepared by Michael Spaziani Architect and Steven Fong and the *New Designs for Multi-Family Housing in Ataratiri and the Railway Lands* prepared by Garwood-Jones and van Nostrand Architects. The first studied the urban design implications of block dimensions and layout, access to services, parking and building typology strategies; the second studied the design potential of dwelling units to accommodate changing groups and needs of occupants. The first report will be discussed here, while the second will be discussed in a later section dealing with residential design.

The *Ataratiri: Building and Block Study* followed four earlier 'General Urban Design Issues Studies' prepared by Toronto architectural firms that each made preliminary suggestions regarding the urban design for the new neighborhood. The *Ataratiri: Building and Block Study*, was a "detailed exploration of alternative block dimensions and layout; service access and parking configurations; ability to accommodate various residential and non-residential building types over a range of densities; arrangement of private and public spaces within the block; and the relationship of buildings to the street hierarchy."[24] It attempted to synthesize the ideas of the four previous studies and proposed a series of scenarios of different potential block dimensions and corresponding prototypical building types based on study of local and international precedents.

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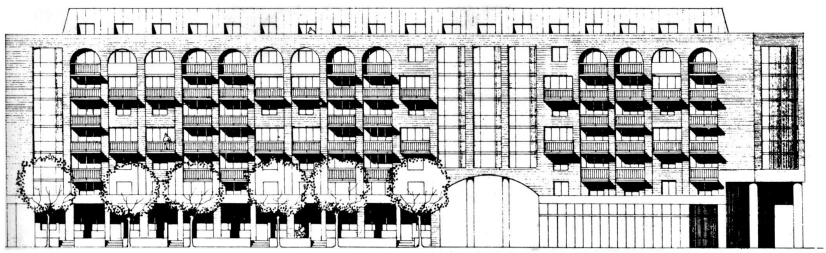
23 Michael Spaziani, Steven Fong, and Toronto Housing Dept., *Ataratiri : Building and Block Study* (Toronto: City of Toronto Housing Dept., 1990), 10.

24 Toronto Planning and Development Dept., *Ataratiri : Principles, Directions and Strategies*, 62.

73.
One of the typical residential apartment buildings of the St. Lawrence Neighbourhood deemed innapropriately large by the *Ataratiri: Building and Block Study.*
(Zeidler Partnership Architects)



Along with the now commonplace requisites of typical street grid, mixed-uses, grade-related activity, streetscape design quality, and neighborhood accessibility, the authors called for a finer grain of lot division and buildings than was typical in most large housing projects, including St. Lawrence. They observed that:

> The failure of many large scale redevelopment projects can be traced to a problem of building projects that are an excessive size. Contrary to this failure of scale, the success of older Toronto neighborhoods stems from their incremental development through many smaller scale projects. These typically were single family or row house buildings built on limited numbers of lots. The result is a fine grained, detailed urban environment with an appropriateness that has evolved over time. The scale of apartment buildings which Toronto developers built at the turn of the century through to the 1940s produced apartments that were constructed with fewer than 100 units, each with an identity and character which complemented the predominant lower density houses.[25]

Their block studies incorporated such mid-scale apartment buildings to achieve higher densities while maintaining the finer grain associated with traditional neighborhoods.

The study suggested a block dimension (72 metres wide and about 136 metres deep), that was in keeping with traditional Toronto neighborhoods and could accommodate a number of building types, while maintaining adequate open space and sun penetration within the block. They developed a system of shared underground parking access and laneway infrastructure that would permit a maximum of individual building parcels within each block. Each of these small-scale parcels could then be potentially built by a different architect and developer: "In Ataratiri projects should be limited in size to increase the likelihood of finer grained development. By allowing for parcels of land with as few as 30 dwelling units, the opportunity for the smaller developer to be involved or a smaller co-operative is possible. These scales of projects would also permit a greater range of architectural firms to participate in the development of Ataratiri. The effect of this smaller parcel development will cause Ataratiri to be more familiar and secure resulting in less institutional forms."[26] The authors also warned, however, that even with an optimal block dimension and access system, that there would be a danger of overbuilding on the blocks with inappropriate building types and densities if not carefully limited.[27]

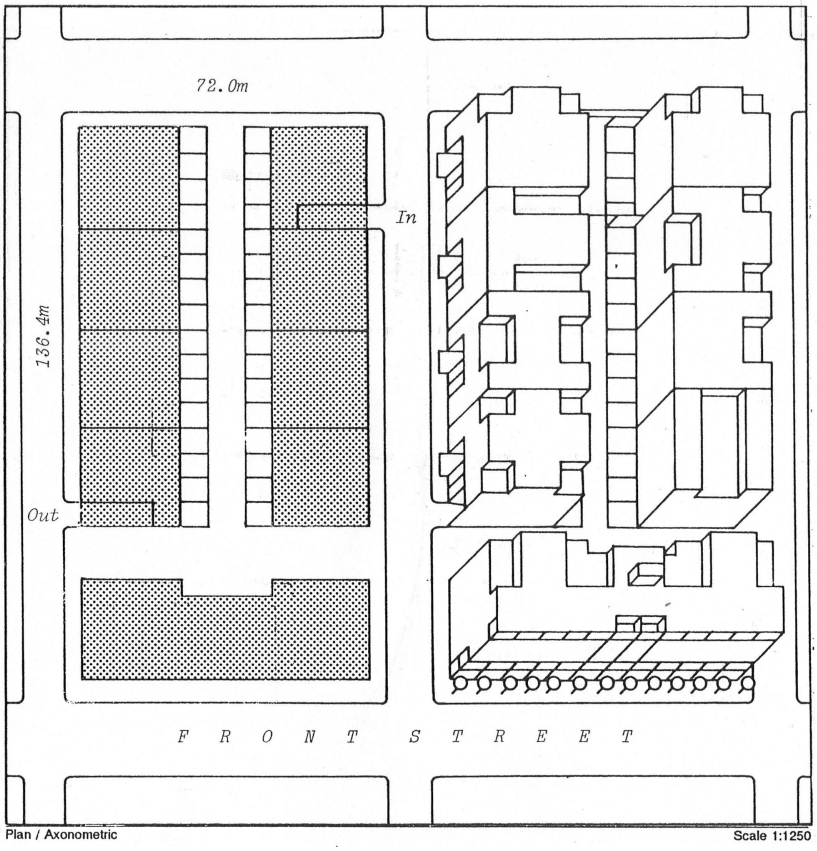
The study looked at a series of precedent buildings locally and internationally, that together would provide a mix of prototypical building types and densities that included perimeter housing, courtyard housing, small

25 Michael Spaziani, Steven Fong, and Toronto . Housing Dept., *Ataratiri : Building and Block Study* (Toronto: City of Toronto Housing Dept., 1990), 117.

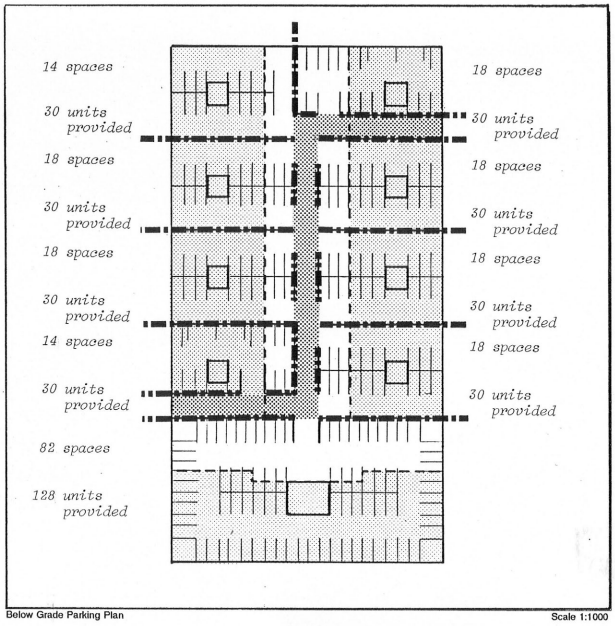
26 Ibid., 117.

27 Ibid., 6.

74.
One of the suggested block configurations that incorporates a mixture of individual buildings, using a shared underground parking system.



Plan / Axonometric Scale 1:1250



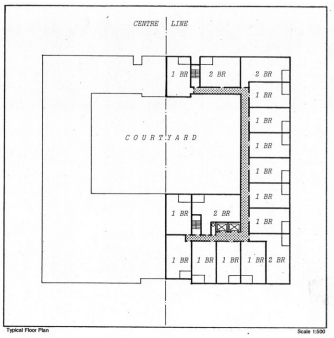
Below Grade Parking Plan Scale 1:1000

European-inspired apartment houses or 'urban houses', and point towers. The combination of types was intended to create a greater possibility of individuation than the more common "freestanding, self referential towers and slabs." They suggested that the need for higher density than was typical of Toronto neighborhoods was a challenge, but need not prevent the creation of viable, high-quality residential neighborhoods. [28] Reflecting on the currents in planning of the day, they recognized that:

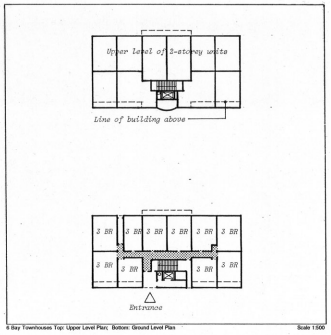
> Since at least 1974 with the resurgence of public conscience, 19th century neighborhoods in Toronto have gained legitimacy and attracted architectural interest. This new found acceptance of the neighborhood street is accompanied by a public admiration for the corresponding housing stock that includes townhouses, semi detached houses, and free standing houses.
>
> However the small apartment building has escaped attention although it too is a component of Toronto neighborhoods. This precedent study records images of many small apartment buildings both as a "corrective" to current perceptions of Toronto as a city of small houses and because it seems likely that such small apartment buildings will constitute an important, basic element in the high density neighborhood proposed for Ataratiri.[29]

The positive consequences to the urban landscape of the strategy of small and incremental development instead of large single buildings was a key finding of this study. Lessons regarding building type and lot size –especially the reintroduction of small apartment buildings- are applicable not only to large public housing schemes like Ataratiri, but to urban intensification and development city-wide.

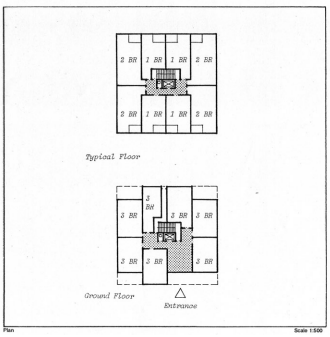
Despite their strong case for breaking up blocks into more and smaller individual buildings, they were obliged to acknowledge the "severe constraints" of economy related to the large amount of affordable housing required in the Ataratiri program (maximum unit prices for affordable units are set by Ministry of Housing regulation, limiting the price developers may charge for the units). Many of the non-profit developers involved with Ataratiri favoured larger, double-loaded, long-corridor access building types with two elevators. Such forms are preferred for their economies of scale and maximum floorplate efficiency. However, the study points out that "It should be understood that the above building types if taken to extremes in Ataratiri could result in an overwhelming institutional neighborhood appearance with long facades facing the street and continuous roof lines...we have suggested that other efficient building types do exist and these in conjunction with the current industry standard will lead to a much more expressive and appealing urban design character for Ataratiri."[30] It should be noted that the large



Courtyard Housing



Townhouse Perimeter Housing



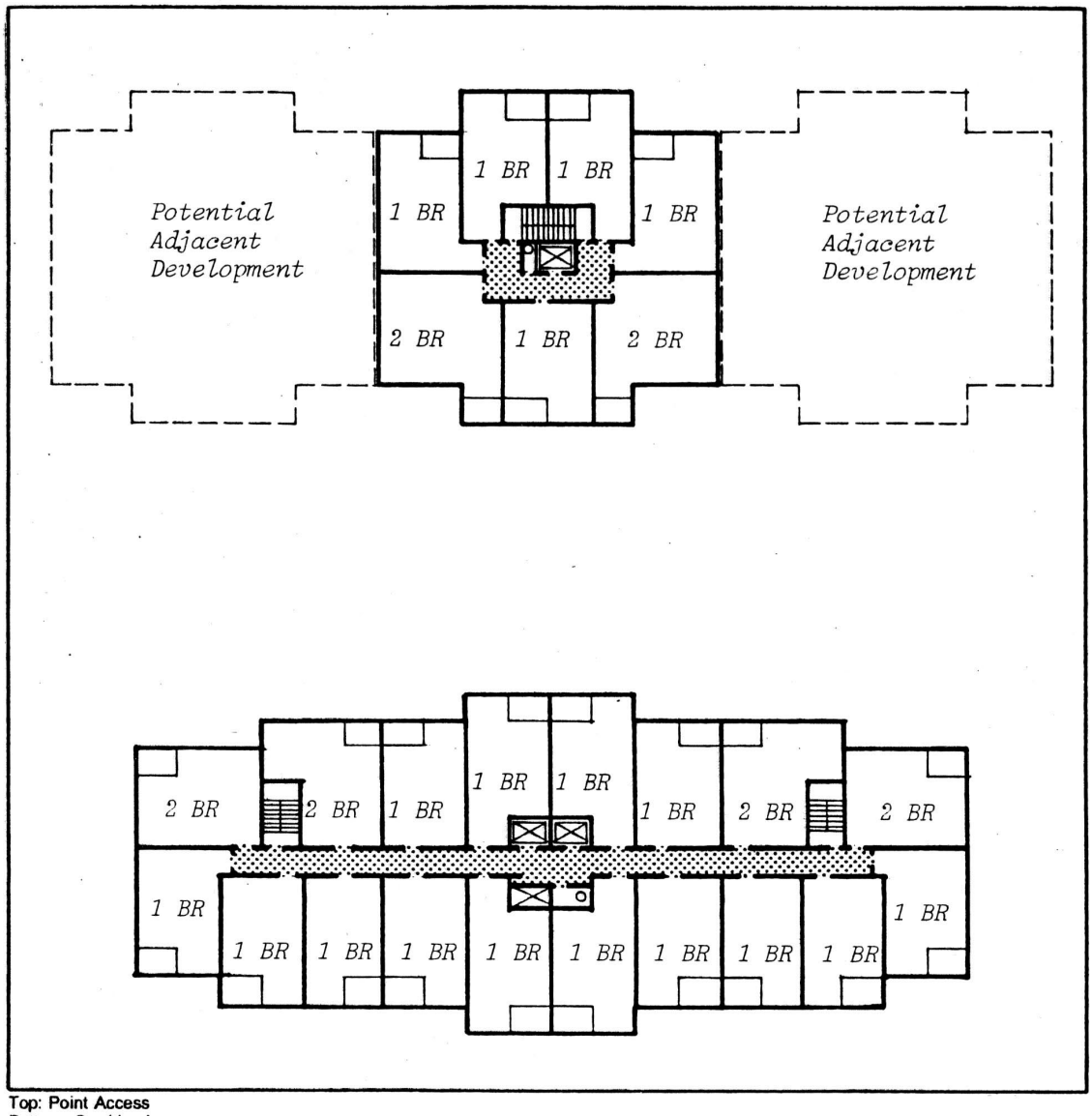
"Urban House" Type

75. (top three)
Recommended housing types as alternatives to the slab block type.

28 Ibid., 7-10.

29 Ibid., 117.

30 Ibid., 13.



Top: Point Access
Bottom: Corridor Access

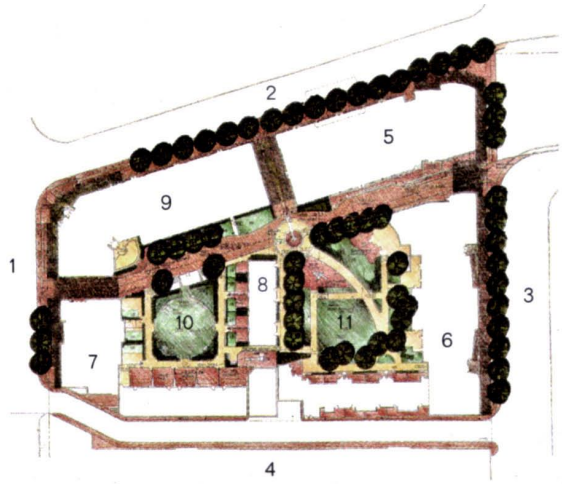
76.
Illustration of the potential for a series of adjacent point-access buildings to achieve equivalent density of the more common double-loaded corridor slab type, while maintaining a diversity of architectural character

slab buildings the study opposed, is a type born of economic expediency, not of relationship to existing city fabric or for its benefits to the overall urban character of a neighborhood, nor for the quality of the dwelling space produced. The demonstrations of high-density alternative building types proposed by the rest of the study indicate possible viable alternatives to large-lot buildings that better accomplish goals of urban design and architectural quality.

Concurrent with the *Building and Block Study*, its authors were also retained by Toronto's Housing Department to propose urban design guidelines and block parcel strategies for the final phase of the St. Lawrence development. This last and easternmost block of the St. Lawrence lands, was planned along very similar lines as those described in the *Ataratiri: Building and Block Study*. The block, known as 'Block C2' is bounded by Market Street, the Esplanade, Church Street and railway tracks to the south. The large block is first broken up into four separate parcels. Each parcel was then to be designed and developed by a different architect and developer, each for a different client group. The buildings are owned by separate co-operative or public housing groups. While each building would have its own identity, they would be coordinated with the other buildings, share common underground parking facilities and an interior landscaped courtyard. Their scale is reflective of the overall (large) size of the buildings of the rest of St. Lawrence's earlier phases, but this block with its ensemble of 4 distinct buildings offers a more varied and even less 'project-like' appearance. This is the result of 4 unique buildings that reflect not just superficial external differences, but rather result from the distinct programs, needs and tastes of their respective users and development teams. Upon the completion of this final phase of the St. Lawrence neighborhood in 1998, *Canadian Architect* editor Marco Polo noted that "at the time of its conception, Block C2 was thought of as a prototype for future development. Although cancellation of provincial funding for social housing has brought to a halt the development of affordable housing projects, it stands as an example of how large blocks can be developed to accommodate a lively mix of residents. The economies realized by virtue of shared amenities, and the variety of architectural expression achieved within a single coherent urban design strategy, provide an exemplary precedent for building –and living- in the city."[31]

31 Marco Louis Polo. "Downtown Prototype." *The Canadian Architect 44*, no. 8 (August, 1999), 21.

77. (Below)
St. Lawrence C2 Block



Site plan

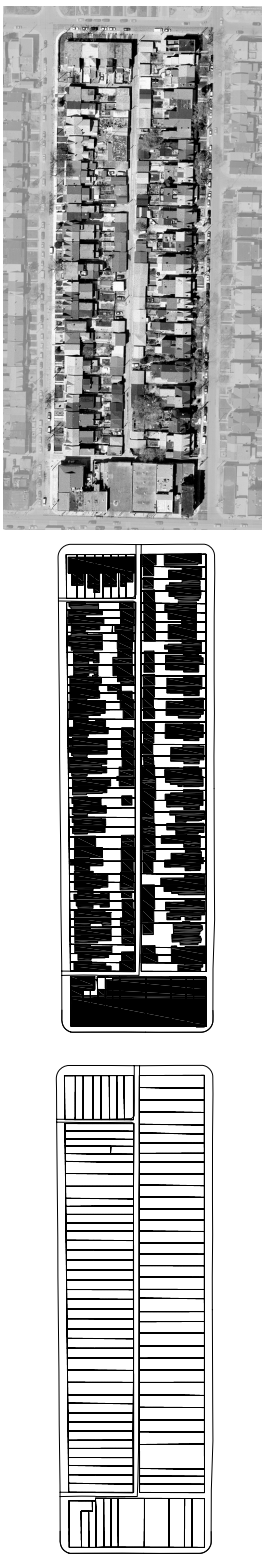
1. Church Street
2. The Esplanade
3. Market Street
4. lane
5. Older Women's Network
6. New Hibret
7. CityHome
8. CityHome townhouses
9. Old York Tower
10. courtyard
11. children's play area

The St. Lawrence Legacy

There have been a number of privately and publicly planned large-site redevelopments since the St. Lawrence that have been completed or contemplated. The formula adopted for the physical planning in these projects has generally maintained the basic premises of street grid continuity, mixed uses and building types, and often the central park, pioneered in the St. Lawrence project. However, the generic block structure of traditional Toronto neighborhoods that was first proposed in St. Lawrence has failed to evolve, applied universally to new urban plans, it and risks becoming over-simplified. The typical Toronto residential block has a fairly consistent physical configuration: blocks are capped at the short ends (often on a main street) with a continuous street wall of buildings of mixed use, with a higher density than the lots that face the two side streets lined with lower density, often townhouses, detached and semi-detached residential buildings. A laneway and open space usually define the interior axis of such a block. Although new blocks replicate those physical patterns of circulation, use, ground coverage or height, they create a coarser grain of few large buildings. This simplification of the grain of blocks is particularly evident on the main street portions of new blocks.

While the low-rise, residential side-streets are still often predicated on multiple individual ownership, and are potentially more easily replaced incrementally with time by virtue of their smaller size, the buildings along the main street portion of the block are increasingly conceived of as a single entity of mixed use frontage. This configuration can be seen in the recent Greenwood/Woodbine Racetrack redevelopment on Queen Street East. Here an abstracted version of the historic Toronto block pattern has been imposed with remarkably uniform results: five blocks of main street frontage are covered by only five buildings that occupy the entire head of the blocks. Similarly, the Lakeshore Village redevelopment and the proposed Regent Park redevelopment plans proposed similarly abstracted versions of the historic neighborhood, replicating some of the mix of uses but not the equivalent mix of buildings or the refinement of block structure and property parcelization suggested by the *Ataratiri: Building and Block Study*. Despite the mixed uses incorporated into individual buildings, the large scale of this kind of development causes fewer buildings to carry the full load of city diversity.

The Lakeshore Village project for example, a 20-acre redevelopment site in west Toronto (Etobicoke) on a former industrial site (the former Goodyear tire factory) was a privately planned project intended to incorporate a mixture of activities, housing forms and tenures. Once again a grid of streets was run through the site, defining development blocks to be sold to individual developers, however, this is where the parcelization stops. The grid of the streets defines development blocks and largely, the dimension of buildings.



78.
Building form vs. lot-divisions of same block. Despite the apparently solid street-wall of main street frontage, the block is made up of numerous individual properties.

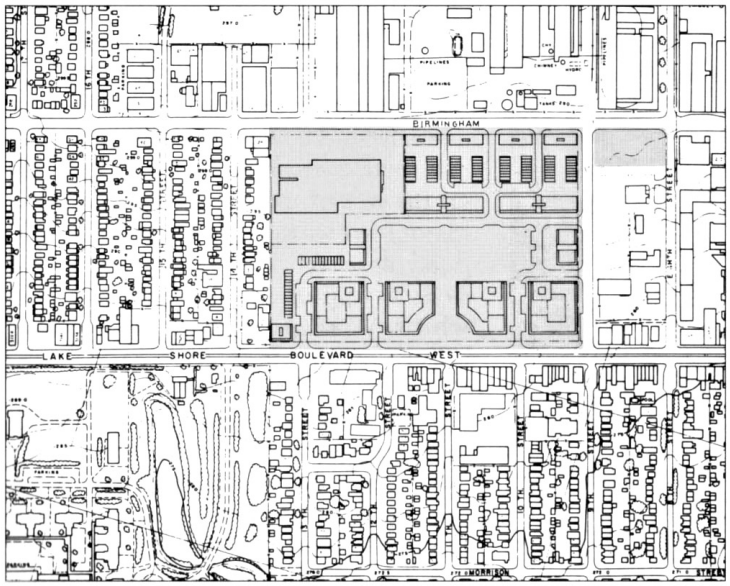
Like St. Lawrence, this plan departs from the traditional neighborhood model by proposing a core for the project that is an open ‘village square’, parallel to the main street. And while the design guidelines require the traditional urban relationships in which “buildings face the streets framing public space, shop fronts are on the major streets, apartments are located above the stores, and street-oriented dwellings front onto local streets”, Val Rynnimeri of the University of Waterloo has noted that for “all their thoroughness, though, the design guidelines still do not resolve the contradiction between the scale of Lakeshore Village and the surrounding urban neighborhoods.” This was particularly apparent in the sites on the Village’s main street, Lake Shore Boulevard, where the development sites until recently remained un-built. Here the “guidelines for the market, mixed-use condominium buildings… are the most hybrid, to the point of being ‘one-off’ buildings instead of more generalized types. These very deep and large blocks extend to the site perimeter, accommodate stores with offices above when facing Lake Shore Boulevard, townhouse units with apartments above when facing the square and side streets, and have internalized loading and parking areas at their centres. Setback upper storeys are intended to contain both offices and condominium apartments.

79.
Regent Park North and South 2003 Redevelopment Plan. Numbers indicate building height in storeys.

This project, begun in the early 1990s, has only recently been completed with rather different building forms than originally proposed. The main street sites, originally intended for the large hybrid main street buildings, have been built out instead with low-rise townhouses. The intended mixed residential-commercial, street-framing role of the Lake Shore Boulevard buildings are conspicuously absent. The key criticism of this plan and its guidelines, and perhaps a caution for all other main street development, is: "What is forgotten in these Village buildings is the fact that the city's diversity is not primarily tied to individual buildings but rather to many buildings in close proximity." [32] That is the condition found on traditional main streets, and the condition sought after in the *Ataratiri: Building and Block Study* with its increased parcelization and more individual buildings of appropriate type to achieve true urban mix.

The application of the physical planning principles of the St. Lawrence Plan is not an assurance of a successful urban redevelopment scheme. The basic planning intentions in St. Lawrence were linked to a specific context of location, program, user-groups, funding formulae, and planning process. It was a pioneering project, and as such, its achievements, successes and failures require evaluation and refinement.

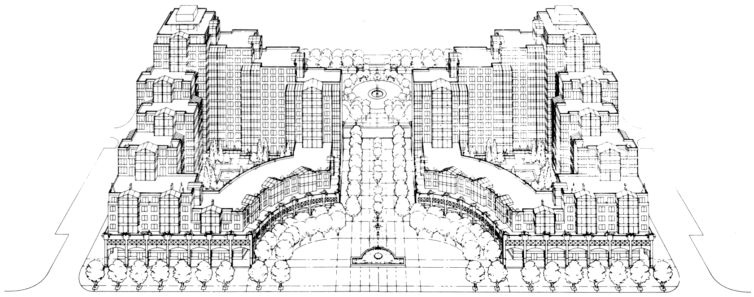
32 Val Rynnimeri, "Deep Pockets." *The Canadian Architect 40*, (March, 1995), 16-19.
See also Adele Freedman, "A New Community Shaping up in Etobicoke," Globe and Mail, 2 October, 1993.



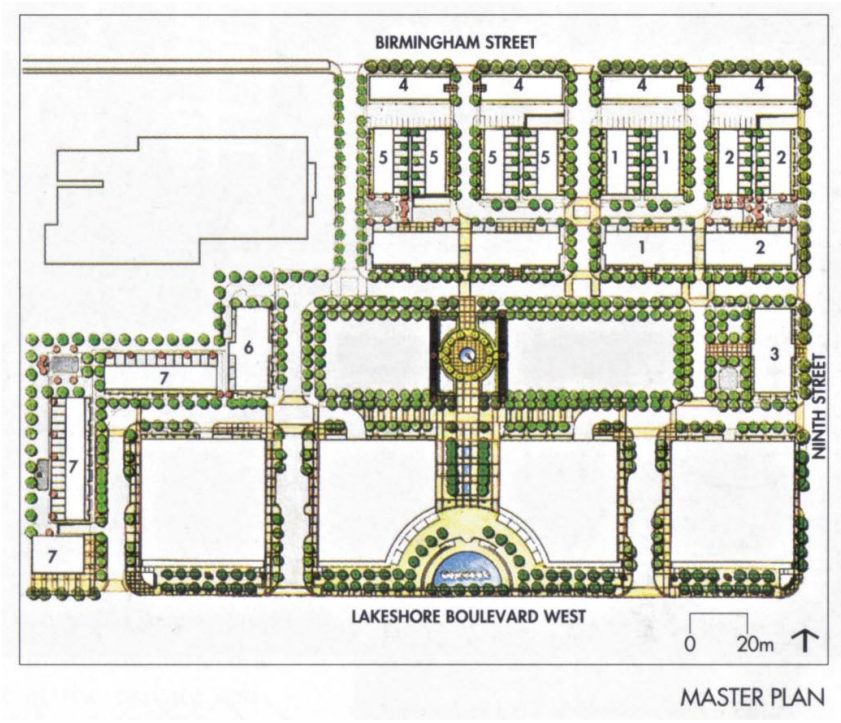
SITE CONTEXT

80.
Lakeshore Village Context Plan

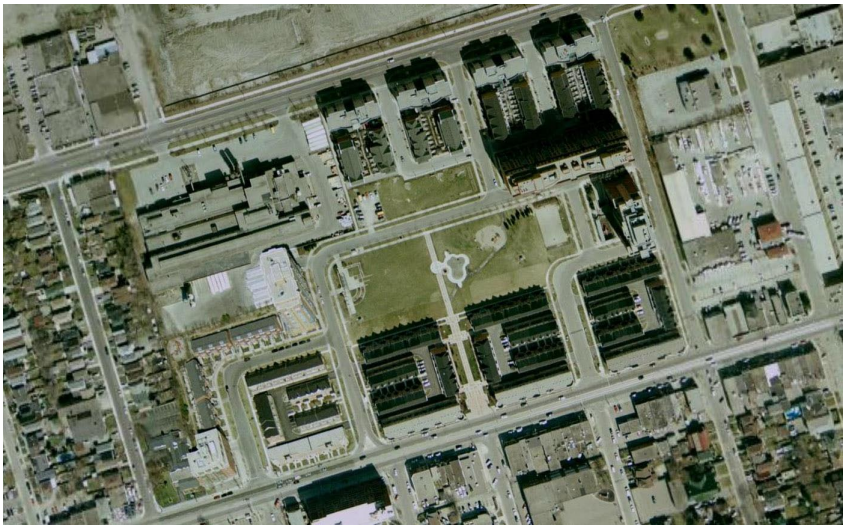
81.
Lakeshore Village, Lakeshore Boulevard mixed-use buildings envisioned in the original master plan

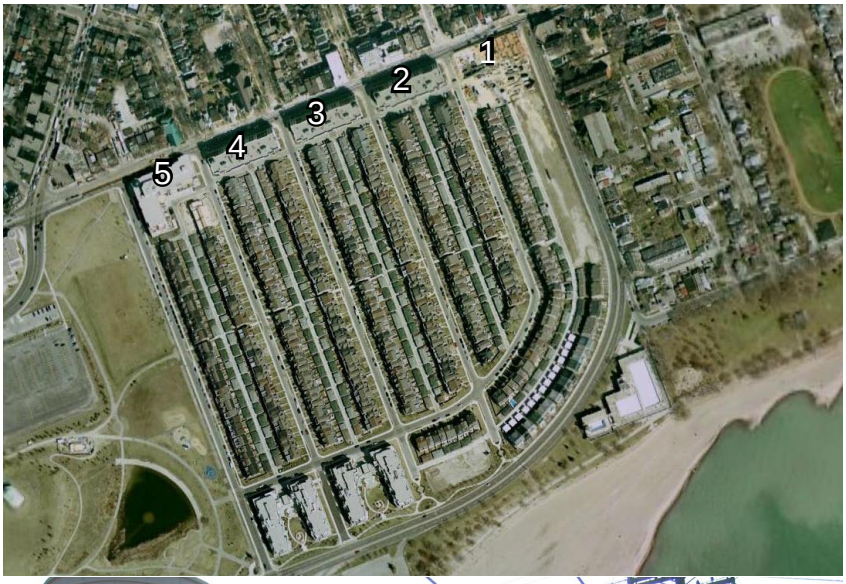


82.
Lakeshore Village Master Plan



83.
Lakeshore Village as built. The Lakeshore Boulevard main street buildings were abandoned in favour of stacked-townhouse buildings.





84.
Greenwood / Woodbine Development on Queen Street East.

A collection of standard blocks, capped by full-block mid-rise commercial/residential condominium buildings. In this case five blocks are controlled by a single commercial landlord that has not managed to encourage retail tenants to occupy the commercial space along Queen Street. The ground floors of these buildings remains largely vacant, with little sidewalk activity.

85.
Block 1

86.
Block 2

87.
Block 3

88.
Block 4

89.
Block 5

The Housing on Toronto's Main Streets Initiative

> The planning vision is called main-streets intensification. The idea is to thicken the city's density by increasing building height along main arterial streets from two or three storeys to five, six or seven storeys, giving Toronto (as the scheme's more ardent supporters like to say) the look of London or Paris.
> The rationale is that, by substantially increasing residential density in the city proper – the core of the four-million-population Greater Toronto Area - urban sprawl will be curtailed Public transit will be more economically efficient, and a satisfactory assault at last will be made on the automobile as commuter vehicle polluting the city's air and soundwaves and consuming vast amounts of space for roads and parking.
> The idea, now at least three years old, was seen, anthropologically, as Toronto's coming of age - its maturation from a gangling adolescent with legs and arms flying off in every direction to an adult metropolis, cluttered, diverse, seething with close-packed life at its heart.[33]

In 1987, Toronto city councillor Richard Gilbert proposed a planning initiative that he suggested would "give life to our main streets; provide a new symbol for Toronto as potent as City Hall, the CN Tower, and our streetcars; and, most important of all, produce some 70,000 units of new housing –enough to solve Toronto's present and future housing problems."[34] This initiative as conceived by Gilbert was a way to deal with a housing crisis and a crisis he perceived in the identity and quality of Toronto's main thoroughfares. His reasons for looking at the shape of main streets were twofold: firstly, "that our main streets really are undistinguished, often tacky, and generally out of keeping with our image of Toronto as being more than a sleepy backwater in the world urban scene" and he suggested that these streets could be "transformed into streets of architectural distinction, elegant yet congenial…"; the second and "most important" reason given was the potential to create large amounts of new housing within the existing areas of the city. A number of ancillary benefits of a large scale redevelopment of main streets were also suggested, including opportunities to bury hydro wires, establish district heating systems, enliven retail strips and commercial activities and to create large amounts of underground parking that could serve surrounding neighborhoods.[35]

Up to the passing of the first comprehensive zoning bylaw in 1954, the piecemeal system of residential and apartment restrictions discussed earlier were all that controlled development on main streets. Their form was largely a natural reflection of market demand and area-specific regulations. The bylaws of the 1950s established zoning categories of permissible use and density throughout the city. Main streets were zoned for commercial activity with a density of up to three times lot coverage, the specific

33 Michael Valpy, "Plenty of planning but where's the vision?," *Globe and Mail,* 2 December, 1992.

34 Richard Gilbert, Metropolitan Toronto . Executive Committee, and Toronto . City Council. Land Use Committee, *A Proposal to Redevelop the Main Streets of Toronto* (Toronto: City Hall, 1987), 1.

35 Ibid., 3.

90.
District Commerce Centre (bottom left) and associated high-rise residential development (top right), located near a subway station. (The Dufferin Mall, ca.1956)

"C1V1" designation also permitted residential development on its own or in combination with commercial in mixed use buildings.

By the mid-1960s, automobile-oriented formats of development were believed to better reflect consumer needs and tastes. Planning policy was developed to favour development of what were called "district commerce centres": shopping centres that combined retail and office uses with surface parking in convenient locations accessible to cars and transit. These centres would be located at major intersections along the subway lines for most efficient use of infrastructure. Zoning allowed for increased density in these areas to encourage this form of development over what were considered outdated retail strips.

In the revision of planning policy that took place within Toronto during the 1970s that began to value the traditional patterns of the city, decline of the retail strips was seen as a detrimental to the city's businesses and consumers, and that the allowable densities of the district commerce centres were potentially out of scale with surrounding neighborhoods. Meanwhile, despite some decline in the 1960s, the strips continued to function largely the same way as they had for a century: as local shopping streets and social centres. The recognition of this fact and their value to the city's structure, led to new mixed-use "CR" (commercial and residential) zoning in 1976.

This new designation for main streets was intended to encourage low-density mixed commercial and residential development much in the style of historical development. The finer points of allowable density mix and residential unit-count favoured commercial density for which there was not necessarily adequate demand in all areas of the city, while the small allowable residential density did not lead to increased new mixed-use building on main streets. Supplementing the Official Plan throughout the 1980s, secondary "Neighborhood Plans" were developed that imposed, on an area-specific basis, the guidelines for height, density and other built-form controls throughout the city, and largely eliminated provisions for "district commerce centres".[36]

Planning policy in the 1980s sought to reinforce the value of the traditional neighborhood structures of the city including main streets. While policy up this point had largely dealt with the commercial aspect of main streets to encourage their role as traditional shopping streets, interest in specifically encouraging increased housing on mixed-use main streets now began to be recommended. The Housing on Toronto's Main Streets Initiative was a "comprehensive policy initiative directed at encouraging additional housing on main streets."[37] Richard Gilbert's 1987 proposal began to investigate the implications of building up these streets with a particular emphasis on production of new housing units. The first *Proposals Report* of the Initiative in 1989, identified the streets to be studied representing 84 kilometres of building frontage where residential intensification would be most appropriate, and found that up to 99 000 new residential units could be built city-wide with only a small increase in density.[38]

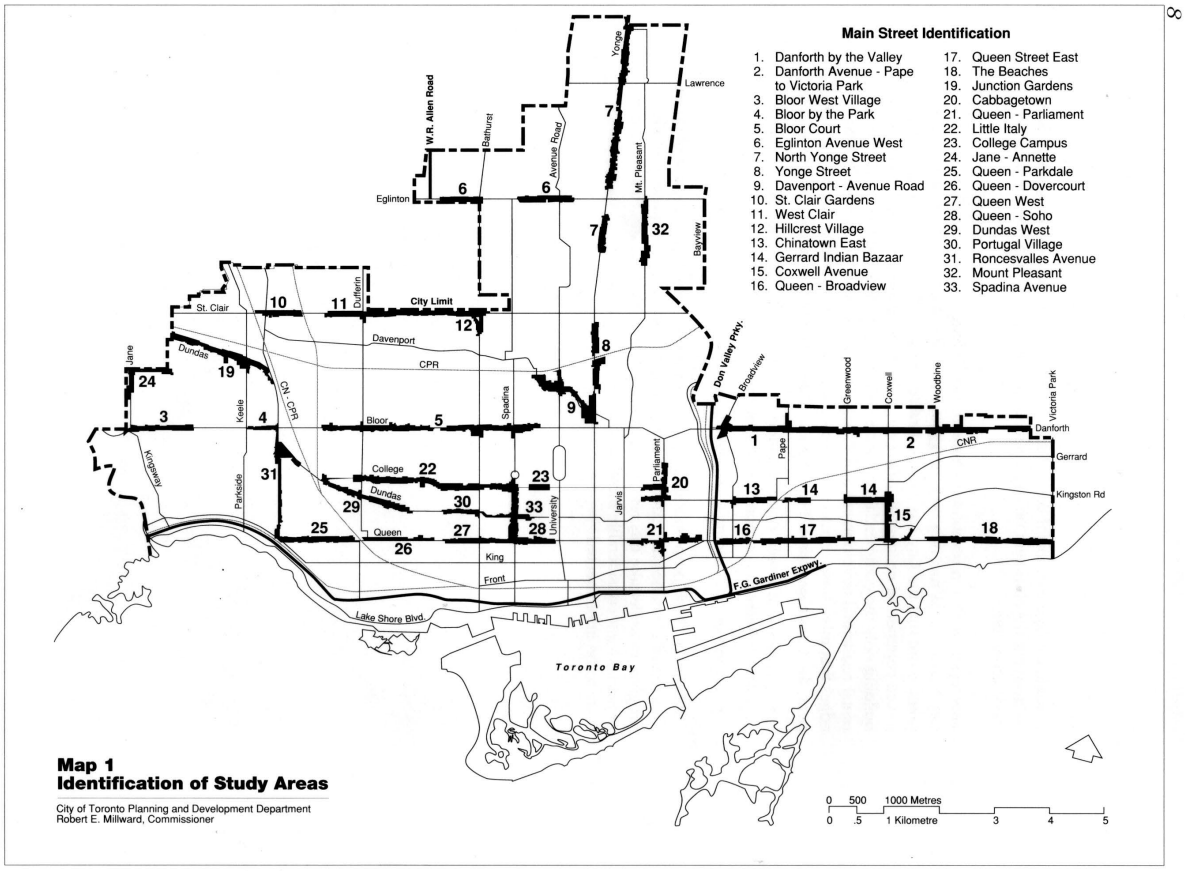
The Main Streets Initiative can be characterized as having two main phases. The first involved studies and information gathering that included a parking study, and economic feasibility study and an international design competition that were then synthesized into an implementation strategy. The next phase was the long process of establishing official policy and zoning regulations that would implement the findings of the various studies. The discussion here will focus primarily on the information gathering and synthesis phase, especially the report titled *The City of Toronto: Building on Main Streets* prepared by Berridge Lewinberg Greenberg Ltd. and Steven Fong Architect in 1991. This study came after the initial stages of information collection and constituted a careful analysis of the previous studies and the design competition, while proposing a potential regulatory framework for implementation of the program. This report embodies the most flexible

36 Toronto City Council., Robert E. Millward, Daniel Burns, and R. M. Bremner. *Housing on Toronto's Main Streets : Proposals Report, July 1989*, (Toronto: The Council, 1989), 19-23.

37 Ibid., 23.

38 Ibid., 12.

and contextually sensitive approach to implementation of the concept of main street intensification before what became a drawn out and ultimately diminished implementation of new policy for main streets.



91.
Main Streets identified for study in the Housing on Toronto's Main Streets Initiative

Early Studies: Economic Feasibility and Parking

The Economic Feasibility Study: Housing on Toronto's Main Streets, prepared by Hemson Consulting and Baird Sampson Urban Design Inc. in 1990, identified factors that typically contribute to the viability of, or constrain main streets development; what kinds of developer would be likely to undertake such projects; the form they could take; what the city could do to encourage such development; and what the potential was for new housing production on these streets in the city. It identified six common characteristics that define main streets, each of which, and the combinations thereof, have an effect on the viability of new development. These six categories were: the commercial market (demand for retail and office space), the housing market (demand for rental and market accommodations), land costs (market and land assembly factors), site availability and type, development activity, and adjacent neighborhood (physical proximity and characteristics, main street width).

Limitations to development on main streets were found to be both physical and regulatory. Physical constraints were largely related to the sites themselves, such as position on block (either corner or mid-block site), the width of frontage (narrow or wide), and presence or absence of rear service lane. These factors effect both the ability to provide underground or rear lane parking and the number of residential and commercial units that can be built.[39] Regulatory restrictions included minimum parking requirements, height and density limits, and the lengthy and complicated municipal permit and development review approvals process.

The study identified two main developer/builder groups who could potentially provide new housing on main streets. It was felt that large-scale developers would not find main streets sites attractive due to the rarity of large vacant sites, and difficulties of land assembly associated with small sites and fragmented ownership. Medium sized commercial and non-profit developers, however, could find opportunities at least among the larger main street sites (generally greater than 12 metre frontages), or with minimal land assembly. It was found that for even medium sized developers, "overhead costs mean that projects on small sites are difficult to justify since they generally require the same amount of planning, design, financing and marketing effort as larger ones." Also, "smaller vacant sites are subject to severe physical constraints (access, adjacent buildings, narrow frontages, etc.), which result in higher development costs and lower profitability" and "smaller developed sites that could be candidates for renovation/housing re-use projects are often highly priced due to existing ground floor retail use."[40]

Smaller sites would be suited, however, to local property owners,

39 Baird/Sampson Urban Design Inc. and Hemson Consulting Ltd. *Economic Feasibility Study, Housing on Toronto's Main Streets*. (Toronto: Hemson Consulting, 1990), 11.

40 Ibid., 14.

who could build or renovate on underused narrow sites. Whereas the medium sized developer typically manufactures the building for sale to long-term investors as a product, extracting a short term profit to be able to move to the next development project, the small scale developer might be interested in holding the building as a long-term investment. Here "projects with a low rate of return can be undertaken in anticipation of long term capital appreciation. Also, since there is no 'middle-man' developer, who would take out a profit, the local property owner can 'invest' this profit in the project."[41] These small independent 'entrepreneurial' developers can accept higher risk levels, have smaller overhead costs, take a longer term perspective, can spot local market opportunities that other larger developers would miss and tend to "exhibit 'pride of ownership', which outweighs short term 'pro forma' returns."[42] These small developers could be able to develop modest amounts of housing on those sites with the narrowest of frontages (below 12 metres).

To encourage both of these developer groups (small and medium) to undertake new building on main streets, the study suggested a number of policy strategies for the City to consider. They suggested that increasing density by adding one floor of building height to existing three and four story limits would create a better economic incentive to developers while maintaining an appropriate scale with respect to surrounding low-rise neighborhoods. At the time of the report, parking requirements that required the provision of at least one parking stall per residential unit in addition to requirements for retail parking were considered a major obstacle in practical and economic terms. While larger market condominium projects can sell parking spaces at a profit and this does not necessarily affect economic feasibility, small sites make it physically difficult to provide enough spaces in typical configurations on-site such as underground accessed by long parking ramps. Also, other types of residential tenure such as rental or non-profit would find it difficult to economically provide underground parking at the required volume. The study therefore recommended a reduction in the residential and commercial parking requirements.

Main street parking was the subject of an entire study prepared by Marshall Macklin Monaghan Ltd., which had also recommended a reduction in parking requirements, a suggestion in keeping with actual surveyed parking needs among existing main street dwellers, whose car ownership was generally low. Lower parking requirements were also in keeping with the goals of encouraging transit oriented development that was intended to cut automobile use through proximity to shopping, employment and public transit. Neighborhood groups and the Toronto Parking Authority remained very

41 Ibid., 16.

42 Ibid., 18.

concerned however that parking should be provided to prevent congestion and street parking within adjacent residential areas –in fact the issue of reduced parking nearly caused the abandonment of the entire initiative in later stages. Strategies proposed by both studies to provide (reduced) parking included sharing the parking requirements of office and residential users whose use patterns typically do not overlap; use of surplus parking in existing nearby facilities, the use of parking elevators and stackers, tandem parking, and provision of off-site parking within a two block radius.[43]

To overcome the long and complicated municipal approvals process, the *Economic Feasibility Study* recommended creating a facilitation program that could include creating a "Main Street Housing Resource Centre" to advise especially smaller, and less experienced developers on zoning and parking regulations and the design and financing of such projects. They recommended a number of possible ways the City could help to finance and/or manage non-profit developments. To benefit all developers, the study recommended streamlining the permit and development review processes for main street sites and suggested that city-owned properties could be used to provide new parking facilities.[44]

Summary of Major Constraints on Main Streets Development

- Difficulty of assembling land: fragmented ownership, typically small lots (developers felt that 15m was minimum frontage required, meaning at least two lots of assembly),
- High land costs; long-term leases difficult and costly to buy out.
- Existing retail activity often provides adequate income to landowners, little desire to interrupt livelihood during redevelopment
- Commercial property owners do not necessarily want to become residential landlords.
- Parking requirements too high
- The lengthy delays associated with rezoning process (variances on parking, height and density) are prohibitive for small builders; highly complex and discretionary procedure that requires costly specialists to see the application and project through.
- Potential community opposition

43 See also Marshall, Macklin, Monaghan Limited, *Housing on Main Streets Residential Parking Study* (Thornhill: Marshall Macklin Monaghan Ltd., 1990), 25.

44 Baird/Sampson Urban Design Inc. and Hemson Consulting Ltd. *Economic Feasibility Study, Housing on Toronto's Main Streets*, 31-32.

The Design Competition

By the end of 1989, The Housing on Toronto's Main Streets Initiative had three clearly defined goals:

1. To define a vision for the future of Toronto's main streets while respecting their historical development pattern.
2. To facilitate the production of much needed housing through the modest increase in building scale on main streets.
3. To enhance the quality of urban space and public life on the street, the principal public realm of the City.[45]

The next step in the realization of these goals was a design competition to generate ideas regarding the physical form of potential main street development. In 1990, the City of Toronto, in conjunction with Metro Toronto and the Province of Ontario (who had all joined in the Housing on Main Streets Initiative), sponsored an international design competition to "develop appropriate building typologies while successfully mitigating the physical impact that intensification of housing may have on adjacent single-family neighborhoods."[46] The results of this competition were to become the basis for new zoning and built-form regulations, provide ideas for potential developers and landowners, and to raise the public profile of design issues on main streets.

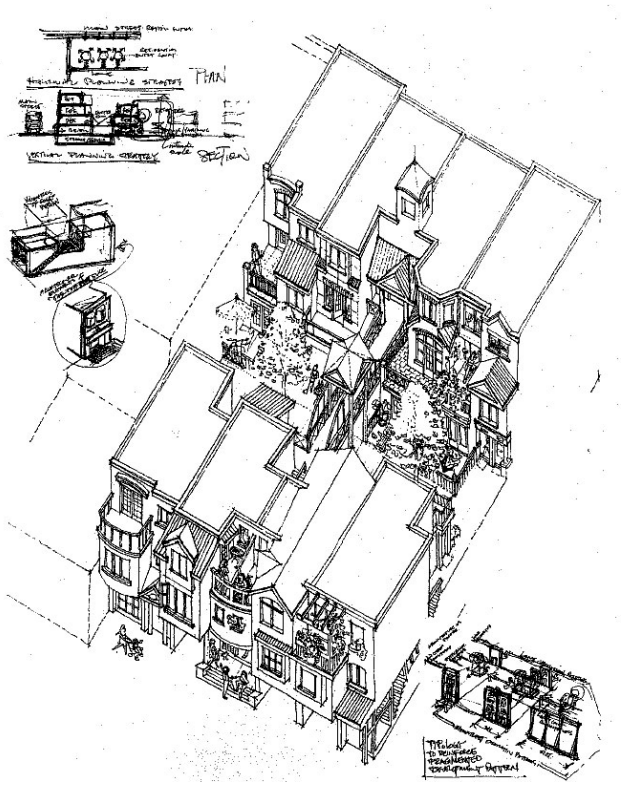
Entrants to the competition were given certain basic assumptions regarding the anticipated built form that was expected from the competition. These assumptions stemmed partly from the findings of the previous studies. It was assumed that residential potential was to be maximized within the "general bulk, height and built form criteria that currently apply to main streets"; at the time this meant, generally 4.5 to 5 storey buildings, at approximately 15 metres height. The increased housing was aimed at alleviating a housing shortage being experienced at the time, particularly in affordable and rental housing especially among small households; therefore it was assumed that the small lots available would be best suited to small dwelling units for single-person households or the elderly to reflect a growing demographic trend in these populations at the time. Buildings were to provide around the clock street activity, enhanced streetscape definition through a slight increase in building scale, and be sensitive to surrounding neighborhoods and local built vernacular. The number of residential units was to be maximized; they should be flexible and adaptable, cater to the needs of "small households of diverse age, occupation and household type" and be

45 Toronto Planning and Development Dept., Art Eggleton, Allan Tonks, and John Sweeney. *Housing on Toronto's Main Streets - a Design Competition. 1990*, 1.

46 Ibid., 2.

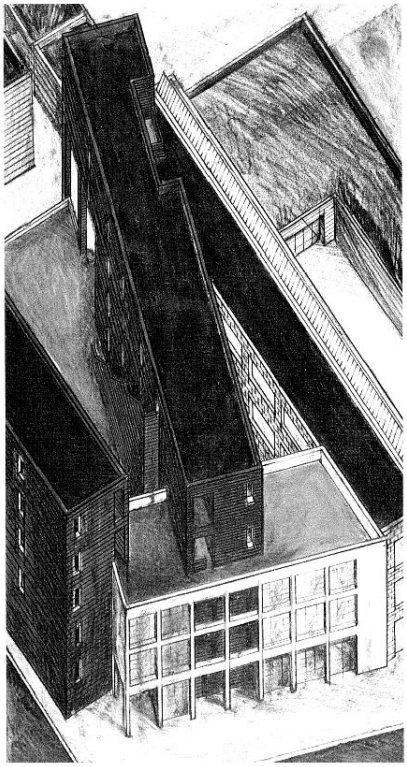
geared particularly to “low and middle income groups.”[47] Ten sites throughout Toronto were selected for the design proposals. These covered three basic types of main street site: corner sites, mid-block sites, and large sites. Each of the ten sites were of varying dimension, but covered a range of typical site conditions found on main streets and were intended to be prototypical for sites all over the city.

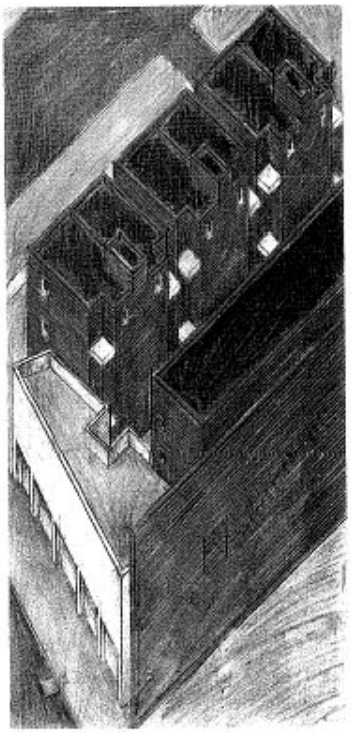
47 Ibid., 43.

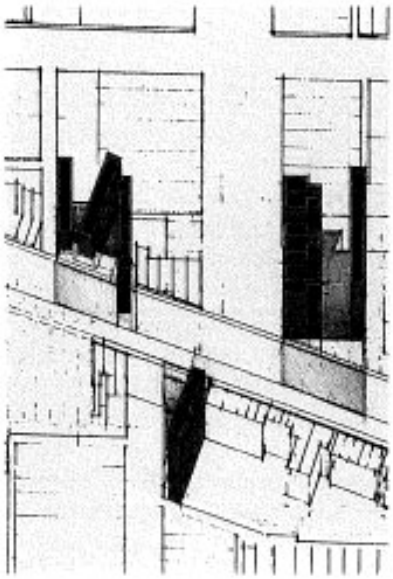


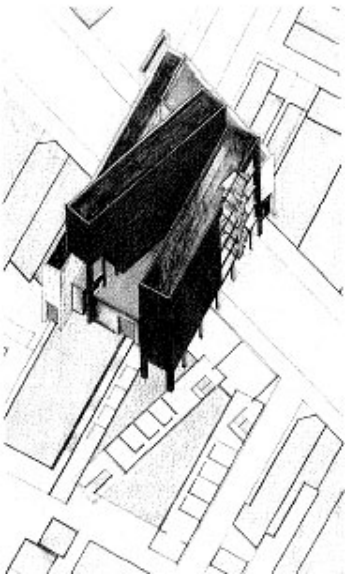
92.
Honourable mention scheme in the Main Streets Design Competition. Proposes two-tiers of housing above a retail level.
(James Colizza, Jaques Bellau and Jaques Hamel, of Ottawa)

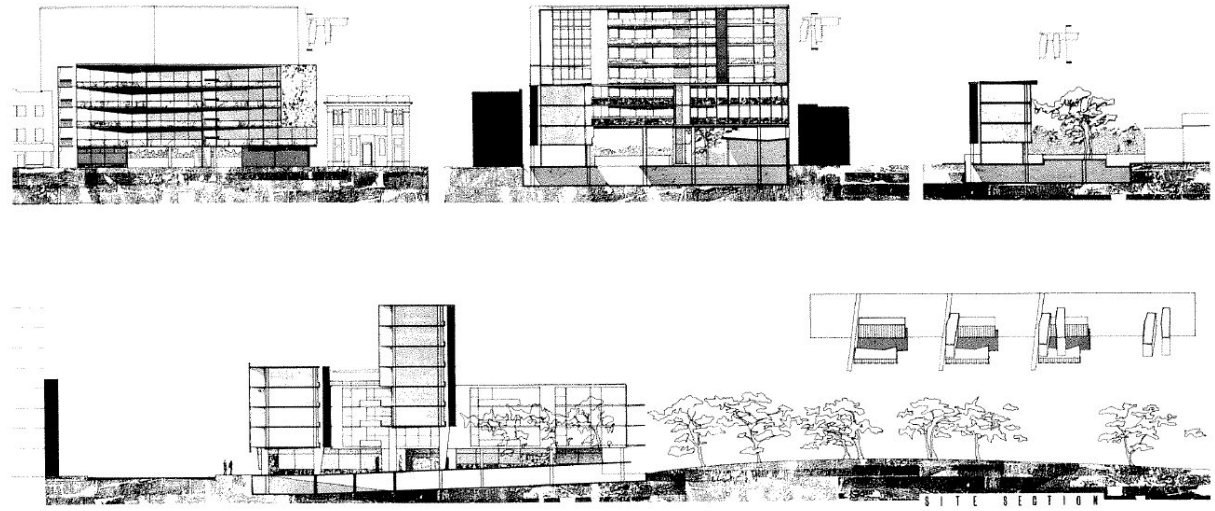
93.
Grand Prize winning scheme, proposed a series of prototypical building types that could be applied across the range of site conditions of the competition brief.
(Alain Carle, Denise Gauthier, Nicolas Roquet, of Montreal)

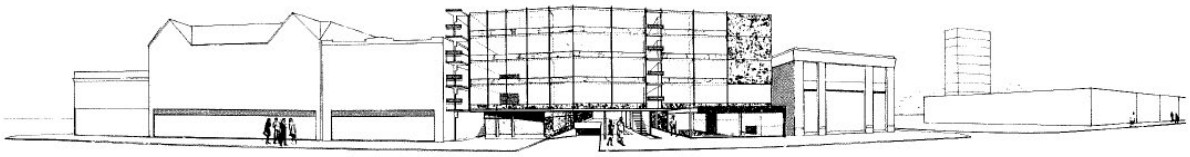




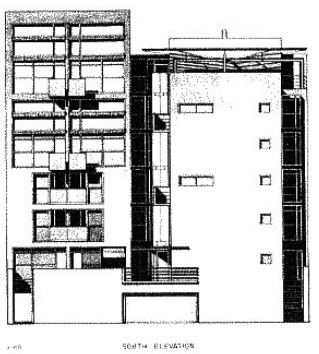


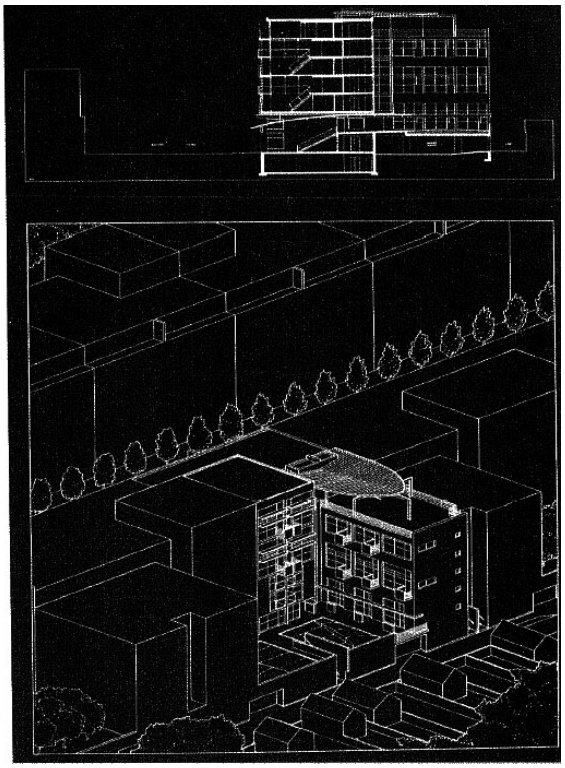


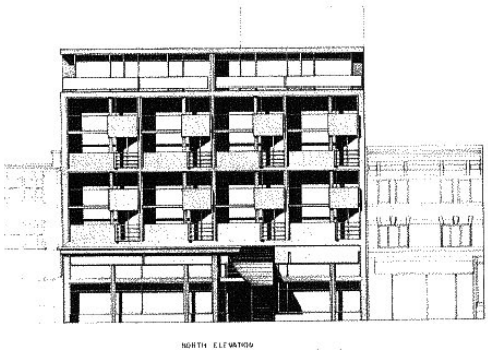




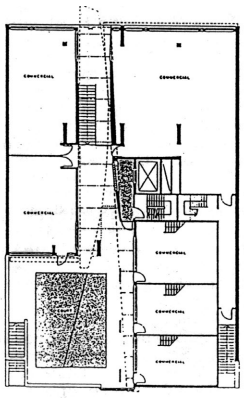
94.
Honourable Mention Scheme.
(Brown and Storey Architects, of Toronto)

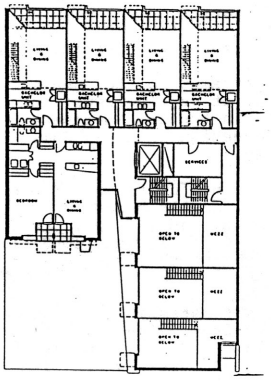


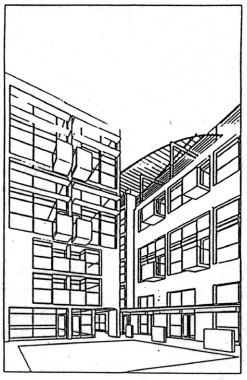


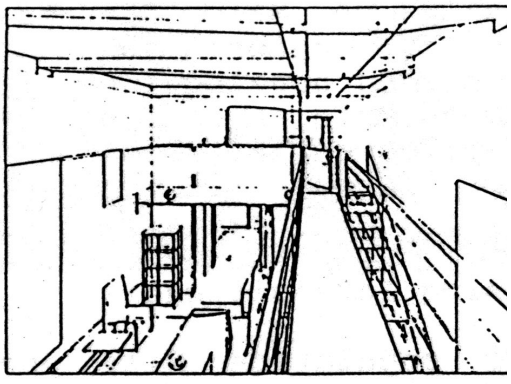


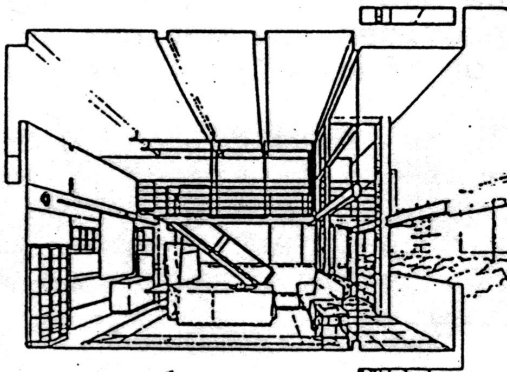
95.
Honourable Mention Scheme.
(Sterling & James Architects, of Toronto)



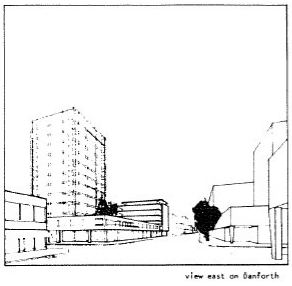


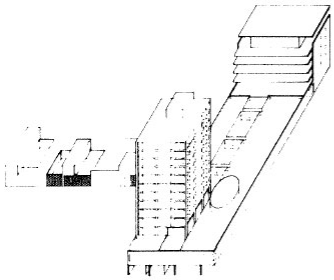


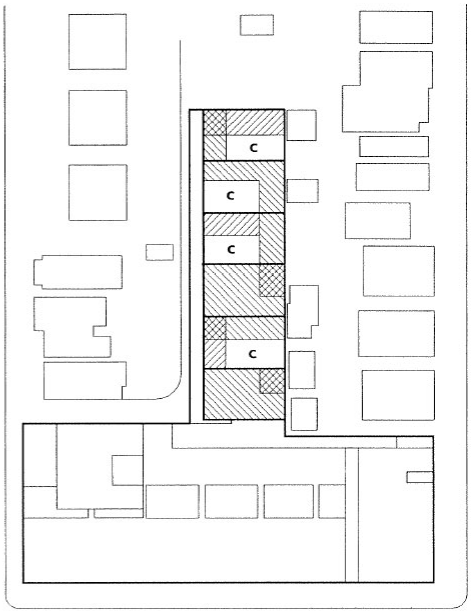




96.
Honourable Mention. Point tower and podium, with courtyard housing behind scheme for large panhandle site.
(M. Kohn Architect / Val Rynnimerri, of Toronto)

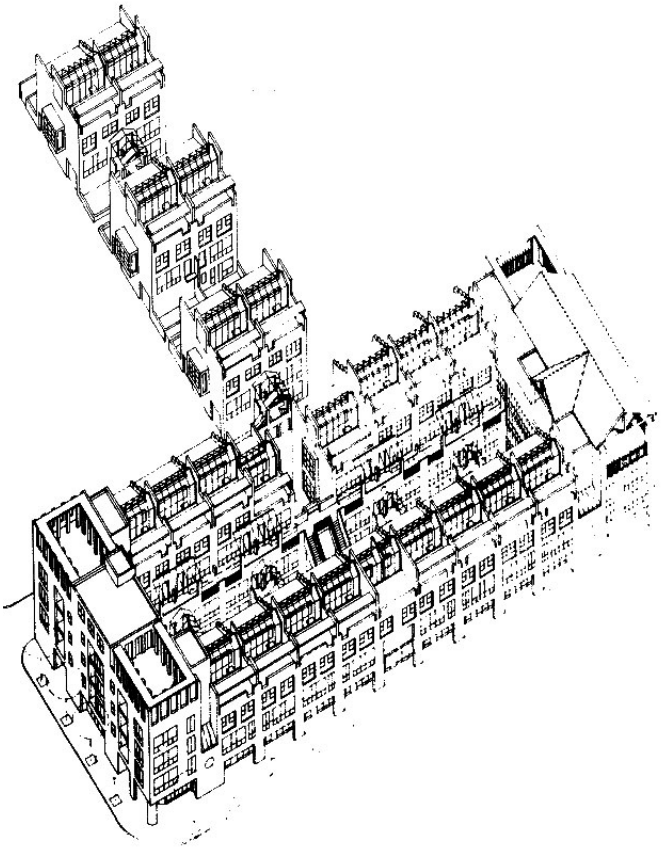






Variations on a Courtyard House

- Second story cantilevered over ground-level courtyard
- One story tall
- Two stories tall
- C Open courtyard



97. (left)
First Award winner. Same site as above.
(Paul Walker Clarke, of Alexandria, Va.)

Results and Synthesis of the Background Studies and Design Competition

The competition received 335 entries from around the world. Jurors of the competition included architects Melvin Charney, Kees Christiaanse, Ken Greenberg, and Daniel Solomon, urban designer Anne Vernez Moudon, Toronto city councillor Richard Gilbert, and author Jane Jacobs. Winners were awarded in all the categories of site, including a grand prize winner that dealt with all three. The entries were displayed for the public as part of the initial public awareness program of the initiative. Following the competion, the next phase of the Housing on Main Streets Initiative was the effort to promote and explore the ideas produced in the study and competition, and to carry out demonstration projects to test and promote the concepts developed. As the competition was an 'ideas' competition, entries were not necessarily intended to be constructed. Results were instead to be analyzed for common strategies and creative approaches to the issue of design on main streets as a general problem, as well as for their individual architectural merits. The City commissioned a study from Berridge Lewinberg Greenberg Ltd. with Steven Fong Architect, to identify ideas, concepts and design strategies from analysis of the competition entries, and to then propose how they might be implemented from a legislative perspective.

The 1991 study entitled *The City of Toronto: Building on Main Streets* is a key document for the study of main street building. It encapsulates the information and recommendations of the previous reports on the Main Streets Initiative, identifies useful strategies for design and suggests an implementation strategy that became the basis of the regulatory framework initially proposed by the Initiative (at least until late in the program, when the implementation and regulation strategies that were imposed differed significantly from those recommended in earlier phases; this will be discussed further in a following section). The study also articulates a number of key concerns and observations about the character, quality and potential of Toronto's main streets, and city building in general that go "beyond the generic regulatory changes that are needed to 'loosen' constraints and generate intensification" and recognize "there is also a need to look at what the physical properties of that intensification will be in order to ensure that it will represent a positive step in the evolution of Toronto's urban form."[48]

Recognizing the historic absence of land use controls that had produced the existing flexible and highly mixed main streets landscape, their first recommendation was to largely deregulate land use on main streets. This would have the effect of allowing developers to respond to market demands as they occur naturally, rather than arbitrarily imposing allowable uses and

48 Berridge Lewinberg Greenberg Ltd. and Steven Fong Architect, *The City of Toronto: Building on Main Streets* (Toronto: Metropolitan Toronto Planning Dept., 1991), 5.

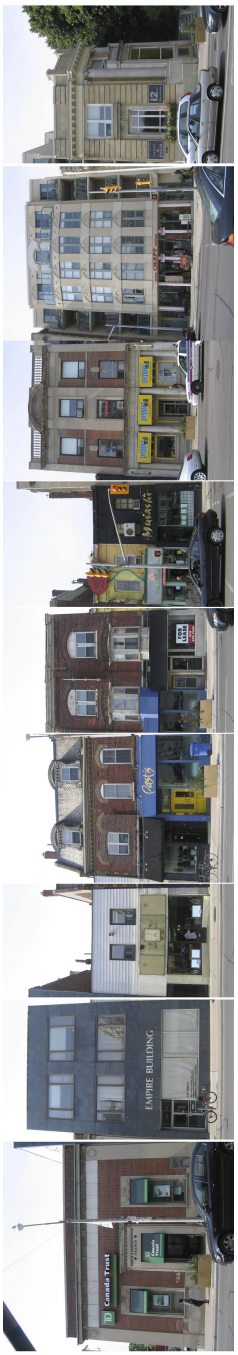
density. While it was clearly desired that new housing be produced, this could be encouraged through certain incentives such as reduced parking requirements or increase in allowable height for housing, and would occur where markets existed rather than by discouraging other uses. Similarly, the market for retail uses is not always strong enough in all areas to make required ground floor retail space viable in new development.[49]

The study also discusses the scale and fit of new buildings on main streets to address the existing patterns on these streets and their surrounding neighborhoods. Much as the *Building and Block Study* for the Ataratiri neighborhood had warned of the potential for inappropriate building types and their negative effects on the character of the neighborhood, this report points out the fundamental typological character of main streets that is made up of narrow frontage buildings, "that stands in stark contrast to the conventional multi-storey apartment building types that have emerged elsewhere as the development industry has attempted to maximize elevator and corridor efficiency."[50] The authors stressed the need to control not only the height of buildings, but also and equally as important, the width of building frontage:

> It is a matter of some concern, that if encouraged, assembly of Main Streets sites would result in demolition and replacement of existing buildings with conventional slab buildings having long monolithic facades and single points of entry. Even if the aspect of height were controlled, this type represents a significant departure from the traditional Main Streets relationships and threatens the concept of Main Streets as a diverse and continuous sequence of individual buildings and uses. We feel therefore that it would be appropriate to introduce regulation to control maximum frontage for new buildings on Main Streets.
>
> On Main Streets, context is cultural and historic as well as architectural. Imposing limits on frontage is therefore not exclusively an issue of design and aesthetics… careful façade treatment can easily disguise a large building so that it "appears" to be a number of discrete buildings. What a conventional slab building cannot simulate however, is the unique contribution made by each individual building to street's social and cultural composition.[51]

To deal with the potential of land assembly, and to accommodate "new development while respecting the essential characteristics of existing urban fabric", they cite examples of other cities that had successfully imposed limits on building height as well as frontage, such as San Francisco and areas of Philadelphia.

A contemporary and widely published example of an urban plan that imposed a variety of limited frontage increments, portioning out building lots that were each designed and built by different architects and owners, is the Borneo Sporenburg project in Amsterdam planned by the firm West 8. The



98.
Typically fine-grained and varied Toronto main street block. Contains ten distinct and uniquely articulated buildings.

49 Ibid., 8.

50 Ibid., 10. It may be significant that Steven Fong Architect is co-author to both of these reports.

51 Ibid., 10-11.

99.
Borneo Sporenburg, Amsterdam. Canal houses on a variety of small lot divisions, each designed by a different architect.

result in that project is a remarkably diverse gathering of individual homes reminiscent of traditional Toronto neighborhoods.[52]

For Toronto, *The City of Toronto: Building on Main Streets* authors suggest that main street redevelopment would consist of two basic groups of scale that would be distinguished by frontage width, given the relatively consistent lot depth across main streets. The first is that of the small traditional lots of 12 metres of frontage or less, that would occur most likely in the form of renovations and small additions. The second would occur on the less common large lots (over 12 metres frontage), or would result from land assembly. The report recommends a limit of 25 metres on frontage above grade for this category, as a compromise between "the fundamental historical and typological character of Main Streets, and allowing practical achievable units of contemporary development."[53] This limit would apply to frontage above grade only, and need not preclude the use of shared below grade parking facilities -such as those found in the C2 block of St. Lawrence- while ensuring a block structure of multiple discrete buildings that better reflect the social, economic and architectural diversity that has long characterized main streets. Even larger lots would be broken down into smaller individual building increments of not more than 25 metres.

To implement the controls on built form, the authors suggested a system of "Base Case Building Envelopes" and "Modifiers". This system would establish two basic scenarios for building form that reflect the two scales of lot likely to be redeveloped. From the base case, certain modifiers such as width of the main street, position of the building within the block, proximity of neighbouring buildings, presence or absence of a rear lane, or orientation of the main street (north-south vs. east-west), could modify, on an area specific basis, the allowable built form and other zoning controls.

Height limits would be determined primarily by sun access for sidewalks and surrounding properties, and recognition of surrounding built context. North-south oriented streets could generally be developed higher as they would not have same the overshadowing effect on adjacent sidewalks and properties as east-west streets. Corner sites have historically been built higher than mid-block sites and their impact is mitigated by the gap in the street wall provided by the cross street. Major intersections could also accommodate higher densities to correspond to their urban significance, creating landmarks at key corner locations. Privacy of properties behind main streets would also affect height as these are often low-rise residential properties that would be

52 Rodolfo Machado. *Residential Waterfront, Borneo Sporenburg, Amsterdam* (Cambridge: Harvard University Graduate School of Design, 2005), 43.

53 Berridge Lewinberg Greenberg Ltd. and Steven Fong Architect, *The City of Toronto: Building on Main Streets* (Toronto: Metropolitan Toronto Planning Dept., 1991), 12.

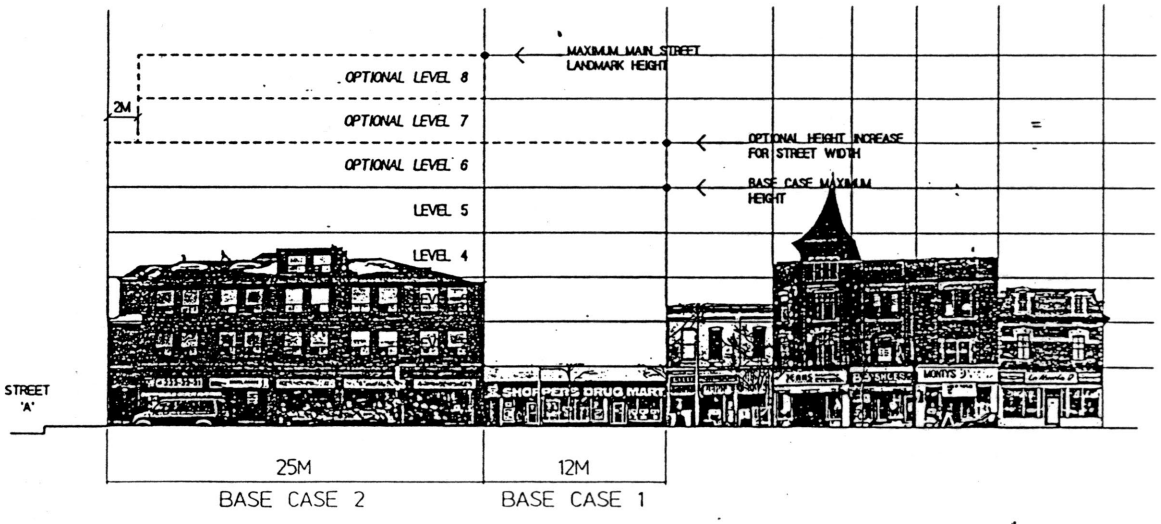
both overshadowed and overlooked by taller buildings on the ends of blocks.

The limits determined by sun access to sidewalks, corresponded to a study carried out for the City Planning and Development Department in preparation for 1993 Official Plan, titled *Sun Wind and Pedestrian Comfort: A Study of Toronto's Central Area*. This study recommended building height restrictions based on pedestrian comfort at sidewalk level that would ensure minimum hours of direct sunlight based on the type of street. The restrictions particularly affect east-west streets whose northern sidewalks are shadowed by buildings on the south side. For main streets which are often the major east-west streets of the city grid and major shopping streets used heavily by pedestrians, it recommended that a window of five hours of midday sun access to north sidewalks be maintained. The height limit for east-west streets that corresponds to the five-hour period of direct sunlight is a building height of 14 metres based on a 40 degree angular plane projected from the northern sidewalk of the average 20 metre wide main street. Buildings could step back from this height limit and still maintain this amount of sun access. For north-south streets, the same amount of sunlight can be achieved by a 16 metre building with a 44 degree angular plane.[54]

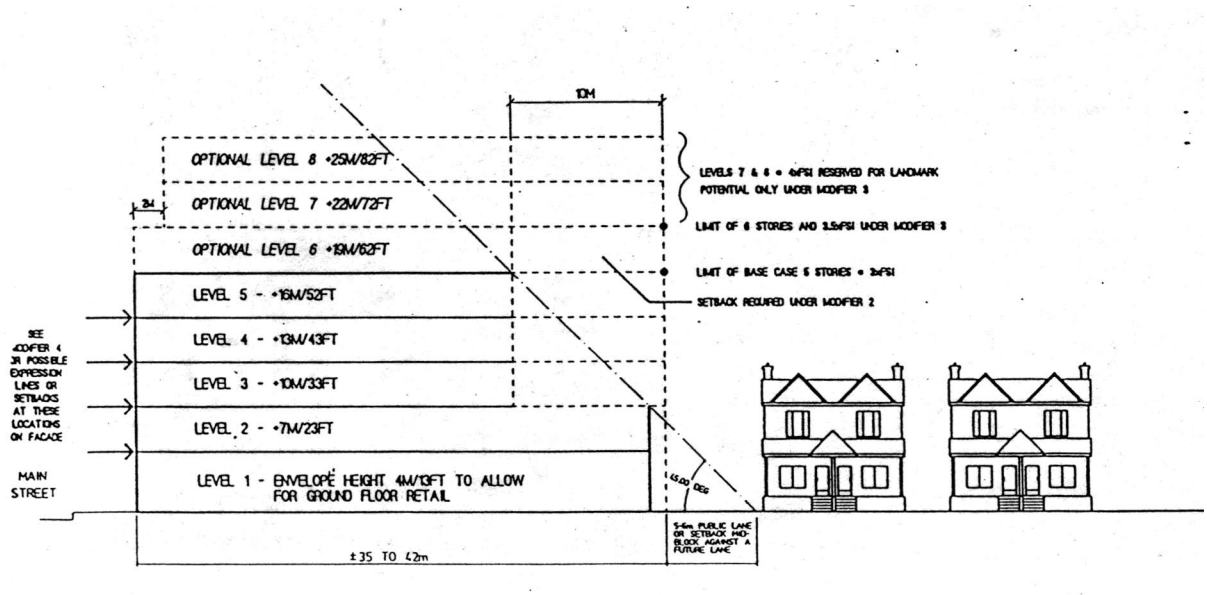
Based on the environmental factors assessed in the S*un Wind and Pedestrian Comfort: A Study of Toronto's Central Area* **,** the base case height for main streets was set at five storeys. As streets differ in width (such as much wider 40m Spadina, 24m St. Clair West, 26m Danforth and 27m College Streets, see figure 1.9) so too can building height differ, higher or lower. Typical 20 metre main streets would allow a 4 metre ground floor, and four 3 metre residential storeys that could be adjusted up or down based on the factors above. This was in keeping with the goals of a modest increase in scale and density set by the Main Streets Initiative and corresponded to the recommendation of the *Economic Feasibility Study* that called for an increase in allowable density above the typical 1-4 storeys to improve economic viability. Special accommodation was suggested for the sites under 12 metres in width by eliminating parking requirements. Sites up to 25 metres in frontage width could accommodate a reduced parking requirement as suggested by the previous studies.

The study also recommended a number of other guidelines that dealt with urban design and streetscape improvement on main streets in general. These included: the reinforcement and creation of new rear lanes, continuing existing lanes and creating new ones where they do not exist and

54 Toronto Planning and Development Dept., *Sun, Wind, and Pedestrian Comfort: A Study of Toronto's Central Area*, Cityplan '91 ; 2. (Toronto: Planning and Development Dept., 1990), 106-109.



The Base Case scenarios respond to the small frontage parcels under 12m and to larger parcels of 12m to 25m.



100.
Illustrations of the 'Base Case' and 'Modifier' system of zoning proposed by the *City of Toronto: Building on Main Streets* report.

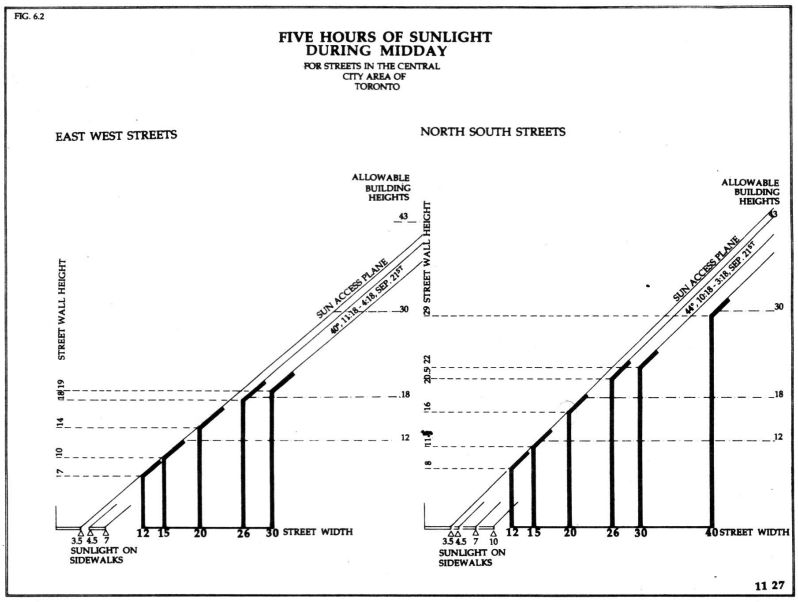
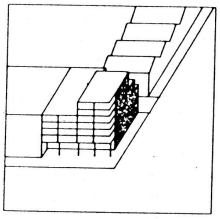
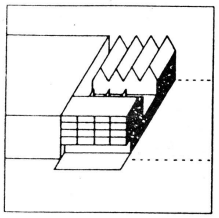


Fig. 6.2 Sun Access Standard.
Five Hours of Sunlight During the Midday Period from March 21st to September 21st.

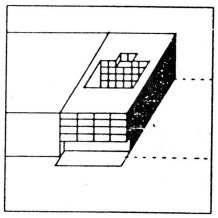
101. (top)
Illustration of angular planes required for five hours of sunlight recommended for main streets in the *Sun, Wind, and Pedestrian Comfort: A Study of Toronto's Central Area report*.



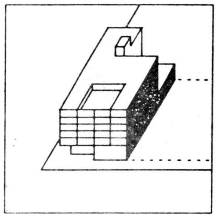
Corner building



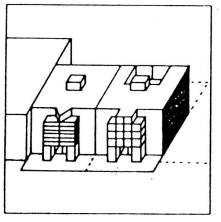
Double tier strategy.



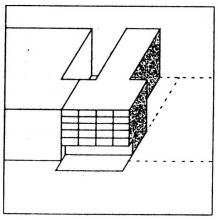
Courtyard building.



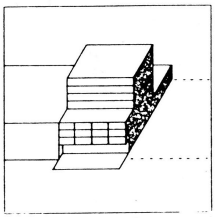
"L" shaped building.



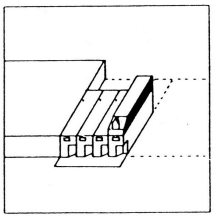
Our preferred strategies parcelize the frontage into increments that are compatible with the scale of 19th century Main Streets.



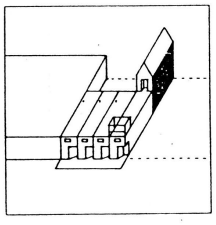
The "T" building.



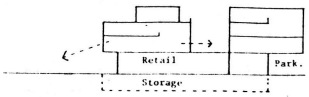
Podium/setback building.



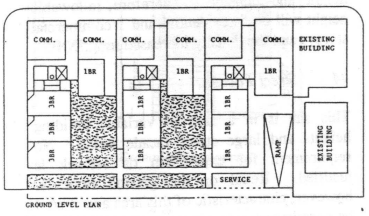
Narrow frontage development by adding height to existing building.

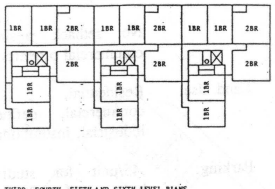


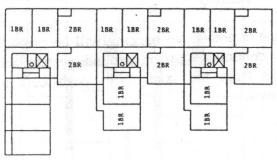
Development behind existing building.

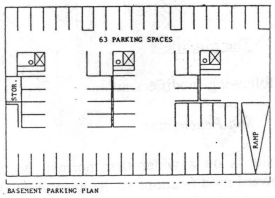


Through-type residential units.

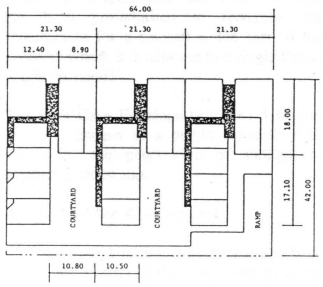




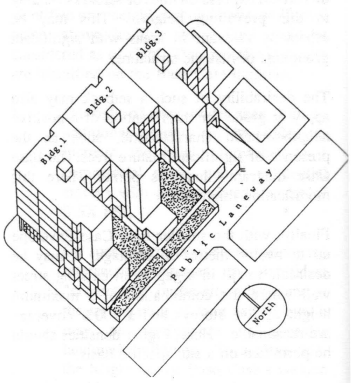




Proposal floor plans.



Dimensions and ground level plan of example.



Axonometric view of proposed site development.

102. (above)
City of Toronto: Building on Main Streets report proposed development based on the principles of limited frontage and zoning recommendations. Underground parking shared by three discrete buildings that create courtyards between.

103. (left and facing centre columns)
Illustrations of the design strategies distilled from the design competition in the *City of Toronto: Building on Main Streets* report.

making laneway improvements to allow them to become secondary pedestrian environments with residential frontages facing into laneways; attention to heritage and existing structures; creation of new or improved cultural, community and recreation facilities for intensified main streets; weather protection in the form of canopies and awnings, bus shelters; regulations for outdoor seating, street lighting, tree planting, enhanced paving and signage etc.

Their analysis of the design competition entries revealed a number of approaches to design on long narrow sites. One common strategy that took a number of forms was a two-tiered approach that created open space midway through the lot with residential units at each end of the property. In many cases this would allow for naturally ventilated units with two exposures and improved day-lighting. To encourage the design of through-units for residential dwellings on main streets, they suggested reducing an existing zoning bylaw that limited facing distances for windows in dwelling units from 15 metres to 11 metres.[55]

Altogether, the study called for an "as-of-right" zoning framework that would be tailored for individual blocks of main streets and allow a clear set of guidelines for potential developers. As-of-right zoning removes some of the uncertainty of discretionary building approval by establishing parameters for automatically allowable building. This would be a flexible zoning system based on the two "Base Case" scenarios and allowed for a series of local variables or "Modifiers". It was hoped that a clear-cut set of zoning requirements would make the municipal approvals process simpler, faster and clearer to those not necessarily familiar with the intricacies of that process. Because it would be locally customized, it would be able to better reflect local context and encourage consultation between planners, architects, residents, property owners, merchants, developers, builders and city councillors. This was largely the strategy proposed by the City Planning and Development Department for the implementation of the main streets initiative at a municipal level. [56] Changes were proposed to the Official Plan and Zoning By-law that would promote the incremental intensification and improvement of main streets.

Planning and Development Department Commissioner Robert Millward initially reiterated and stated even more forcefully than the Berridge, Lewinberg, Greenberg and Fong report their concerns about the size of development on main streets:

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55 Berridge Lewinberg Greenberg Ltd. and Steven Fong Architect, *The City of Toronto: Building on Main Streets* (Toronto: Metropolitan Toronto Planning Dept., 1991), 39-42.

56 Toronto Planning and Development Dept. *Principles and Proposed Strategy for Implementing the Main Streets Initiative* (City of Toronto, Planning and Development Department. 1991: 1991), 19.

> Based on the principle of building in small increments, I am recommending that main street properties with small frontages (up to 18 metres wide) be developed in the least restrictive way. Providing incentives for development on sites with narrow frontages will encourage housing intensification in the least intrusive manner.
>
> Buildings on narrow frontages have a direct relationship to the street. A small number of residents share a hallway and stair system which provides easy and quick access to the sidewalk. This tends to foster neighbourly relationships which do not easily occur in the long anonymous hallways of conventional long slab-like buildings running parallel to the street.
>
> Larger whole block developments produce the biggest threat to the character and stability of main streets. The long slab building type has emerged as the development industry attempted to maximize elevator and corridor efficiency. The quality of living in such buildings is diminished. Apartments located on either side of a long corridor have a single aspect facing the street or the rear of the building. Cross ventilation, light and views are limited in this building type. It is also more difficult to create a sense of community in the building with 150 units of more.[57]

For these reasons, the 25 metre limit on building frontage and the base-case envelope system of area-specific zoning that were proposed by the earlier report were initially endorsed by the planning department.

Deliberations stretched for several years, through numerous iterations, revisions and delayed approvals. They resulted in general principles of the main street concept adopted in the 1993 Official Plan, but not yet in the zoning by-law. The implementation strategy that had intended to include a series of city-commissioned demonstration projects to test and fine-tune the new zoning regulations and to promote and publicise the concept of main street redevelopment, was set aside, and the projects never built. [58]

New zoning did finally result in the new mixed-use main streets zoning designation, 'MCR', in 1994. The new regulations scrapped the area-specific zoning system in favour of a standardized series of limits on height, density and use, regardless of factors such as solar orientation, position in block or street hierarchy, width of street or local market and neighborhood context. Use was not deregulated, and biased very intentionally towards residential uses; although some live-work uses were permitted. Instead of imposing a limit on frontage to prevent undesirable land assembly and oversized buildings, a series of incentives were put in place mainly for the smallest sites, including a reduction of parking requirements for sites under 12m in frontage and without back lanes and requirements for common amenity spaces in buildings of fewer than 20 dwelling units were waived. An

57 Ibid., 33.

58 The City did purchase a demonstration site at 1549 Danforth Avenue and a feasibility study was carried out. The program however was for a 90-100 unit public housing project, a program that proved unworkable given the new regulations for main street zoning. See Brown and Storey Architects and Michael Spaziani Architect Inc., *Housing on Main Streets Demonstration Project Feasibility Study: 1549 Danforth Avenue* (Toronto: Brown and Storey Architects and Michael Spaziani Architect Inc., 1992).

overall reduction in residential and commercial parking requirements was implemented for all MCR designated sites. Height limits were set generally at five storeys (16 metres), but in some cases limited to three or four. The facing distance between dwelling unit windows was reduced from 15 to 11 metres (a restriction that goes beyond that in the Ontario Building Code limiting distance requirements). The approvals process was not significantly simplified nor was a set of comprehensive main street design guidelines developed. Options for municipal involvement in project financing were also dropped. The housing shortage that the initiative was designed to address in the late 1980s was far less of a factor in the economic downturn of the early 1990s, and the new zoning did little to excite new redevelopment at that time.

What began as a call for wholesale redevelopment became a study in intensification; an attempt to develop the regulatory framework to encourage new housing in the form of infill buildings, additions and renovations by private developers and landowners, especially on the smallest of main street sites. Richard Gilbert's original suggested means of long-term implementation was a large-scale program of land acquisition and building to be undertaken directly by the City government at considerable public cost. He warned that if "the City moves on its main streets but relies on the private sector to initiate redevelopment, the result will likely be the same as if the City had done nothing. The work is too complex, fiddly, and potentially unprofitable for the private sector to become animated by the opportunities… If our people are not properly housed, if our local economic activity is held back, and if our streets are without character, we will be denying ourselves the full economic and cultural potential of this remarkable city we are passing our lives in."[59]

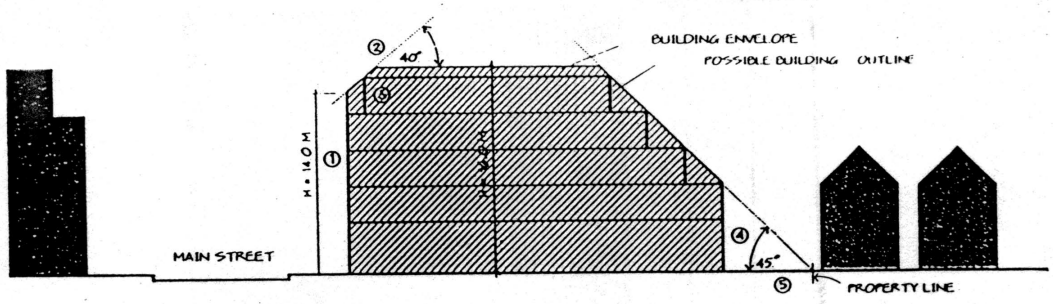
This was in many ways the fate of the Housing on Main Streets Initiative: left to the private sector in an economic recession, with no municipal demonstration projects, education or funding resources ,very little new development occurred as a direct result of the new and highly contentious regulations. Main streets remained unattractive to small private developers, for whom the approvals process and other restrictions even on small sites remained daunting, and of little interest to large developers who could focus on larger opportunities elsewhere. Toronto's lack of appropriate mid-rise, human-scaled main street buildings has also been blamed on the restrictive building code requirements of two exits from each floor, a restriction that precludes the kind of single-stair European-style apartment buildings that allow for double-aspect units accessed directly from one central stair. Such

104. (facing)
Illustration of the concept of the proposed MCR zoning ordinances affecting built form. The zoning ultimately approved differed slightly in its setback and angular plane provisions.
See p.113-114 for final building envelopes.

59 Richard Gilbert, Metropolitan Toronto . Executive Committee, and Toronto . City Council. Land Use Committee, *A Proposal to Redevelop the Main Streets of Toronto* (Toronto: City Hall, 1987), 17.

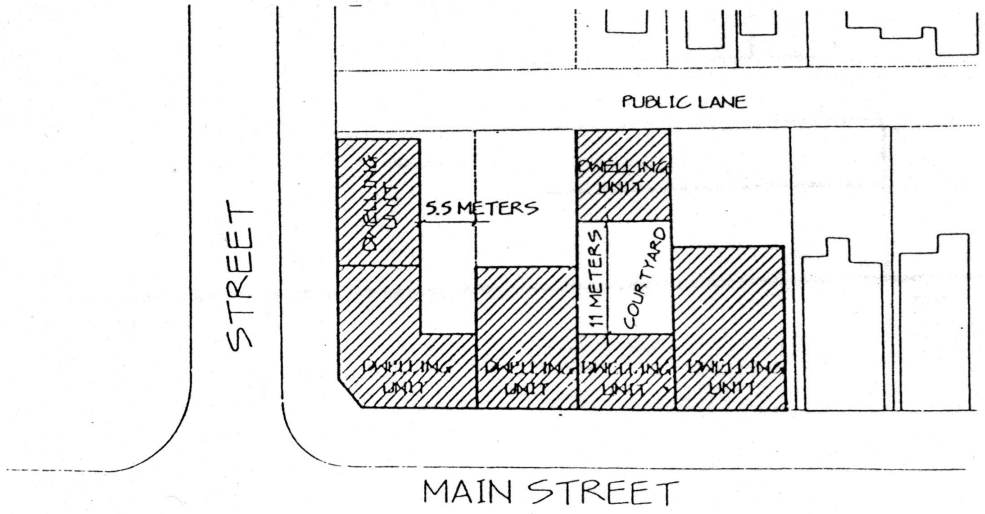
Illustrations of Building Envelope Provisions

ILLUSTRATION 1
ZONING PROVISIONS FOR BUILDINGS ON A TYPICAL MAIN STREET
(maximum height 16 metres, 40 degree angular plane at 14 metres)



1. Height at street: point at which 40 degree angular plane is taken for setback
2. 40 degree angular plane
3. Building setback at front
4. Rear 45 degree angular plane
5. Point at which rear angular plane is taken (rear of property line or, if lane, at far side of lane abutting the rear property line)

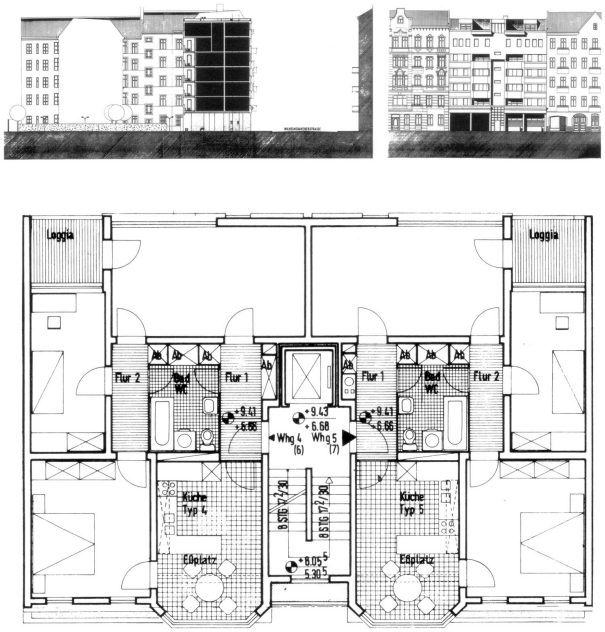
ILLUSTRATION 2
DAYLIGHT, VIEW AND PRIVACY STANDARDS FOR RESIDENTIAL UNITS



Residential Floor Plan

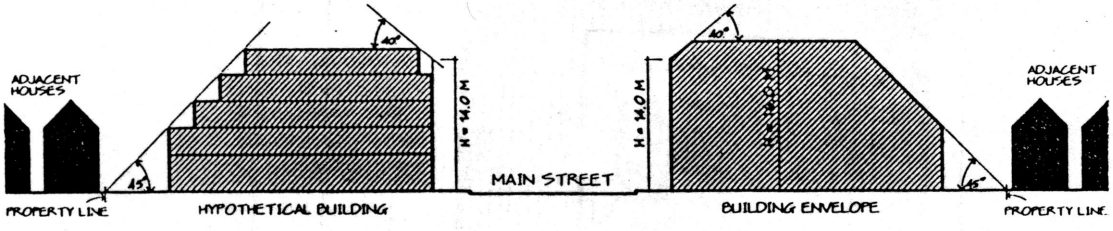
building types seem imminently suited to Toronto's main streets as they have been for the streets of European cities. The provision of a second stair instead tends to produce larger, double-loaded corridor building configurations, with single-aspect units in either slab or point tower formats. Another popular typology that results from the exit requirements is the stacked townhouse type that has a maximum height of four storeys, each unit having its own exit stair. These building types are well represented in current urban housing production, but as the discussion has so far shown, these are not types necessarily well suited to main street locations.[60]

60 Eberhard Zeidler, "The Single Stair and Housing on Main Streets Blues,." *Intensification Report, no.4* no. 4 (1993): 1-3. Also, Christopher Hume, "Stairway to a better Toronto," *Toronto Star* (Toronto), 22 January, 2004.



105.
Typical European single-exit-stair apartment building.
(Johannes Uhl, Berlin 1981)

106. (bottom)
Main Street zoning envelope. When built-out to its limits, produces very deep floorplate buildings with different apartments every floor, or encourages massing towards the front of the site in long corridor slab buildings.



What Happened to Main Streets?

The value of the Main Streets Initiative was primarily in the extensive study it undertook, if less so in its implementation. In its information gathering phase it pointed out the traditional attributes of main streets and their contribution to city diversity and identity of Toronto. The design competition showed the possibilities of innovative design to create appropriately scaled building forms unique to main street sites. The benefit of increased density to be located on these streets was clearly intended to be balanced with preservation of the historic patterns that had created main streets. The new 'MCR' zoning regulations that remain today on many of the city's main streets did not, however, lead to the full achievement of either of these aims. Regulations have not necessarily prevented overbuilding on main streets sites with buildings out of scale their traditional fine-grained patterns of development. Nor have large quantities of new housing been located on main streets.

As planner Pierre Filion points out, "the late 1980s and 1990s did experience some redevelopment, mixed-use development and a measure of density increase. But the vast majority of development took place in functionally and socially segregated suburbs provided with plentiful arterial roads and expressways to accommodate a near total dependence on the car." He accounts for this discrepancy between the prevalent tone of planning documents of the period such as the Main Streets Initiative (that championed reurbanization, intensification and environmental sustainability) and the actual prevalent forms of development by a number of factors, such as "the profit motive and the influence of the existing built environment on consumer tastes. Together they account for developers' unwillingness to deviate from prevailing norms for fear of encountering lack of interest on the part of consumers whose preferences are shaped by the prevailing urban environment and who are notoriously loath to take risks with their housing investment." He cites the "municipalities' fiscal imperative which makes local administrations – particularly growing suburban jurisdictions –wary of planning formulas liable to deter development. This explains in part suburban administrations' resistance to provincial government directives for higher densities in a context where consumers still prefer low density single-family housing" noting also "it seems that municipal administrations are more sensitive to immediate fiscal rewards of mainstream developments than to the infrastructure savings that could accrue from intensified urbanization. It is not irrelevant to this thinking that part of infrastructure funding was (until recently) assumed by the province."[61]

Another factor of conservatism in development is the emphasis on public consultation and involvement in the planning process that was part

61 Pierre Filion,. "Rupture Or Continuity? Modern and Postmodern Planning in Toronto." *International Journal of Urban and Regional Research 23*, no. 3 (September, 1999), 439-440.

of the reform movement of the 1970s. Neighborhood activism and public participation did much to stem the tide of modern planning in Toronto in the 1960s and 1970s, and represented a renewed interest in the traditional patterns of the city such as its street network and pre-war urban forms and neighborhoods. The reform councils of the period were themselves rooted in activism and public consultation. However, this movement also served to encourage the so called NIMBY ("not-in-my-back-yard") effect –wherein neighborhood groups or "ratepayer organizations" were likely to oppose almost any form of new development, including less invasive attempts at "intensification" or "reurbanization", not just high-rise or 'modern' formats of development. Almost any project that promoted intensification or increase in density could spark concerns over the provision of services, parking, open space, neighborhood character, property values, historical structures, and overcrowding. Projects that include subsidized housing tend to particularly raise concerns about neighborhood character. Community consultation and opposition has to some extent always been part of Toronto development regulation as was seen in the earliest residential restrictions of 1904, brought about by ratepayer concern for property values. It is very difficult to achieve consensus among all the groups involved, that often include the development industry; neighborhood, environmental and special interest groups; public and private institutions and utilities, as well as the various municipal authorities (planning, parking, parks and recreation etc). As a result, despite the tone of many planning documents and policy since the 1970s, even new incremental and less invasive development has remained difficult and slow to be implemented.[62] The current efforts of City planners to deregulate land use in key downtown areas, the allowance for the semi-autonomous Toronto Waterfront Redevelopment Corporation, and efforts to relax some of the restrictions on new development are a response to the tradition of conservatism towards development that had been institutionalized through the reform years.

The reform movement succeeded in protecting much valuable built heritage and prevented the cataclysmic modern re-imagining of the city that threatened to occur in Toronto in that period. The 'tower in the park' superblock format of development that was prevalent and particularly destructive to existing fabric, did however respond to market demands for more centrally located housing, and more apartment units for smaller households. The urban residential neighborhoods, protected by low-rise

62 See also Pierre Filion, "Balancing Concentration and Dispersion? Public Policy and Urban Structure in Toronto," *Environment and Planning C: Government and Policy 18*. (2000), 163-189.

zoning, have not provided new housing for either small households or for families over the last 40 years. The current production of small-unit condominium housing is producing new urban housing that caters primarily to small households. This kind of urban intensification does not address the imbalance of housing type between the city and suburbs, wherein the housing needs of larger households and families continue to be met in suburban areas. (see tables p.112)

In the current phase of Toronto's development, "the emerging metropolitan planning vision continues to speak the language of urban reform. Public space, vibrant neighborhoods, street life, public transit, high-density urban living, an endorsement of Toronto's large tenant population as a force usually overlooked in local politics, and a critique of sprawl continue to inform the current planning vocabulary", yet as Stefan Kipfer and Roger Keil of York University have indicated, "the key focus of the new planning language is renewal and reinvestment, indicating the overarching importance of competitiveness and entrepreneurialism in framing current planning discourses."[63] The new push for intensification of the 'Avenues' that replaces the former 'Main Streets' concept in City planning discourse, represents this new emphasis on reinvestment, rather than the older reform interests in providing affordable housing in the downtown, preserving social mix (including families and working-class households) and citizen participation in planning.

Following the 'downloading' of social services from Provincial to Municipal jurisdictions[64], pressures have mounted on the City to expand its property-tax and development base by means of more permissive zoning and development regulation to encourage new building.[65] The 'Avenues' strategy is part of this trend, and although the policy aims to reduce urban sprawl, Toronto has no effective jurisdiction over the exurban regions at a planning level as it once did in the regional governance of the Municipality

63 Stefan Kipfer and Roger Keil, "Still Planning to be Different? Toronto at the Turn of the Millennium," *DISP* no.140, (2000), 33.

64 Accompanying Toronto's amalgamation in 1998, was a new financing arrangement with the Provincial Government (popularly referred to as 'Downloading'), in which the Province assumed all education expenses formerly covered by municipalities, while municipalities in turn assumed the costs of social services such as public housing, welfare, public health, and transit. For Toronto, this shift in funding has severely strained city budgets, and placed greater pressure on the property tax base –the City's primary source of revenue. New taxation powers have recently been granted to Toronto to raise revenues, and at the time of writing, are being exercised for the first time simply to meet a budget crisis faced by the City.

65 David Ley, "The New Middle Class in Canadian Central Cities", in *City Lives and City Forms: Critical Research and Canadian Urbanism*, Jon Caulfield and Linda Peake, eds. Toronto: UofT Press, 1996, 29. See also Gene Desfor, Roger Keil, Stefan Kipfer, and Gerda Wekerle, "From Surf to Turf: No Limits To Growth in Toronto?" *Studies in Political Economy 77*, (Spring 2006), 152.

of Metropolitan Toronto, and the new intensified development does not necessarily replace the forms of housing or affordability of suburban development.[66] As planner Frank Lewinberg has pointed out, the reform-era policy of preserving the existing built fabric of inner-city neighborhoods succeeded in preventing the loss of physical form, but did not prevent the loss of social and economic diversity in the central city. Instead, the low-rise limitations on residential neighborhoods created the stability for reinvestment in older properties by increasingly affluent purchasers (gentrification), driving property values higher, and pushing lower-income residents out of the inner-city. Despite this stasis of physical form, demand for other formats of housing, changes in demographics towards smaller households, and continued population growth, particularly through immigration, have continued to evolve.[67] Rather than maintaining larger families within the downtown, higher-income smaller households have bought up houses within the neighborhoods, often de-converting houses with multiple rental apartments into fewer or single units. In response to such market conditions, new development has been pushed either upwards -into high-rise development such as the condominium towers of the Downtown former railway lands, waterfront, and "Reinvestment Areas" such as King-Parliament and King-Spadina areas, that benefit from relaxed zoning[68]- or outwards into low-rise suburbs outside the urban area in the regions that now compete with Toronto for development investment in the absence of a regional planning authority. Without radically changing the approach to the central low-rise residential neighborhoods, the strategy of encouraging intensification of main streets is one of the few ways to add new housing in the built-up central neighborhoods.[69]

This is why intensification of 'main streets' is still a good idea: with arguably minimal impact on the existing residential fabric, it is possible to begin to renovate these neighborhoods on their borders, adding density and amenity. However, just as the character and quality of the low rise residential areas was, and arguably still is, worthy of preservation, so too is the existing

66 Gene Desfor, Roger Keil, Stefan Kipfer, and Gerda Wekerle, "From Surf to Turf: No Limits To Growth in Toronto?" *Studies in Political Economy 77*, (Spring 2006), 138,139.

67 Frank R Lewinberg, "Neighborhood Planning: The Reform Years in Toronto," *Plan Canada* vol. 26, no. 2, (April 1986), 40-45.

68 Paul Bedford, "When They Were Kings: Planning for Reinvestment", *Plan Canada* vol.38, no.4, (1997), 18-23.

69 The recent interest in intensifying existing neighborhoods through alternative means such as laneway housing reflects the need to provide more housing within the rigidly zoned neighborhoods. See Charles Waldheim, Brigitte Shim, Donald Chong, and Steffanie Adams. *Site Unseen : Laneway Architecture and Urbanism in Toronto*. Toronto: Faculty of Architecture, Landscape, and Design, University of Toronto, 2004.

character of their main streets. That character is keyed directly to the surrounding density, grain and scale of building, which are in most cases low-rise detached and semi-detached homes on small lots. The traditional main street lots have typically been made up of correspondingly narrow lots, and low-rise buildings, that have proven equally versatile in meeting the needs of succeeding generations of occupants, and their diversity reflects that.

Intensifying main streets is a logical 'next step' in the growth of Toronto. However, in the transition from buildings of 1 to 3 storeys, containing a handful of apartments and a multitude of shops to the next scale of development, a drastic shift should be avoided. Instead, a widespread, incremental renovation of these streets, providing a mix of housing through a small increase in density and scale across the city, rather than in concentrated individual projects, remains a desirable option. This was the approach initially suggested by the Housing on Toronto's Main Streets Initiative, but its vision still has not been realized, and regulations effectively still discourage mid-size buildings with a mix of dwelling types and high-quality interior spaces.

107.
2006 Census Data
Describing household and dwelling characteristics for Toronto.

The 1946-1970 -period of residential construction reflects the boom in development of both suburban houses and high-rises within and without the downtown.

Household size continues the trend towards fewer persons and corresponds to the small average dwelling size in the city.

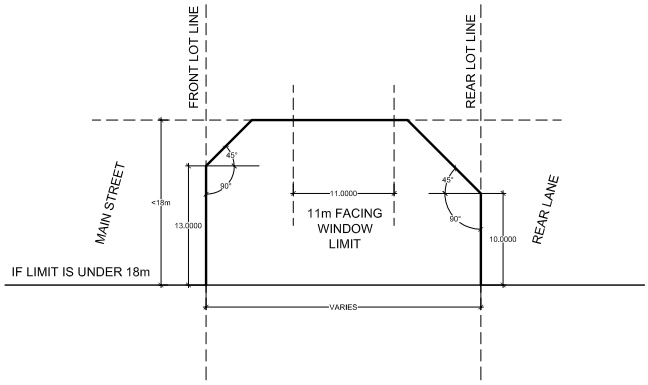
Period of Construction	**#**	**%**
Total Dwellings	979,440	100.0
Before 1946	180,785	18.5
1946-1960	203,495	20.8
1961-1970	185,315	18.9
1971-1980	161,750	16.5
1981-1990	115,490	11.8
1991-2000	72,215	7.4
2001-2006	60,390	6.2

Structure Type	
Single Detached	266,880
Semi-Detached	69,465
Row/Town house	54,690
Apartment Duplex	44,105
Apartment <5 storeys	162,985
Apartment 5+ storeys	379,700
Other Single-Attached	1,345
Movable dwelling	165

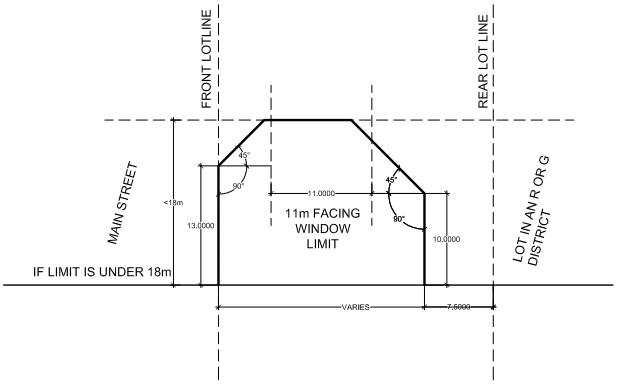
Average Dwelling Size	
No. of rooms	5.5
No. of bedrooms	2.3

Household Size	
1 Person	295,825
2 Persons	282,685
3 Persons	161,440
4-5 Persons	200,735
6 of more Persons	38,645
Average size	2.5

108.
Final built-form restrictions for buildings in MCR zoning districts
(City of Toronto Zoning By-Law No. 438-86, Section 8)

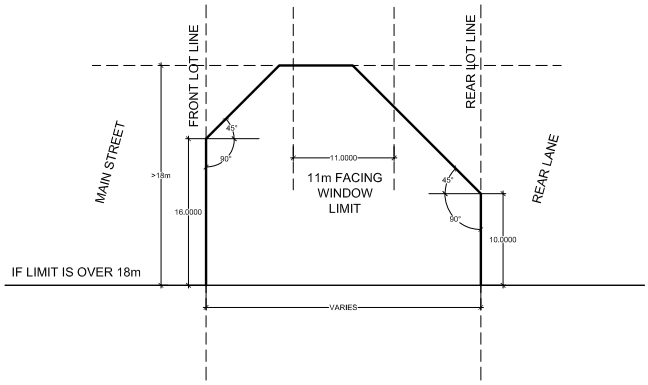


IF REAR OF LOT ABUTS A PUBLIC LANEWAY
OR ROAD

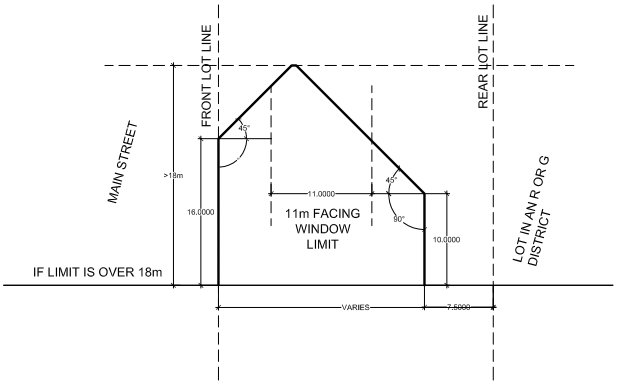


IF REAR OF LOT ABUTS A RESIDENTIAL (R) OR PARK
(G) DISTRICT

Zoning envelopes for MCR buildings with height limit under 18m



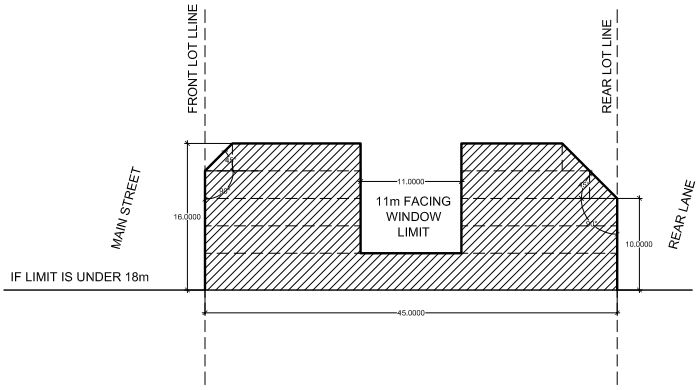
IF REAR OF LOT ABUTS A PUBLIC LANEWAY
OR ROAD



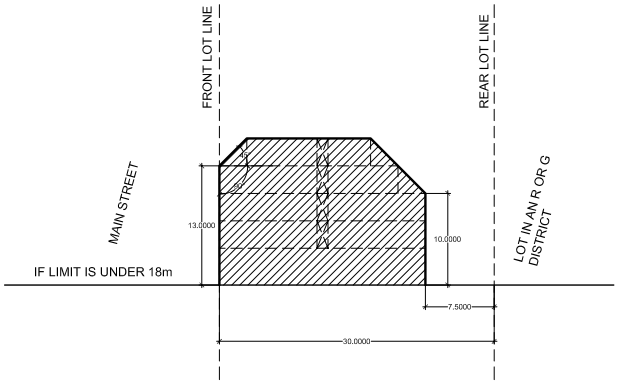
IF REAR OF LOT ABUTS A RESIDENTIAL (R) OR PARK
(G) DISTRICT

Zoning envelopes for MCR buildings with height limit over 18m

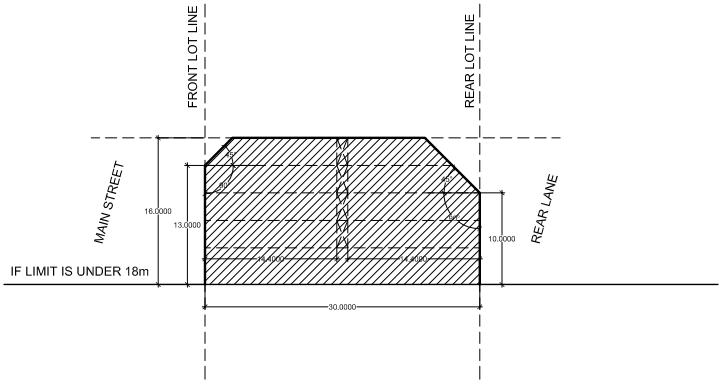
109.
Massing scenarios resulting from zoning constraints



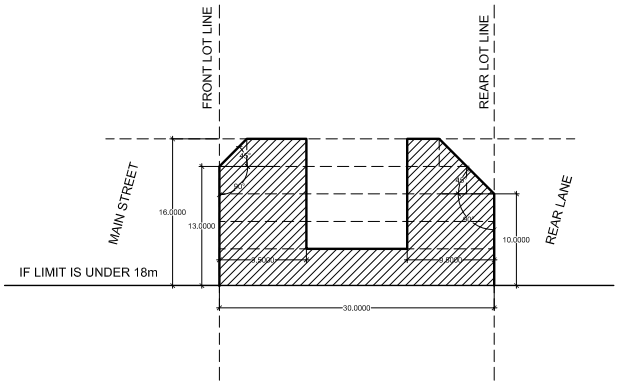
IDEAL SITUATION: LARGE LOT, REAR LANE,
TWO TIERS OF HOUSING



WORST CASE SCENARIO: AVERAGE 30m LOT, ABUTS A
RESIDENTIAL OR PARK LOT BEHIND, DOUBLE LOADED
CONFIGURATION, LEAVING UNUSABLE EMPTY SPACE
BEHIND



COMMON OPTION: AVERAGE 30m LOT, REAR LANE
DOUBLE LOADED CONFIGURATION, DEEP UNITS



DIFFICULT OPTION: AVERAGE 30m LOT, REAR LANE,
UNITS TOO SHALLOW

110.
MCR Parking requirements

TYPE OF BUILDING, USE AND OTHER FACTORS	PARKING REQUIREMENT
residential building, non-residential building or mixed-use building which: (i) is on a lot with a lot frontage of 12.5 metres or less; (ii) is on a lot served by a public or private lane; and (iii) contains not more than 12 dwelling units	a parking facility on the same lot as the use having: (i) a minimum depth of 6 metres, measured from a point equal to or greater than the setback required (ii) a minimum width equal to the width of the lot at that location, minus, where they are provided, the width of three structural supports, the width of any passageway required by the Ontario Building Code or a passageway for bicycle parking, or the width required for boundary fences,
residential building, non-residential building or mixed-use building which: (i) is on a lot with a lot frontage of 12.5 metres or less; (ii) is not served by a public or private lane; and (iii) contains not more than 12 dwelling units	1 parking space for each 2.6 metres of lot frontage,
dwelling units or dwelling rooms on a lot which has a lot frontage of more than 12.5 metres; or residential building or the portion of a building containing more than 12 dwelling units;	1 parking space for every 6 dwelling rooms; 0.5 parking space for each bachelor or one-bedroom dwelling unit; 0.75 parking space for each dwelling unit containing two or more bedrooms; plus 0.06 parking space for each dwelling unit for visitors.

*Where the calculation for determining the minimum number of parking spaces results in a number containing a fraction of one, such fraction if equal or greater than 0.5 shall be counted as one and if less than 0.5, it shall not be counted.

INGRESS AND EGRESS TO AND FROM THE PARKING FACILITIES REQUIRED BY THIS SECTION SHALL BE PROVIDED AS FOLLOWS:

A building or structure shall be such that the facilities are accessible to a public highway either directly or by means of a driveway or passageway having a minimum width of 3.5 metres for one-way operation and a minimum width of 5.5 metres for two way operation.

111.
Some of the MCR regulations of particular relevance

OFF-SITE PARKING PROVISION:

The parking facilities for uses in an MCR district, unless otherwise specified in this subsection, may be provided in a parking facility on the same lot as the use or on a lot within 300 metres of the containing such use; provided nothing in this paragraph shall mean that parking spaces can be provided on a lot or on a portion of a lot located in an R district, unless such parking spaces are in a permitted parking facility and are accessory to a principal use of uses permitted on the whole of the lot or on the portion of the lot on which the parking spaces are to be provided.

NEW REGULATIONS REGARDING PERMITTED USES:

A live-work unit is a permitted residential use, provided the work component is restricted to the following uses or classifications:

office, workshop, studio, personal grooming establishment or
tailoring shop.

A parking stacker is permitted, provided:
(i) it is accessory; and
(ii) it is located within a building.

RESIDENTIAL AMENITY SPACE

No person shall erect or use a building containing 20 or more dwelling units unless residential amenity space is provided in accordance with the following table:

TYPE OF RESIDENTIAL AMENITY SPACE REQUIRED	AMOUNT OF RESIDENTIAL AMENITY SPACE REQUIRED
residential amenity space in a multi-purpose room or contiguous multi-purpose rooms, at least one of which contains a kitchen and a washroom:	2 square metres of residential amenity space for each dwelling unit
residential amenity space located outdoors:	2 square metres of residential amenity space for each dwelling unit of which at least 40 square metres is to be provided in a location adjoining or directly accessible from the indoor residential amenity space

LOADING REQUIREMENTS:

Shall not apply to any non-residential use located on a lot in an MCR district if the lot has an area of less than 1000 square metres.

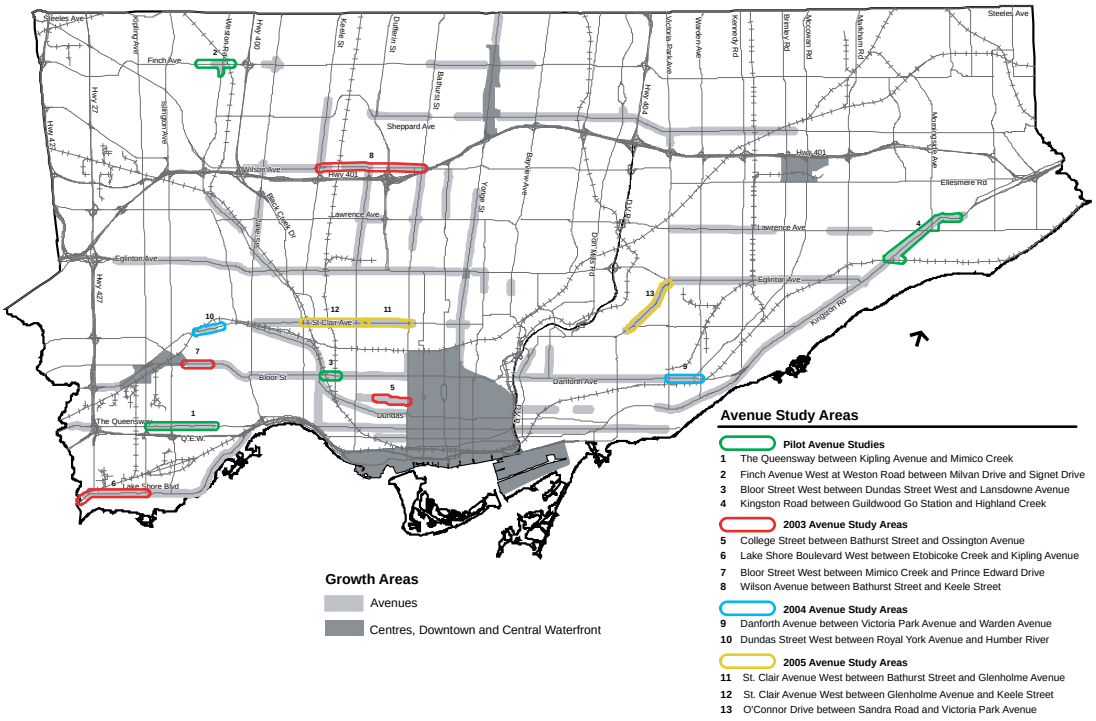
WINDOW SEPARATION:

No person shall erect or use a residential building or a mixed-use building on a lot in an MCR district containing more than 5 dwelling units or dwelling rooms or combination thereof in which the main window of a dwelling unit or dwelling room in the building is closer than:

(i) 11 metres to the main window of another dwelling unit or dwelling room on the same lot; or

(ii) 5.5 metres to a wall, or to a lot line that is not a street line or that does not abut a public park or a UOS (Open Space) district.

MINIMUM UNIT SIZE REQUIREMENT:
Removed in favour of deferral to Ontario Building Code.



112.
Map of the Avenues selected for new “Avenue Studies” to inform future site-specific zoning for these areas.

113.
The planning vision for currently poorly defined and underdeveloped Avenues: Buildings are full-block, free-floating, self-referential forms with little visible impetus for street activity.

Main Streets Development Today: "Reurbanizing the Avenues"

> Everybody with an interest in urban planning agrees that North America's experiment with the low-density, sprawling city was a disaster. Everybody is searching for ways to intensify our cities, to do more with the land we already have rather than paving over more farmland. The virtues of intensification are now so widely acknowledged they are platitudes.[70]

As Richard Gilbert explained in 1991, the motivations of the original Main Streets proposal had shifted in a few short years since its start:

> The original 'Housing on Main Streets' proposal, put together in 1987, had two goals. One was to add more housing in the city. It came out of my experience as a municipal politician who was frequently frustrated by neighborhood opposition to housing projects. I found adding housing to main streets was of less concern to neighborhood activists. At the same time, the goal of more housing was less concerned with intensifying the city as with meeting the strong demand for increased residential space per person…Today there is a more urgent goal: to intensify our entire metropolitan fabric. In the last three years we have learned that we must huddle together to use less fossil fuel and help prevent global warming. Intensifying development along main streets is not simply a matter of housing people more cheaply and using infrastructure more efficiently and making main streets more vital: It is now almost a matter of life and death. [71]

Those goals remain largely the same as those expressed in the recently approved 2006 Toronto Official Plan.[72] This is the first Official Plan of the amalgamated City of Toronto. Each of the former Metropolitan Toronto municipalities as yet maintains its own zoning by-law, and the process of harmonizing the regulations of the different former jurisdictions is ongoing. The category of "Main Streets" developed for the 1993 Toronto Official Plan that resulted from the Housing on Main Streets Initiative, is no longer part of the new Plan, but the 'MCR' main street zoning category developed for the 1993 Plan remains in effect in the former City of Toronto area. Changes are being contemplated once again, however, to Toronto's zoning bylaw; this time on a more area specific basis ("Avenue Studies" are being carried out on a few specific sections of these streets to determine the most appropriate forms of new development and regulation). Meanwhile the market for housing in the central area of Toronto is experiencing a boom, and demand for new urban housing is putting pressure once again on increasingly scarce undeveloped and underused land. Main streets are finally becoming the location of new housing to meet the growth needs of Toronto. The form of this new main street development could have a considerable impact on this very old urban structure that has in many ways defined Toronto's identity and image.

The current Official Plan incorporates many of the principles of the Housing on Main Streets Initiative and still seeks to encourage new

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70 John Barber, "Form & Content: City Hall crosses Main Streets," *Globe and Mail*, 30 April, 1992.

71 Richard Gilbert, "The Imperative for Housing on Main Streets." *Places 7*, no. 2 (Winter, 1991), 74.

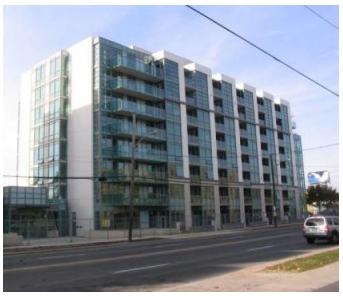
72 The current Official Plan was first presented in 2002, but was substantively approved in 2006.

development of mid-rise mixed-use housing along main streets. The category of the Official Plan is now titled "Avenues: Reurbanizing Arterial Corridors", and the intention remains to provide "new housing and job opportunities while improving the pedestrian environment, the look of the street, shopping opportunities and transit service for community residents." The plan recognizes the role of main streets as a community focus and that they should develop incrementally one building at a time in keeping with the individual character of the area in question.[73] However, accompanying the change in language from "Main Streets" to "Avenues" appears to be a change in attitude towards the preservation of the old patterns of main streets in favour of encouraging visible growth and reinvestment. Developing the avenues "one building at a time" says nothing about the scale of that one building.[74]

As Robert Freedman, Director, Urban Design, Planning Division for the City of Toronto stated in his introduction to the 2005 City-sponsored 'Mid-rise Symposium' (co-sponsored by the Canadian Urban Institute and the Toronto Society of Architects):

> The policy framework is compelling but the Toronto development community has not fully embraced the mid-rise building type. By mid-rise, we mean buildings that are taller than a townhouse, but no taller than the street right-of-way, usually between 6 to 12 stories in height. These buildings are typically constructed of concrete, require common circulation, underground parking and elevators. The general feeling among developers in Toronto seems to be that this scale of building is just too expensive and therefore too risky to build in any great numbers at the present time. While the Toronto development community has "cracked the code" on point tower condominiums and long rows of townhouses, the secret to unlocking the mid-rise scale continues to evade us.[75]

The symposium sought the input of developers, designers and other experts to help find ways of "unlocking" development on the avenues. The obstacles identified by the planning department and elaborated in the findings of the workshops echo most of the same issues and their possible solutions that were articulated in the Housing on Main Streets Initiative of 15 years previous. The same constraints on development posed by small sites, difficulty of land assembly, overly restrictive zoning limits on use, parking and built-form, the complicated and costly municipal approvals process, and the need for promotion and education surrounding building and living on avenues remain largely the same.



114. (above and facing)
A selection of recent buildings from Director, Urban Design, Planning Division for the City of Toronto, Robert Freedman's Mid-Rise Symposium Presentation. These represent the type of building promoted in the Official Plan's "Avenues" category.

73 Toronto Planning and Development Dept., *Toronto Official Plan* (City of Toronto, Planning and Development Department, 2006), Chapter 2, 15.

74 Even the preparation of the new Official Plan undertook less public consultation than the previous 1993 plan, in favour of a panel of "key decision makers". See Stefan Kipfer and Roger Keil, "Toronto Inc? Planning the Competitive City in the New Toronto", *Antipode 34*, no.3, (2002), 247.

75 Robert Freedman, "A City of Great Avenues," Symposium overview paper. http://www.toronto.ca/planning/midrise_symposium.htm (Accessed January 16, 2007).

There appears to be a bias, however, in this new round of study of the avenues, towards larger mid-rise development. Whereas the Main Streets Initiative had emphasized development for the smallest sites and even contemplated limiting the size of individual buildings, some of the key recommendations of the Mid-rise Symposium suggest a move in the opposite direction -even the definition of mid-rise is higher than those currently permitted on most main streets. Among the suggestions to come out to the symposium were to:

- Create polices to preserve larger sites.
- Limit severances on properties with wide frontages on designated Avenues.
- Minimum lot depths for Mid Rise Buildings should be 120 feet [36.5 m].[76]

The types of buildings that were referenced in the presentation by Robert Freedman, as examples of the potential for intensification, were also of an average scale very much larger than those of traditional main streets, especially for the inner city. It was suggested that "the amalgamated city includes newer, wider Avenues. These Avenues have the potential to accommodate taller mid-rise buildings; the parcels are larger, requiring less land assembly and making building layout and parking easier."[77] The up-front economic advantages such larger buildings are numerous: access to the site and providing below grade parking becomes simpler; the same municipal approvals process applies to a large project as a small one; economies of scale can be achieved with many repeated systems; designing efficient floorplates is easier; marketing and design teams are similar regardless of project size, so the larger the more economical the project; the market is not as accustomed to these forms of development as more popular (high-rise/townhouse) types, therefore, the closer the project approaches those other forms of housing, the easier they are to market and obtain financing. As well, the one-time development charges and land assessment values for the city are higher for larger projects.

Despite the ease of design and the availability of large sites, the urban pattern suggested by such building is quite different from older main street forms. Their ability in large quantities, to reproduce the conditions that have in the past established main streets as interesting, vital and flexible primary public spaces, is questionable. Despite the apparent difficulties of developing within the scale and fit of the old fabric -and doubts about commercial viability- new development has occurred at this scale throughout the city. Particularly recently, a number of small scale main street mixed-use residential buildings have come on the market or are being planned. The

76 http://www.toronto.ca/planning/midrise_suggestions_summary.htm

77 Robert Freedman, "A City of Great Avenues".

economics may not be the same as for larger projects, but they clearly make sense to certain developers. The challenge is to create more and better of this kind of smaller scale development.

Three categories of issues affecting development on the avenues identified in the Mid-Rise Symposium:

1. Policy and City-Wide Planning Issues:
    - The policy is unrealistic. If there was a market for mid-rise buildings along the Avenues, the development community would be responsive.
    - Required property assembly is too difficult, particularly in the older parts of the city.
    - Parking requirements are too onerous.
    - The City must lead with great transit to enhance the appeal of the Avenues.
    - The City's expectations with respect to continuous ground floor retail are unrealistic.
    - Nimbyism - People like the idea of mid-rise, but only if it is not adjacent to their backyard. They fear overlook, shadowing, traffic and parking impacts, and over- crowding within local community and recreational facilities.
2. Mid-Rise Building Issues:
    - Mid-rise buildings are typically concrete structures with high construction costs that need to be supported by higher densities and building heights.
    - The requirement to make ground floor units easily convertible into retail, restaurant or other public uses, can be difficult and expensive.
    - The extent of common space required, for the scale of building, negatively impacts financial feasibility.
    - A range of small building design issues including the challenge to design an efficient footprint, the expense of underground parking, accommodation of a second means of egress, the provision of expensive elevators and their ongoing maintenance, as well as onerous loading and garbage requirements.
    - Expensive noise abatement measures (e.g., triple glazing) may be necessary to make street-facing units marketable.
3. Market and Economic Issues:
    - The market is finicky. The majority of potential condominium buyers want a unit with a view.
    - Many people do not want to "live above the shop", and feel that there is a certain stigma attached to it.
    - Some buyers like the idea of living on a transit line, others do not.
    - Some see the Avenues as a great place for empty nesters and seniors, while others see it as a hard sell.
    - There is a market for affordable housing, but it raises NIMBY issues.
    - Ground floor entertainment retail, restaurant and bar uses are often seen to be in conflict with residential uses above.
    - Small sized mid-rise buildings can be very expensive to build with poor economy of scale.
    - The City's rezoning and development review process is too onerous and too slow. Banks are wary of mid-rise projects.
    - There are no tax or financial incentives for this form of development, as there are in other Canadian and US cities.
    - The Avenues begin to work and create synergy when there is a critical mass of buildings on both sides of the street. "Pioneer" builders are therefore burdened with greater risk.
    - Townhouses are faster and easier to get approved and built, even if it means leaving density on the table.
    - The "hipness factor" - the condo marketing machine has associated urban living with high-rise condos and lofts - whether for singles or empty nesters. Mid-rise on the Avenues is a tougher sell.
    - Condo living has yet to catch on in a big way with the family housing market.

115.
Percent of Total Proposed Residential Units by Height in Priority Growth Areas (as defined in the 2006 Official Plan)
Higher buildings continue to dominate.

	Total No. of Proposed Units	1-4 storeys	5-12 storeys	13-29 storeys	≥30 storeys
Downtown and Central Waterfront	39,198	2%	8%	29%	61%
Centres	10,427	2%	3%	46%	49%
Avenues	19,012	10%	24%	42%	24%
Other Mixed Use Areas	6,641	29%	14%	50%	7%
Whole City	75,278				

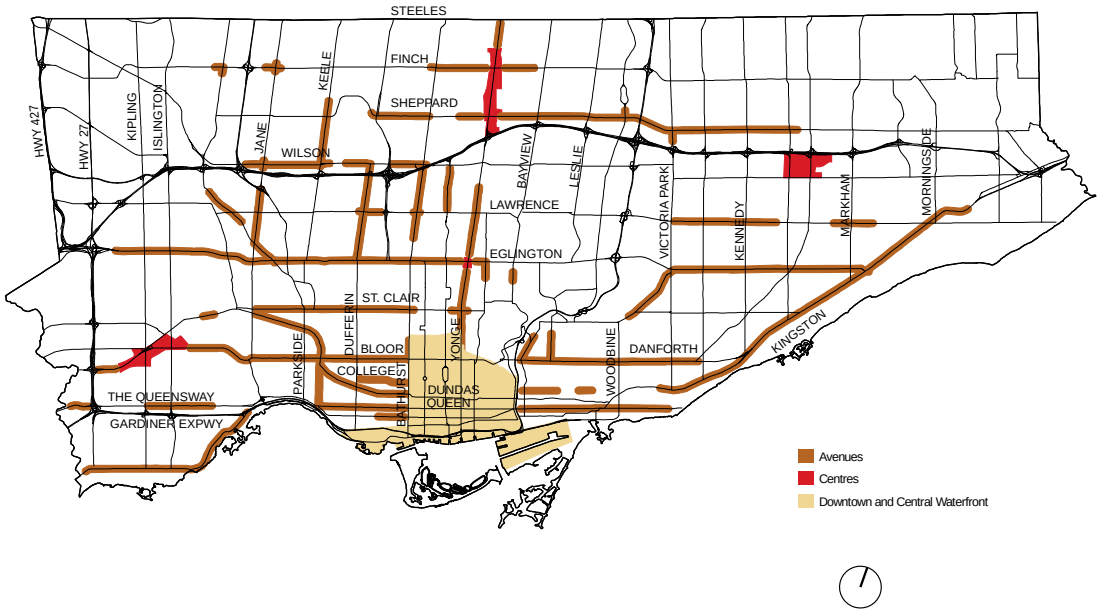
Source: Land Use Information System -applications received between November 1, 2002 and December 31, 2006.
(Policy and Research, Toronto City Planning Division)

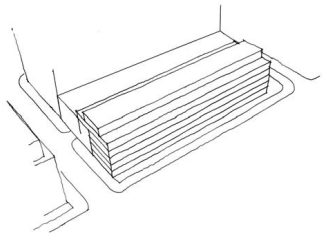
116.
Distribution of Mid-Rise Residential Buildings (4-12 Storeys)
5-Year Pipeline July 1, 2000 - June 30, 2005

			4-6 storeys		**7-9 storeys**		**10-12 storeys**	
	Total Projects	Total Units	Projects	Units	Projects	Units	Projects	Units
All Projects*	241	23,696	124	7,038	69	9,110	48	7,548
Avenues	71	5,784	43	1,690	17	1,915	11	2,179
Downtown and Central Waterfront	47	2,766	21	551	13	649	13	1,566
Centres	7	541	1	12	2	213	4	316
Rest of City	116	14,605	59	4,785	37	6,333	20	3,487

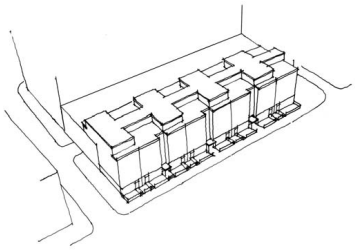
*Represents proposed projects from applications received by City Planning
Source: IMBS, July 1, 2000 - June 30, 2005
(Policy and Research, Toronto City Planning Division)

117.
Priority Growth Areas as defined in the Official Plan

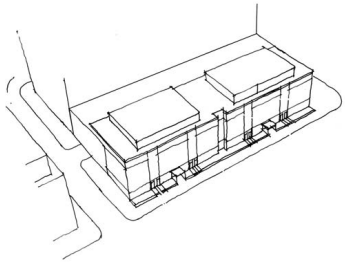




Massing envelope



Massing alternative; Developers have flexibility in the location of the penthouse to create a varied roof profile.

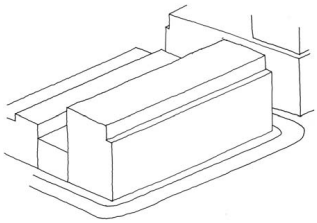


Massing alternative

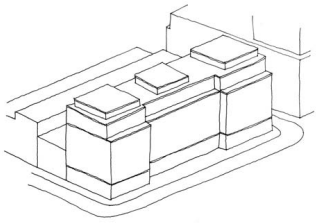
A Vancouver apartment building with directional bay windows, balconies, and roof terraces responds to view and solar orientation.

A mix of materials and façade compositions within a large building mass creates vertical regulating lines.

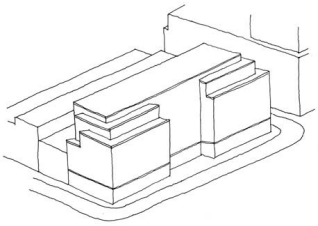
This Toronto apartment building has stepbacks with terraces and a rich composition of wall planes and materials.



Massing envelope



Massing alternative; Developers have flexibility in the location of the penthouse to create a varied roof profile.



Massing alternative

The Argument for a New Increment of Development on Main Streets

118. (facing top)
Comparison of a main street block made up of multiple individual buildings and a full-block building that uses cosmetic variation of its facade to simulate several buildings.

> It makes no difference if market surveys show that people prefer lower density single family homes on 60-foot lots. People record their preferences by buying and renting what is produced. They can take only what is offered and what they can afford. What is offered depends on our developers and our regulators.[78]

The major difference between much contemporary main street development and historic building forms is the size of individual projects. Many of the new buildings that have begun to appear on main streets have a much larger footprint than most traditional buildings. The pursuit of efficiency in parking, circulation, unit layouts, exit stair and elevator provision have favoured larger vacant or assembled sites, where often one building represents an entire block of frontage. Contemporary redevelopment plans such as the plan for the West Donlands (the same property formerly referred to as the Ataratiri Site), take an approach to city diversity that is largely cosmetic –exactly the approach cautioned against in both the *Ataratiri: Building and Block Study* and the *The City of Toronto: Building on Main Streets* report. For example, part of the design guidelines for the new West Donlands area suggests:

119.
(facing bottom)
Extract of the West Donlands Design Guidelines showing strategies for exterior variation of envelope.

The question of what exactly constitutes an "appropriately" scaled façade is at issue here. It would seem to suggest a simulation of the traditional small and incremental forms of development that naturally created a visually diverse streetscape through the assemblage of many buildings designed, built, and occupied by an actual diversity of individuals -a condition that can no more result in a "horizontal skyscraper effect" than its character can be simulated through surface treatment.

Changing the grain, scale, ownership pattern, and balance of uses of the buildings on these streets may not create streets that behave the same way and provide the same kind of amenity as the traditional patterns of development –what were called 'main streets'. Cosmetically, these large buildings may reproduce the look of main streets, but they lack the kind of individual contribution of unique buildings in an ensemble of many. As was discussed in the *City of Toronto: Building on Main Streets* report by Berridge Lewinberg Greenberg and Fong[79], these are not the same kind of buildings and they do not perform the same way.

The current approach to intensifying main streets seems to be aimed at adapting avenues to better accommodate standard forms of housing –creating the conditions to encourage large developers to provide the standardized, small-unit, auto-friendly, higher-density housing forms that

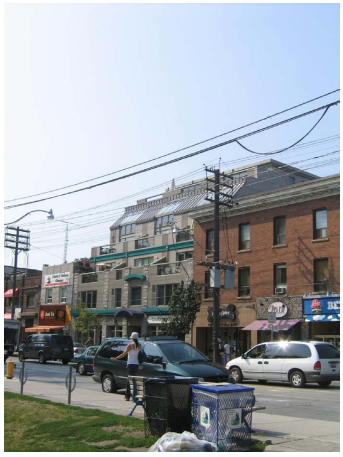
78 Frank Lewinberg, "Some Thoughts about Intensification," *Intensification Report*, no.1 (March, 1993), 4.

79 See page 104.

are available on any number of sites, from the waterfront to the suburbs. Despite this, the interest is still low on the part of developers and the public to embrace main streets as a place to live. Rather than trying to provide the same kind of housing options that have so far not attracted families, non-nuclear households, a variety of income groups, or offered a viable alternative to the single family home, perhaps what main street could offer is a different kind of housing; one that provides a greater scope for inhabitation than the usual one-bedroom and den that is available in towers, in slabs or lofts throughout the city.

The dominance of small apartment units in current urban housing production poses a danger to the diversity of the urban population, and accentuates the divide between urban and suburban dwellers or forces larger households to occupy apartments of inadequate size. The speculative boom in such condominium units has also increased the number of non-resident investors who individually rent out their condominiums; this raises concern about long-term maintenance in new large buildings. City Councillor Adam Vaughan has raised this concern, cautioning that "tall buildings that fall apart don't bounce back easily."[80] Whether tall or wide, this kind of problem is not related to building form, but to building scale and to the number of units in the individual project. Too many small dwelling units can also negate arguments about reducing urban sprawl through intensification: small apartments cannot meet the long-term needs of many residents, offering only temporary lodging until having to seek the larger housing forms typically offered only in suburban locations. In a 2006 survey of downtown residents living in housing built since 2001 conducted by the Toronto City Planning, Policy and Research Division, 73 percent of respondents indicated an intention to move within the next five years. This number is not surprising given that 92 percent of new housing built in that period in the downtown contained 2 bedrooms or less. The survey also notes that although the largest group of residents in the downtown were young singles and childless couples, "many new dwellings are being occupied by families with children, working age persons and the

80 Quoted in Ivor Tossel, "High Stakes" *Globe and Mail* (1 September, 2007). Vaughan compares new downtown high-rise development CityPlace (on the former Railway Lands) to the privately developed St. James Town project of the 1960s -a high-rise project of, largely small apartments, initially successfully marketed to young downtown white-collar workers. St. James Town quickly degraded as the initial tenants moved on. The buildings were poorly maintained, occupied by short-term users, and have now, because of their relative affordability and proximity to downtown, been populated largely by low-income households and many families. The intention of 1960s redevelopment to eliminate overcrowded, poorly maintained, low-rise slums was effectively replaced by a new high-rise version. Vaughan fears a repetition of this pattern in new high-rise development.



120.
Two contemporary main street buildings that successfully conform to the basic intentions of the MCR zoning requirements on narrow frontage lots.

elderly."[81] Presumably, these households occupy the same predominantly small units, whether well suited to their needs or not. (see fig. 121)

If building on main streets could offer a wider spectrum of choices of better dwellings –not just smaller or cheaper dwellings- this can be a way of realizing the potential of main streets. Various types of mid-size multiple-occupancy buildings are prevalent in many cities worldwide, but to date in Toronto, they are largely lacking. Given the persistence of the densely subdivided grid structure of Toronto, one would have expected a compendium of excellent small-lot building types to be continually evolving. Instead, houses, towers and slabs are imposed through land assembly, or through compromise of design. The problem has been that main street sites are not well suited to providing the typical forms of housing; rather than making main streets better suited to typical forms of housing, perhaps new housing could instead conform to the unique conditions of main streets.

The large-scale main street buildings are not the only form available for redevelopment on these streets. Buildings with narrow frontages (less than 25 metres), that represent small assemblies of property or that could replace the countless low-rise buildings on such sites across the city, remain an option for redevelopment and intensification. However, such buildings present more constraints on design than their larger counterparts in terms of site limitations, zoning and building code restrictions. They are typically pursued by smaller developers, whose ability to access the more permissive development environment of the Official Plan, through variances and rezoning, is limited. Nonetheless, these sites present their own opportunities for design. Through some further relaxation of zoning (particularly of rear setbacks, or using the Ontario Building Code requirements for facing windows, rather than the more stringent Zoning By-Law requirement of 11 metres), further deregulation of land use, mandating a mixture of unit types, and by developing adaptable new building types for main streets that can be applied to a variety of sites, the concept of low-impact, incremental main street redevelopment might be realized.

81 Policy and Research, Toronto City Planning Division, *Profile Toronto: Living Downtown Information Bulletin*, (October 2007), http://www.toronto.ca/planning/living_downtown.htm

Household Types by Number of Bedrooms in Recent Downtown Housing (since 2001)

Household Type / Bedrooms	Single	Couples without Children	Couples with Children	Single Parent	Other	All Households
Recent Housing -Post 2001						
None (Bachelor / Studio)	6%	1%	0%	0%	2%	4%
One Bedroom	68%	47%	16%	17%	18%	52%
Two Bedrooms	24%	45%	53%	67%	57%	36%
Three Bedrooms	2%	7%	25%	17%	12%	6%
More than Three Bedrooms	0%	0%	6%	0%	11%	1%
All Recent Households	49%	35%	7%	2%	7%	100%

Source: Living Downtown Survey, Toronto City Planning, Research and Information, December 2006

121.
Table of household types by number of bedrooms in recent downtown housing (since 2001)

x1

x15

122.
Comparison of a single full-block main street building to the equivalent number of historical building divisions.

Conclusion to Part I: Diversity on Main Streets

> Wherever we find a city district with an exuberant variety and plenty in its commerce, we are apt to find that it contains a good many other kinds of diversity also, including variety of cultural opportunities, variety of scenes, and a great variety in its population and other users. This is more than coincidence. The same physical and economic conditions that generate diverse commerce are intimately related to the production, or the presence, of other kinds of city variety.[82]

To summarize the discussion so far, the argument for small increments of development, applied to both infill and large site redevelopments can be made on the grounds of providing for three kinds of diversity –economic, social and visual- that contribute to the quality of the urban environment and create the conditions for vital, flexible and engaging streetscapes capable of evolving with the city over time. It was this capacity for diversity that struck architect and Main Streets Design Competition juror Kees Christiaanse, writing on the subject in 1991:

> In the early days many of these buildings were of Victorian or Georgian style; today they are in every possible style and non-style imaginable. Buildings of different ages stand side by side, reflecting the diversity of population in Toronto and in Canada. Buildings from different epochs contribute to the image of the street and show that the city is a live organism. The co-existence of various cultures and sub-cultures is the most important base for the attractiveness and liveliness of the main street and needs to be guaranteed in future zoning regulations.[83]

By favouring a smaller scale of development, one more in keeping with the historic lot patterns of main streets, the conditions for city diversity are increased. While larger buildings can and do succeed in some locations, their chances for providing richly varied, dynamic and lively streets are fewer.

Economic Diversity:

As has been previously discussed, main streets and their fine-grained mix of old and new buildings have fostered a diversity of economic activity, particularly in the form of small businesses. In contrast to that pattern, larger (often full-block) buildings, must carry the entire task of creating diversity within a singular entity. Despite a mix of uses (residential and commercial), or even a building containing multiple individual stores or businesses, all of these are often still within the control of single ownership or at the very least, sharing the fate of one building. The uniform standards for leasing of each retail unit pre-selects one type of retail tenant. Often, the appearance of storefronts and maintenance standards must conform to the overall standards of the building.

Projecting such large buildings into the future, the success or failure

82 Jane Jacobs, *The Death and Life of Great American Cities* (New York: The Modern Library, 1993), 193.

83 Kees Christiaanse, "Urban Design for Architectural Diversity," *Places 7*, no. 2 (Winter, 1991), 69.

of an entire block is now determined by the success or failure of one building. The entire building, and thus the entire block, ages and potentially degrades at the same rate, whereas in historic development, some buildings lost value at different rates and assured a mixture of rent levels, accounting for their role as an incubator of new small business and entrepreneurialism.

Unlike many individual side-by-side buildings that could be gradually repaired, replaced, re-imagined, renovated and adapted to new uses, new needs, ideas and tastes, one small piece at a time, these are now a single entity that must be dealt with as a whole. This precludes the possibilities of small individual property owners to exercise control over their space and storefront in terms of design and appearance. The result is a loss of diversity, of potential for community, of individual involvement, investment and care for the street, and the possibility of gradual evolution of the block.

The simplified division of uses in a full-block building -retail at grade, residential above- also imposes a kind of urban monoculture of use; single-use institutions, businesses, or even entirely residential buildings cannot occur within such a block, nor can these specialized buildings be easily converted to other uses later.

Traditional main streets rarely contain a uniform level of affluence or business type for long, a contributing factor of their dynamic and consistently engaging form and content. Their fortunes rise and fall gradually, bouncing back more easily than large entities. In such settings the impact of failures or decay are naturally limited by small scale, but success can spread among more individual increments.

Social Diversity:

Older main streets have traditionally reflected a diversity of tenants, shoppers, residents and business types and sizes. The small increments of building and property, have allowed smaller businesses and individuals to participate in shaping the street. They have often reflected the influence of specific cultural or ethnic groups. Larger sites and buildings involve larger land and development costs that make participation in the building process accessible to fewer kinds of investor, developer, builder, owner or tenant.

These larger buildings typically contain a limited mix of unit types, marketed to a limited sector of residential buyer and commercial tenant. The design complexity required to incorporate many unit types in single buildings, makes this costly and rare. It is also difficult to incorporate different income levels within single projects. The potential for a mix of economic and social groups occupying such buildings and consequently the street and neighborhood, is limited. In areas where the unit mix is narrow, it becomes difficult in the long term to maintain the same group of continuous

residents who must look farther away from their neighborhood to meet their changing housing needs as they age, or as their family situation changes. A sense of stable community, ownership and responsibility for the spaces of the neighborhood are critical to long term success of an area, but this is difficult to accomplish with short-term tenants and owners, who must move to find suitable living space -a condition that also fuels the demand for land-intensive suburban development. Smaller buildings represented by smaller condominium or co-operative associations, or individual landlords, might be better able to react to the individual needs of residents and contribute to the sense of ownership and engagement in the buildings and quality of the city. The possibility of knowing ones neighbours is also limited in large buildings, and further separates individuals from the care and engagement with their neighborhood, treating it as a temporary place to stay, rather than a long-term living option.

Visual Diversity:

> The current tendency with respect to the issue of creating visual diversity with any given housing "project" promotes architecturally designed diversity, rather than emphasizing the much more authentic diversity which follows from the role of inhabitants in making dwellings identifiable and familiar to themselves and others. (The streets of downtown Toronto stable neighborhoods are lined with similar semi-detached houseforms, yet the individualization of each results in diverse expressions to the street.)[84]

As Gordon Cullen wrote in his 1961 book on the visual and experiential nature of the urban environment, *Townscape*: "bring people together and they create a surplus of enjoyment; bring buildings together and collectively they can give visual pleasure which none can give separately."[85] He suggested that "within a commonly accepted framework –one that produces lucidity and not anarchy –we can manipulate the nuances of scale and style, of texture and colour and of character and individuality, juxtaposing them in order to create collective benefits. In fact the environment thus resolves itself into not conformity but the interplay of This and That."[86] Such a 'commonly accepted framework' is the fine-grained lot pattern of main streets. The importance of creating specificity of places, a Here as distinct from a There ("This and That"), is a central preoccupation of Cullen's work, and a way of establishing meaningful connections to place that must be created by the unexpected combinations, juxtapositions and shifts in the quality and character of settings,

84 George Baird, Donald Clinton, Bruce Kuwabara, and Barry Sampson, *Built-Form Analysis* (Toronto: City of Toronto Planning Department, 1975), 161.

85 Gordon Cullen, *Townscape* (London: Architectural Press, 1961), 9.

86 Ibid., 14.

and places that cannot be wilfully created either through uniformity or cosmetic variation.

Despite the respectful appearance of many large buildings that attempt to cosmetically break down their mass through architectural articulation, they have a very different effect on the street. What was once a series of fine-grained, unique buildings -each the vision of a different developer and architect, and reflecting the needs of a particular group of users- are now only one. When one building must attempt to reproduce the appearance of many different buildings, the result is often a pastiche of historical facades or elements. Individual small buildings, however, can usually manage a visual coherence at least within themselves and the assemblage of several of these buildings that at least share a common basic pattern of lot size, heights and build-to lines, creates a coherent, yet truly visually diverse, detailed streetscape that reflects the divergent interests and tastes represented by each. These smaller increments have the potential to create a sense of place that is specific to a particular shop or group of apartments that can be more readily individuated and identified with.

Even if an area or block of many separate buildings is redeveloped all at once in this way, it has the potential to change incrementally over time, unlike one building whose replacement or renovation might cause mass displacement and cataclysmic change to the streetscape. Smaller buildings allow for the gradual evolution of the streetscape by providing increments of building under the control of many parties rather than few, which can be more easily replaced with new buildings or renovated to reflect as-yet unexpected conditions and trends. The kind of visual diversity that results is a genuine reflection of the complex relationships, patterns of ownership, activities, and populations of the contemporary city.

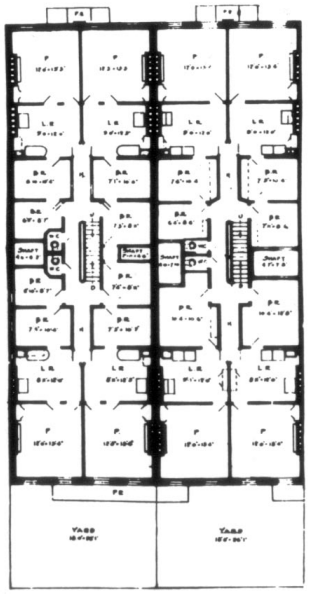
PART II

> The sun must penetrate every dwelling several hours a day even during the season when sunlight is most scarce. Society will no longer tolerate a situation where entire families are cut off from the sun and thus doomed to declining health. Any housing design in which even a single dwelling is exclusively oriented to the north, or is deprived of the sun because it is cast in shadow, will be harshly condemned…To introduce the sun is the new and most imperative duty of the architect.
>
> *- From the 1943 'Athens Charter' of the International Congresses for Modern Architecture (CIAM)* [1]

Building codes and zoning ordinances intended to ensure that new building is fundamentally safe and of adequate quality for human habitation, contain basic health parameters for residential design. These parameters ensure a baseline of quality; adherence to such minimum criteria is not an assurance of architectural excellence, only of non-criminality. Nevertheless, much of the housing production in Toronto today adheres to a minimal interpretation of the building code, particularly where access to daylight and natural ventilation are concerned. Where the design of apartments is concerned, the Ontario Building Code requires that "every room used for sleeping in any building, and every principal room or combination thereof in dwelling units shall be provided with windows."[2] The Code's allowance of 'combination' rooms in which sleeping areas are allowed to form part of other living space and thus share access to windows with their combined spaces, allows the design of apartments in which bedrooms can have no window of their own. Such configurations are now prevalent throughout the city.

The provision in the building code for rooms that share their access to light and ventilation, maintains life-safety and some degree of light-access to bedrooms, however, when such a condition occurs in a deep and narrow unit -such as is often the case in main street buildings- the conditions of daylight, natural ventilation and privacy at the rear of the unit are compromised. In the context of the last century of architecture and the pursuit of the ameliorating housing conditions, buildings with these interior conditions represent a regression of architectural standards.

The development of building codes and minimum standards of quality have long been concerned with the provision of adequate light and air, the same goals have also been the aims of much of the modern movement in architecture of the last 100 years. The modernist freestanding high-rise tower and slab type apartment buildings were originally intended to prevent such interior conditions by allowing maximum areas of glazing for individual units, with optimal solar orientation. Large open spaces, however, are required between such buildings to prevent overshadowing. The disastrous

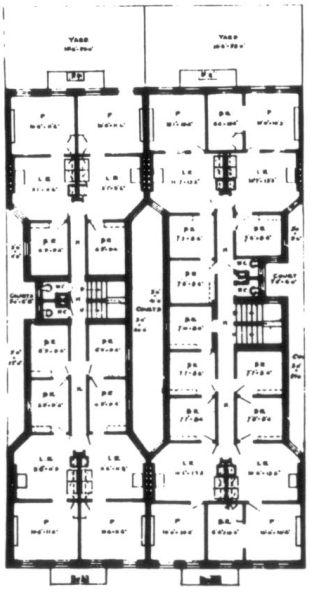


'RAILROAD' TYPE

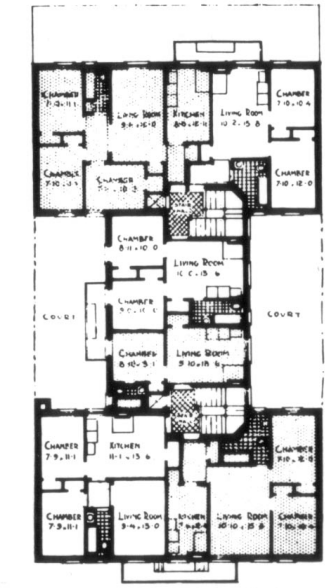
123. (clockwise from top) 3 floor-plans of New York apartment houses from the 19th and early 20th Centuries that show the evolution from 'railroad' type apartment buildings to the hourglass type of the to dumbbell configurations of the 'new law' of 1901, requiring a window in every room. Each type is an improvement on the last. The railroad type, with rooms arranged like cars in a train, might be compared to the units produced today in Toronto: rooms near the centre of the block have no access to daylight.

1 LeCorbusier, *The Athens Charter* (New York: Grossman, 1973), 63..

2 Ontario Building and Development Branch, *2006 Building Code Compendium* (Toronto: Queen's Printer for Ontario, 2006), 3.7.2.1.



'HOURGLASS' TYPE



'NEW LAW' DUMBBELL TYPE

effects of that model of building at an urban level are, by now, widely recognized. Models of urbanism that re-establish relationships between streets and buildings are now accepted as preferable. However, in the return to neo-traditional forms of urbanism, the forms of housing that respond to the denser block conditions that such urban models imply, have not been equally revisited. Modern typologies, such as the double-loaded corridor slab building type, or the point tower, that were rationally developed for large suburban or cleared urban sites, are instead, now being irrationally adapted to dense urban sites with party-wall conditions, height limitations, busy streets, and adjacent low-rise neighbourhoods. No longer having access to large open spaces, and their orientation dictated by the street grid, these building types no longer provide optimal conditions of daylight, ventilation or access to views.

On main streets, even when the large scale building types (tower or slab) are not possible due to the size of the site, or when zoning prevents adequate height, smaller versions of these types continue to be used. The interior spatial conditions that result are a throwback to the poorest housing of the 19th century in cities like New York -a city with similarly rigid grid divisions to that of Toronto (see illustration this page). Already by 1900, New York apartment buildings of 5-6 storeys housed 2.3 million inhabitants -a population roughly equivalent to all of Toronto today.[3] These apartment buildings had already replaced generations of detached homes and townhouses. Today, Toronto has reached the population of New York at the end of the 19th Century, yet has not reached the level of sophistication in housing forms already achieved there at that time. No such middle-scale of housing has developed widely in Toronto: it retains mainly detached and semi-detached homes or high-rise buildings.

The following chapter presents two groups of buildings: the first are contemporary residential buildings on the market in Toronto, most of which are located on main street sites illustrating the current standard of multi-unit residential design in the city; the second group of buildings are non-typical main street types from Toronto as well as a few international examples, intended to show some alternatives to the standard.

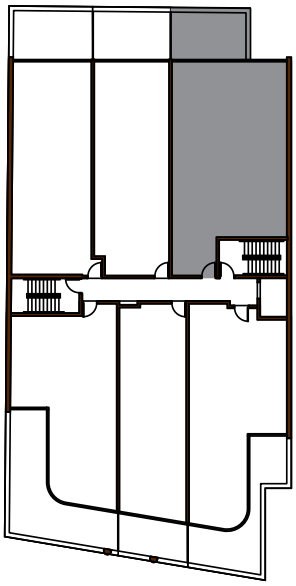
3 Richard Plunz, *A History of Housing in New York City: Dwelling Type and Social Change in the American Metropolis* (New York: Columbia U. Press, 1990), 21-49.

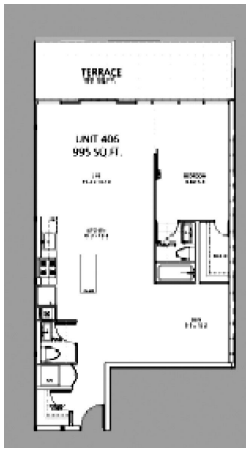
Group 1: Typical Toronto Residential Buildings

The first group of buildings are characteristic of new urban housing in the city in terms of the design of their apartments. The selected buildings mostly occupy lots of a limited width, typically 30 metres or less -a scale that is generally in keeping with existing main lot street patterns, representing minimal land assembly. It is the quality of the dwelling units in these buildings, however, that falls short. They are dominated by small units: one- and two-bedroom configurations are typical, while three or more bedroom units are entirely absent. The use of a combination bedroom and living space configuration is common throughout these buildings, resulting in bedrooms that lack direct access to daylight or ventilation. Their open plan configurations allow little gradation from public to private spaces as entry areas often open entirely onto every other space of the unit, allowing no threshold conditions. Storage is typically minimal. The plans offer little opportunity to differentiate any one space from the next: kitchens, bedrooms and dens open directly onto living spaces, or are passed through to reach other spaces. Spatial variety in ceiling height, floor level, openness or enclosure is absent or minimal. Single orientation units are the standard, such that variation in daylight is a linear drop-off from a floor-to ceiling window-wall at one end of the unit, to the dark rear areas of the unit.

Building 1:

Compressed double-loaded slab type
(2007, Streetcar Developments Inc.)



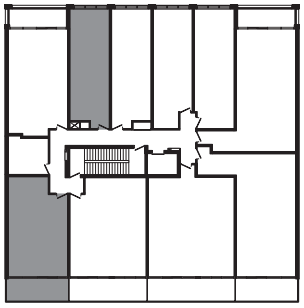


124.

Building 2 & 3:

Two point-access main street buildings in the Corktown area. Very deep and narrow units.
(2007-2008, Streetcar Developments Inc.)

125.



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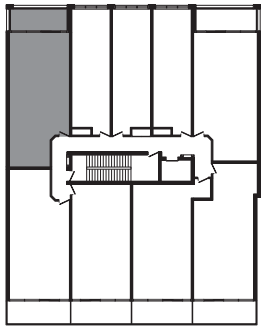
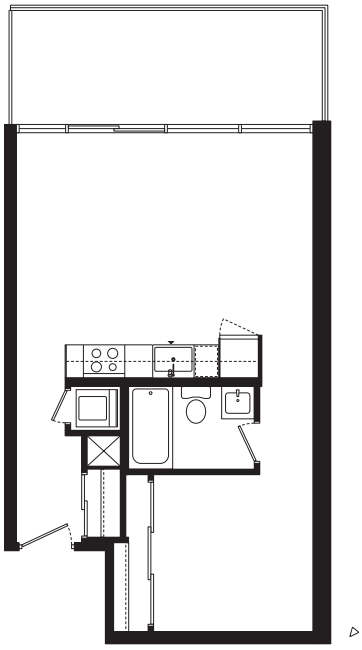
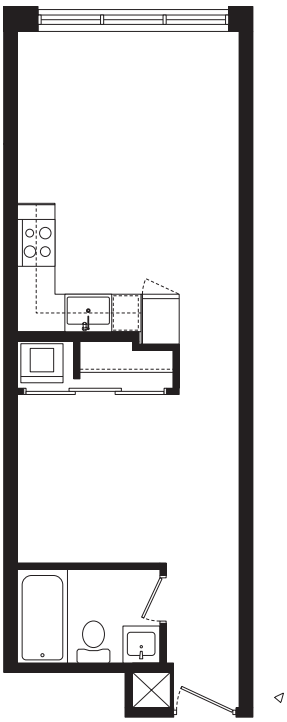
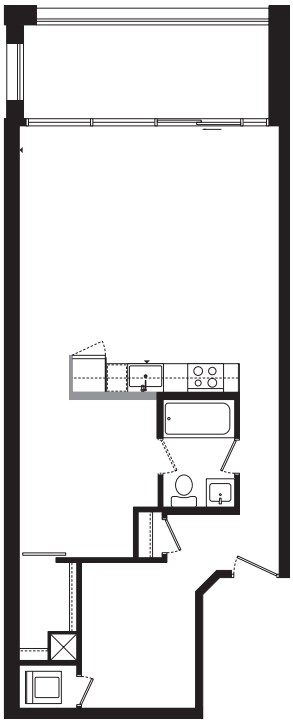


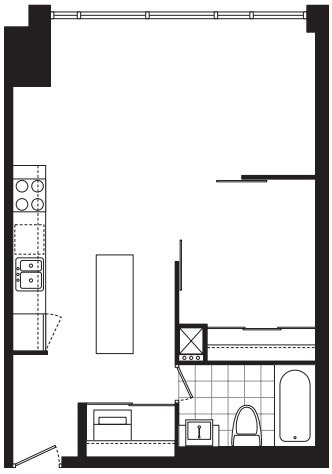


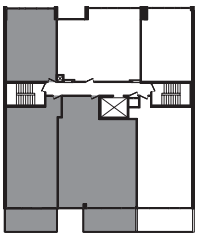


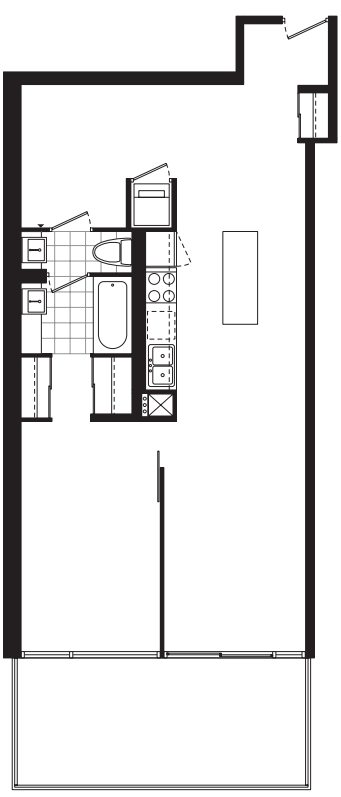


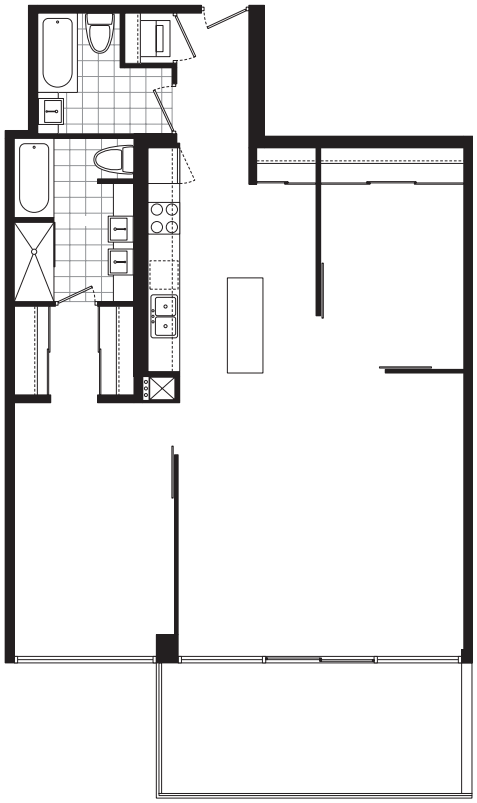
Building 4:

Compressed double-loaded slab type, on a site without rear lane. Setback requirements push the building mass to the front of the site.
(2007-2008, Neilas Inc.)





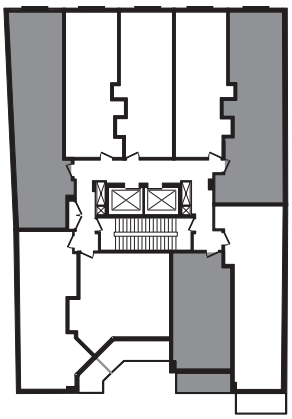


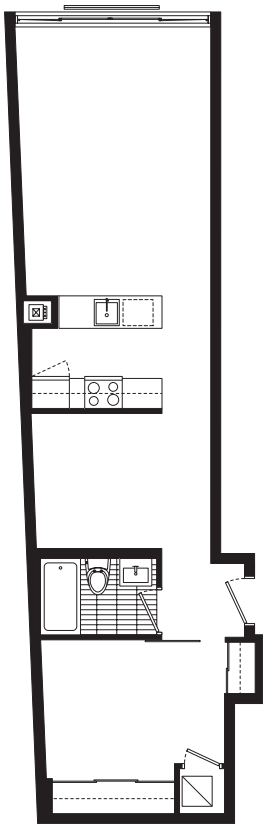


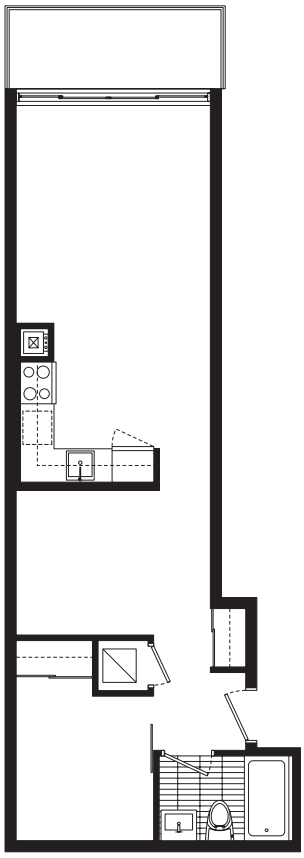
127.

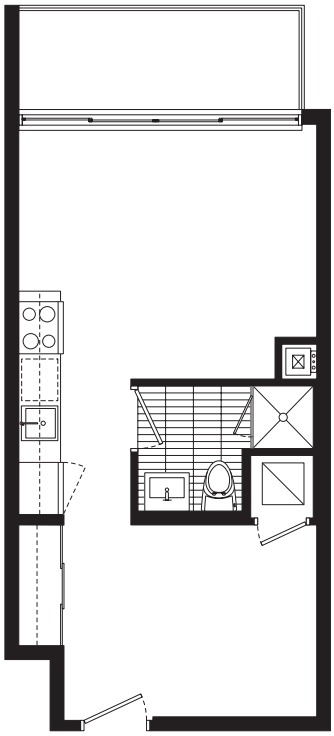
Building 5:

A point-access building between party-walls in the King - Parliament Reinvestment Area. Very deep and narrow units. Height limits in this area are much higher than typical main streets, but this type is typical of such narrow lots.
(2007-2008, Glasshouse Developments Inc.)





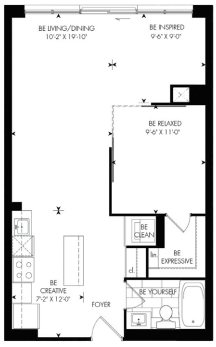


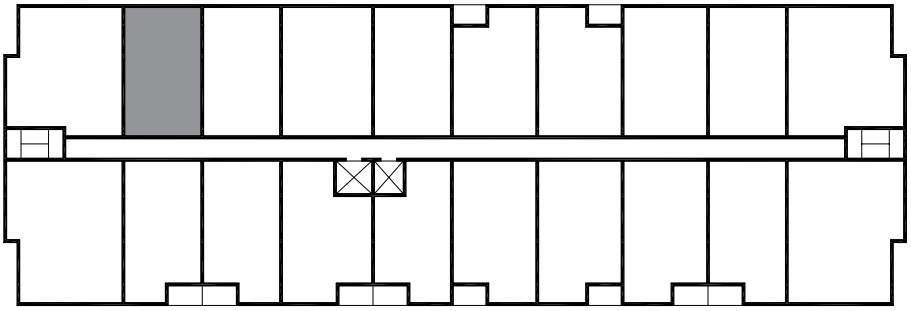


128.

Building 6 & 7: Slab type

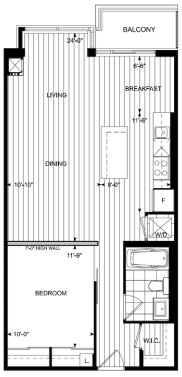
Main street slab type. Up to full-block length double-loaded corridor configuration. This building shares its large site with a point-tower behind. The two most expedient and generic modern residential building types are here adapted to a unique urban site. (2007-2008 Page + Steele Architects)





129.

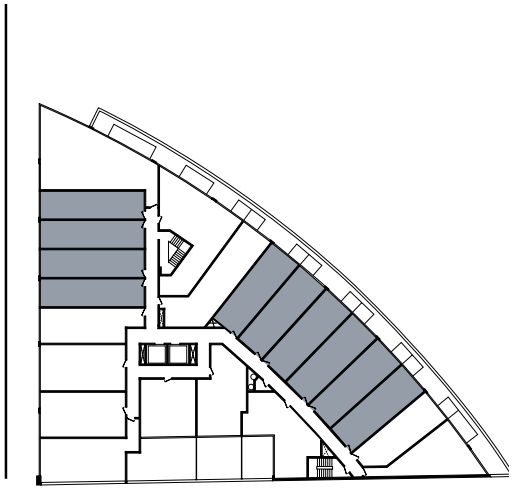
This project is located adjacent to St. Jamestown, not directly on a main street. Illustrates the ubiquity of the 'slab' type, regardless of location, or individual context.
(2007, Tridel)

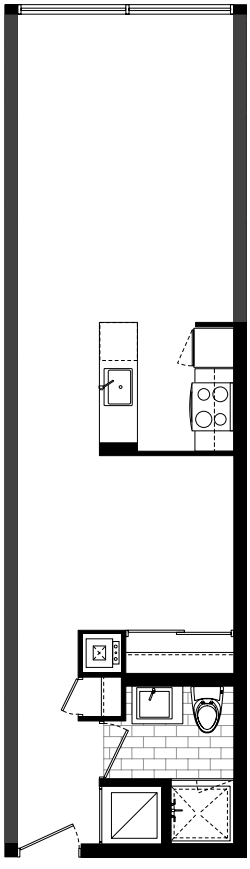


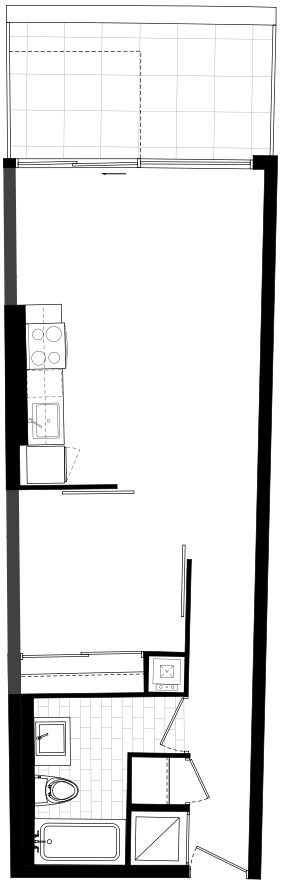
130.

Building 8: Loft Building

A mid-rise loft building incorporating standard unit types within a very deep floorplate. (2007-2008 Core Architects)



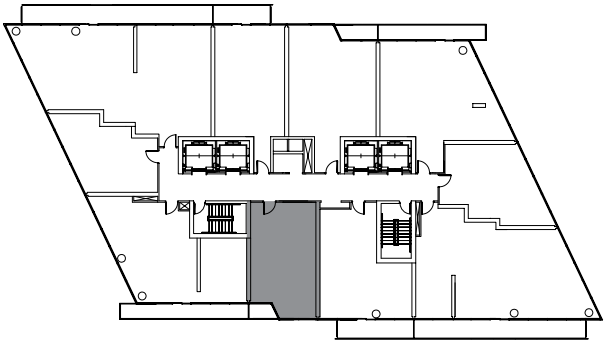


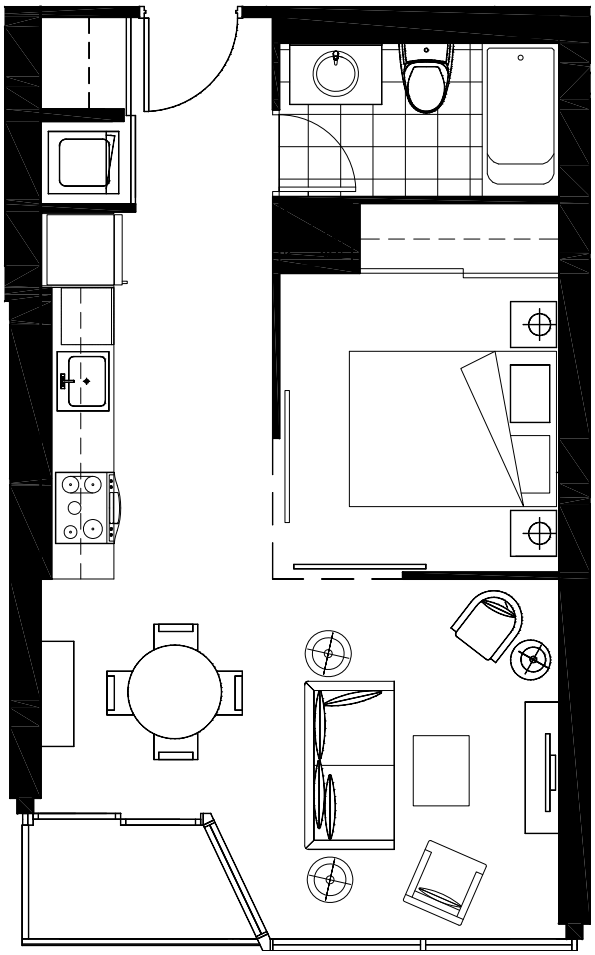


131.

Building 9: Point-tower for comparison

48-storey, 480-unit residential tower projected for downtown. Similar unit types as slabs or other building types. Clear illustration of the ‘combination’ of bedroom with living space, eliminating the bedroom window.
(2007-2008, Architects Alliance)





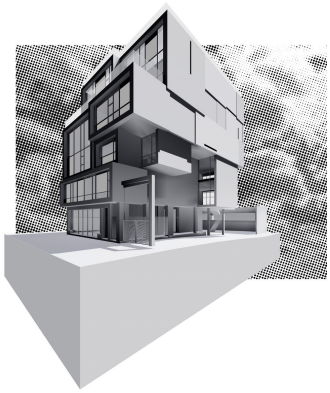
132.

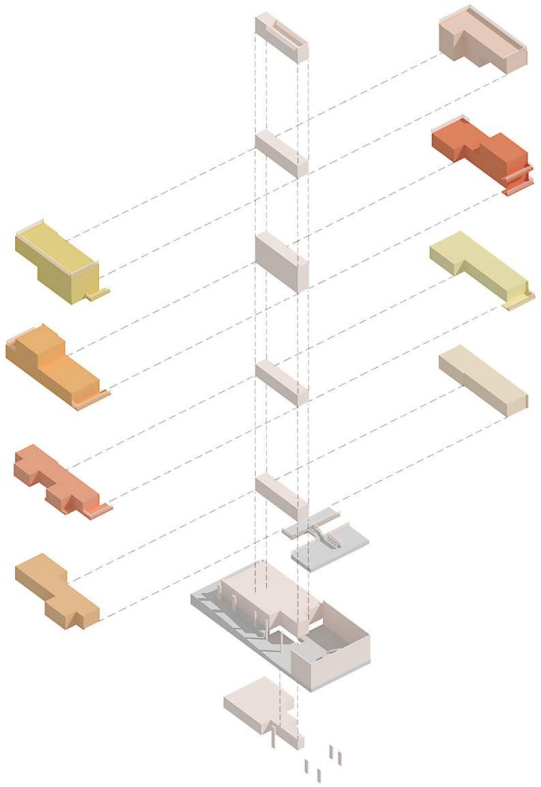
Group 2: Non-Typical Small-Lot Main Street Types

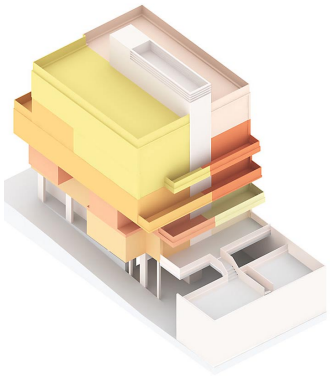
The second group of buildings illustrate alternative approaches to main street building. Fewer, larger units, cross-ventilated double-aspect units, and interior courtyards or light-wells, are some of the strategies that these buildings suggest to overcome the failings of the buildings of the first group. They produce fine-grained and diverse streetscapes, exploit the depth of their lots, and create opportunities for adjacent buildings to share open space within the block. They are unmistakably buildings developed for dense cities. They are not suburban typologies intended for open sites, transplanted to urban sites. They are opportunistic, richly varied, and together create a range of unique interior and exterior spatial conditions.

Building 10:

Unique 8-unit building for College Street. No two units are alike. Designed for the same site as building 2. In this design, however, larger units achieve double-exposure. (Unbuilt, Quadrangle Architects, 2007)

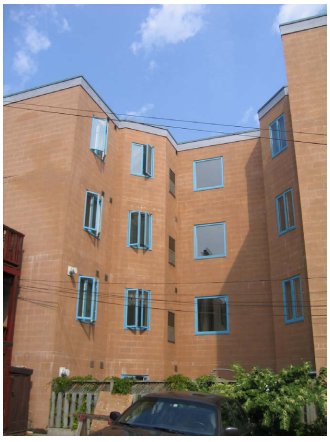






133.

Building 11



134. (clockwise from top left)
Facade, rear lane balconies,
oblique view of side, light court.

These two building use a two-tiered massing strategy with a two central light-courts. The facing distance between the windows in the court, however do not conform to the 11-metre minimum of the zoning by-law, nor do the balconies in the rear lane. Nevertheless, the added amenity of double-orientation units, a window in the public corridor, and the security of surveillance provided by balconies in the rear lane are all advantages in this building.
(Building dimensions approximately 15m x 31m)

135.

Building 12

12-unit building on Queen Street East. 16m wide x 36m deep site.

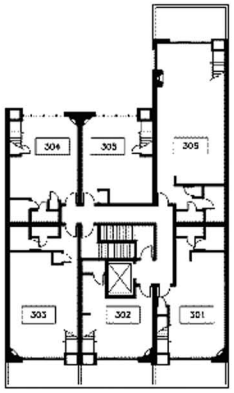
Uses a compact point-access system, with access to units on every second floor. All units are 2-storeys with generous terraces.

2 ground level storefronts integrate well with existing streetscape. Parking is accessed by a partial lane at rear.
(2005, Mitchell & Associates)

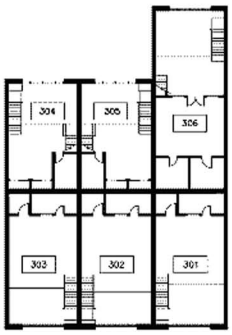
136.

Plans and interiors

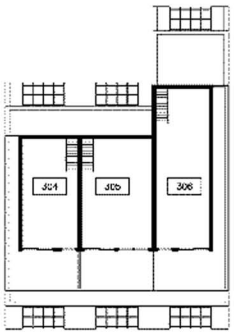
137.



Main

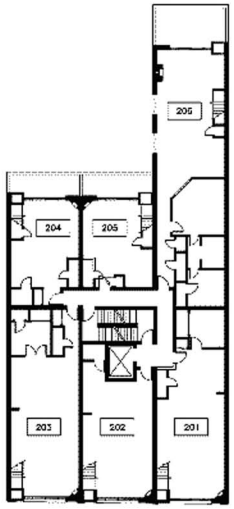


Mezzanine



Penthouse

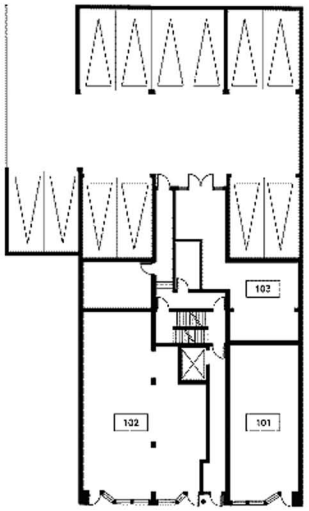
Third Level



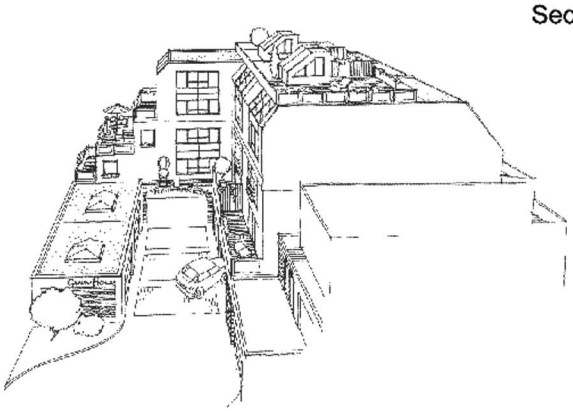
Main

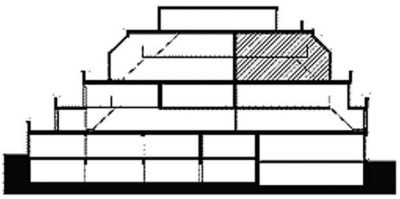
Mezzanine

Second Level

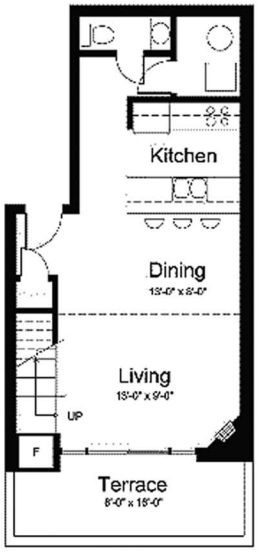


Ground Floor

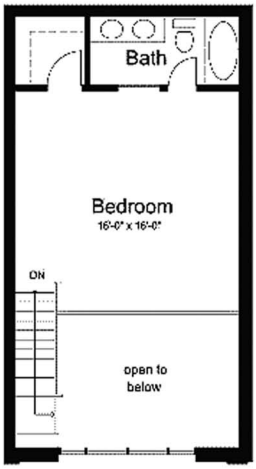




Section N.T.S.



Main Level



Main Level Mezzanine

Parisian Buildings

138.
Panorama of Parisian urban fabric

Paris is an example of a uniformly dense city, made up largely of mid-size apartment buildings (6-8 storeys) using single-stair access. Such buildings provide well-defined streets (often on narrower streets than Toronto's) of a comfortable scale, incorporating commercial ground floor uses with high-quality residential space above.

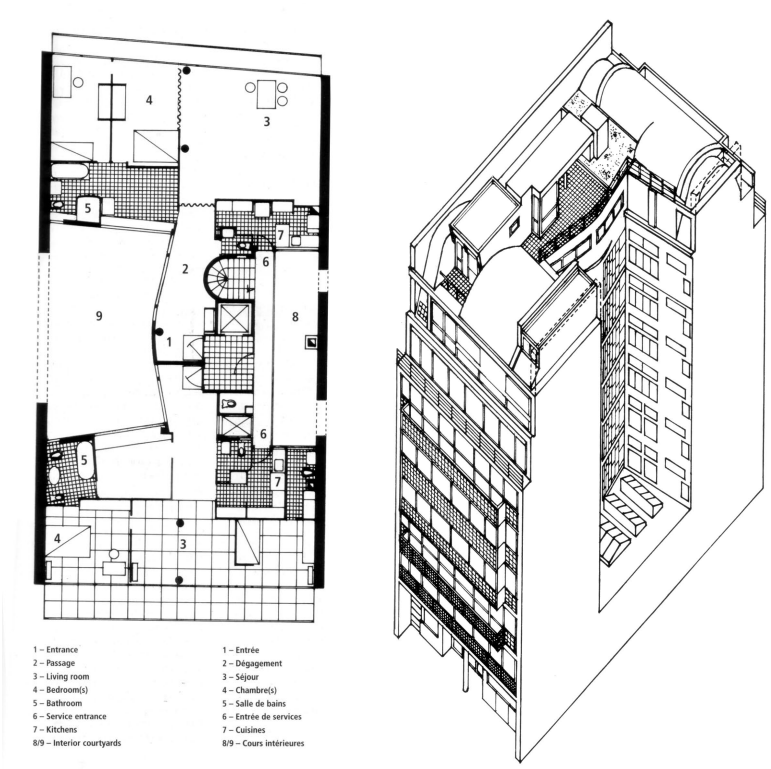
The two buildings that follow occupy sites that are similar in size to the long and narrow sites of Toronto main streets. Both exploit the full depth of their site, producing units with at least 2 exposures.

139.
Parisian residential streetscape

Building 13

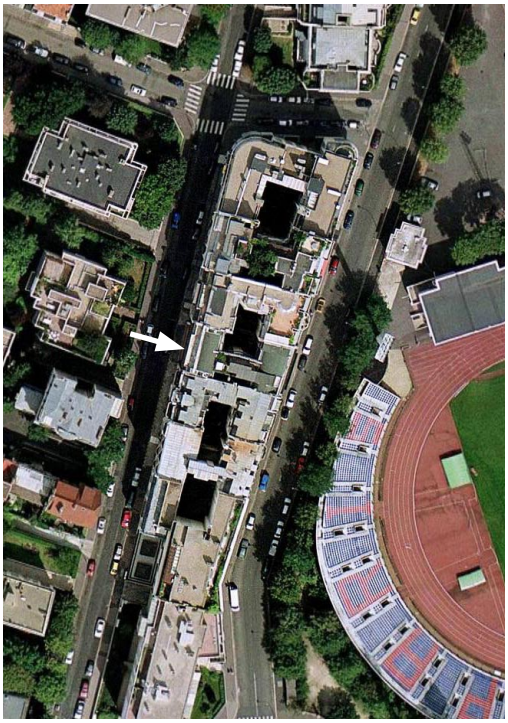
26m deep x 13m wide lot; 18 units. Uses two internal courts to give access to light on two sides for all units. Works with neighboring buildings to achieve larger internal open space conditions.
(Le Corbusier, Paris 1933)

140. Street view



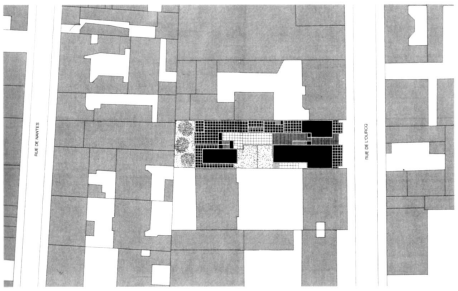
142. Floor plan and axonometric

141. Aerial view



143. Street elevation

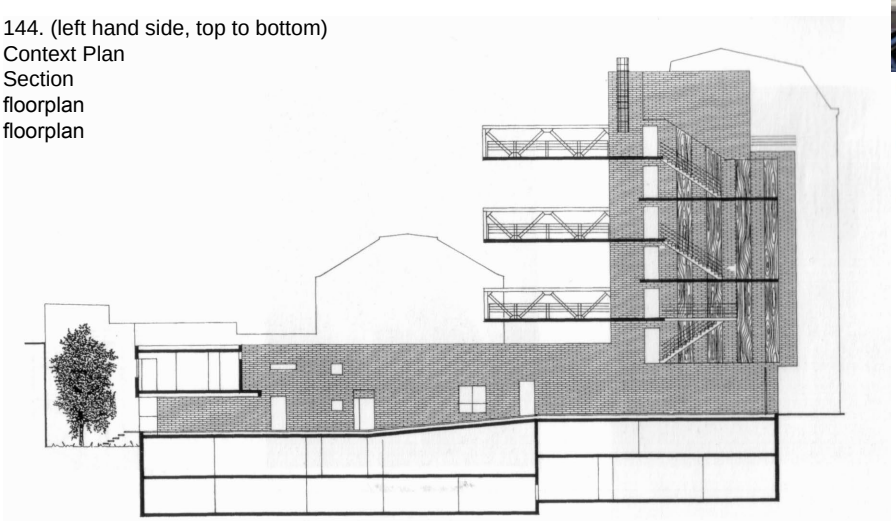
Building 14

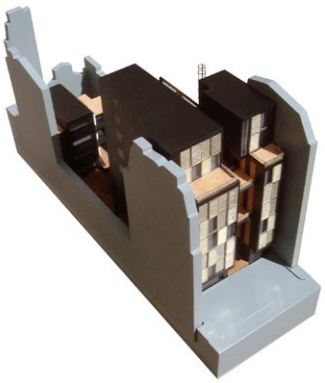


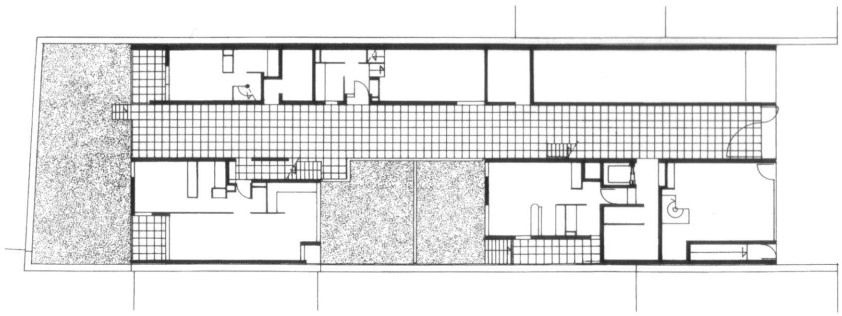
42m deep x 15m wide lot; 26 units, (Phillipe Gazeau, Paris, 1993.)

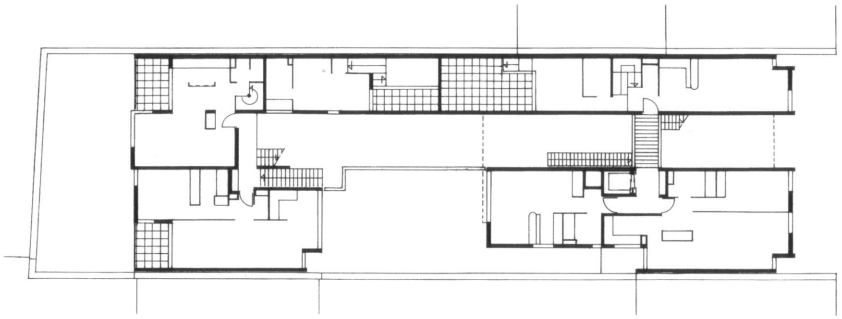
145.Exterior views and model

144. (left hand side, top to bottom)
Context Plan
Section
floorplan
floorplan





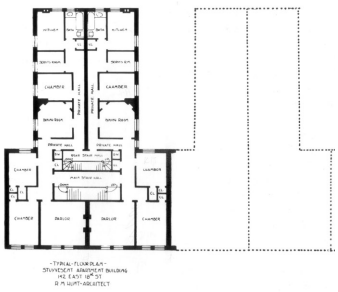




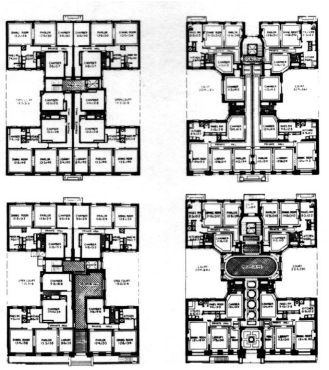
New York Buildings

Throughout the 19th century, New York struggled with housing quality standards, mostly dealing with health and safety. Its tenements and apartment houses were subject to successive legislation to ensure adequate space, light and ventilation.

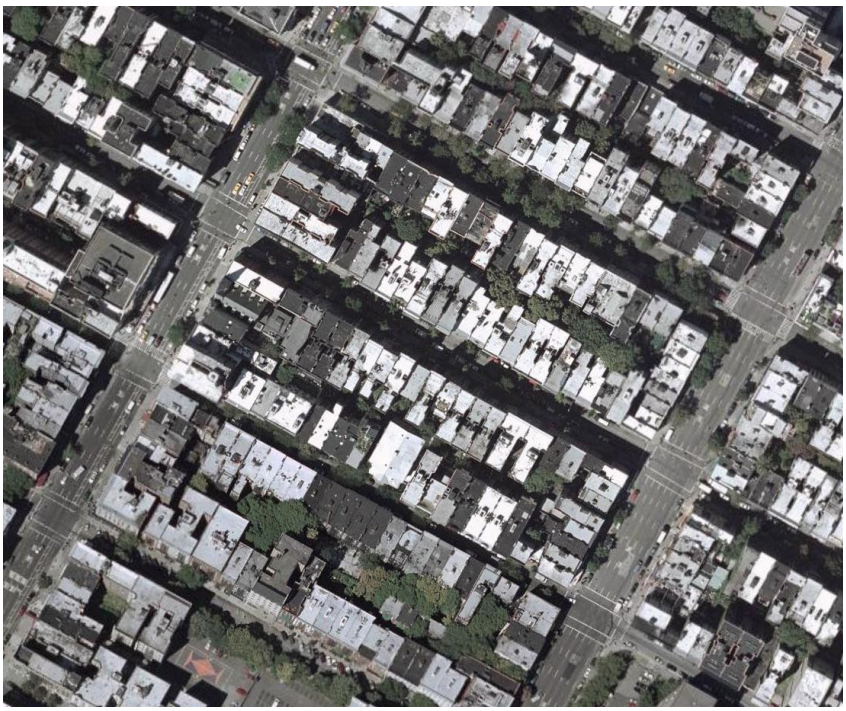
The city's rigid grid network of streets and lots produced an array of mid-sized apartment types in closely packed conditions while maintaining adequate conditions of light and ventilation.



146.
T-plan

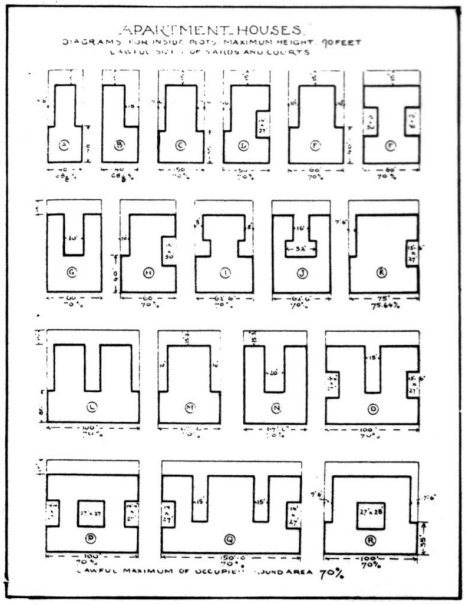


147.
Dumbbell plans



149.
Aerial view of residential fabric

148.
Block defining buildings that produce a fine-grain streetscape based on the standard 25'x100' New York lot grid -a similar dimension to Toronto's main street lots.



150. (below)
Streetscape

Chapter 4: Design Proposal

Introduction

The precedents of the Main Streets Initiative and the Ataratiri Plan have suggested that smaller developers would be able to create buildings of more appropriate scale for main streets, and that there are more possibilities for the design of alternative building types that can provide a high-quality urban environment and better residential space. This potential seems to have been largely forgotten in the latest round of development and discussion of the 'Avenues' in the current Official Plan and the materials presented in the 2005 Mid-Rise Symposium. The range of building and unit types seems to be growing narrower, and the living options becoming increasingly polarized between the extremes of low-density single-family, and high-density condominium developments; they become more standardized regardless of building type or location. Despite being in low, mid- or high-rise type buildings, a standardized set of components and living configurations has developed. This is especially evident in attempts to provide mid-rise housing on main streets. Here types of units and buildings that were developed for free-standing slab buildings, high-rise towers, or that mimic conversions of industrial buildings, have been squeezed into a new situation of smaller lots, lower heights, linear contiguous arrangement and direct access to sidewalks found on main streets. The resultant units are limited in frontage, typically have a single aspect and are thus limited in access to daylight and natural ventilation. They retain the same sacrifices to efficiency that might be offset by advantages such as access to views and parking in other building types. Even examples of smaller main street buildings that conform to existing zoning in terms of setback, height, and use, often consist essentially of a double-loaded shortened slab, or a two-sided point tower between party-walls.

The designs that will be proposed here, implement a 25-metre limit on building frontage above grade as was suggested by the precedent research to promote the continuation of the positive urban qualities of historic main streets, and seeks to develop buildings of the finest grain possible while still providing increased density and public and private amenity on main streets. Emphasis will be placed on the qualities of the dwelling units, the variety of living options, and the development of building forms specific to the main street setting. The section that follows is a discussion of the specific architectural aims of the proposed buildings and an introduction to the site that will be used to demonstrate the potential of this kind of building.

Housing Quality: The Design of Dwelling Units

Before embarking on a discussion that will try to establish a series of architectural principles that will inform the design of buildings and dwelling units, a more matter-of-fact approach to the issue of multi-family residential design is suggested in the form of a checklist of design criteria. As mentioned in Chapter 2, a second study to come out of the Ataratiri planning process, discussed the design of new dwelling units for multi-family buildings. The *New Designs for Multi-Family Housing in Ataratiri and the Railway Lands* study prepared by Garwood-Jones and van Nostrand Architects, surveyed existing city-owned public housing stock to evaluate its design for its ability to accommodate changing occupant needs, lifestyles and family structures –nuclear and non-nuclear. It then proposed prototypical generic design strategies for new dwelling units that could be refined by the different architects of new housing projects not only for Ataratiri but also city-wide.

The study focussed on six specific household types that represented the kind of changes in housing needs being seen at the time. These represented the growing number of smaller, non-nuclear household configurations being seen in Toronto at the time. Detailed criteria were developed for evaluating existing and proposed dwelling designs based on a long list of architectural qualities and design principles. Consideration was also given to design of common spaces for residential buildings such as common rooms, elevator lobbies and fire stairs.

The design principles are particularly useful as a checklist for residential design; they cover a wide range of concerns from technical considerations to "architectural character". Regardless of specific intended user, income level, or construction type, these suggestions and the checklist simply represent good design practice that ought to be included in any residential design –a set of criteria by which much contemporary housing would score poorly. In 1972, John van Nostrand, one of the authors of the *New Designs for Multi-Family Housing in Ataratiri and the Railway Lands* study, co-authored with George Baird, Joost Bakker, and Bruce Kuwabara, a criticism of the judging criteria for a major housing design competition sponsored by the Ontario Housing Corporation, that was published in *Canadian Architect*. [1] The authors criticized a number of the assumptions about residential quality and design within the competition brief, and sought "to establish criteria for mass housing as both specific objectives to be achieved in building new housing and as critical standards to be used in judging housing which now exists –or is in the process of being constructed…

1 George Baird, Joost Bakker, Bruce Kuwabara, and John Van Nostrand. "Criticism, the OHC Design Competition 1972 : Towards Better Housing?" *Canadian Architect 17*, (July, 1972), 38. See also: George Baird, Donald Clinton, Bruce Kuwabara, and Barry Sampson, *Built-Form Analysis*, (Toronto: City of Toronto Planning Board, 1975), 153-164, for a similar list of criteria.

as part of a possible new housing primer." Many of the criteria developed in that critique are elaborated in the later Garwood-Jones and van Nostrand study, and the method of evaluation of dwelling units is very similar. The elaborated list is included here in its entirety because it is such a thorough and thoughtful series of considerations for all residential design of which this thesis attempts to undertake. The category of 'Architectural Character' is of particular interest to this thesis; these criteria address, in a very direct way, some of the aspects of architectural quality that will be discussed through the work of a number of architects in the following section.

Complete list of Design Criteria reproduced from the *New Designs for Multi-Family Housing in Ataratiri and the Railway Lands* study:

Specific Needs

Can the units accommodate the specific needs of the six households in question

.1 A retired woman
.2 Single working adult using the home as a workplace
.3 Single at-home parent and one child
.4 Two working adults who are not living conjugally
.5 Single working parent and two children of the opposite sex
.6 Two working parents and two children

Flexibility

.1 Are the spaces within the unit related to each other in such a way that they might be used in alternative or reversible ways?
.2 Can the individual rooms within the unit accommodate a variety of types of furniture in various layouts?
.3 Is there provision in the unit for messy activities (e.g. larger kitchen, storage room, etc.)?
.4 Is there a spare room (e.g. storage room) that can be used as a hobby room or workspace?
.5 Are there alternative ways of entering and leaving the unit? Is the entry located so as to provide passage to the private areas of the unit without passing through the public areas? And vice versa?
.6 Are there options (e.g. doors, sliding panels) for isolating the various spaces within the unit with respect to sight, noise, or smells? Conversely, can spaces within the unit be interconnected for appropriate uses and/or occasions (e.g. large social gatherings? Enlarging bedrooms, etc.)?
.7 Is it possible to control the degree of enclosure of the kitchen?
.8 Is the kitchen large enough to accommodate a variety of related activities (e.g. playing, eating, working) in addition to food preparation?

Adaptability

.1 Can additional commonspace be appropriated by the unit?
.2 Can balconies be enclosed to accommodate sleeping/ sunrooms, etc?
.3 Are there spaces within the unit which can be readily converted into extra bedrooms for new family members?
.4 Can kitchens and bathrooms be established in alternative locations?
.5 Is it possible to enlarge the kitchen?
.6 Does the technology of unit construction facilitate physical changes made by the occupants?
.7 Does the technology of unit construction facilitate reconstruction by a typical small contractor?

Storage

.1 Is there adequate storage for tools, bicycles, garbage, etc?
.2 Are the storage areas appropriately located (e.g. can boots and baby carriages be left near entrances and exits)?

Outdoor Space

.1 Is the outdoor space provided for the unit suitable in size for a variety of uses (e.g. garden, patio, play space, etc)?
.2 Is there easy access to the outdoor space from other living areas and from the kitchen?

Sunlight

.1 Is the directional orientation of the unit planned to optimize daylighting conditions?

Ventilation

.1 Is cross-ventilation possible?

Architectural Character

.1 Is the entry well-defined and part of a gradual procession from the commonspace to the public parts of the unit?
.2 Are the public and private areas within the unit clearly separated? Has a gradual transition been provided from one to the other?
.3 Is it possible to accommodate both formal (e.g. dining room, living room) and informal (e.g. den, family room, play area, study) living spaces within the public areas of the unit?
.4 Do the units provide a range of spaces of varying quality (e.g. big and small, high and low, light and dark, etc.)?
.5 Do the units provide good internal and external views to the outdoors and the City beyond?

Architectural Aims

The uniqueness, variation and complexity that characterise people, families, communities and cities must find their equivalent in built form. If our built environment is to reflect the richness and diversity of our communities, it too must possess commensurate richness and complexity –what architect and theorist Aldo van Eyck has called society's 'counterform.'[2] To this end, a series of architectural precedents will be examined that provide a model for new designs. These precedents are found within a collection of architects and projects that suggest a series of qualities or strategies that inform the proposed designs.

Main streets have historically accommodated and reflected the variety, complexity and diversity of the larger city. It is exactly that richness that occurs in cities as the result of the bringing together of many people, buildings and ideas over time, into a heterogeneous gathering that produce the intensity, contrast, texture and excitement that urban environments can provide. There is a parallel between the diversity of spaces found on main streets –with their ability to accommodate an array of people and activities and to produce identity and specificity of place- and the interior spaces created by certain architects. These architects manage to create specificity through a varied gathering of tonally and spatially diverse settings that, when combined, provide a rich series of opportunities for inhabitation –supporting many potential configurations, activities, and atmospheres. These spaces register the traces of their inhabitants in the way they are used and furnished –in a similar way that main streets register the mark of individual owners and businesses. Each room or property can be reinterpreted, but provides the necessary framework for inhabitation.

Like main streets, individual buildings, and the homes they contain, also need to accommodate a wide spectrum of changing needs, tastes, desires, individuals and their possessions over time. Main streets, in their continual spatial and tonal shifts from one building to the next -storefront to storefront- create the framework for, and the reflection of, the diversity of a city. So too can the variations of spatial settings of a home create the flexible framework for, and the reflection of, the diversity and complexity of private life. Main streets create an urban landscape for the public functions of commerce, transit, entertainment and social interaction; homes should create an interior landscape for the diverse private functions of dwelling.

The designs for the new buildings in this thesis envision architecture not as a neutral container or backdrop to activities, objects and appliances,

2 "…Make of each place, a bunch of places of each house and each city, for a house is a tiny city, a city a huge house. Get closer to the shifting centre of human reality and build its counterform –for each man and all men, since they no longer do it themselves..." Aldo van Eyck, in Alison Smithson, ed., *Team 10 Primer* (Cambridge Mass.: MIT Press, 1968), 101.

but rather as having the ability to take an active role in the performance of dwelling. Such architecture has the qualities of a framework or scaffold for the performance of domestic tasks –the stage and sets for the activities of domestic life. They should be able to create a distinct sense of place: an environment specific to that situation and that inhabitant.

The basic domestic functions such as eating, sleeping, washing (and watching television) are potentially only a few of the many activities supported by a home –the spectrum of domestic activities is much broader, such as entertaining, reading, working, exercising, studying, meditating, and -very prominently –storing. The house is the reservoir of objects and memories accumulated over a lifetime by its occupants. To provide for long-term dwelling, the form of the home should therefore accommodate this collection; provide the framework upon which all these activities and objects can rest.

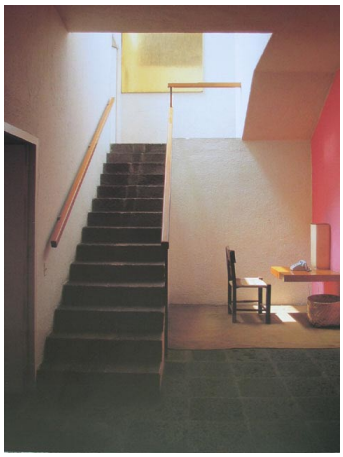
Each household is to some extent unique. Hobbies, collections, family size, activities and interests, personalities and tastes, etc, all differ, and change over time. Customization of all homes beforehand to best suit each situation at a scale of multi-unit housing, is clearly not practical, economical or necessary. If at least a wide enough variety of housing options is available in an area, the needs of a variety of households can find their place, and can, if need be, still find an appropriate dwelling nearby to meet changed needs, allowing a prolonged connection to that area of a city. At the level of individual building and unit design, strategies to allow varying interpretations of form could be developed. To this end, the most versatile forms for housing are not necessarily the most empty, blank, or neutral spaces possible in which freestanding furniture, appliances and all other props of domestic life, not to mention people, are disengaged from the container in which they sit. Living spaces should instead be able to absorb the habits and objects of inhabitation through more than their square footage alone. The domestic environment, in order to engage directly with occupants over long lifetimes and to remain stimulating, hospitable and practical, must provide an array of spaces, niches, nooks and crannies, a range of experiences, sensations, atmospheres, and conditions that can gradually unfold over time.

A home needs to provide for different conditions, some that can be predicted and others that cannot be imagined by the designer beforehand: conditions of light and shadow, large and small, high and low, warm and cool, open and enclosed; spaces to move and spaces to rest; spaces in which to conceal objects, and surfaces on which to display them; spaces to be alone, to gather with others, for parties, for individual conversations apart from the group, for children's play; for decorations on special occasions; for hobbies, for work –both clean and messy; for organizing records, books and papers; to

leave bicycles and strollers, keys, coats and shoes; to feel together or apart from the other people and spaces of the home; to feel sheltered and feel that one can escape -can ascend or descend into another setting; to know whether it is day or night, clear or raining, connecting to the exterior as well as the other interior spaces; to feel that there might be more to the domestic terrain than four bounding walls. In other words: as rich a scope for inhabitation as possible.

The single-family detached home is often better suited to this variety of settings and conditions; it offers the ability to spread each activity apart, and to absorb the changes in lifestyle that occur over time. It contains catch-all spaces such as garages, attics and basements, yards and garden sheds that provide the conditions for a great deal of storage and the sense that the range of one's habitat extends beyond the walls of prescribed rooms. However, the apartment, as a form of dwelling is limited in size and in its relationship to the other attached dwellings and adjacent buildings. To be a viable setting to spend a lifetime, and to accommodate the needs of children, the elderly, of extended family or shared accommodation, not only those of the young professionals, couples, singles and empty nesters that are the usual targets of apartment living, the apartment as a form of dwelling should try to offer, perhaps not all, but as many of those spaces and qualities mentioned above as possible.

Certain kinds of architecture and spatial configurations seem to provide those conditions in a concentrated form: in limited space they are able to provide for many of those conditions. Even when unoccupied, they appear lived in, or at least readily inhabitable. The following gathering of architects and concepts is an attempt to extract a few themes or principles that could enhance the domestic spaces of the design propositions. These principles are drawn largely from the modern canon of custom designed, private, detached homes –a rather exclusive segment of housing. To compare these, however, to the conditions of small-lot multi-family housing is to accept a certain limitation to the possibilities of what can be achieved. The nature of contiguous buildings in an urban ensemble precludes the 'object building'; they become instead 'fabric' buildings that are inherently dependent upon, and must cooperate with surrounding buildings. However, such housing need not be neglected in terms of spatial quality for the sake of expedience. The design and configurations of spaces themselves, regardless of material and finish, should provide the requisite variation, specificity and quality within the dwellings.



151.
Casa Barragán, Main stair hall

152.
Casa Barragán, stair in library up to mezzanine study

Interior Spatiality:

> What makes us think of things as spatial? Spatiality is a feeling, a sensation we undergo, and particularly when the thing we see is impossible to take in at a glance and thus unspecified. Or rather, that it has such layeredness about it that we are incapable of surveying it in its entirety. It arouses expectations.
>
> The sense of space is sustained by the lack of an overall view of the space you are in. Even when we mean a space shut in on all sides that is surveyable in all its parts, there is, or at least so it seems, always something around the corner.[3]

The 'spatial' quality in architecture described by this passage can give the impression of being situated within a larger series of spaces. Either through direct or partial visual connections from one space into another –especially between spaces of different character- it gives the impression or intimation that there is more to a space than what can be seen directly. Even if around the corner is merely a dead end or a niche, the effect is an enlargement of the sensation of space not necessarily connected to square footage. This sensation might be accomplished through horizontally or vertically overlapping spaces, through diagonal views, corners that obscure other spaces, windows, and shifts in floor level or ceiling height. Such an approach contrasts with the concept of the open plan, in which many spaces are combined to give the impression of more space, yet can actually make space feel more limited. If there is not more to a space that what can be seen at a glance, the sense of spatial limitation is emphasized. In apartments, one is made more aware of the confined boundaries of that space. The strictly flat floorplate construction, combined with open or linear unit planning that is found in most apartments, all limit the sense of space and the potential for a rich and engaging domestic architecture.

The Casa Barragán by architect Luis Barragán is an example of this sense of spatiality. It creates a particularly mysterious sense of extension of every space within the house. The sense that there is something more around each corner is ever present –one cannot necessarily see what the next space is, but one knows something more is there. Mezzanine levels, stairways, L-shaped rooms and unexpected windows abound in this labyrinthine composition, giving the house a seemingly endless sequence of space.

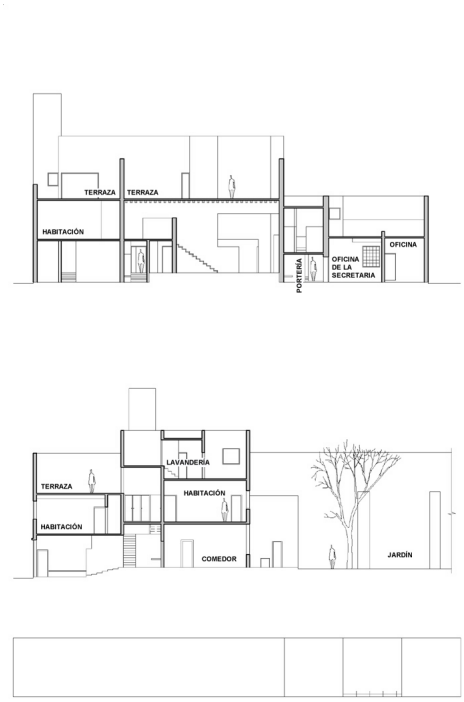
The spaces described here result from the combination of a variety of distinct spatial conditions. When high, low, light and dark, open and enclosed spaces are brought together within an interior setting, they release this 'spatiality'. It is not the same as simple spaciousness and greater square-footage, but rather, it is a description of a more complex series of interior

3 Herman Hertzberger, *Space and the Architect* (Rotterdam: 010 Publishers, 2000), 17.

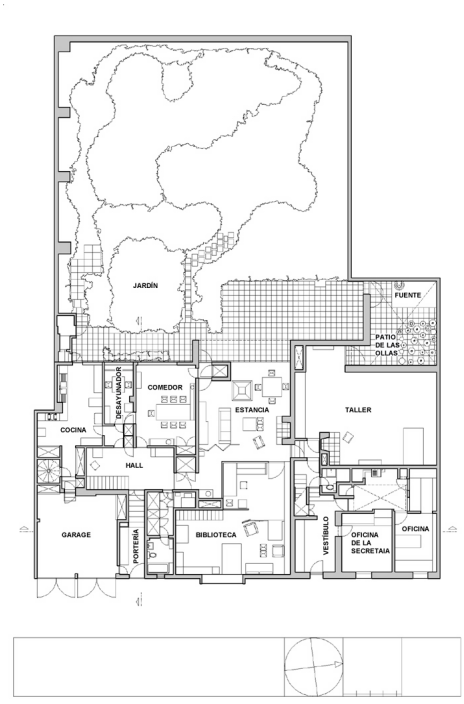
153.
Casa Barragán, dressing room, with stair to roof terrace at left corner

154.
Casa Barragán, mezzanine study, overlooking library

155.
Casa Barragán, living room connected to library



156.
Casa Barragán, sections



157.
Casa Barragán, ground floor plan

relationships, connections and conditions. The spaces of the following architects and the design approaches that produced them, all exhibit a similar spatial complexity and richness, a condition that reflects the potential complexity of the lives they are meant to contain. Such interior complexity is particularly lacking in much contemporary apartment architecture.

Raumplan: Discrete Settings and Specificity of Place

> In the Raumplan the interior falls apart into a conglomerate of details and rooms of different tonality. There are high, light, representative rooms with a rich variety of materials; small, cosy sitting areas with a "feminine" accent; studies and libraries with dark timber and leather-covered furniture; private bedrooms and servants' halls, each with a distinct and specific character. All are gathered up in a more singular interior volume and threaded together by the rotating movement of the stairs; the Raumplan is not a beautiful, harmonic whole of false rhetoric and glamour, but a whole of dissonances. The differences between the interior strictly separated from the exterior and the rooms of the Raumplan, which induce a certain sense of disruption, express in a mimetic way the fragmentation typical of the experience of modernity.[4]

Two architects in particular have explicitly developed approaches to domestic architecture that display the 'spatiality' described above. Their approach results in highly diverse and habitable interiors. Adolf Loos and Rudolph Schindler are considered here together as their work is complementary and the influence of Loos is often acknowledged in the work of his former pupil. Their approaches to design combine many discrete settings into spatially complex, interconnected wholes. This characteristic in the work of Loos is usually called the 'Raumplan': a concept that is used to describe particularly his villa projects of the late 1920s such as the Villas Müller and Moller. Schindler's conception of 'Space Architecture' produced similar results and had similar goals, but results from numerous additional influences and is realized in a different palette of construction.

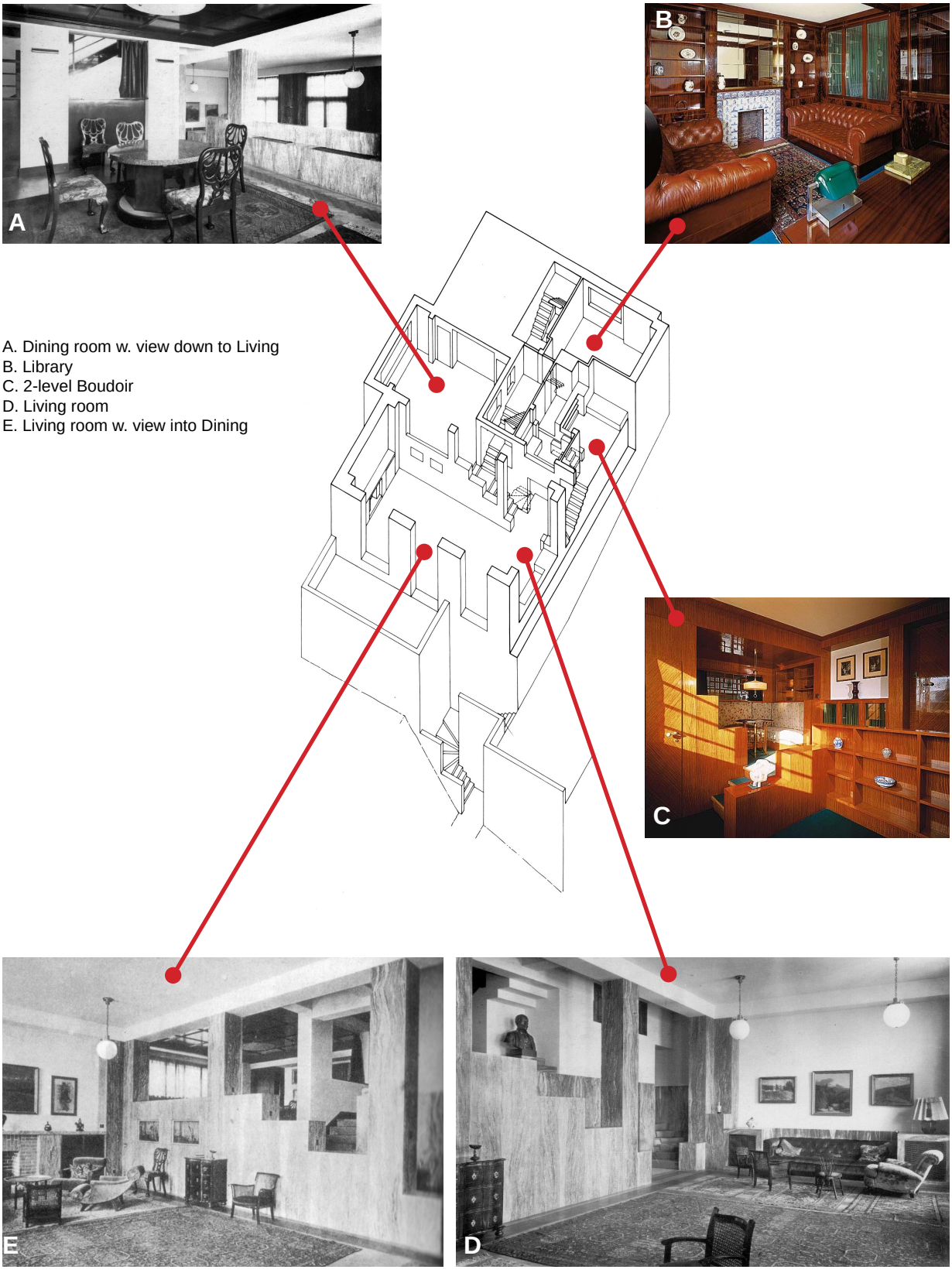
Loos' architecture is often described in terms of his tendency to accentuate contradictions and dualities, such as: inside/outside, public/private, movement/rest, dark/light, large/small. These kinds of differences are often juxtaposed and exist in a relationship of tension to one another within each work.[5] The device through which these divergent qualities are combined is the concept of the 'Raumplan' or plan of volumes. Loos has described his approach as follows:

> I design no plans, facades, sections, I design space. In fact, there is

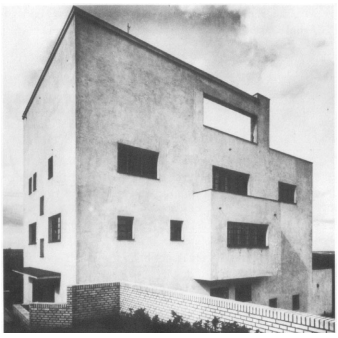
4 Hilde Heynen, "Architecture between Modernity and Dwelling: Reflections on Adorno's Aesthetic Theory." Assemblage, no.17 (Apr, 1992), 88.

5 This is often considered part of Loos' critique of the dominant aesthetic movement in Vienna at that time, exemplified for Loos by Josef Hoffman and the designers of the Viennese Secession, whose ornate and totalizing designs disguised the true conditions of rupture and alienation experienced by the dweller of the modern city. Appropriateness and utility were values Loos prized over harmony and beauty.

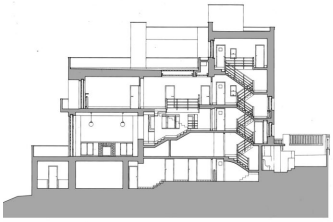
158.
Villa Müller. Interiors
(Adolf Loos. Prague, 1930)

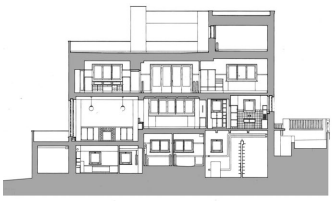


A. Dining room w. view down to Living
B. Library
C. 2-level Boudoir
D. Living room
E. Living room w. view into Dining



159.
Villa Müller. Exterior





160.
Villa Müller. Sections

> neither a ground floor, not a first floor, nor a basement in my designs, there are only integrated rooms, anterooms and terraces. Every room requires a specific height (the dining room needs one different from the larder) therefore ceilings must be arranged at different levels. Also, these rooms must be integrated in such a manner that the transition is not only imperceptible and natural, but also functional.[6]

Individual rooms are designed as autonomous spatial entities, yet they are frequently disrupted by the path of circulation and unexpected views into, or overlooked by, another space. The complexity of the interior is juxtaposed with the simplicity and muteness of the exterior façade, revealing little of the private realm to the exterior. The ability of the Raumplan to gather a heterogeneous collection of rooms and spaces of different tonality within a usually single cubic volume -each space interlocking with the next- creates surprising overlaps, interpenetrations and combinations; "the whole ensemble fitted together but not wholly interconnected. Openness or interconnection of this kind did not presume the elimination of spatial (room) division and differentiation, as in later 'free-plan' designs; instead, it allowed for the 'integration' of highly diverse settings."[7] Each of these settings is unmistakably a specific and particular place within the ensemble, distinct from, yet connected to the others.

The interlocking volumes are usually navigated by a winding staircase and circulatory path that meanders its way through and between each spatial episode. The visitor to a Raumplan house is at once drawn along paths of movement and invited to rest and inhabit many carefully scaled and configured spaces along the way.[8] The numerous conditions of transition, threshold and connection created by the interface of circulation and rooms, are richly articulated –the complication of the intersection of volumes at different levels and the connections between, create sculptural formations of elements. Typically the perimeters of rooms are the site of built-in benches, shelves, stairs, balustrades, sideboards, ledges, sills, columns and partial walls. These peripheral elements often serve to focus attention to the empty centre of rooms left clear for movable furniture. The resulting profusion of horizontal surfaces, niches and protrusions create the conditions for multiple opportunities for inhabitation and use. On an aesthetic level, they create sculptural episodes that seem to shift their appearance depending on the location of the viewer.

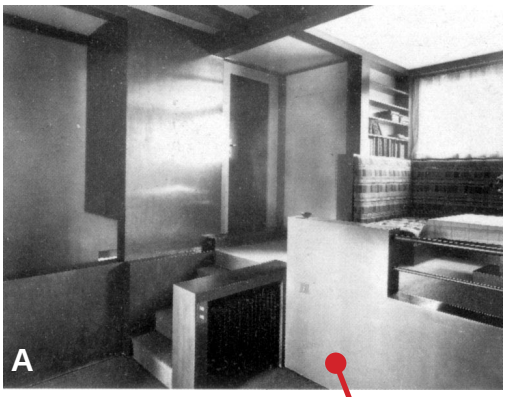
In creating a conglomerate of discrete, yet interconnected spatial

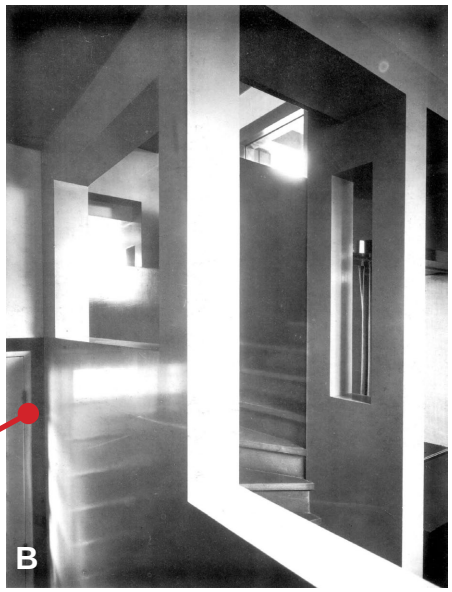
6 Quoted in David Leatherbarrow, *The Roots of Architectural Invention* (New York: Cambridge U. Press, 1993), 135-136.

7 Ibid., 133-134.

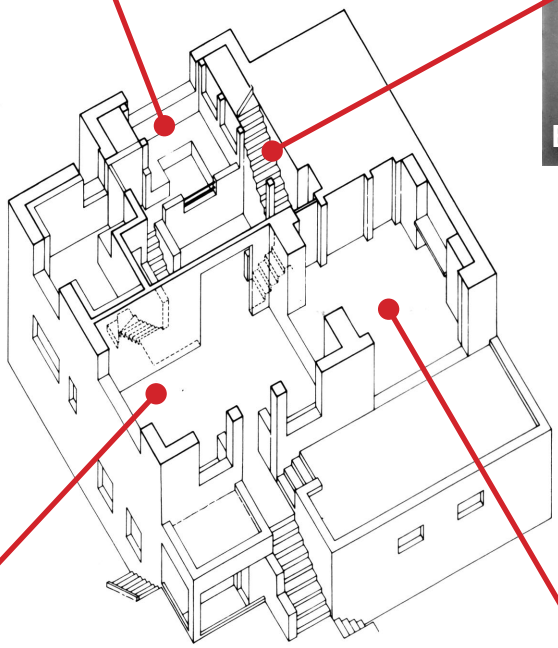
8 Leslie van Duzer and Kent Kleinman, *Villa Müller: A Work of Adolf Loos* (New York: Princeton Architectural Press, 1994), 39.

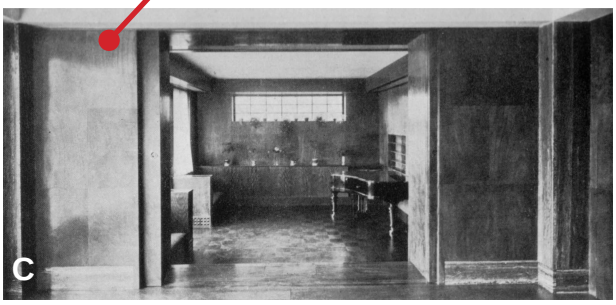
161.
Villa Moller. Interiors
(Adolf Loos. Vienna, 1928)

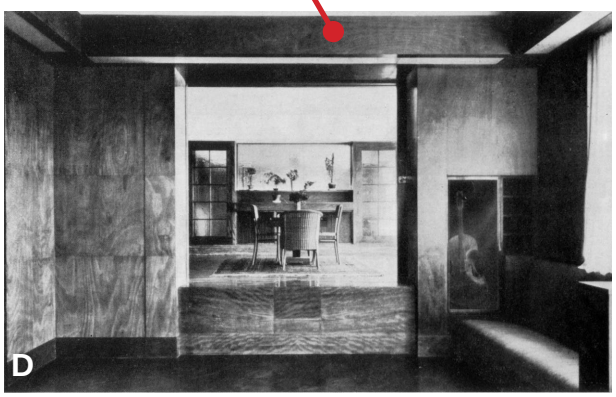


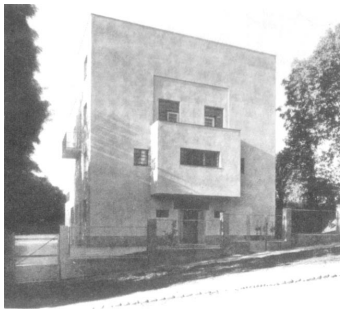


A. Reception hall
B. Main Stair
C. Music room
D. Living room
E. Dining room

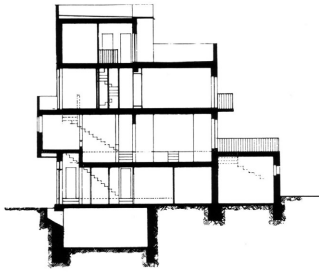








162.
Villa Moller. Exterior



163.
Villa Moller. Section

episodes,and locating on the periphery of these spaces an array of elements that constitute the necessary equipment for living, Loos' villas are uniquely able to immediately support habitual dwelling practices, and allow the occupants to define the elements such as furniture and objects that they bring with them to inhabit the spaces. In reference to Loos' attitude to designing of living space, Hilde Heynen has pointed out that: "dwelling has to do with one's personal history, with memories, and with the proximity of loved ones. Furnishing a house is the expression of this and should also offer its occupants the possibility of putting their personal stamp on it, changing it whenever they choose."[9] As Loos wrote:

> A home that has grown together with a family can withstand a great deal. When, on the other hand, one puts even one extra knickknack that does no belong there in a 'stylish room', the entire room can be 'ruined'. In the family's room, however, every new piece is absorbed immediately and completely into the space. Such a room is like a violin. One can get to know a violin by practicing on it, a room by living in it.[10]

Loos famously draws a distinction between art and architecture, and the respective capacities and limitations of each. For Loos, "the house has to please everyone, contrary to the work of art, which does not. The work of art is a private matter for the artist. The house is not. The work of art is brought into the world without there being a need for it. The house satisfies a requirement. The work of art is responsible to none; the house is responsible to everyone…"[11] This distinction requires that the architecture of the home engage very directly with the living habits, patterns and comfort of its occupants unlike a work of art. It is not the role of domestic space to necessarily achieve an aesthetic unity –a unity that is seldom in keeping with the divergent patterns of use, or the experiences of people living in the spaces. Loos' attitude to architecture, and its supportive role in the performance of dwelling, is summed up by Beatriz Colomina: "The house should be a stage for the theatre of the family, a place where people are born and live and die. It is an environment, or stage, whereas a work of art presents itself as an object to a detached viewer."[12] This distinction applies to the earlier discussion of main streets and the public spaces of the larger city in a similar way; achieving aesthetic unity or uniformity is to deny the underlying patterns that make life interesting on any number of levels. Jane Jacobs has echoed Loos' attitude

9 Hilde Heynen, *Architecture and Modernity: A Critique* (Cambridge, Mass.: MIT Press, 1999), 76.

10 Loos, Adolf, "Interiors in the Rotunda" in *Spoken Into the Void: Collected Essays 1897-1900* (Cambridge, Mass.: MIT Press, 1982), 24.

11 Loos, Adolf, "Architecture" in Yehuda Safran and Wilfred Wang, eds. *The Architecture of Adolf Loos: An Arts Council Exhibition* (London: Arts Council of Great Britain, 1985), 107.

12 Beatriz Colomina. "Intimacy and Spectacle." in *Strategies in Architectural Thinking*, John Whiteman, Jeffrey Kipnis, Richard Burdett eds. (Cambridge: MIT Press, 1992), 77.

when writing of cities: "When we deal with cities we are dealing with life at its most complex and intense. Because this is so, there is a basic aesthetic limitation on what can be done with cities: A city cannot be a work of art."[13]

Rudolph Schindler had studied with Otto Wagner and Adolf Loos in Vienna before moving to the United States to work with Frank Lloyd Wright and then establishing his own practice in Los Angeles in the early 1920s. His architecture reflects the influence of the interior spaces of both Loos and Wright. He insisted on the primacy of space as the medium of the architect; a medium under which the other architectural concerns such as structure, materials, and technology are subservient, merely means to an end. The goal of what he called "space architecture" was the creation of a flexible framework for life and a more human living space:

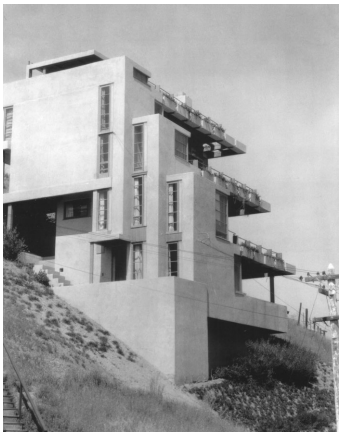
> Creative architecture…must visualize the life of the future, and develop a frame to receive it. It does much less express the present than to form the channels through which we may escape from it…The architect must steer us away from unhealthy whirls in our development towards a life which will satisfy our deeper instincts as human beings. And the house, like a personality, finds its fulfillment not in efficiency, practicability, structural obviousness, or stylistic loyalty alone, but in achieving 'charm'.[14]

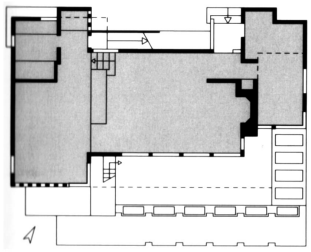
Most of Schindler's architectural output is in the form of private detached homes, and a number of small apartment buildings. In many of these projects, spaces seem to cascade from one into the next; each shift in level becoming an opportunity for seating, cupboards, shelves, drawers, recesses and surfaces. While this quality is often linked to dramatic hillside sites to which his architecture responds to and exploits, this spatial quality occurs on flat sites as well, and in the apartment buildings. They resemble in their spatial complexity and integration the 'Raumplan' spaces of Loos, both displaying the previously mentioned sense of 'spatiality', and a particular sensitivity to the potential of the architecture of the interior to support the people, objects and activities within.

The interconnection of spaces in Schindler's work is more fluid than in Loos'; his conception of architecture is less disjunctive and reflects some of Wright's organicism, often incorporating more explicit connections to outdoor space, conceived of together with the interior spaces of the house, and unlike Loos, he also often exploits the complexities of intersecting diagonal geometries. Unlike many of the later California Modernists, Schindler did not adhere to the canonical characteristics of the International Style, with its tendency towards functionalism, machine production, dematerialization,

13 Jane Jacobs, *The Death and Life of Great American Cities* (New York: The Modern Library, 1993), 485.

14 Rudolph Schindler, "Furniture and the Modern House: A Theory of Interior Design," in August Sarnitz ed. R.M. *Schindler, Architect : 1887-1953 : A Pupil of Otto Wagner, Between International Style and Space Architecture*. Translated by David Britt. (New York: Rizzoli, 1988), 53.





164.
Wolfe House. Exterior and plan
(R.M. Schindler. Catalina Island, California, 1928-29)

165.
Wolfe House. Interior: sleeping area cascades into main living space

166. (right)
Walker Residence. Living room
(R.M. Schindler. Los Angeles, 1935-36)

structural expression, open planning and mechanical systems to modulate climate. Schindler eschewed the universal space that resulted from this kind of building, instead using the local site and climate conditions and client needs to generate very specific architectural solutions.[15] He exploited spatial relationships rather than pursuing overtly tectonic or technological expression.

Schindler's architecture de-emphasizes material and cladding, relying more on spatial manipulation to achieve distinct settings. Much of his building took place during the economic depression of the 1930s, and much of his efforts went to creating richly articulated spaces by adapting inexpensive materials and techniques. Despite the strictures of the Depression, he continued to build, adapting wood frame, stucco, plywood and fiberglass construction to create his architecture affordably. While the spatial richness of Loos is complemented by a rich palette of sumptuous material and fine craftsmanship that aid in the articulation of each spatial episode, Schindler relies of the space itself to create this effect.

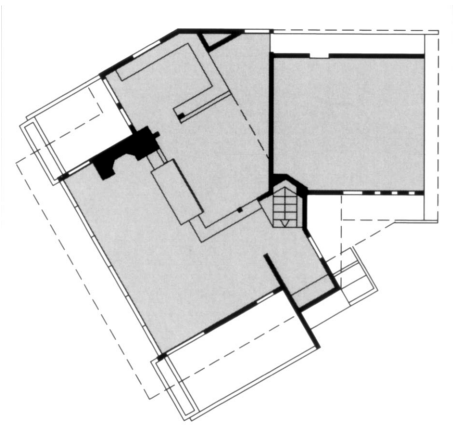
Similar formations of surfaces, shifts in level, tone and lighting occur in the work of Schindler. Shelving, seating, fireplaces, niches and stairs all merge to create an interior topography that engages the occupant equally in movement and in rest. It provides the places for placement of furniture, for storage and for placement of personal artefacts, in an indeterminate but suggestive manner. Objects and people immediately belong to these spaces.

Unlike Loos, however, Schindler worked within a different context and culture of construction. Loos' cultural criticism that informed his architecture was opposed to what he saw as the superfluous stylistic preoccupations of turn-of-the century Viennese bourgeois culture. Schindler, for his part, found himself at odds with the contemporary modern movement in architecture at the time; a movement he believed to be too concerned with establishing a new "International Style" of rational functionalism; a movement contradictory to what he saw as the true goal of architecture –the creation of more human environments.

167.
Mackey Apartments. Interiors (R.M. Schindler. Los Angeles, 1939-40)

15 In a letter to Philip Johnson discussing his exclusion from the International Style exhibition at the Museum of Modern Art, he states "Each of my buildings deals with a different architectural problem, the existence of which has been entirely forgotten in this period of rational mechanization. The question of whether a house is really a house is more important to me, than the fact that it is made of steel, glass, putty or hot air." Quoted in Judith Sheine, *R.M. Schindler* (London: Phaidon, 2001), 70.

168.
Wilson Residence. Interiors
(R.M. Schindler. Los Angeles,
1935-39)

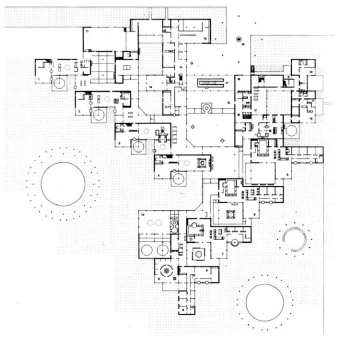


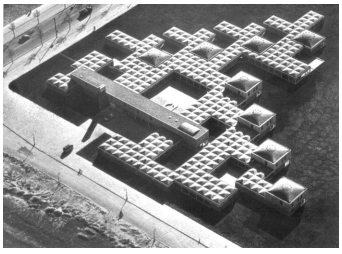
Polyvalent Form:

Although perhaps resulting from different motivations, the spaces described above might be considered analogous to, or to anticipate the 'polyvalent forms' promoted by Herman Hertzberger and the 'Dutch Structuralist' architects. Their work grew out of the group of architects and critiques of Team Ten in the late 1940s and early 1950s. This generation of architects, working in Europe after the Second World War, had begun to question mainstream modernism in architecture. The perceived failure to deliver a rational, technological utopia, and the sterility of much of its architecture were being criticized and alternatives were being sought. Their projects and writings tried to deal with fundamental human qualities and needs, and introduce a richer vocabulary of constructed spaces through understanding of patterns of human association at different scales: house, street, district and city. They dealt as much as possible with specific rather than universal responses –social, environmental and constructional problems. They concerned themselves with the "actual human subject, taking into account his or her actual experience, angst, and lived knowledge of specific space and time."[16]

The tone of their discourse was fundamentally humanist and concerned with the reestablishing social and community relationships through urban design and architecture, and to allow a deeper connection between people and their environment. As Team Ten member Jacob Bakema put it: "we have to work for the creation of a physical environment that will satisfy man's emotional and material needs and stimulate his spiritual growth."[17] This desire is echoed by Hertzberger: "In order to make a real contribution, architects have to use everything they influence or create to support the people in the struggle against alienation from their surroundings, from each other, and from themselves…by providing the people with an appropriate environment which has scope for everyone: an arena in which each can play as many parts as he has within him, so that everyone can become more truly himself."[18]

It is worth noting that this critique of orthodox modernism is very similar to Schindler's much earlier arguments. Much of the work by this group similarly reduced the material palette of construction and focused on the performance of spatial, formal and structural configurations. It is perhaps this shared search for a more human architecture that is recognized more than





169.
Municipal Orphanage
(Aldo van Eyck. Amsterdam
1955-60)

170.
Central Beheer Office building
(Heman Hertzberger. Apeldoorn,
1968-72)

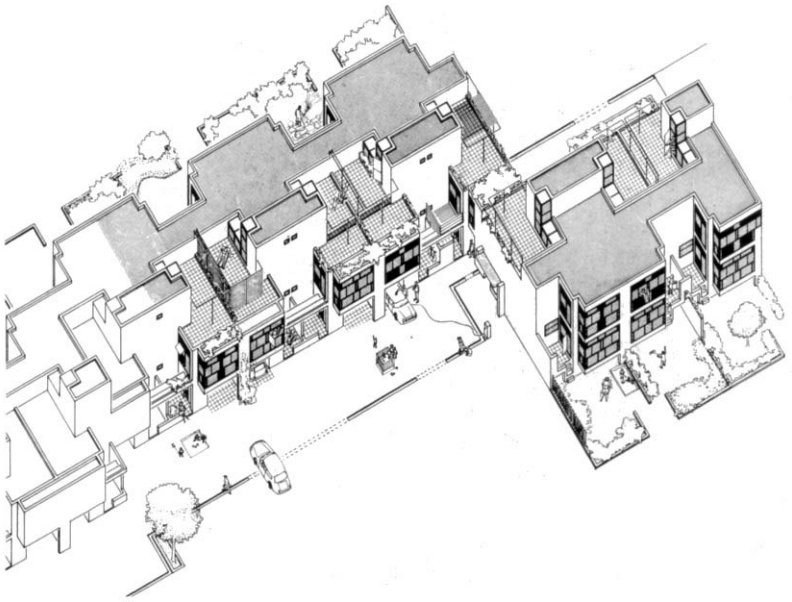
16 Ignasi de Sola-Morales, "Architecture and Existentialism." In *Differences: Topographies of Contemporary Architecture* (Cambridge Mass.: MIT Press, 1999), 47.

17 Alison Smithson ed. *Team 10 Primer*, (Cambridge Mass.: MIT Press, 1968), 23.

18 Herman Hertzberger, "Architecture for People," *Architecture and Urbanism 75* (Mar, 1977), 126.

171.
Diagoon Dwellings
(Heman Hertzberger. Delft, 1972)

Collection of “carcass” houses that use a sectionally stepped spatial configuration and anchor elements of bathroom, kitchen and stairs around which the rest of the living spaces are left undefined. The form of the house is meant only to suggest a series of possibilities, not to prescribe living patterns. The basic form itself is not however merely an empty shell; the variety of spaces it contains, and its potential for spatial connections and overlaps offers an invitation for the individual inhabitants to interpret and appropriate the house for themselves.



30 years later by Hertzberger when writing of Schindler's work: "he does no more than create the habitable space in between people and object, providing the utmost scope for everybody to be himself. All this could only be made by a true engagement, not particularly with form but with people and ways of living…What Schindler did could only be done from limitless commitment and love for people, and it is only this that makes architecture make any sense at all."[19]

Hertzberger, who had been involved with Team Ten, started the influential journal *Forum* along with Aldo Van Eyck and Bakema Together they articulated an approach to architecture that came to be referred to as 'structuralism' (sometimes 'configurative design', or 'Forum' architecture). Influenced by the fields of anthropology and art, structuralist architecture was concerned with configurations and patterns (the structures) of dwelling and community –their architecture sought to give voice to the many by allowing flexible reconfigurable spatial units that could be arranged in clusters to promote communal relations that could be re-imagined functionally and formally. The complexity of the city was to be reflected in the building, becoming a city within a city. Analogous structures to those found in vernacular urban and village settings were explored within individual buildings conceived as clusters of individual houses connected by streets and squares of common space. To encourage direct involvement of users with their own spaces, strategies such as partially finished spaces, modular construction, and movable elements were explored.

Iconic structuralist works such as van Eyck's Amsterdam orphanage and Hertzberger's Central Beheer office building were, however, criticized for their tendency towards agglomerations of permeable units that create weakly defined urban edges, for their overall lack of legibility as an entity, and the hermetic nature of complex internal relations that seem to have little correspondence or relationship with the rest of the urban fabric.[20] In their desire to give scope to each person, and to reflect the diversity of complex human relationships and dwelling patterns, their buildings tried to assume all of the complexity that results from unanticipated combinations in the real city –an impossible task for a single designer. This failing of some of their architecture is a caution for future design, but the humanist aims of the movement remain laudable.

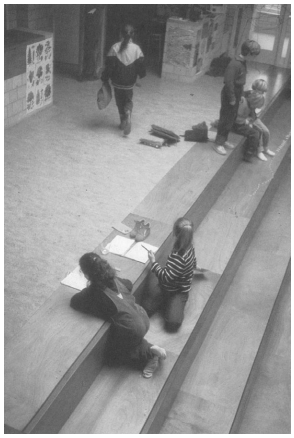
One particular concept to emerge from the structuralist movement that echoes the architectural qualities mentioned so far, and that might inform

19 Ibid., "Didicato a Schindler: Some Notes on Two Works by Schindler," *Domus*, no.454 (Sept, 1967), 2.

20 Kenneth Frampton, "The Structural Regionalism of Herman Hertzberger." in *Labour, Work and Architecture: Collected Essays on Architecture and Design* (London: Phaidon, 2002), 295-296.

172 .
Willemspark School.
(Heman Hertzberger. Amsterdam,
1980-83)

“The most elementary provision to enable people to take possession of their direct environment is probably the provision of seating (the opportunity to seat oneself having everything to do, linguistically, with settlement). A place to sit offers an opportunity for temporary appropriation, while creating the circumstances for contact with others.”
-Herman Hertzberger. *Lessons for Students in Architecture* (Rotterdam: 010 Publishers, 1991). 177.



the design of new main street dwellings, is the notion of 'polyvalent form'. Hertzberger describes this concept as follows:

> In the designing of every building it must constantly be held in mind that its occupants must have the freedom that will allow them to decide for themselves the way in which they want to bring into use every space and angle of it. Because it is impossible (and always was) to make the individual setting that exactly suits everyone, we have to create the possibility for personal interpretation, by making the things in such a way that they are indeed interpretable.[21]

This concept could apply to streets, to buildings, to rooms, to individual architectural elements or to furniture. The structuralist analogies of the game-board (i.e. chess) with many possible moves, or of language and speech, in which with the same set of words is used by many speakers to express limitless new meanings, when applied to built-form, suggests an architecture that can be reinterpreted or re-formed into new configurations, meanings and uses by many users.

Applying this notion to urban main streets, the lot structure is itself a polyvalent urban form that is reinterpreted by many speakers: the lots on main streets are the language and each building is the individual speech. The equivalents in architectural terms are elements that can perform multiple possible functions –columns, stairs, walls, floors, balustrades, sills, rooms and clusters that can recombine visually, usefully, or physically into new uses or forms without losing their identity. An aesthetic by-product of this kind of approach in Hertzberger's work is often a richly modeled form that can accommodate immediate engagement with the activities and objects of inhabitation. As in visual arts or literature, where multiple layers of meaning or significance lead to new interpretations and extended enjoyment over repeated readings, polyvalent or layered architecture can result in extended utility, multiple interpretations and prolonged engagement -qualities much needed in a domestic architecture intended for a lifetime of use.

21 Arnulf Luchinger, *Structuralism in Architecture and Urban Planning* (Stuttgart: Kramer, 1981), 55.

Interior Topography:

The particular spatial and formal characteristics of the architecture discussed so far are similar to what critic David Leatherbarrow describes as "topographical" or as "shelved spatiality."[22] This topographical quality is a way of describing the ways that the diverse individual spaces are integrated into a uniquely flexible and useful interior landscape. He likens this aspect of architecture to landscape formations or the more conventional use of the term 'topography': "Architecture can discover its topographical sense if it acknowledges essential aspects of landscape phenomena: material variation, temporal unfolding, recessive potential, and an unmatched capacity for unexpected figuration."[23] Or as Hertzberger has similarly expressed, architecture with "a capacity to acquire signification and surrender it again, without itself substantially changing" in this way "form becomes a potential vehicle of changing significations; innately receptive to being coloured in, as it were, for and by various situations, therefore always capable of evoking new images."[24]

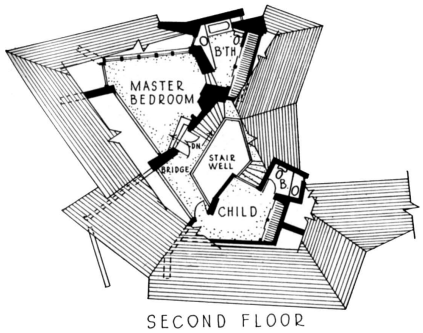
In his book *Uncommon Ground: Architecture, Technology, and Topography* Leatherbarrow discusses the work of mid-century modernist architects such as Richard Neutra -an architect closely linked with Schindler and Loos personally, professionally, historically and architecturally- in topographical terms. He describes the characteristically free-flowing, laterally spreading, yet subtly shifting sectional quality of much of Neutra and his contemporaries' work, by comparing it to a flattened and dispersed version of Loos' Raumplan:

> Within such a stratification of slabs or sections of slabs, discrete settings were established by other horizontal elements, too. One finds in many buildings of this period seating platforms or benches that extend from one end of a room to another, defining what might be called a level of repose…Equally common was the lowered or raised fireplace, providing a condition of warm intimacy otherwise lacking in the lateral spread of a living room in to the entryway or garden terrace. Other intermediate levels of repose and residing were frequently established at table or bar height, particularly when these elements were joined to deep window sills or other interior-exterior connections.
>
> In these buildings the multiplication of floor levels took the place of floor-to-ceiling elements in the definition of spaces. If not like geological strata, clouds, or rafts of a river, these levels were similar to landings on a meandering or ceremonial stairway, or perhaps to its many treads, except that the riser heights of such a flight of steps were always varied

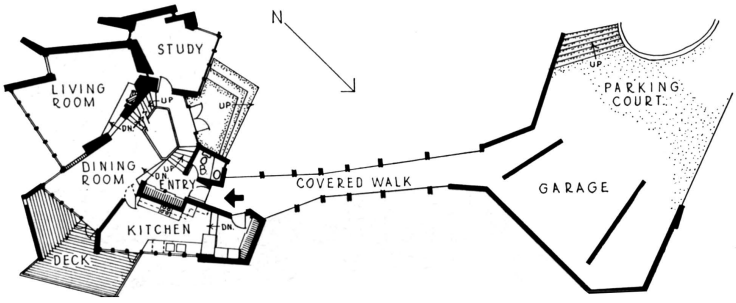
22 David Leatherbarrow, *Uncommon Ground : Architecture, Technology, and Topography* (Cambridge: MIT Press, 2000), 32.

23 David Leatherbarrow, *Topographical Stories: Studies in Landscape and Architecture* (Philadelphia: U. Pennsylvania Press, 2004), 13.

24 Herman Hertzberger, "Architecture for People," *Architecture and Urbanism75* (Mar, 1977), 127.



SECOND FLOOR



173. (facing)
Fraser House
(Ron Thom. Toronto, 1969)

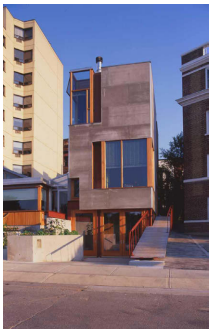
Every space of the house becomes an enlarged landing on the central stair. The overlaps, overlooks, collisions and connections between spaces create innumerable distinct settings and a continually varied terrain of unique spatial experience. The intersections of the each of these spaces becomes a potential location for seating, placement of objects and furniture, or a social setting on its own or with access to the larger collection of spaces.

> and each level was meant to serve as a provisional stopping place that sustained the purposes of distinct dwelling habits, not only the passage from one place to another.[25]

This interior topography creates an engaging living environment by creating a variety of settings without necessary recourse to the absolute divisions of walls and rooms. It invites the body in kinetic engagement, moving through, over, up and down the varied terrain of the dwelling at the same time as creating 'levels of repose'. It creates visual variety, both through that movement and variety of viewpoint, and through the partial concealment and revealing of interconnected spaces. This topographical approach to architecture enhances its specificity and sense of place by articulating individual settings as distinct from others; allowing particular habits, memories, and associations to become related to a specific location. Such an architecture remains partially obscured; it does not necessarily impose itself on our awareness, it remains available for use and for individual interpretation. Leatherbarrow further describes this latent or "recessive" aspect of a topographical architecture as follows: "Within an ensemble of useful items, no single piece obtrudes itself into awareness, unless of course, it is broken. When a setting works as it should, all of its parts coexist in a condition of shared latency or silent readiness…the enabling devices we position within a setting, those we use to define it, withdraw from objectlike visibility into a context in which each merges with the next, all with one another, settling into a web of opportunities, remote in its unobtrusiveness but nearby just the same."[26] This sense of tacit utility, while unobtrusive, is not mere neutrality or emptiness. Such topographical architecture contains a richness of spatial opportunities that allow it to support and enhance domestic function and experience.

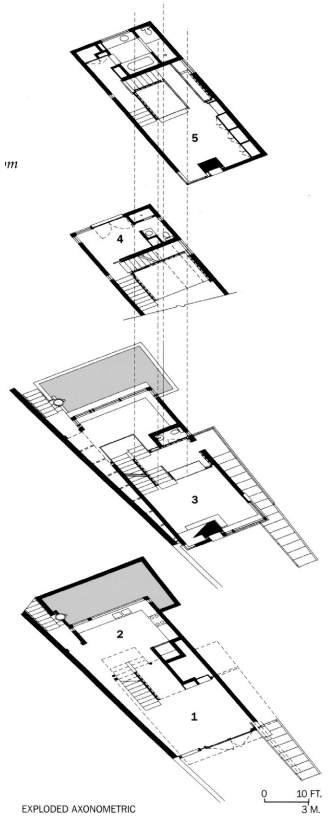
25 David Leatherbarrow, *Uncommon Ground : Architecture, Technology, and Topography*, first quote pp.32, second pp.35.

26 Ibid., 174.



Design Conclusions

The design strategies described variously as spatiality, specificity, polyvalence or topography, suggested by this gathering of architects and buildings are intended to inform the building designs that follow. These approaches to design could contribute to the realization of a number of those design criteria outlined by the New *Designs for Multi-Family Housing in Ataratiri and the Railway Lands* report, particularly in the area of 'architectural character'. The utilitarian and technical concerns of housing are more easily quantifiable, and their value more easily assessed in terms of monetary, dimensional or material worth. The matter of architectural character, and the issues of habitability, 'charm', warmth and livability that are the focus of those architects and writers mentioned here, are the areas where the opportunity for improvement and innovation are less frequently explored. It is the intention of this thesis to incorporate as many of these concerns into the design within the parameters of current construction and design practice and regulation, and within reasonable expectations of commercial and practical viability.



The Site

174. (facing)
Tower House
(Shim Sutcliffe Architects. Stratford, 2002)

A house with seemingly no doors. The vertical sequence of individual spaces retain their identity through the stratification and individual articulation of each, rather than through recourse to definitive spatial division. The resulting space is richly layered, gradually unfolding and full of unexpected visual connections and opportunities for inhabitation.

The location selected for the design proposal is part of a 27-acre site in downtown Toronto south of Queen Street West between Dovercourt Street to the west and Shaw Street to the east, Sudbury and King Street West to the south. It is the site of the Centre for Addiction and Mental Health [CAMH] facilities which take the form of a campus of pavilion buildings set within a green landscape with internal road access and a series of raised walkways connecting the buildings. Its frontage on Queen Street runs approximately four blocks, unbroken by another street, with all but one of the buildings set well back from the sidewalk. Its east and west sides retain their historic brick perimeter walls, now no longer enclosing the site, but still a barrier to view and passage.

The surrounding blocks consist of typical low-rise main street retail/commercial storefront buildings with apartments above facing Queen Street, with low-rise residential streets running north-south that use laneways for rear access to lots. The characteristic lot size in this area has a narrow frontage (from about 4.5m) and deep (up to about 40m) depending on its location in the block. If the regular street pattern of north south streets were to have been continued from Queen to King, the site would have been no different to any number of other of Toronto's downtown neighborhoods.

The site is located on one of the city's primary east west corridors, a popular shopping street containing among other uses, shops, restaurants, salons, hotels, and particularly numerous art galleries. It is well served by public transit in the form of streetcars on both Queen and King Street and a bus line on Ossington Street. What marks out this stretch of Queen Street as different however, is the lack of street life and slower rate of improvements on the blocks facing the current CAMH site. The lack of street frontages along the CAMH property are a serious discontinuity in the otherwise consistent street wall and symmetrically opposed commercial zones on either side of Queen street. The combination of this gap in the flow of commercial and pedestrian activity combined with the stigma long associated with the institutional history of the site, make this a low point on the Queen Street strip that has otherwise enjoyed vigorous activity. Increasing development in the residential condominium market on all sides of the site is adding to the popularity of, and pressures on, this area.

The site is currently marked by a high proportion of green space: lawns planted with trees surround the pavilion like buildings. Nearby green spaces also include Joseph Workman Park immediately south of the site, the grounds of an elementary school to the north, and the very large Trinity-Bellwoods Park just one block to the east.

In 2002, the Centre for Addiction and Mental Health embarked on a major redevelopment plan for its property and facilities. The Master Plan for the project developed by Urban Strategies Inc., has three main premises:

1. To create a hub to integrate key CAMH functions –care, research, education and health promotion and prevention –in one location, linked to community based satellite services throughout the province
2. To create an 'urban village' of the facilities and a mix of other uses on the site, in order to address the stigma associated with mental health and the hospital within the community.
3. Respecting the landscape with respect to existing trees and historic structures

175.
The site of the Centre for Addiction and Mental House (CAMH) and its neighbourhood context

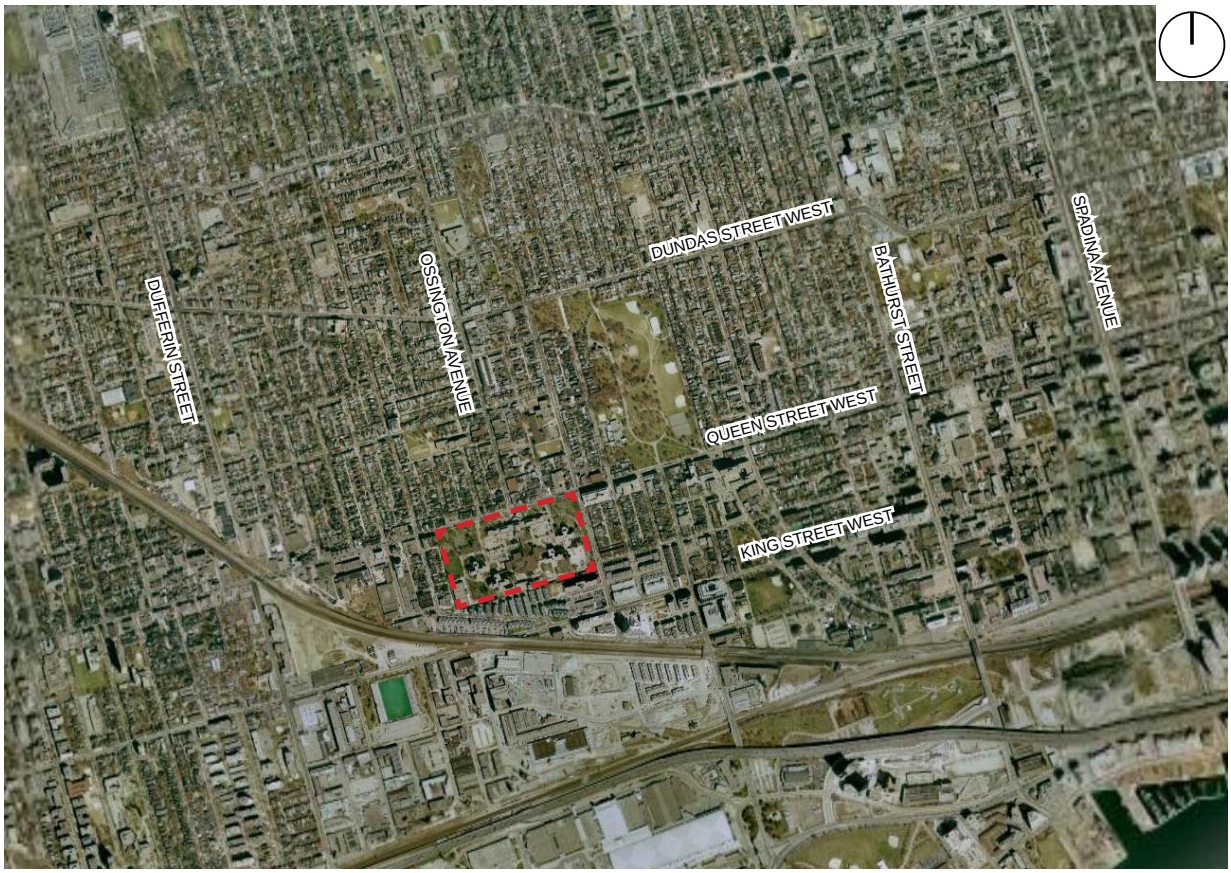
The new 'village' is intended to contain a variety of uses such as allied research institutions, offices, laboratories, retail, art galleries, restaurants, community facilities, parks and open space and some residential uses. The intent is to remove the institutional atmosphere of the hospital district. To this end, new streets following the city grid will be introduced giving each building its own street address and opening the site to pedestrian, cycle and automobile traffic. The new CAMH buildings are intended to be flexible in contrast to the buildings from the 1970s, are more loosely programmed and most incorporate internal private outdoor spaces. All the institutional buildings are to be designed by a consortium of three architectural firms, while the non-CAMH blocks will be developed through long-term lease arrangements, by outside developers.[27]

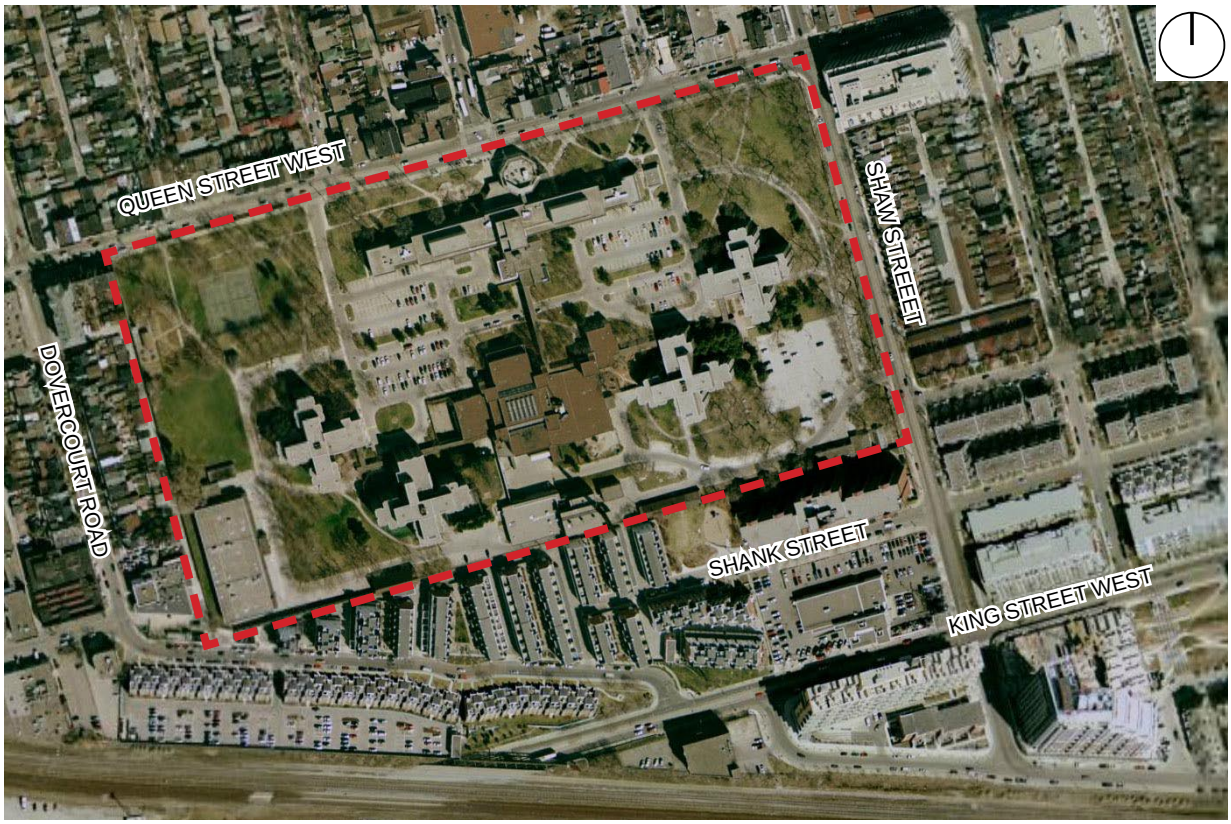
176.
The site of the Centre for Addiction and Mental House (CAMH) existing site conditions

The master plan is a typical Toronto redevelopment plan in the mould of the St. Lawrence redevelopment in many respects: it begins with the introduction of new streets within the site to allow direct access to buildings, new sidewalks, porosity and accessibility, and to blur the edges of the site with the surrounding neighborhood; it makes efforts to preserve existing heritage structures and established trees within the site; some mixture of buildings is proposed over the site and a mix of uses is desired to complement what would be a dominantly institutional character. All the new facility buildings are, however, to be designed by a single group of architects. The form of the buildings along the main street of the site, indicated in the Facilities Master Plan, are large full-block buildings that contrast sharply with the fine grain of the buildings on the opposite side of the street. Many of these buildings are also set back from the current sidewalk, and isolated from the adjacent blocks by two large park spaces. [28] In this way the continuity of the Queen Street

27 Urban Strategies, Inc., *Master plan for the Centre for Addiction and Mental Health, 1001 Queen Street West Toronto, Ontario* (Toronto : Centre for Addiction and Mental Health ; Urban Strategies, 2002).

28 C3 Community Care Consortium. *Rethinking the Queen Street site facilities master plan.* Toronto : Centre for Addiction and Mental Health ; C3 Community Care Consortium, 2002.


DUNDAS STREET WEST
DUFFERIN STREET
OSSINGTON AVENUE
BATHURST STREET
SPADINA AVENUE
QUEEN STREET WEST
KING STREET WEST


QUEEN STREET WEST
SHAW STREEET
DOVERCOURT ROAD
SHANK STREET
KING STREET WEST

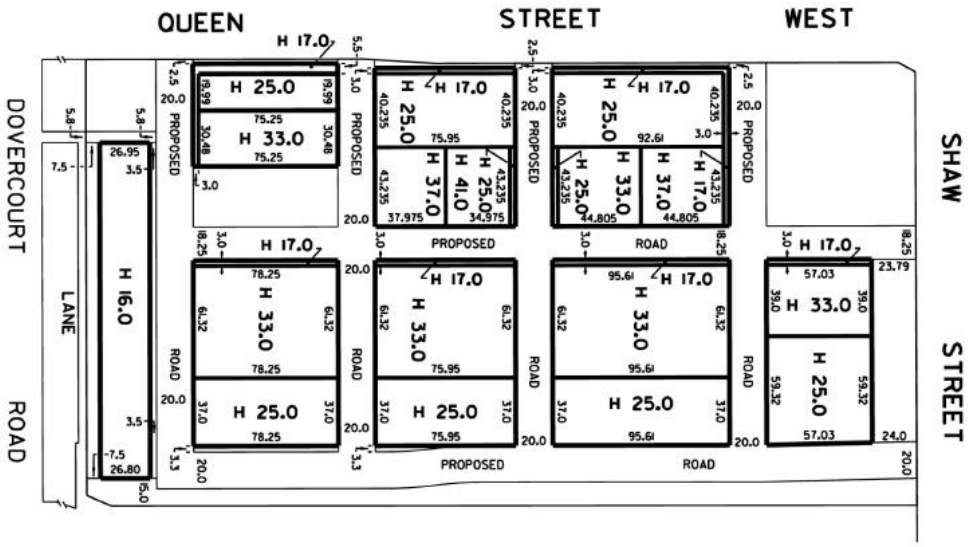
building edge continues to be broken.

Within the current Master Plan for the site are included development blocks intended for redevelopment by outside non-institutional interests, among which might include some residential uses. One of the blocks in the master plan slated for outside development is located on Queen Street and provides a prototypical site to explore the scale of the block and individual buildings that have implications to this specific site as well as to other main street sites within the city. Because development blocks were defined only by height and street boundary, the actual parcelization and built makeup of the block could be speculated on without diverging far from the master plan. One of these non-institutional sites is the area proposed for the designs that follow.

177. (facing)
Proposed height limit for entire redevelopment site

178. (facing)
New block structure with new roads. Block 3 is the site of the design proposal, and is highlighted in red.

179. (below)
View inside site to north towards Queen Street West



Proposed Heights

1001 Queen Street West

Not to Scale
08/15/03

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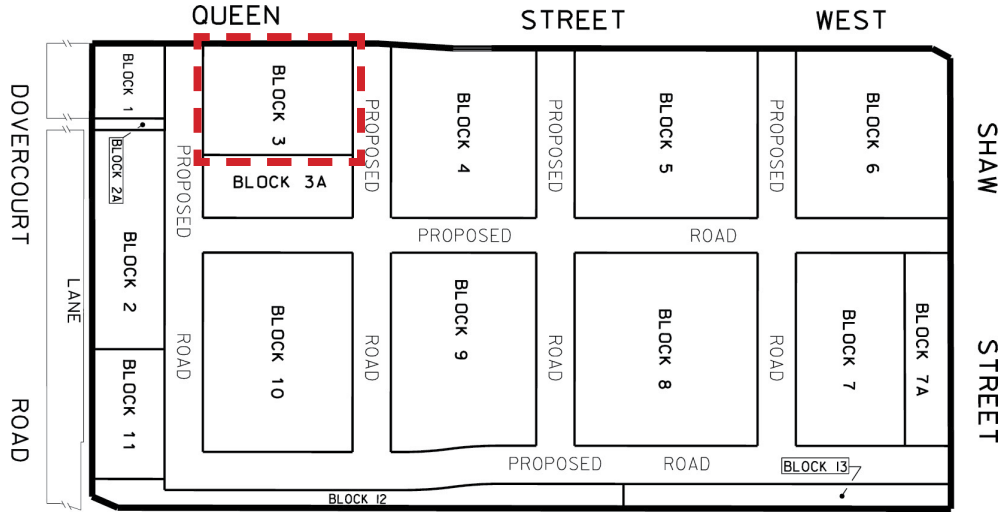


Not to Scale

TORONTO
City Planning Division

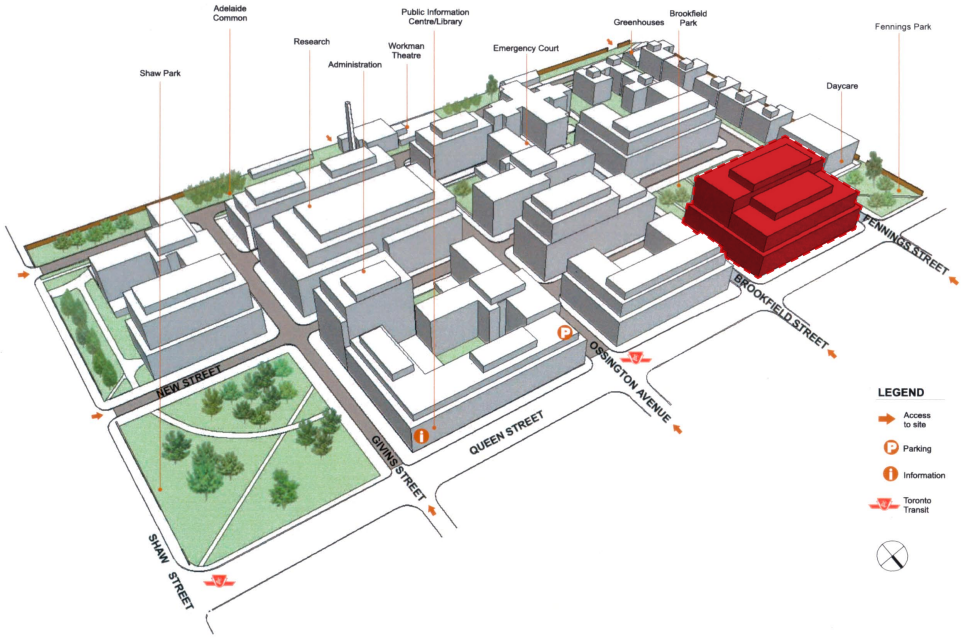
Garrison Common North Secondary Plan

MAP 14-2 Block Plan

Centre for Addiction and Mental Health / Centre de toxicomanie et de santé mentale

C3 Community Care Consortium

Location Plan

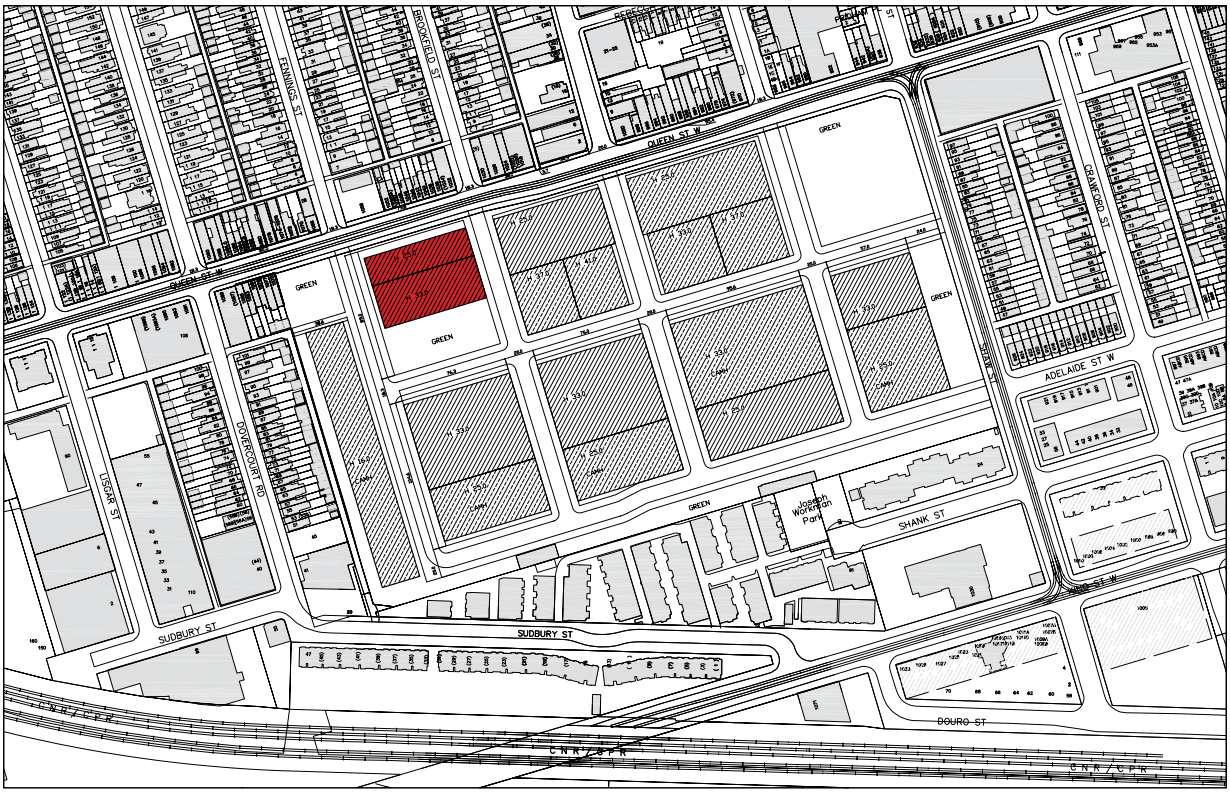


Centre for Addiction and Mental Health / Centre de toxicomanie et de santé mentale

C3 Community Care Consortium

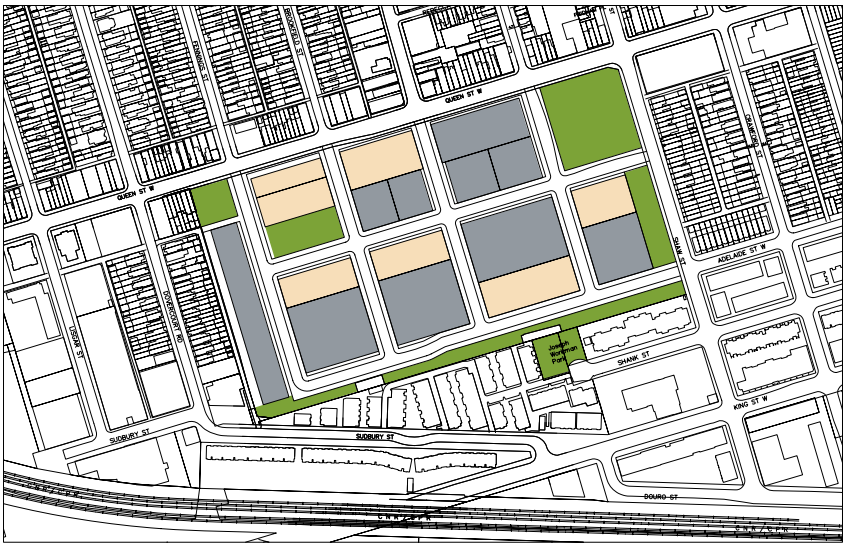
0 30 75 150 feet
0 10 25 50 meters

Site Massing
05.04.02



180. (above)
Redevelopment plan with built context. Site for proposed designs highlighted red

181. (right)
Diagram of development parcels



CAMH development site

Non-CAMH development site

Open Space

182. (facing)
Images of planned site massing from redevelopment master plan. Design proposal site highlighted in red.

Design Proposal

Currently the site is parcelled into large development blocks whose frontage is equivalent to a traditional main street block. The design proposal breaks the development block into smaller parcels, each to be developed as a separate building, ideally by a different developer and architect. This would not preclude the provision of shared underground facilities assuming adequate coordination between builders. Such a strategy would be particularly appropriate on this site, due to its lack of existing development, but would be more difficult to achieve on infill sites. Parking could also be considered in this circumstance by more centrally located dedicated parking structures elsewhere within the larger site, or in small facilities on a main street site. The maximum frontage for each lot is set at 25-metres as was initially suggested by the Main Streets Initiative, but a variety of sizes smaller than this are also explored to demonstrate the potential of the approach to other sites of an infill nature. A new rear lane would be introduced behind the main street lots at approximately the depth of the longest typical main street sites throughout the city, and related to the adjacent lot dimensions along the south side of Queen Street. In the CAMH master plan, the spaces behind the blocks on main streets would not be the typical low-rise residential buildings of many neighborhoods, allowing the potential for taller buildings to the rear of the lot, and could accommodate dwelling units overlooking the planned park or a rear lane and the interior of the block. However, to make the proposed buildings suitable to sites throughout the city, the rear-lot height limitations of the MCR zoning are generally adhered to. Ideally, land-use would be largely deregulated to allow for a variety of complementary programs to occur within the block. However, the emphasis of this study is on residential design, and thus the buildings shown mix only commercial and residential uses, with the potential for some live-work arrangements as well.

A variety of two-tiered building types were developed to provide units with two exposures allowing natural ventilation and improved access to daylight and to create distinct zones of front and back within the units. Courtyard conditions would be created as these buildings are combined next to one another. At a typological level, the designs offer configuration strategies with regard to internal circulation and unit access, parking, and massing. The assumption is that if one designer can devise an array of strategies for such sites, then other architects can equally devise unique and particular solutions for specific sites -not unlike the unrealized promise of the 1990 Main Street Design Competiton.

A variety of unit types were developed to meet the needs of a number of household types, and to respond to the varying conditions within the block. Large two-storey units, split-level units, one- to four-bedroom units and live-work options were explored. Although the buildings could be designed

instead to accommodate a greater number of smaller units, here, in keeping with the goals of creating non-typical living options and a variety of unit sizes, larger units have been given preference. Given the correlation of the number of units to the number of parking spaces and the amount of shared amenity space required, greater unit count is not necessarily always desirable.

For all the buildings, a variety of parking options could be used, including: underground parking per building or shared by several buildings to minimize instances of ramps, mechanical parking stackers, or off-site parking in communal garages could also be considered. The block that results from this scale of building accommodates as many at least five discrete buildings. The variety of units, different designs, tenants and ownership when these buildings are combined, creates a block that is close in scale and fit to the traditional main street block in terms of potential economic, social and visual diversity. The building types are intended to exploit the closely-packed, long and narrow lot character of main streets, and to use this condition to make units specific to this kind of site.

Design Drawings

The following building designs are designed for the Queen Street site. They are, however, also intended as prototypical for main streets in general. Because main streets have a range of lot sizes, where lot depth is the most consistent variable across main street sites - typically ranging between 30m and 45m in depth- these buildings are differentiated by lot size, by their overall circulation strategies and the type of units they contain. Variations are shown for both the deeper lot depth available on the Queen Street site, as well as variations applicable to other potentially shallower sites.

-

BUILDING 1A: 18m x 40m lot, mid-block (Queen Street site)
BUILDING 1B: 18m x 30m lot, mid-block (Hypothetical main street site)
BUILDING 1C: 12m x 30m lot, mid-block (Queen Street site)

BUILDING 2A: 15m x 40m lot, mid-block (Queen Street site)
BUILDING 2B: 15m x 30m lot, mid-block (Hypothetical main street site)

BUILDING 3: 18m x 30m lot, corner lot (Queen Street site)

ELEVATION OF PROPOSED BLOCK OF 5 BUILDINGS

QUEEN STREET LOOKING WEST

BUILDING 1A

Lot size:	18m x 40m (59' x 131')
Gross Floor Area:	2440m^2 (26264 sf)
FSI:	3.4
Number of Units:	15
Unit Types:	1, 2, & 3 Bed
Common Amenities	Gym + Roof Terrace
Commercial Space	x2, ground floor units
Type of Parking:	Underground self contained
Number of Parking Spaces:	14 (12 underground, 2 surface)
Spaces required by MCR:	11
Number of storeys:	6
Block Position:	Mid-block

MAIN STREET ELEVATION (N.T.S.)

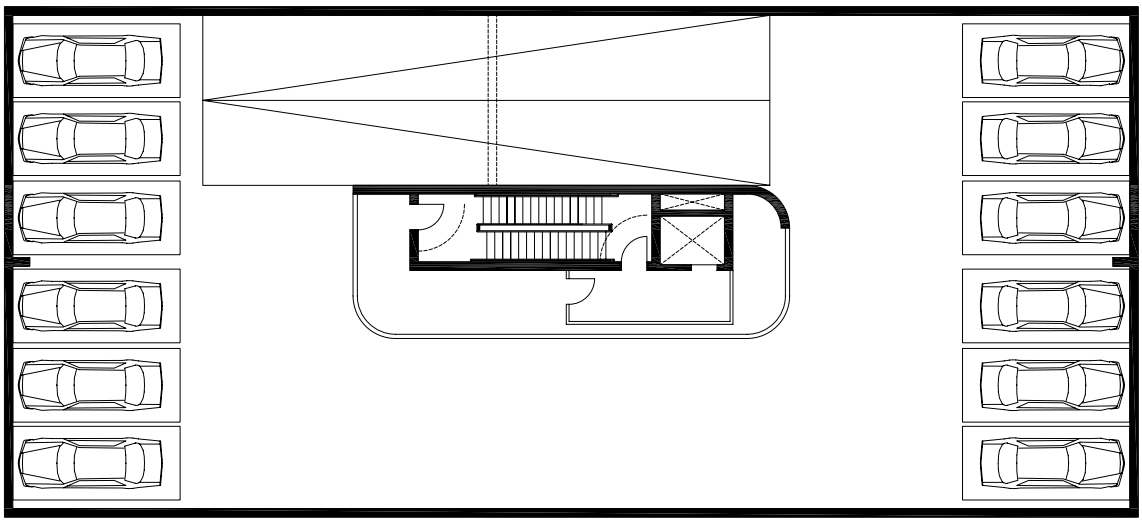
DESCRIPTION

-Both exit stairs and public corridors are naturally lit.
-All but two units have two exposures.
-Split level units and double height units provide spatial variation and increase privacy within units.
-Ceiling heights in living areas are 4 metres.
-Roof level common gym and outdoor terrace.
-Unit entries offer privacy from rest of unit, most are naturally lit.
-Balconies occur on both front and rear of the building.
-11m light-courts

SITE PLAN

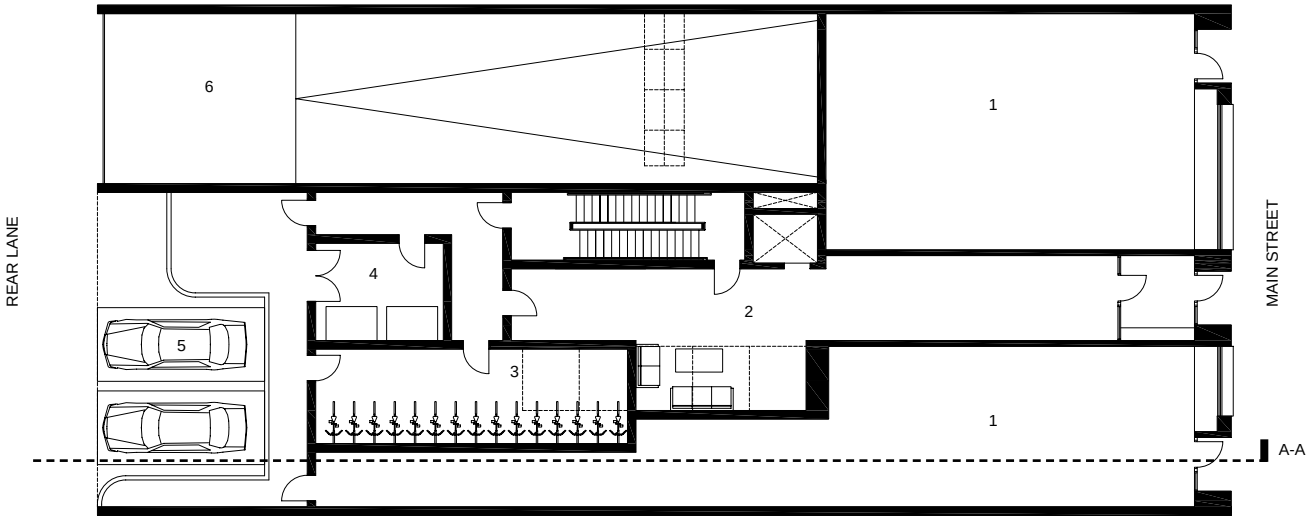
SCALE 1:2000

BUILDING 1A



PARKING LEVEL

12 Spaces

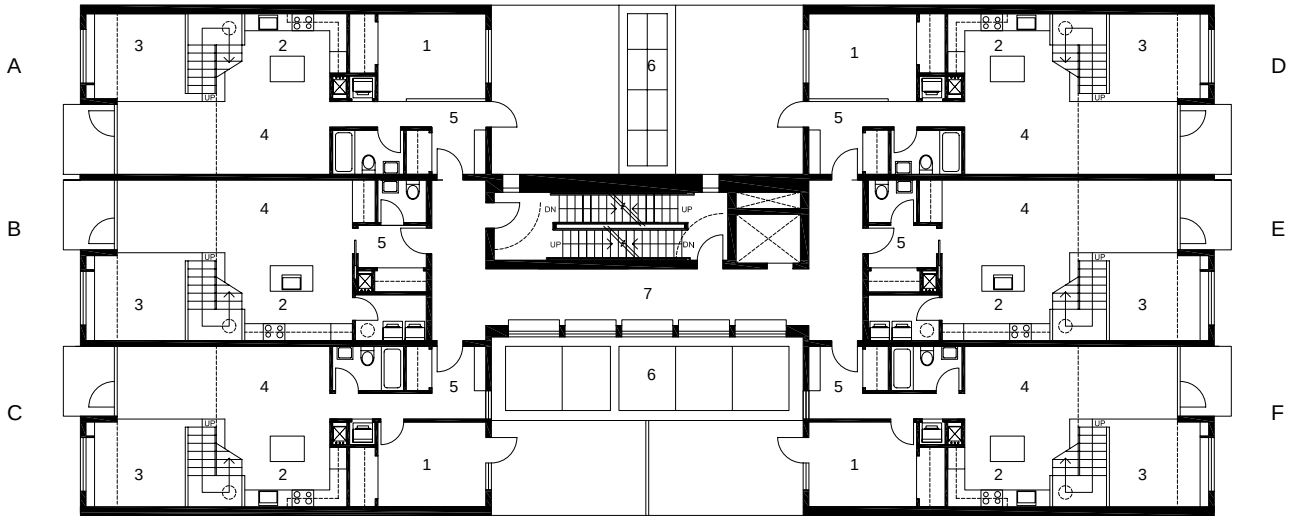


GROUND FLOOR

1. Retail
2. Lobby
3. Bicycle storage
4. Garbage room
5. Parking
6. Parking ramp

SCALE 1:150

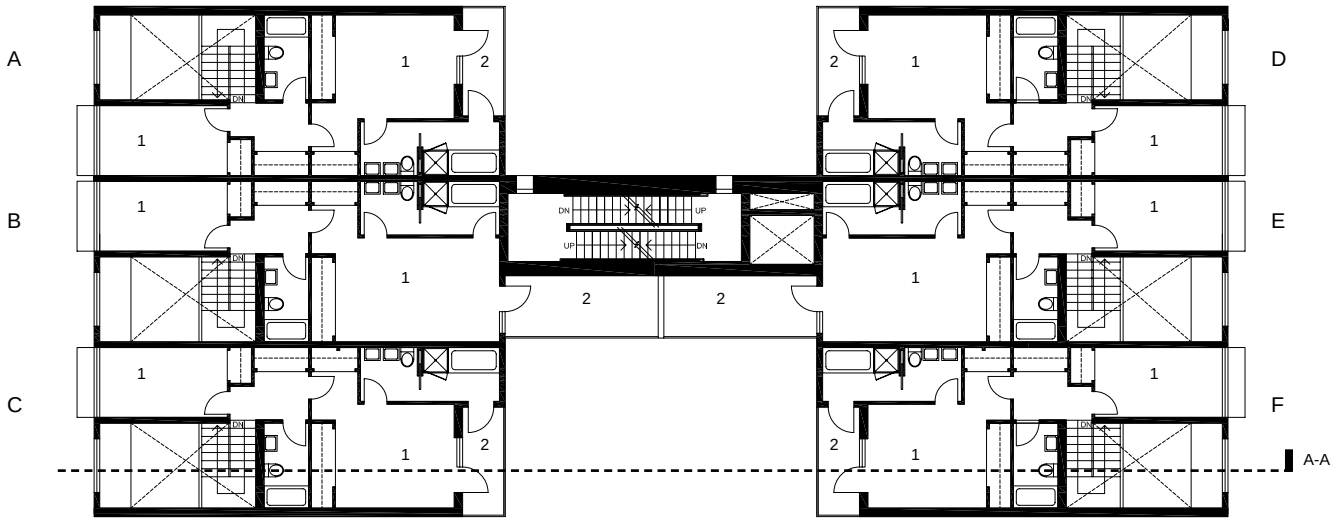
BUILDING 1A



SECOND FLOOR

A/C/D/F. 3 Bedroom unit
136m² (1464sf)
B/E. 2 Bedroom unit
132m² (1420sf)

1. Bedroom/Den
2. Kitchen
3. Living
4. Dining
5. Vestibule
6. Skylight to below
7. Corridor



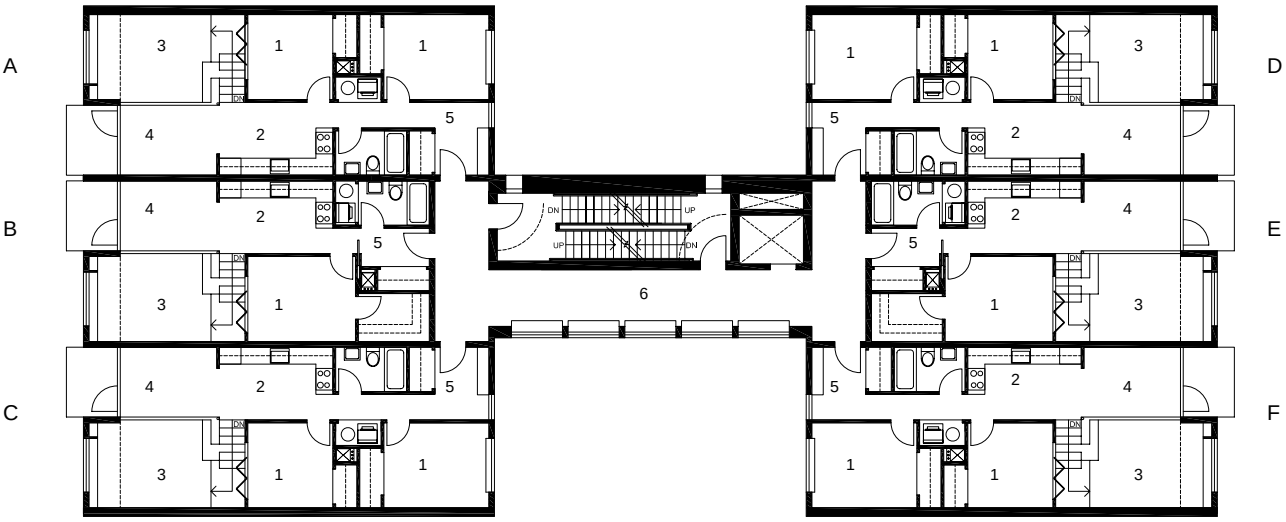
THIRD FLOOR

A/C/D/F. 3 Bedroom unit
(upper level)
B/E. 2 Bedroom unit
(upper level)

1. Bedroom
2. Balcony

SCALE 1:150

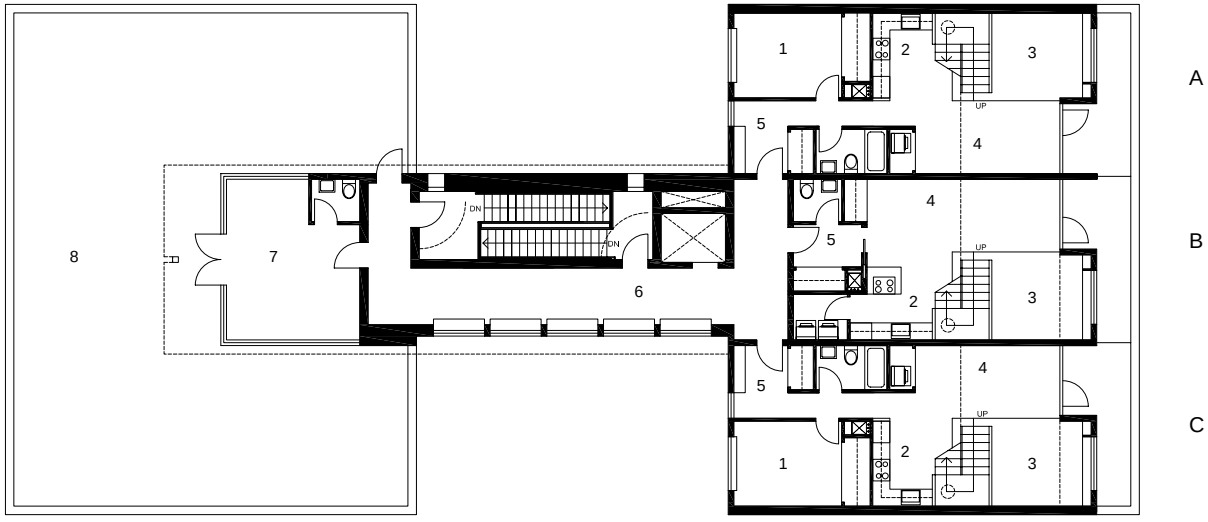
BUILDING 1A



FOURTH FLOOR

A/C/D/F. 1 (+1) Bedroom unit
78m² (840sf)
B/E. 2 Bedroom unit
67m² (720sf)

1. Bedroom/Den
2. Kitchen
3. Living
4. Dining
5. Vestibule
6. Corridor



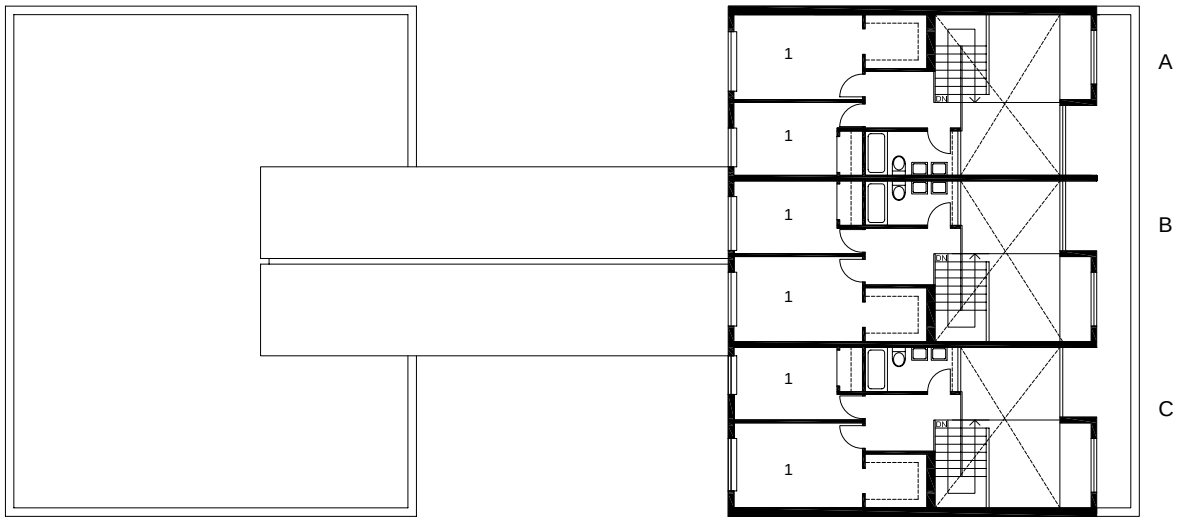
FIFTH FLOOR

A/C. 3 Bedroom unit
114m² (1227sf)
B. 2 Bedroom unit
102m² (1098sf)

1. Bedroom/Den
2. Kitchen
3. Living
4. Dining
5. Vestibule
6. Corridor
7. Gym/Common room
8. Roof Terrace

SCALE 1:150

BUILDING 1A



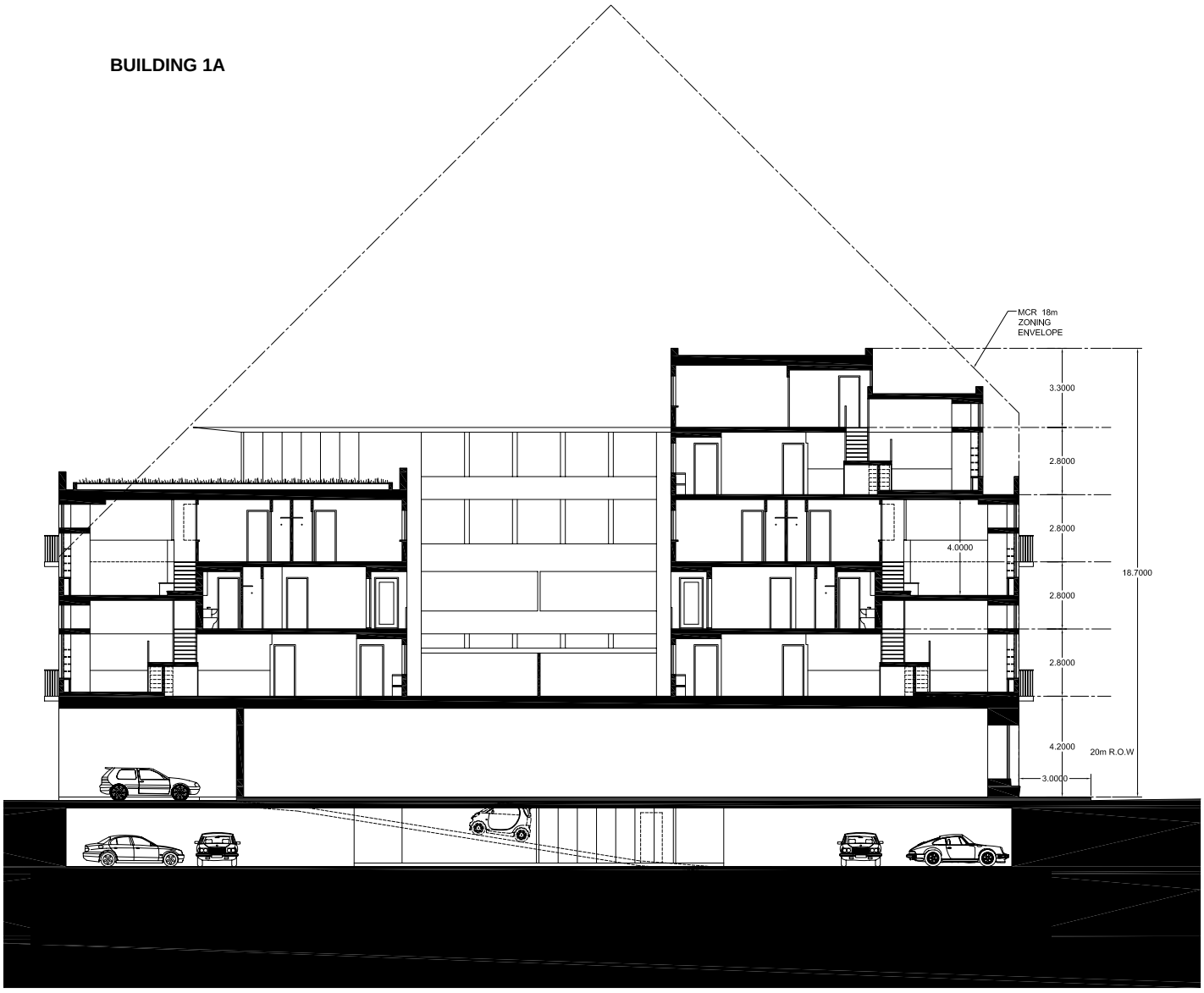
FOURTH FLOOR

A/C. 3 Bedroom unit
(upper level)
B. 2 Bedroom unit
(upper level)

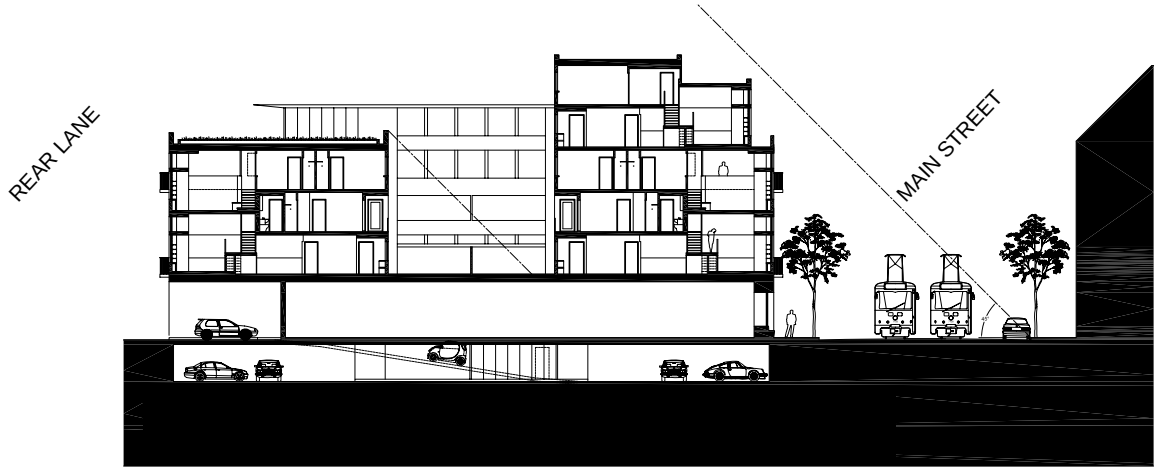
1. Bedroom

SCALE 1:150

BUILDING 1A

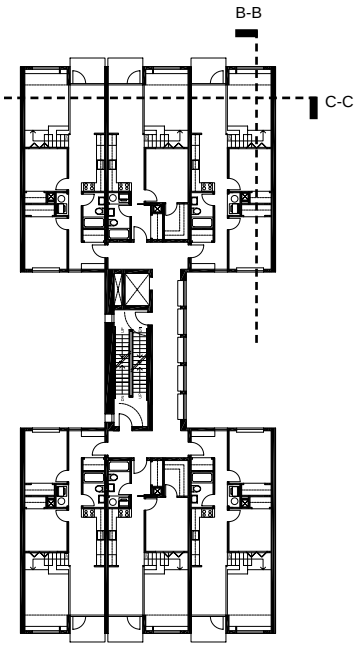


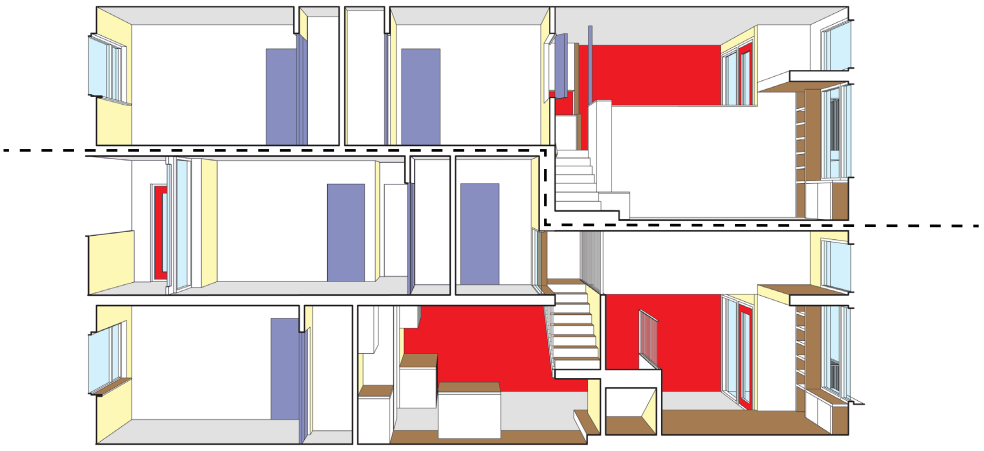
SECTION A-A SCALE 1:150



SECTION A-A SCALE 1:500

BUILDING 1A





SECTION PERSPECTIVE B-B

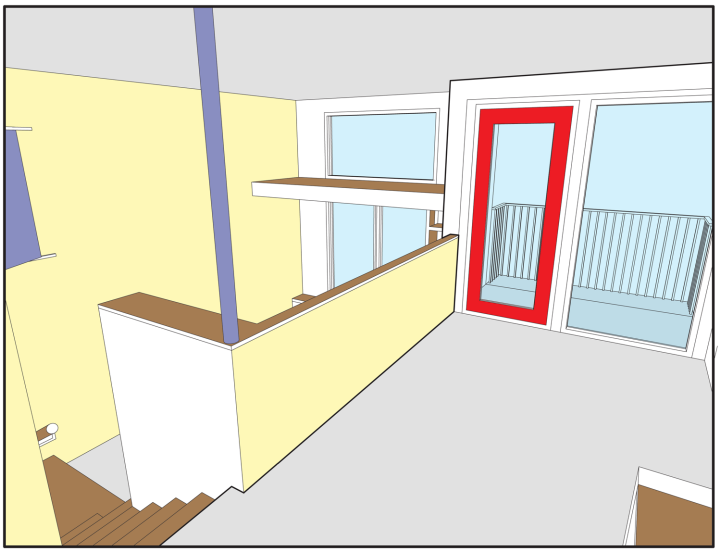
SECTION PERSPECTIVE C-C

BUILDING 1A

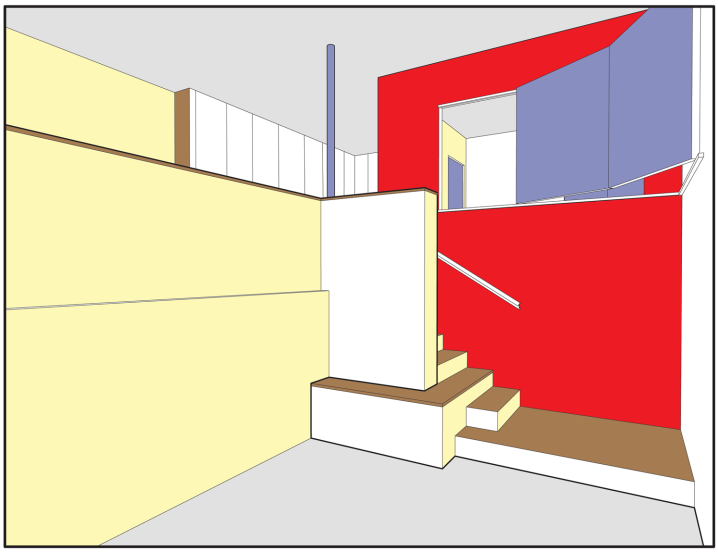
UNITS

1. Bedroom
2. Kitchen
3. Living
4. Dining
5. Vestibule
6. Closet
7. Bathroom
8. Storage
9. Den
10. Terrace

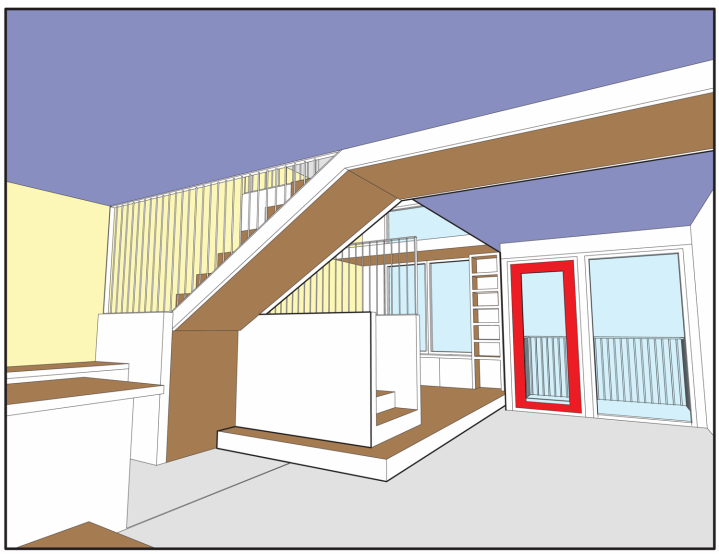
BUILDING 1A



Split level units,
dining area



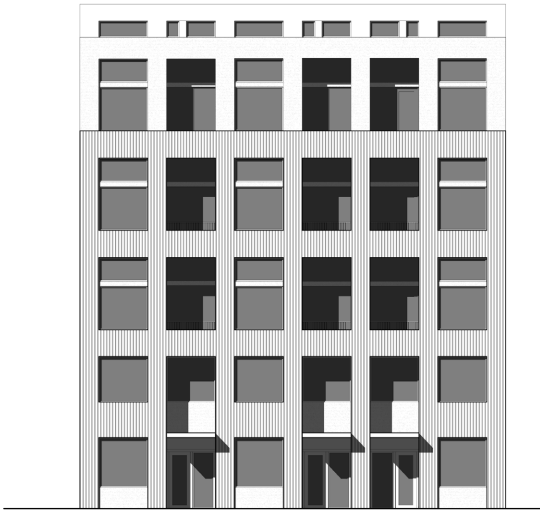
Split level units,
living area



2&3 bedroom units
kitchen and living areas

BUILDING 1B (30m lot depth option)

Lot size:	18m x 30m (59' x 98')
Gross Floor Area:	2175 m^2 (23412 sf)
FSI:	4.0
Number of Units:	11 to 15
Unit Types:	1, 2, & 3 Bed
Common Amenities	Gym (or extra 1bedroom apt.)
Commercial Space	x2, double storey ground floor units
Type of Parking:	Underground self contained
Number of Parking Spaces:	11 (8 underground, 3 surface)
Spaces required by MCR:	9 (11 units) or 11 (15 units)
Number of storeys:	7
Block Position:	Mid-block



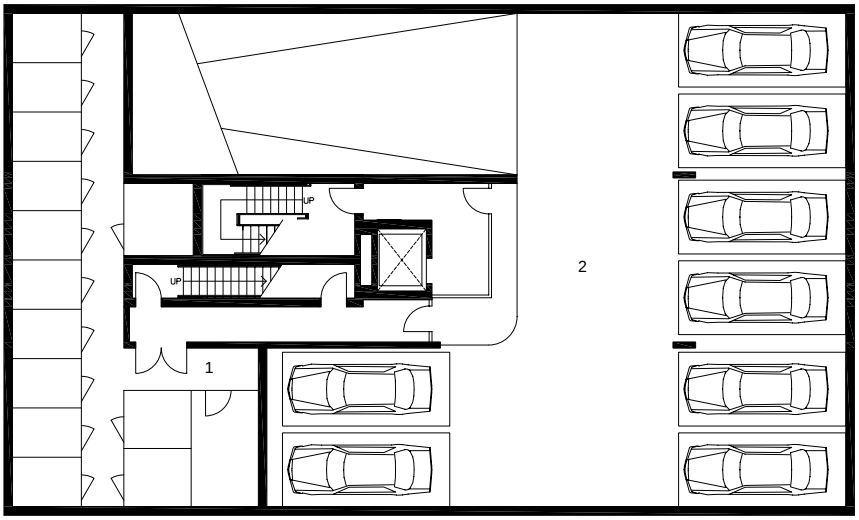
MAIN STREET ELEVATION (N.T.S.)

DESCRIPTION

-Both exit stairs and public corridors are naturally lit.
-All but one unit have two exposures.
-Split level units and double height units provide spatial variation and increase privacy within units.
-Ceiling heights in living areas are 4 metres.
-Rear units have large skylights to light middle of unit.
-Option of common room (gym or party room) or one extra one-bedroom unit.
-Option of either double height ground floor retail spaces, or 3 more one-bedroom units on second floor.
-Unit entries offer privacy from rest of unit, most are naturally lit.
- Balconies occur on both front and rear of the building.

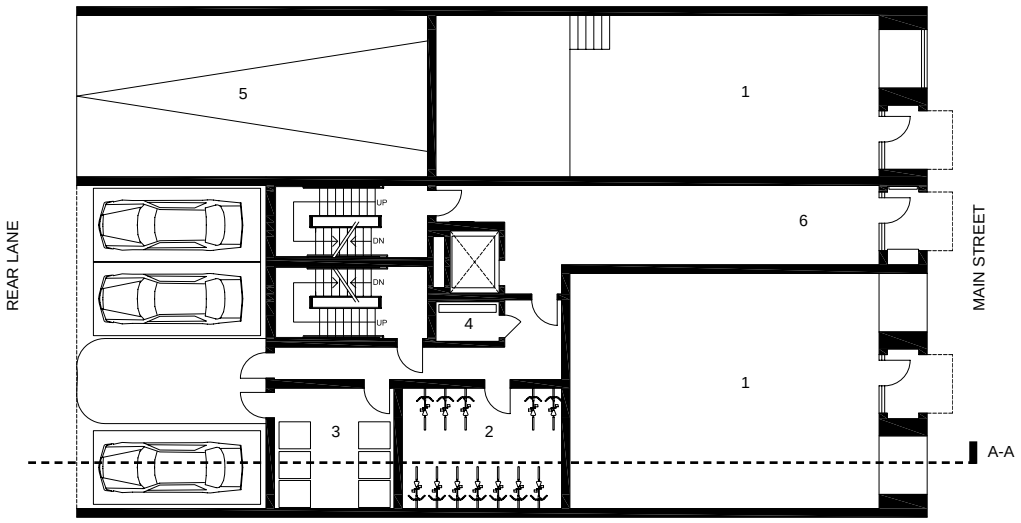
HYPOTHETICAL SITE PLAN SCALE 1:2000

BUILDING 1B



PARKING LEVEL

1. Storage lockers
2. Parking (8 spaces)

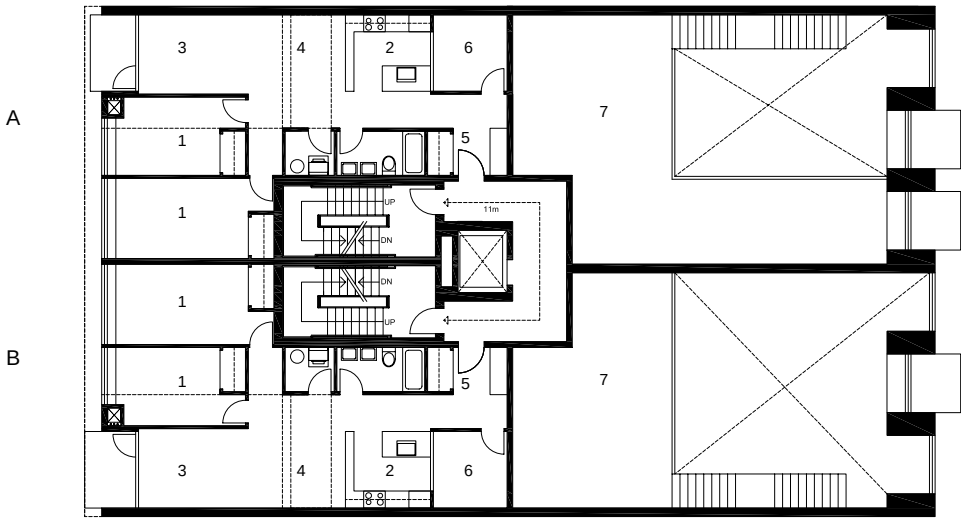


GROUND FLOOR

1. Retail
2. Bicycle storage
3. Garbage room
4. Elect. closet
5. Parking ramp
6. Residential entry

SCALE 1:150

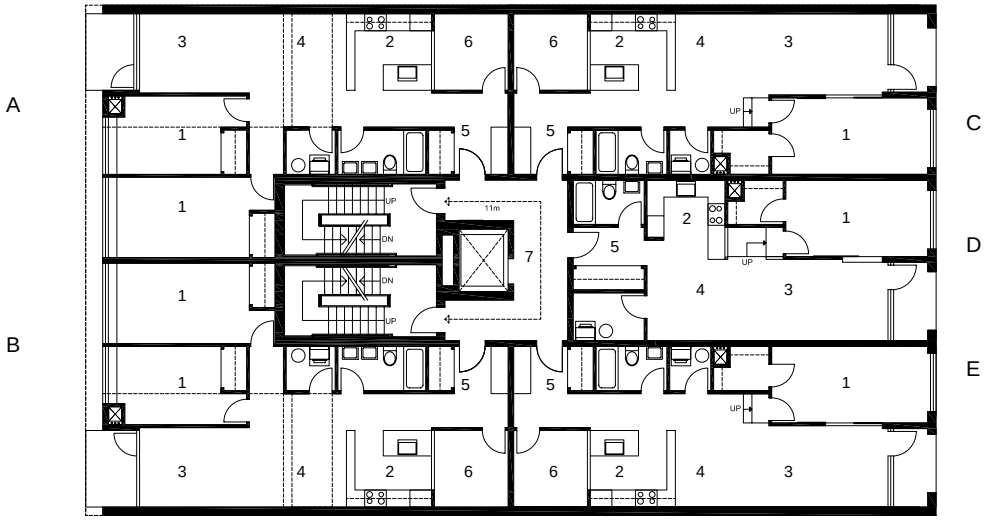
BUILDING 1B



SECOND FLOOR

A/B. 2 Bedroom unit
98m² (1055sf)

1. Bedroom
2. Kitchen
3. Living
4. Dining
5. Vestibule
6. Den
7. Retail Mezzanine



ALTERNATE SECOND FLOOR

A/B. 2 Bedroom unit
98m² (1055sf)

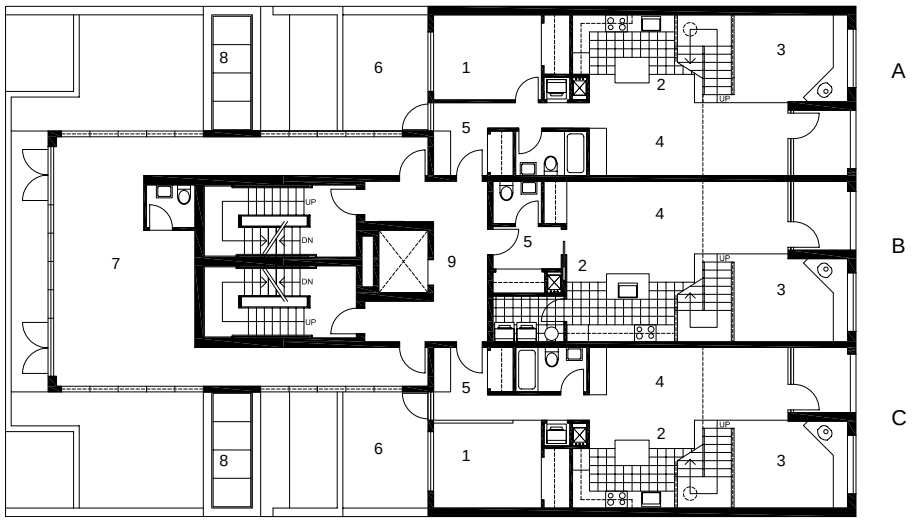
C/E. 1 Bedroom unit
98m² (1055sf)

D. 1 Bedroom unit
98m² (1055sf)

1. Bedroom
2. Kitchen
3. Living
4. Dining
5. Vestibule
6. Den
7. Corridor

SCALE 1:150

BUILDING 1B

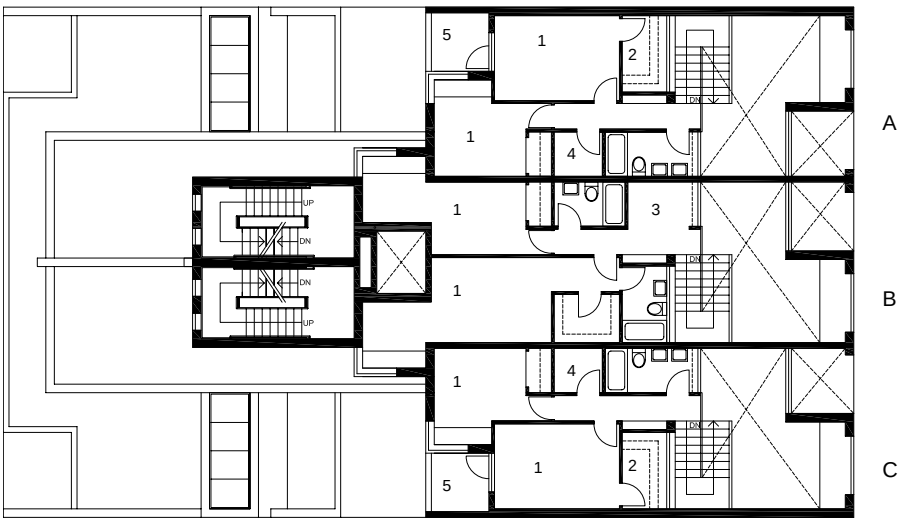


THIRD FLOOR

A/C. 3 Bedroom unit
125m² (1345sf)

B. 2 + Den Bedroom unit
131m² (1410sf)

1. Bedroom/office
2. Kitchen
3. Living
4. Dining
5. Vestibule
6. Garden patio
7. Common space or 1 bedroom unit
8. Skylight
9. Corridor



FOURTH FLOOR

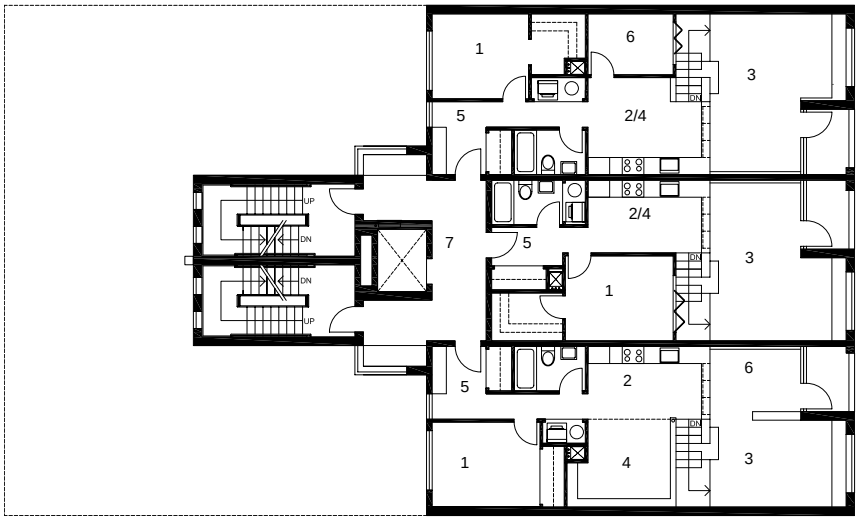
A/C. 3 Bedroom unit
(upper level)

B. 2 + Den Bedroom unit
(upper level)

1. Bedroom/office
2. Closet
3. Den
4. Storage
5. Balcony

SCALE 1:150

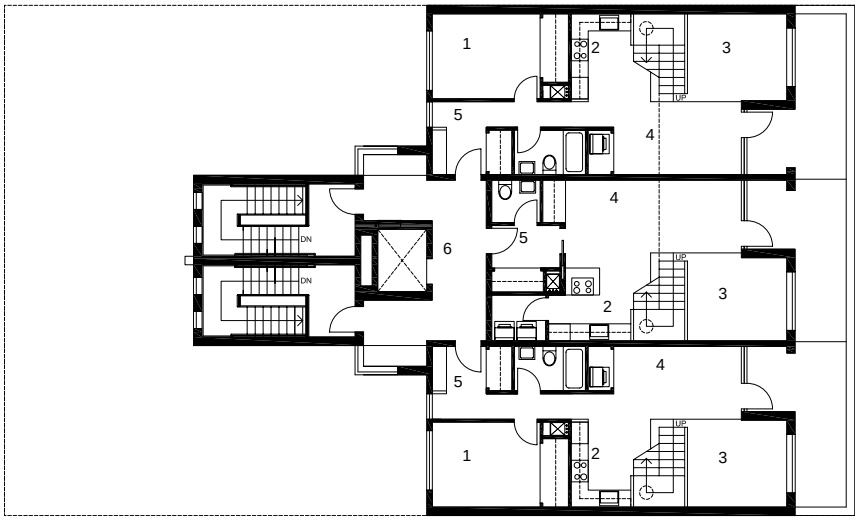
BUILDING 1B



FIFTH FLOOR (SPLIT LEVEL)

A/C. 1 (+1) Bedroom unit
80m² (861sf)
A/C. Bachelor unit
69m² (743sf)

1. Bedroom
2. Kitchen
3. Living
4. Dining
5. Vestibule
6. Den/extra sleeping area
7. Corridor



SIXTH FLOOR (SET BACK)

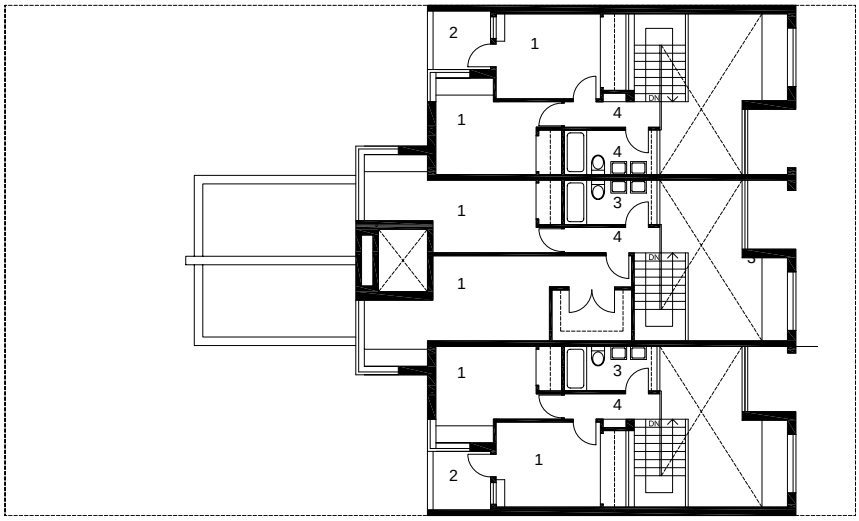
A/C. 3 Bedroom unit
105m² (1130sf)

B. 2 Bedroom unit
112m² (1206sf)

1. Bedroom
2. Kitchen
3. Living
4. Dining
5. Vestibule
6. Corridor

SCALE 1:150

BUILDING 1B

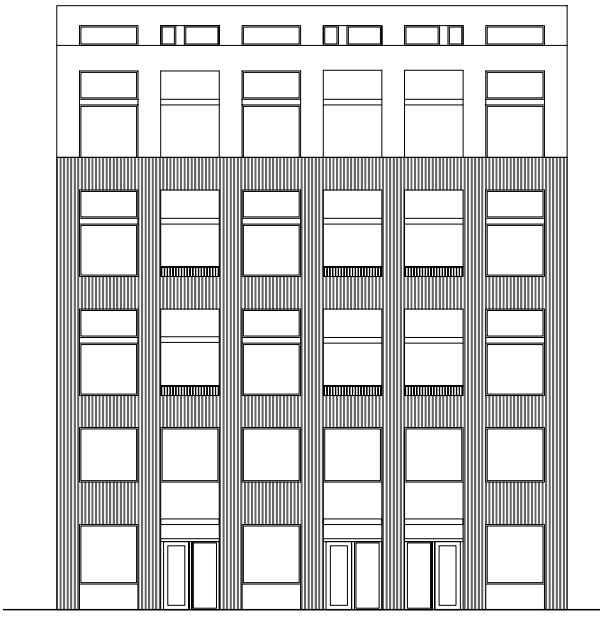


SEVENTH FLOOR

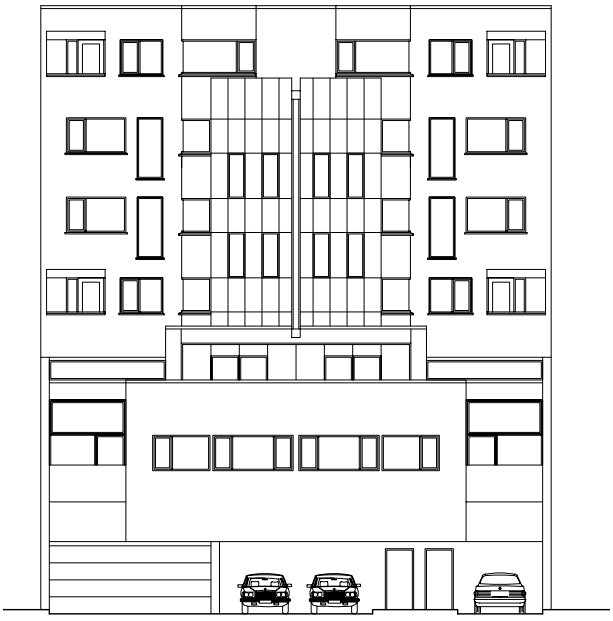
A/C. 3 Bedroom unit
(upper level)

B. 2 Bedroom unit
(upper level)

1. Bedroom
2. Balcony
3. Bathroom (clerestory lit)
4. Hall (clerestory lit)



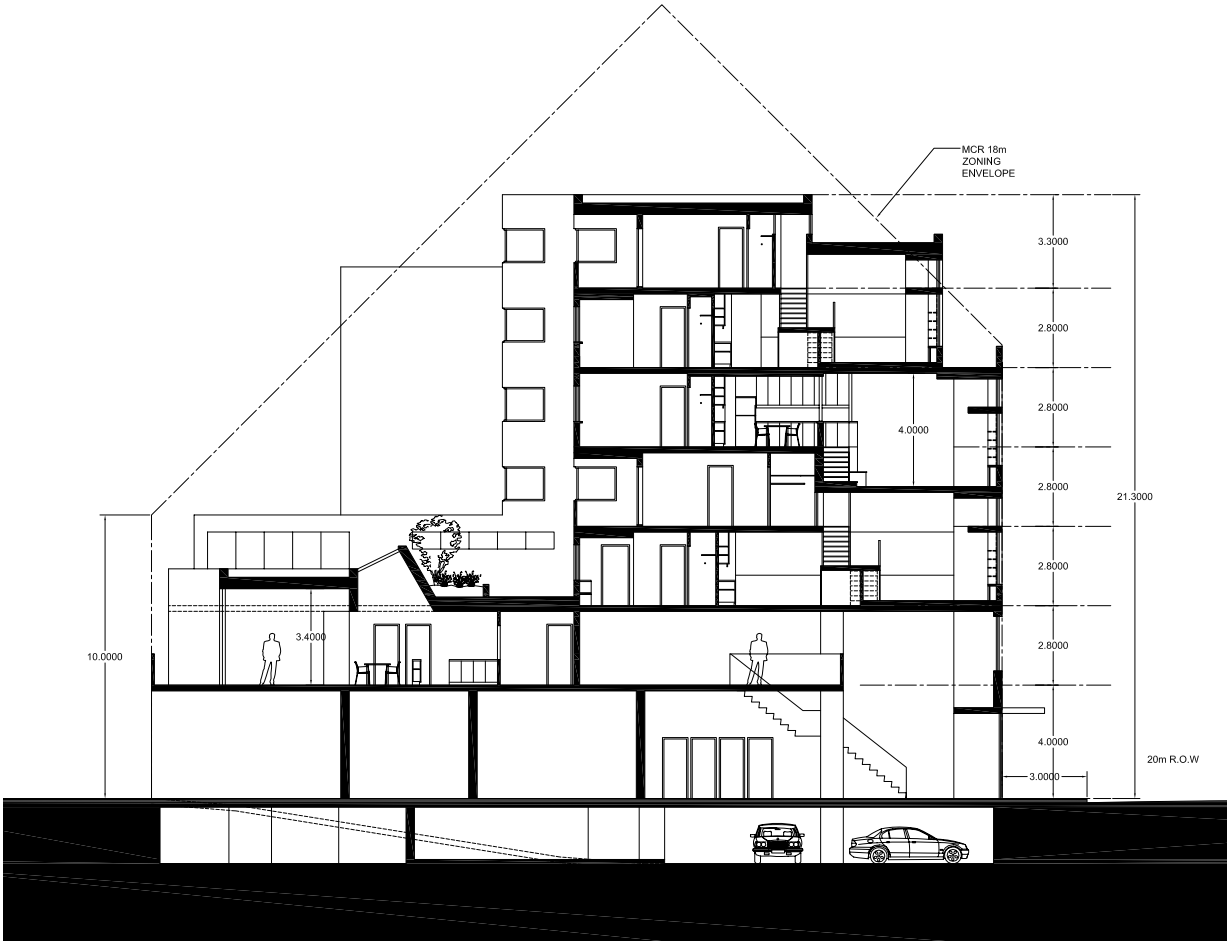
FRONT ELEVATION (MAIN STREET)



REAR ELEVATION (LANEWAY)

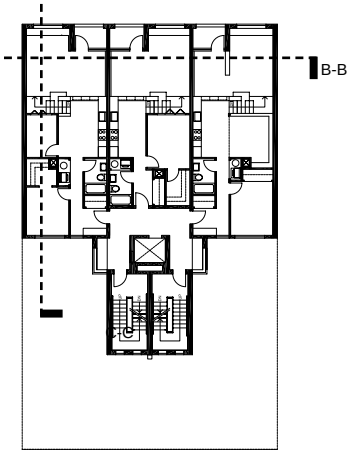
SCALE 1:150

BUILDING 1B

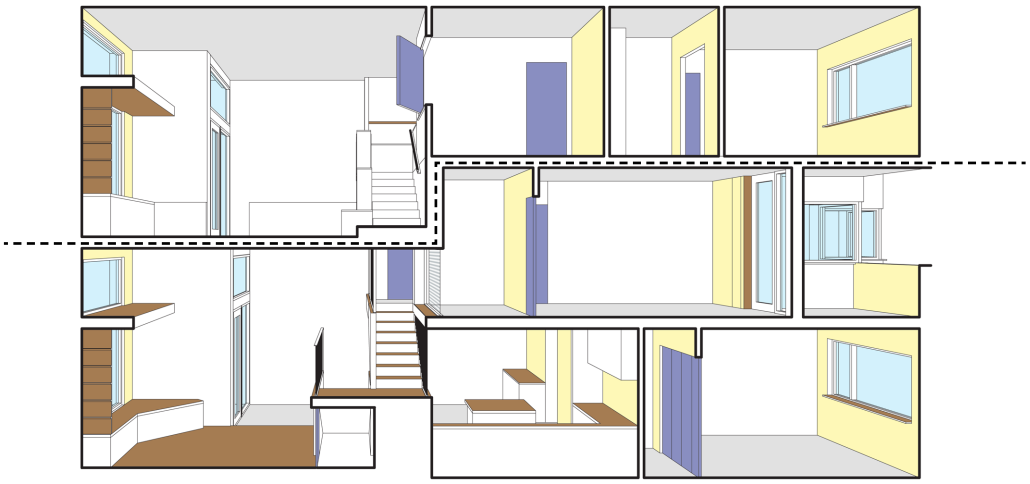


SECTION A-A SCALE 1:150

SECTION A-A SCALE 1:500

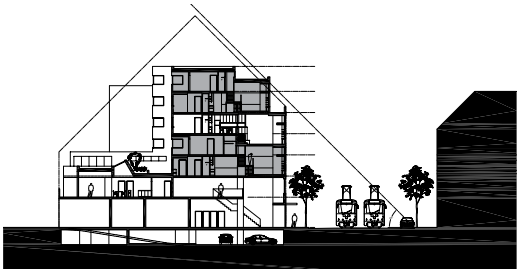


SECTION PERSPECTIVE B-B



SECTION PERSPECTIVE C-C

BUILDING 1B

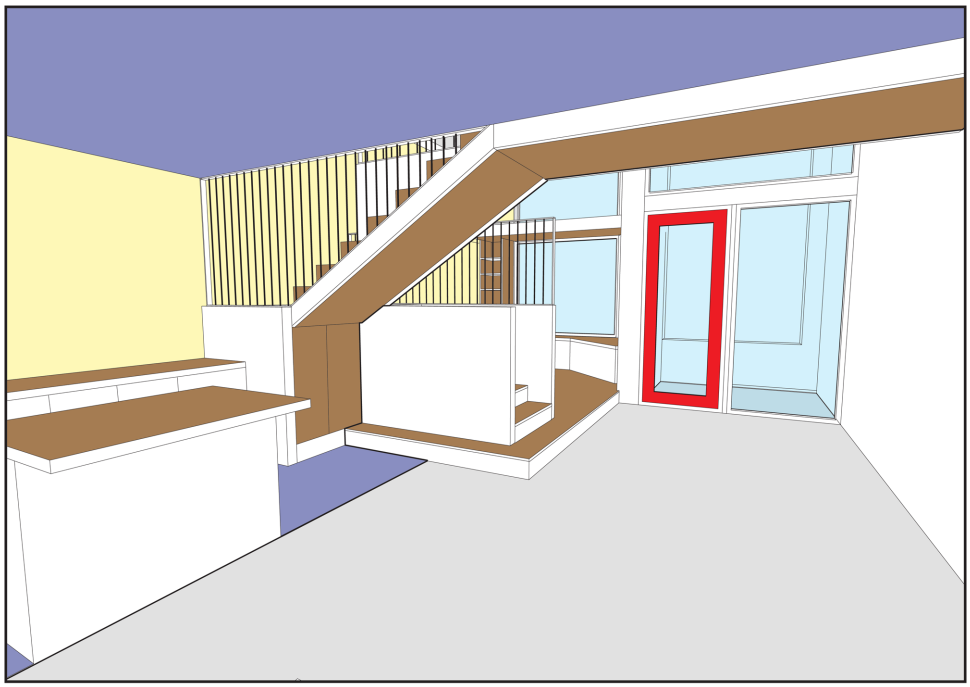


Floors 3-4 & 6-7
2 & 3 Bedroom units

1. Bedroom
2. Kitchen
3. Living
4. Dining
5. Vestibule
6. Closet
7. Bathroom
8. Storage
9. Den
10. Terrace

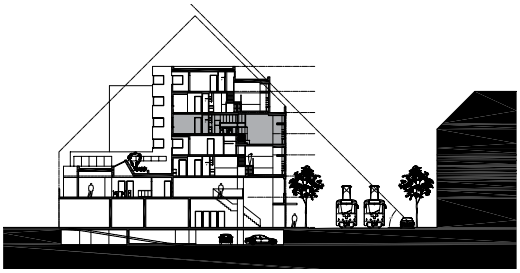
BUILDING 1B

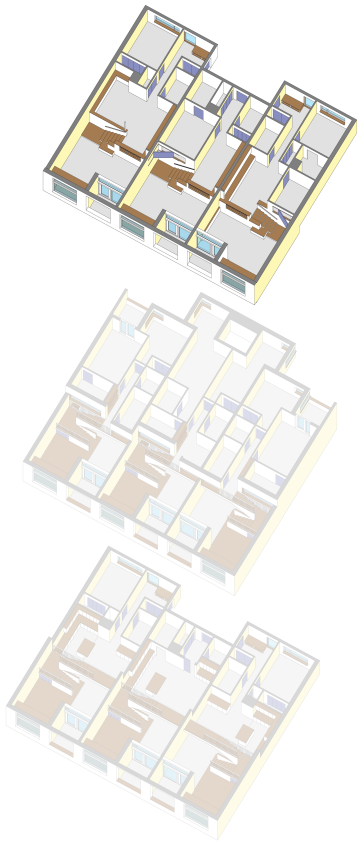
2-STOREY 2 & 3 BEDROOM INTERIOR



2-STOREY 2 & 3 BEDROOM INTERIOR

BUILDING 1B

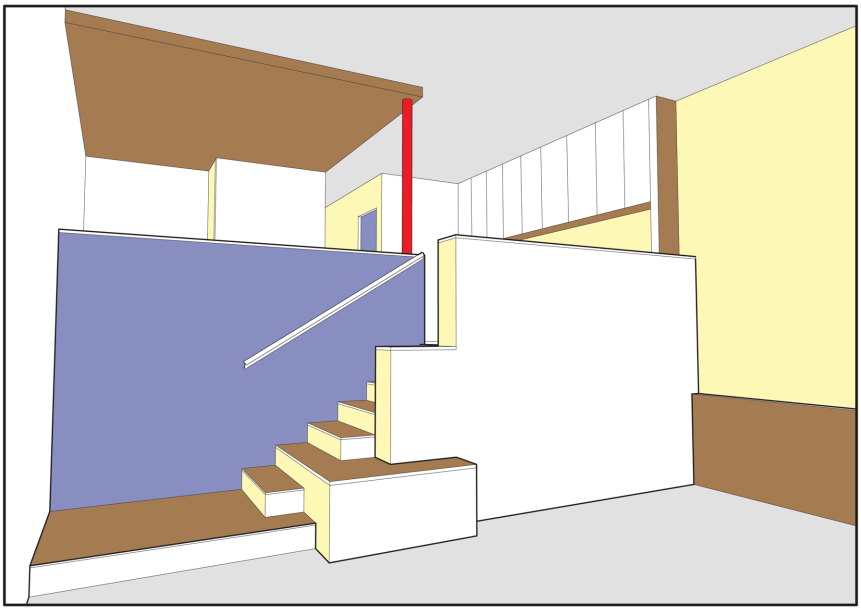




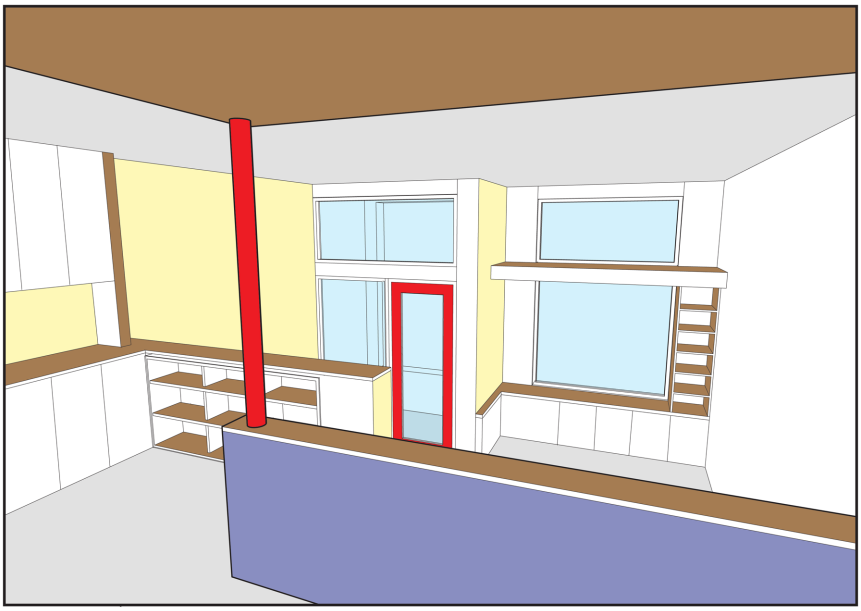
Floor 5
1 (+1) Bedroom & bachelor loft units

1. Bedroom
2. Kitchen
3. Living
4. Dining
5. Vestibule
6. Closet
7. Bathroom
8. Storage
9. Den
10. Terrace

BUILDING 1B

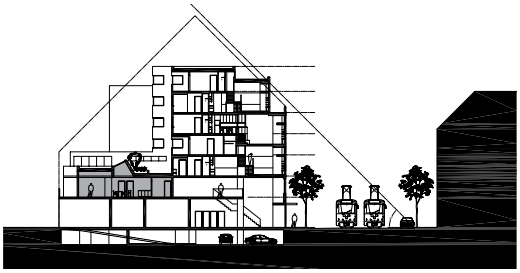


SPLIT LEVEL UNIT INTERIOR



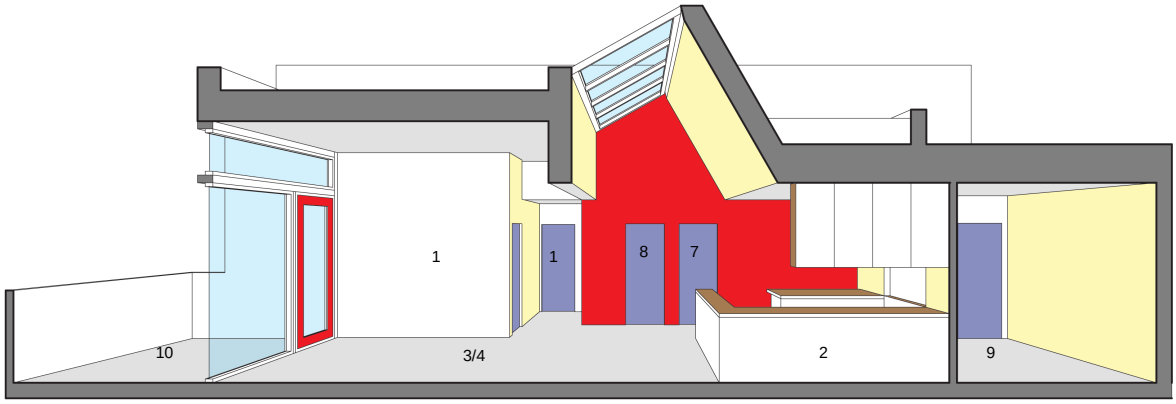
SPLIT LEVEL UNIT INTERIOR

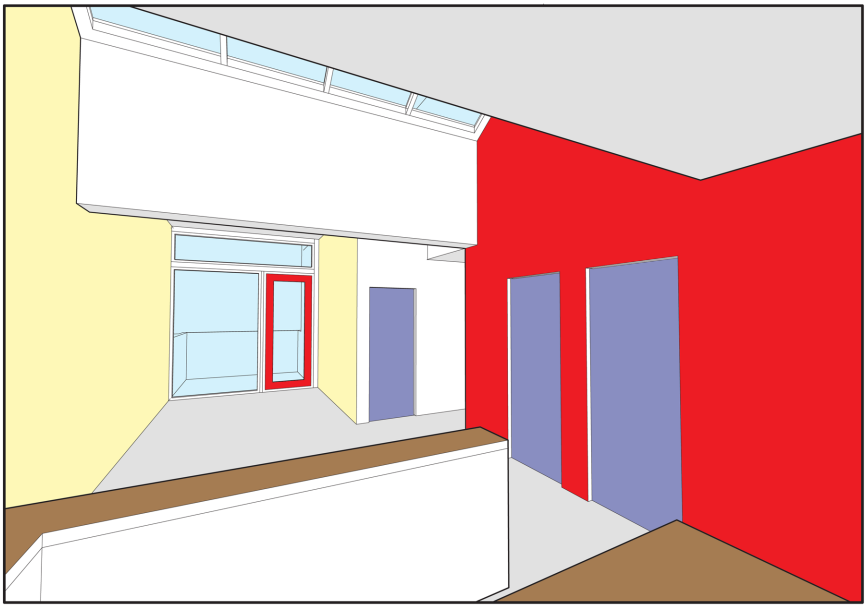
BUILDING 1B



1. Bedroom
2. Kitchen
3. Living
4. Dining
5. Vestibule
6. Closet
7. Bathroom
8. Storage
9. Den
10. Terrace

Floor 2
2 Bedroom rear units





BUILDING 1C

Lot size:	12m x 40m (39' x 131')
Gross Floor Area:	1843m^2 (19838 sf)
FSI:	3.8
Number of Units:	15
Unit Types:	1 (+1),& 3 Bed
Common Amenities	Roof Terrace
Commercial Space	x2, ground floor units
Type of Parking:	Underground shared or self contained mechanically stacked
Number of Parking Spaces:	10 if shared, 9 if stacked
Spaces required by MCR:	9
Number of storeys:	6
Block Position:	Mid-block

MAIN STREET ELEVATION (N.T.S.)

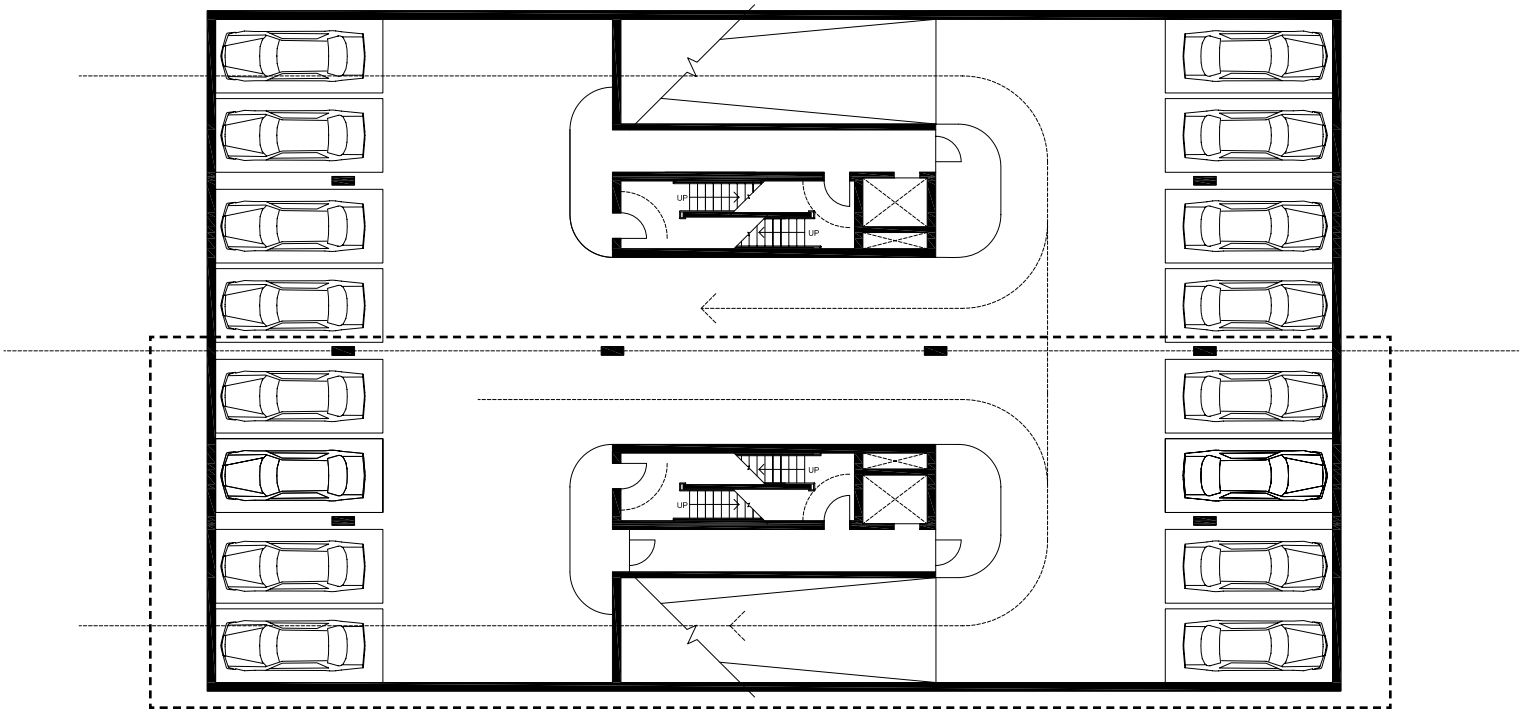
DESCRIPTION

-Similar units to building 1A
-Both exit stairs and public corridors are naturally lit.
-All units have two exposures.
-Split level units and double height units provide spatial variation and increase privacy within units.
-Ceiling heights in living areas of most are 4 metres.
-Roof level common outdoor terrace.
-Balconies occur on both front and rear of the building.
-11m light-courts

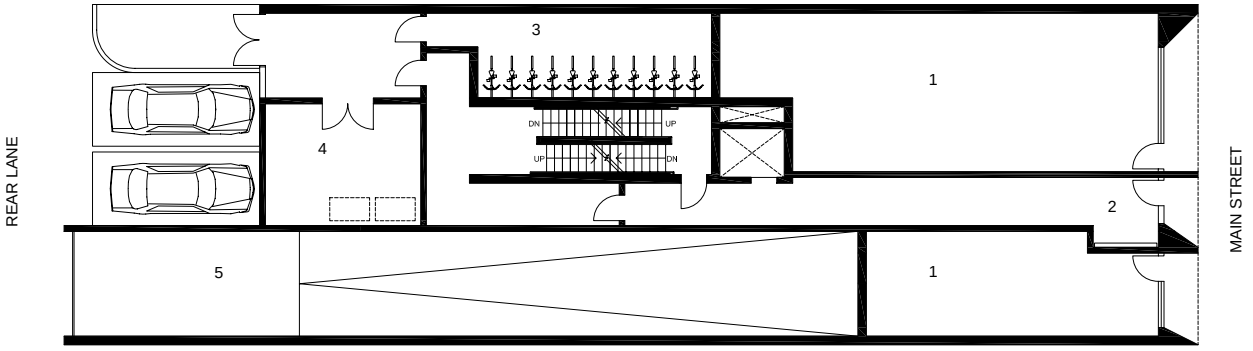
SITE PLAN

SCALE 1:2000

BUILDING 1C



PARKING LEVEL -SHARED PARKING OPTION (24 METRES WIDTH)
16 spaces

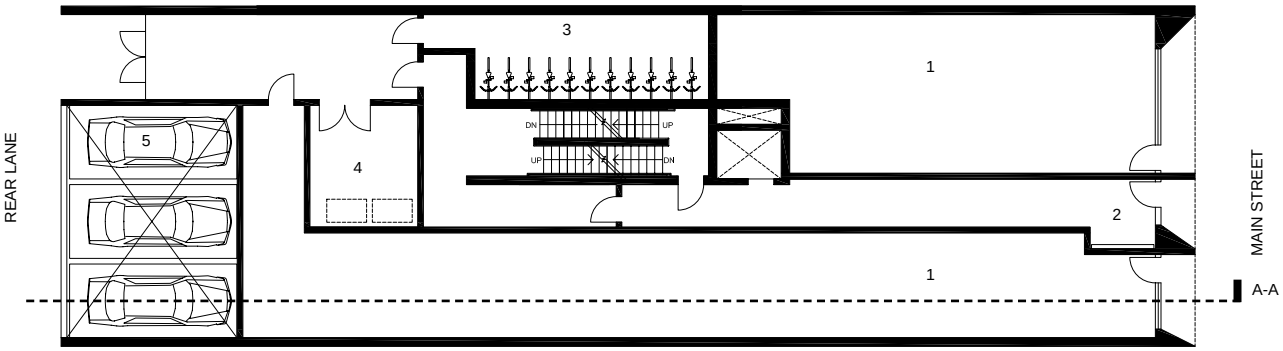


GROUND FLOOR - SHARED OPTION (24 METRES WIDTH)
2 additional spaces

1. Retail
2. Residential Entry
3. Bicycle Storage
4. Garbage room
5. Parking Ramp (one-way)

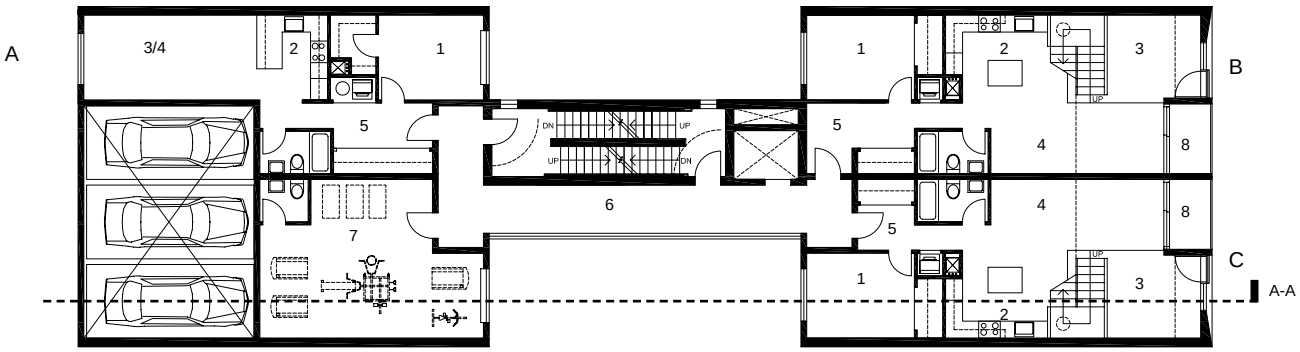
SCALE 1:150

BUILDING 1C



GROUND FLOOR - STACKED PARKING OPTION
9 SPACES

1. Retail
2. Residential Entry
3. Bicycle Storage
4. Garbage room
5. Mechanical parking stacker



SECOND FLOOR (STACKED PARKING OPTION)

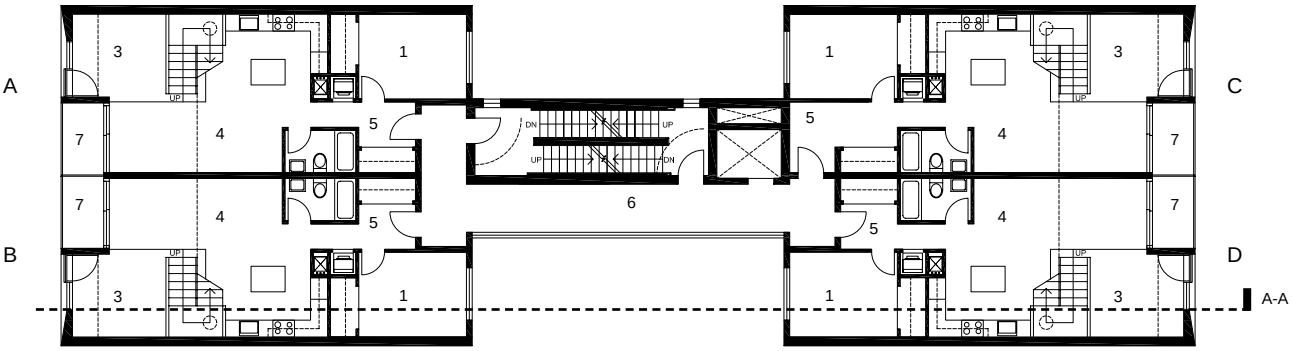
A. 1 Bedroom unit
60m^2 (645 sf)

B/C. 3 Bedroom unit
130m^2 (1400 sf)

1. Bedroom
2. Kitchen
3. Living
4. Dining
5. Vestibule
6. Corridor
7. Common room/gym
8. Balconies

SCALE 1:150

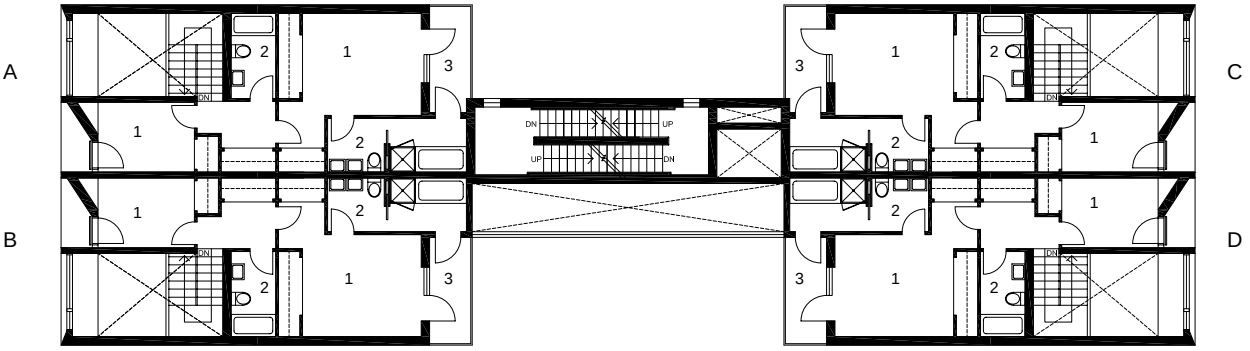
BUILDING 1C



SECOND FLOOR

A/B/C/D. 3 Bedroom units
130m² (1400 sf)

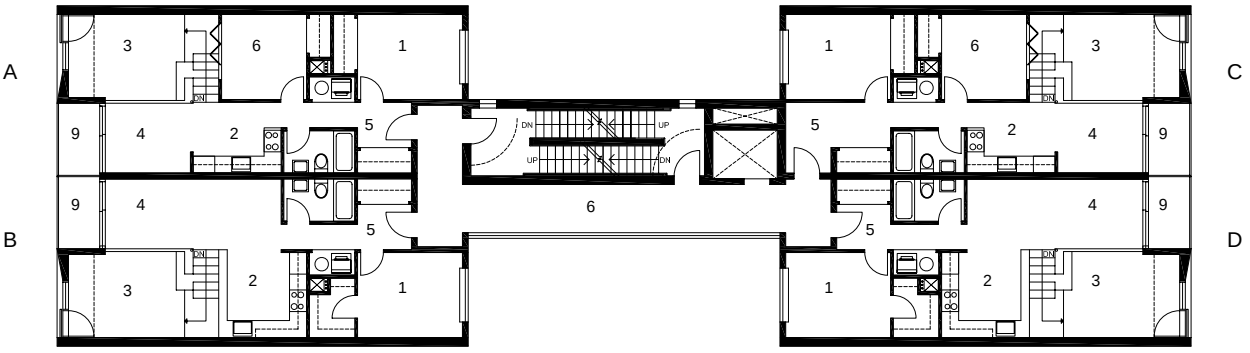
1. Bedroom
2. Kitchen
3. Living
4. Dining
5. Vestibule
6. Corridor
7. Balcony



THIRD FLOOR

A/B/C/D. 3 Bedroom units
(upper level)

1. Bedroom
2. Bathroom
3. Balcony



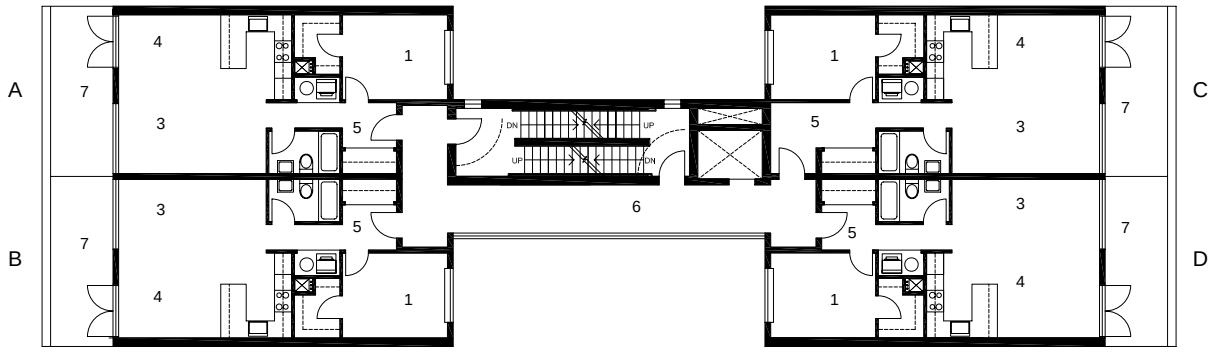
FOURTH FLOOR

A/B/C/D. 1 (+1) Bedroom units
76m² (818 sf)

1. Bedroom
2. Kitchen
3. Living
4. Dining
5. Vestibule
6. Extra room
7. Corridor
9. Balcony

SCALE 1:150

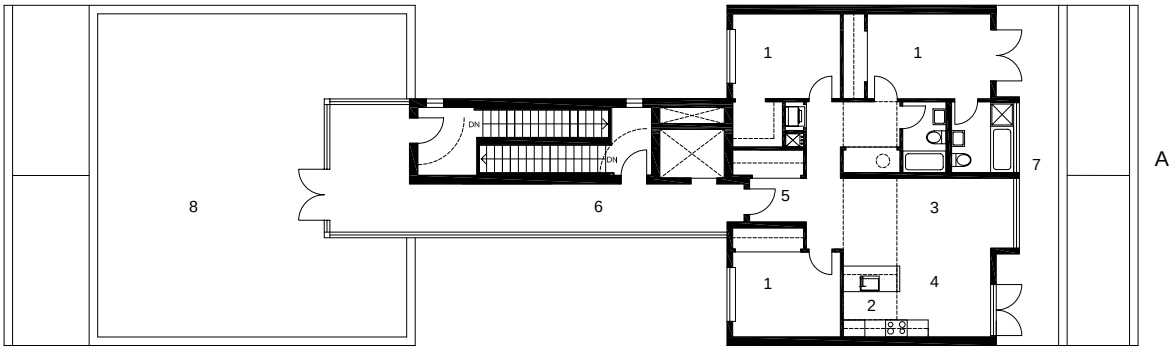
BUILDING 1C



FIFTH FLOOR

A/B/C/D. 1 Bedroom units
66m² (710 sf)

1. Bedroom
2. Kitchen
3. Living
4. Dining
5. Vestibule
6. Corridor
7. Balcony



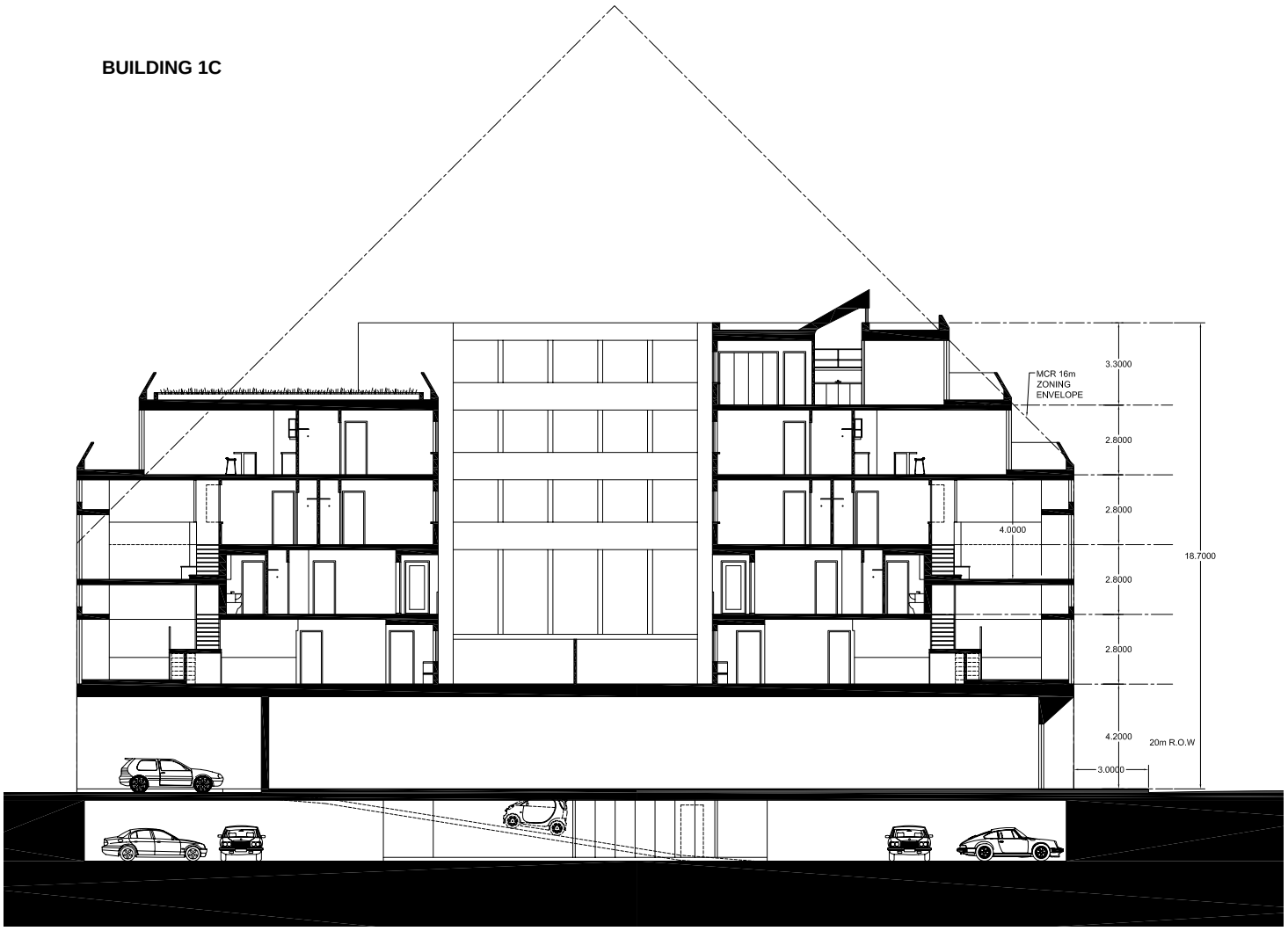
SIXTH FLOOR

A. 3 Bedroom penthouse unit
107m² (1152 sf)

1. Bedroom
2. Kitchen
3. Living
4. Dining
5. Vestibule
6. Corridor
7. Balcony
8. Common roof terrace

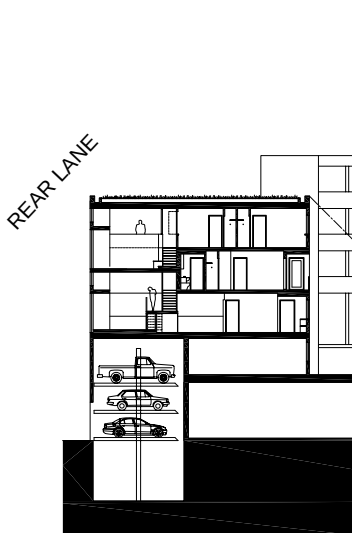
SCALE 1:150

BUILDING 1C

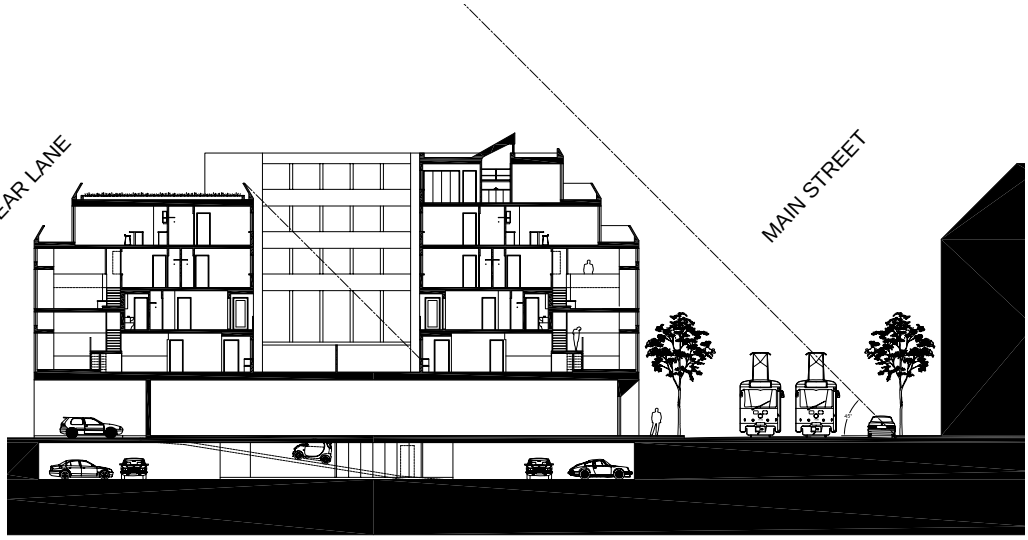


SECTION A-A

SCALE 1:150



SECTION A-A
(STACKED PARKING)

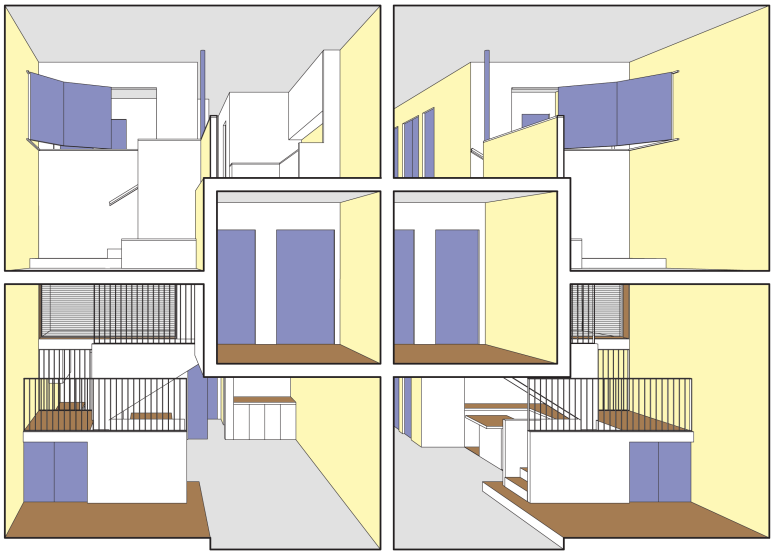


SECTION A-A
(UNDERGROUND PARKING)

SCALE 1:500

BUILDING 1C

*** FOR UNIT TYPES, SEE BUILDING 1A ***



BUILDING 2A

Lot size:	15m x 40m (50' x 130')
Gross Floor Area:	2286 m^2 (24606 sf)
FSI:	3.8
Number of Units:	14
Unit Types:	1(+1) Bed, 3 & 4 Bed
Common Amenities	Rooftop Terrace
Commercial Space	x2, single storey ground floor units
Type of Parking:	Underground shared or self contained
Number of Parking Spaces:	12.5 shared or 9 self contained
Spaces required by MCR:	9
Number of storeys:	6
Block Position:	Mid-block or corner

MAIN STREET ELEVATION (N.T.S)

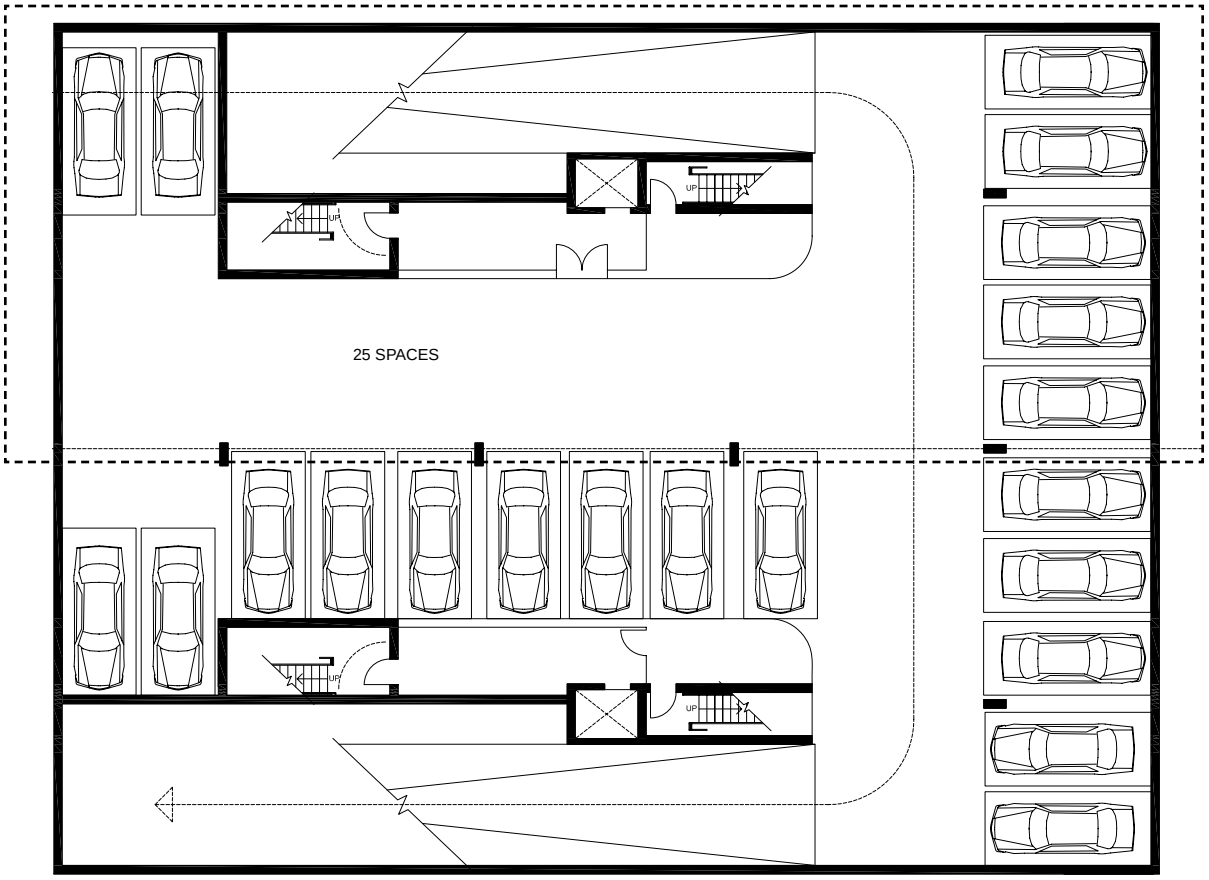
DESCRIPTION

-Front stair and common corridors highly glazed to allow light and view and encourage stair use.
-Central link allows views of interior of the block; if connected to similar buildings, central zone connects visually to the entire length of block.
-Sleeping rooms largely face quiet interior court, while living rooms face the main street or rear of building. All units cross ventilated with two exposures.
-Unit entry vestibules are lit by natural light and in larger units can be double height; none open directly into living spaces, offering privacy from entry area.
-The 1 bedroom units contain an extra room plus storage room, which can be combined with main living space or serve as additional sleeping area or workspace. These units have two distinct zones -front and back that can be kept separate from one another if need be, entry area and bathroom can serve the rear room without entering the living areas and kitchen.
-The larger rear units can be configured for 3 or 4 bedrooms. Double height spaceS are possible in each, with second level additional entries possible. The first level of each contains one of the bedrooms that remains potentially autonomous of the upper level bedrooms, allowing for greater privacy, while sharing common kitchen and living spaces.

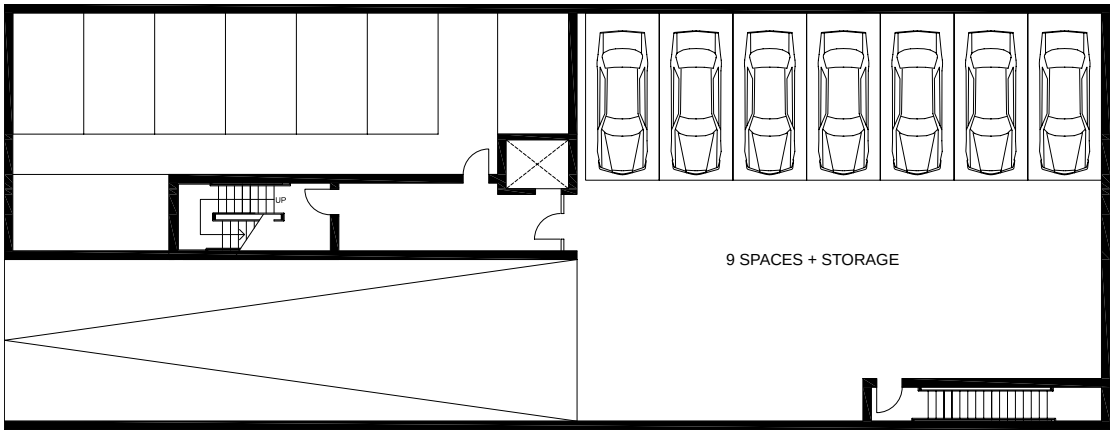
SITE PLAN

SCALE 1:2000

BUILDING 2A



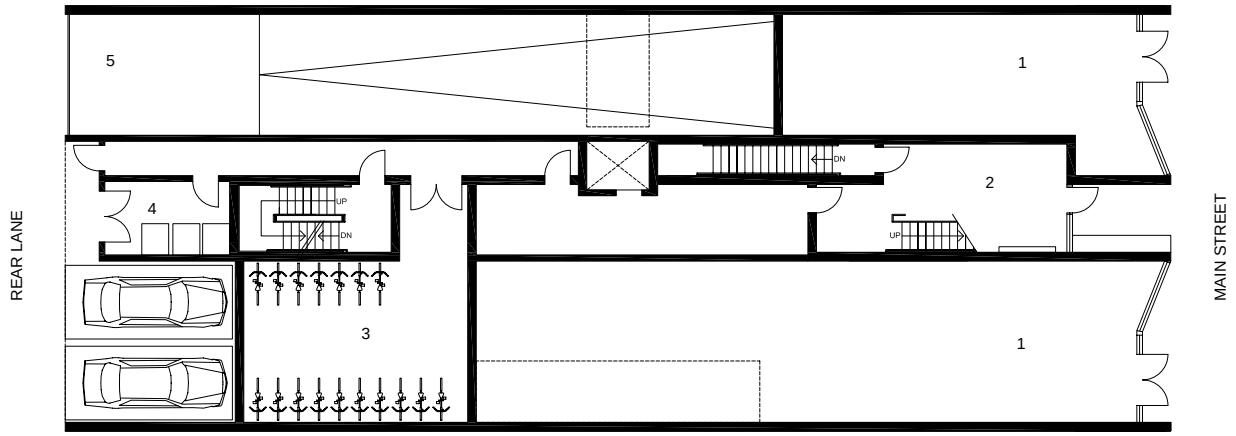
SHARED PARKING OPTION



SELF CONTAINED PARKING OPTION

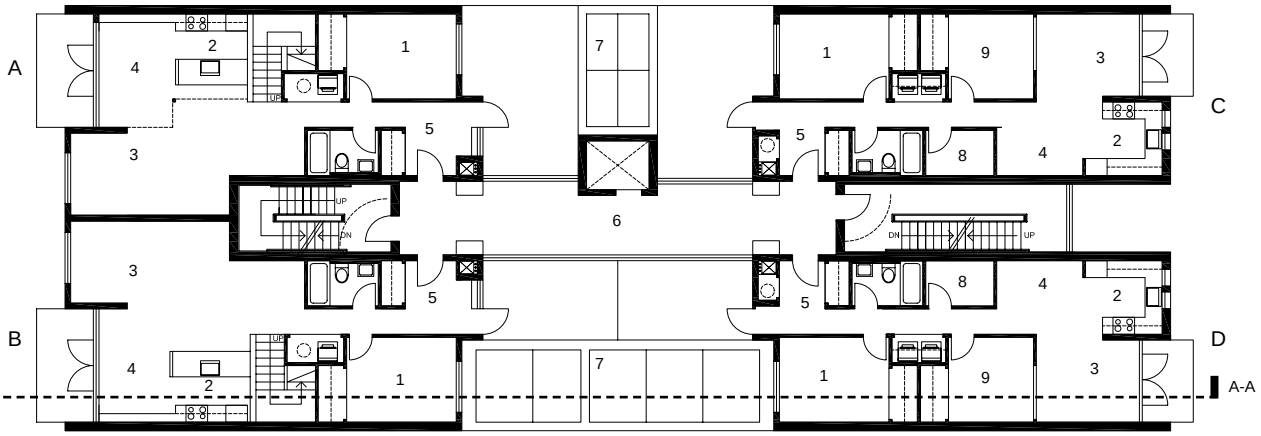
SCALE 1:150

BUILDING 2A



GROUND FLOOR

1. Retail
2. Residential Entry
3. Bicycle Storage
4. Garbage room
5. Parking Ramp



SECOND FLOOR

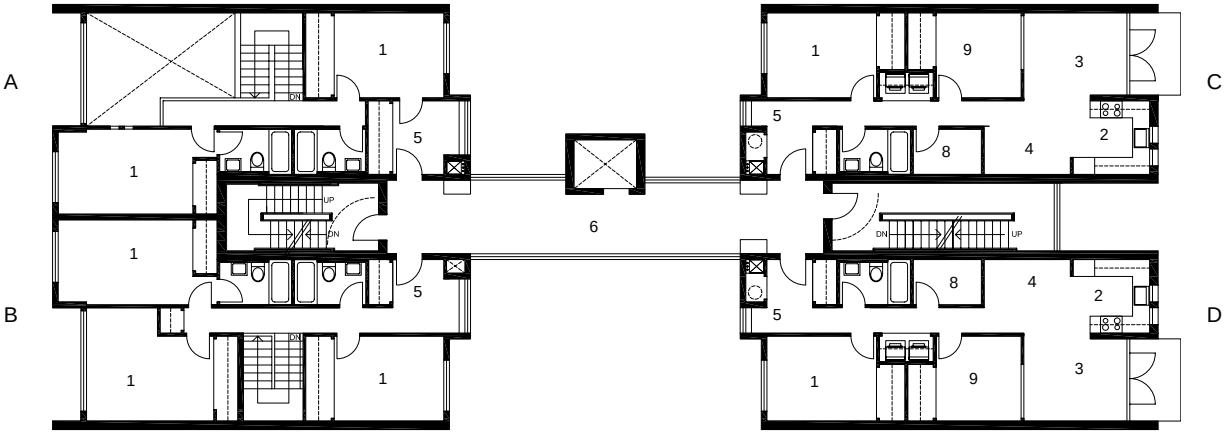
A/B. 3 Bedroom unit
145m² (1564sf)

C/D. 1 (+1) Bedroom unit
79m² (850sf)

1. Bedroom
2. Kitchen
3. Living
4. Dining
5. Vestibule
6. Corridor
7. Skylight
8. Storage
9. Spare room

SCALE 1:150

BUILDING 2A

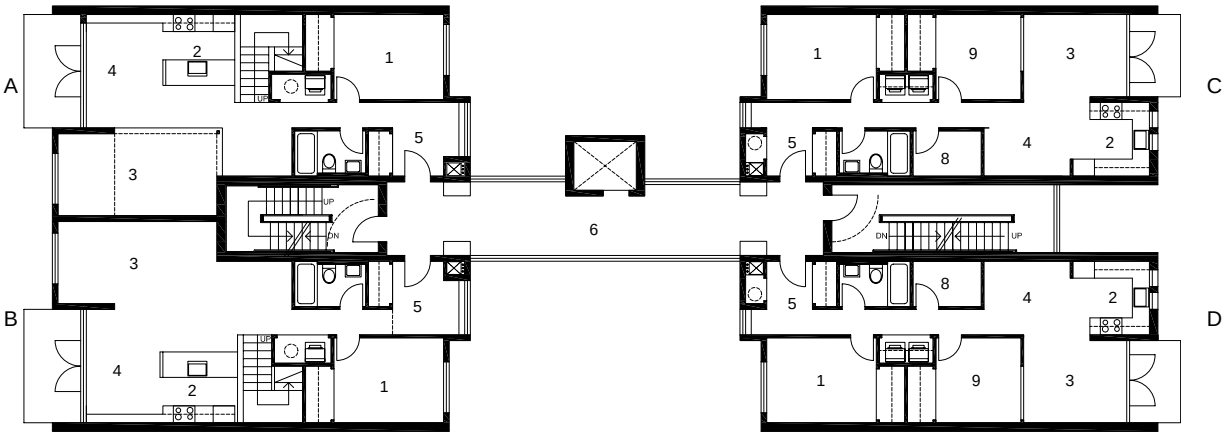


THIRD FLOOR

A/B. 3 or 4 Bedroom unit (upstairs)

C/D. 1 (+1) Bedroom unit
79m² (850sf)

1. Bedroom
2. Kitchen
3. Living
4. Dining
5. Vestibule
6. Corridor
7. Skylight
8. Storage
9. Spare room



FOURTH FLOOR

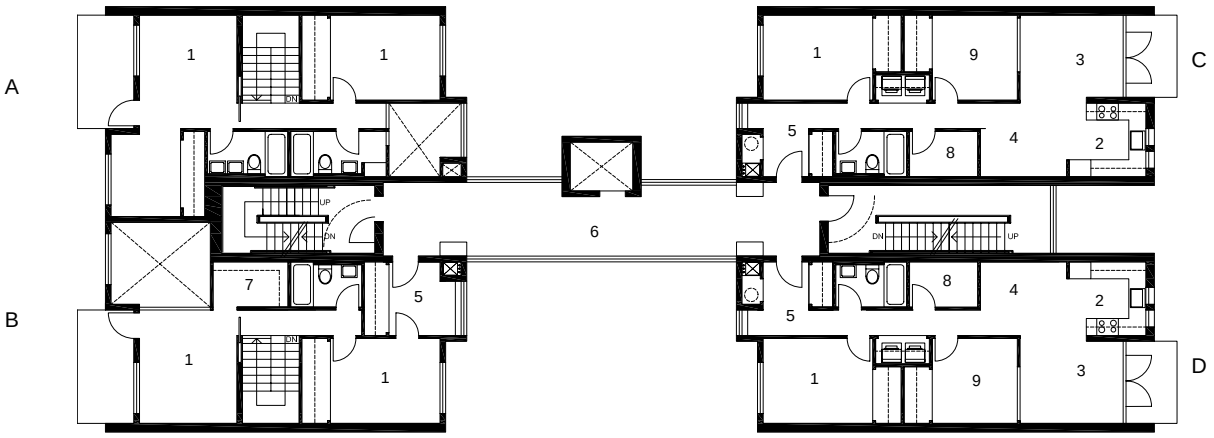
A/B. 3 Bedroom unit
145m² (1564f)

C/D. 1 (+1) Bedroom unit
79m² (850sf)

1. Bedroom
2. Kitchen
3. Living
4. Dining
5. Vestibule
6. Corridor
7. Skylight
8. Storage
9. Spare room

SCALE 1:150

BUILDING 2A

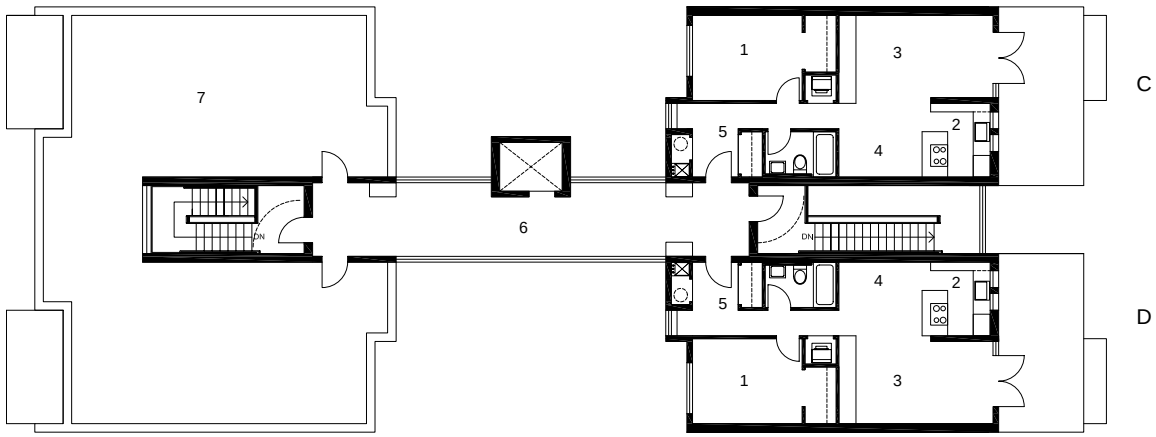


FIFTH FLOOR

A/B. 3 or 4 Bedroom unit (upstairs)

C/D. 1 (+1) Bedroom unit
79m² (850sf)

1. Bedroom
2. Kitchen
3. Living
4. Dining
5. Vestibule
6. Corridor
7. Closet
8. Storage
9. Spare room



SIXTH FLOOR

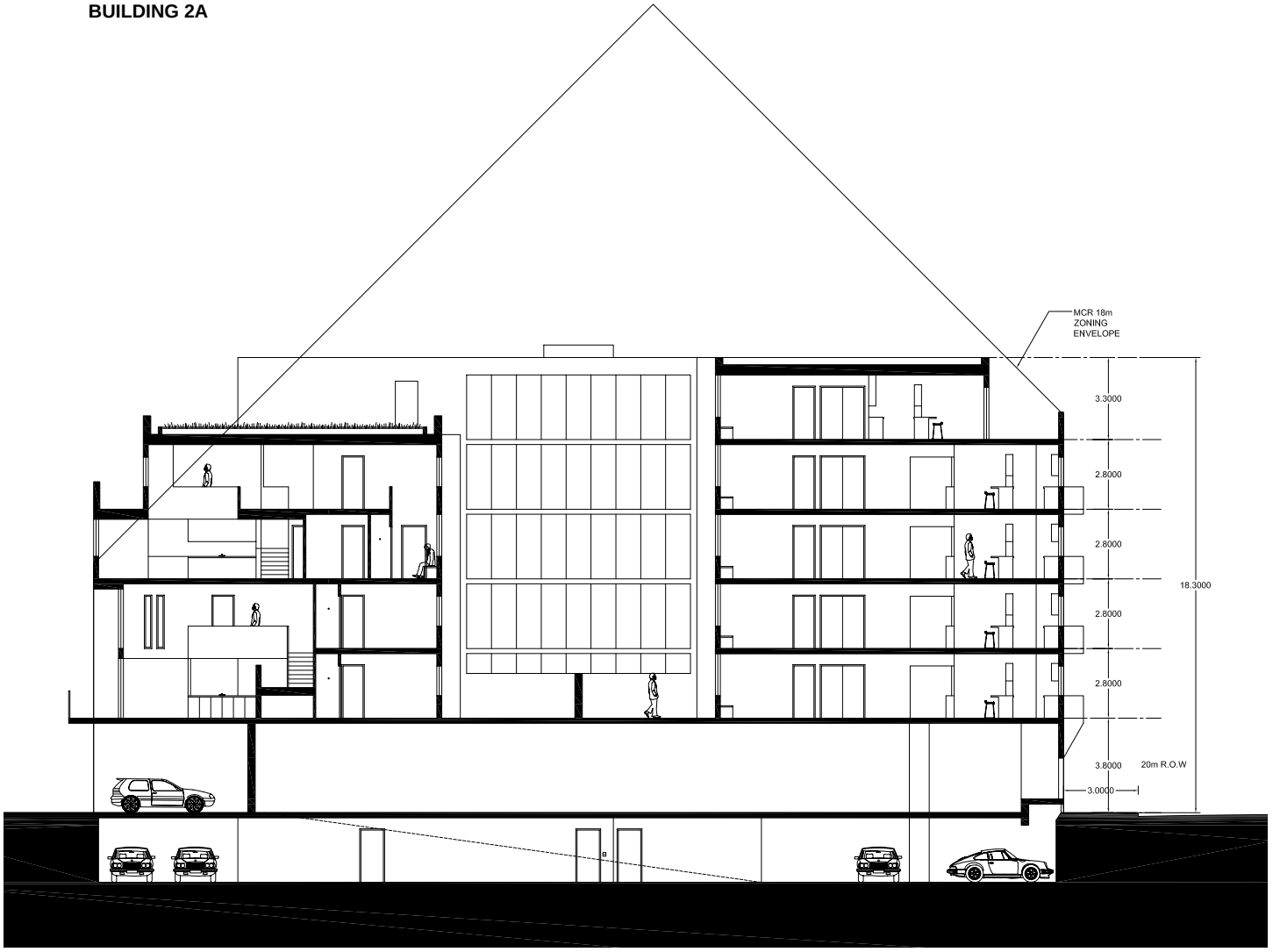
A/B. 3 Bedroom unit
145m² (1564f)

C/D. 1 Bedroom unit
64m² (690sf)

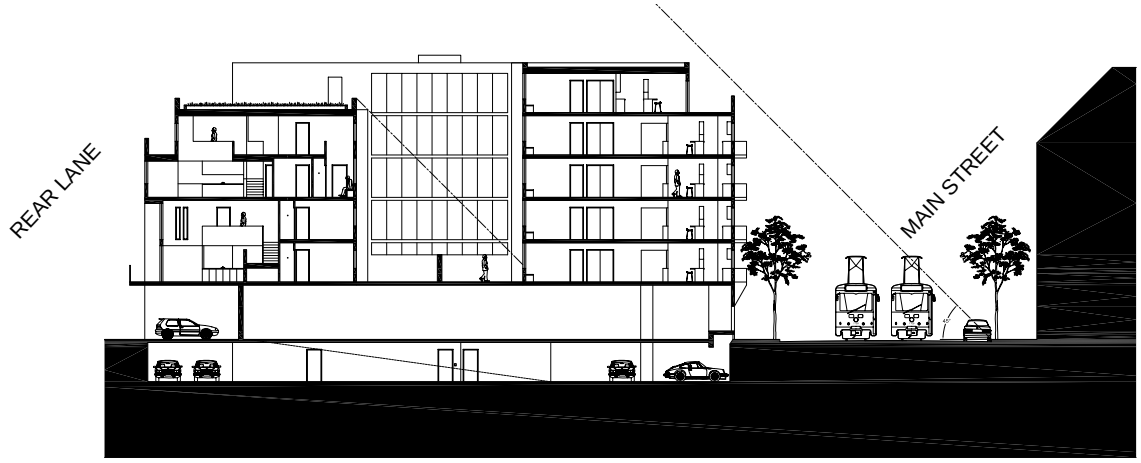
1. Bedroom
2. Kitchen
3. Living
4. Dining
5. Vestibule
6. Corridor
7. Roof terrace
8. Storage

SCALE 1:150

BUILDING 2A

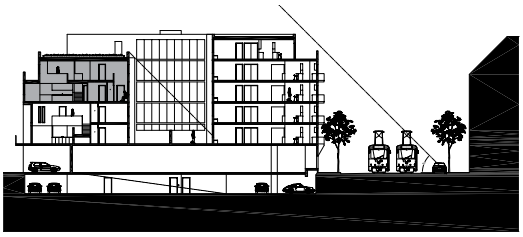


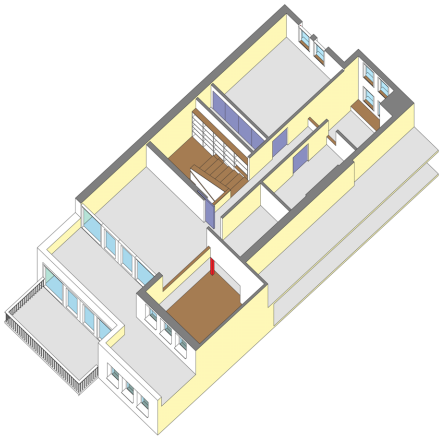
SECTION A-A SCALE 1:150



SECTION A-A SCALE 1:500

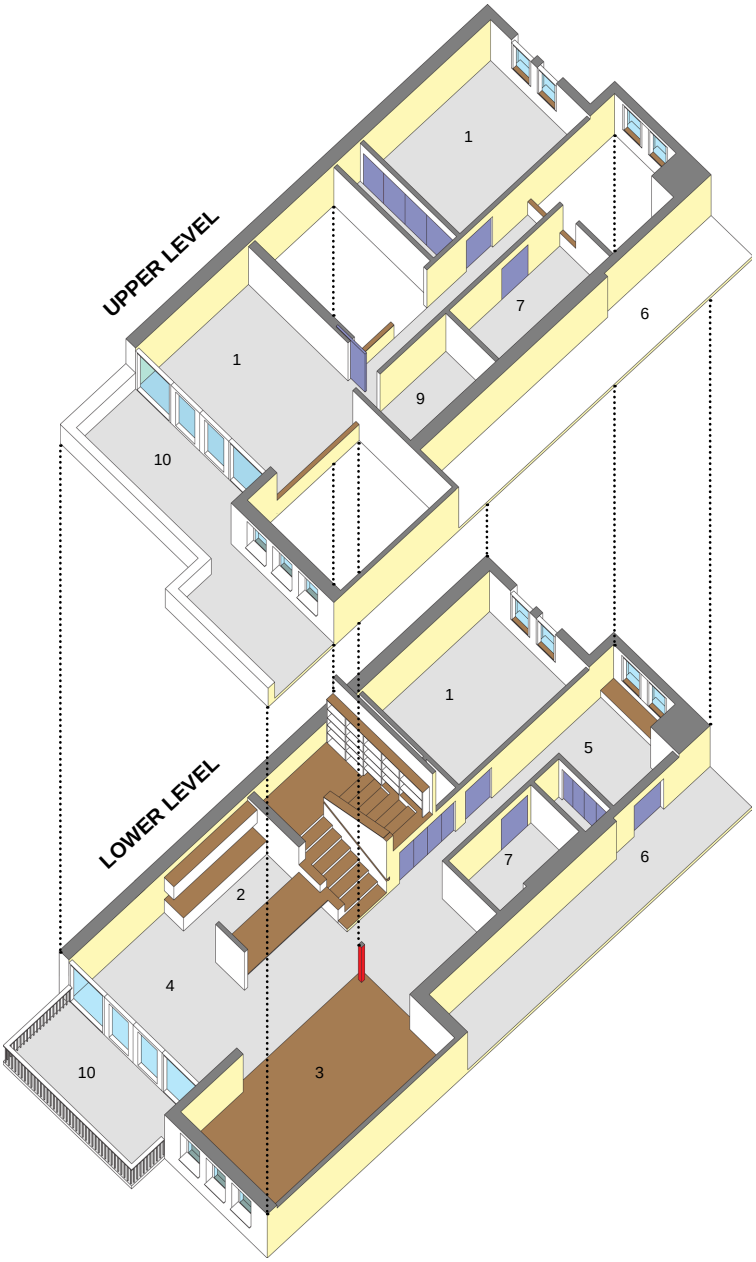
BUILDING 2A

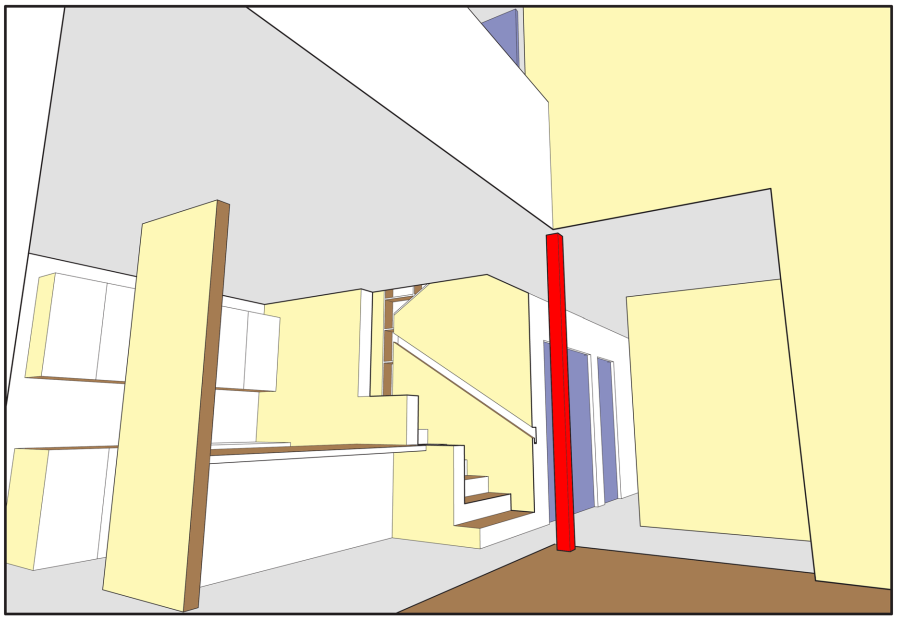




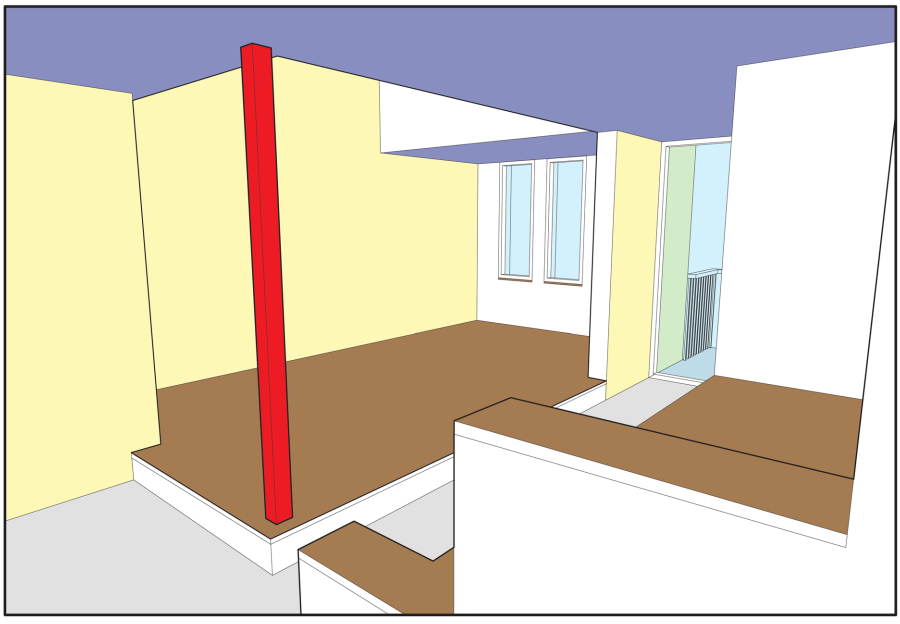
3 or 4 Bedroom units

1. Bedroom
2. Kitchen
3. Living (double height)
4. Dining
5. Vestibule (double height)
6. Corridor
7. Bathroom
8. Storage
9. Closet
10. Terrace



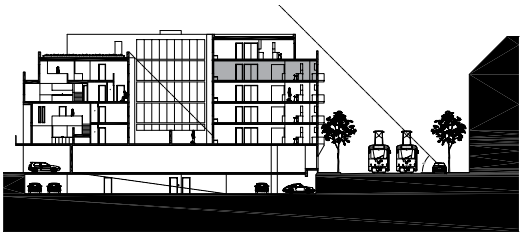


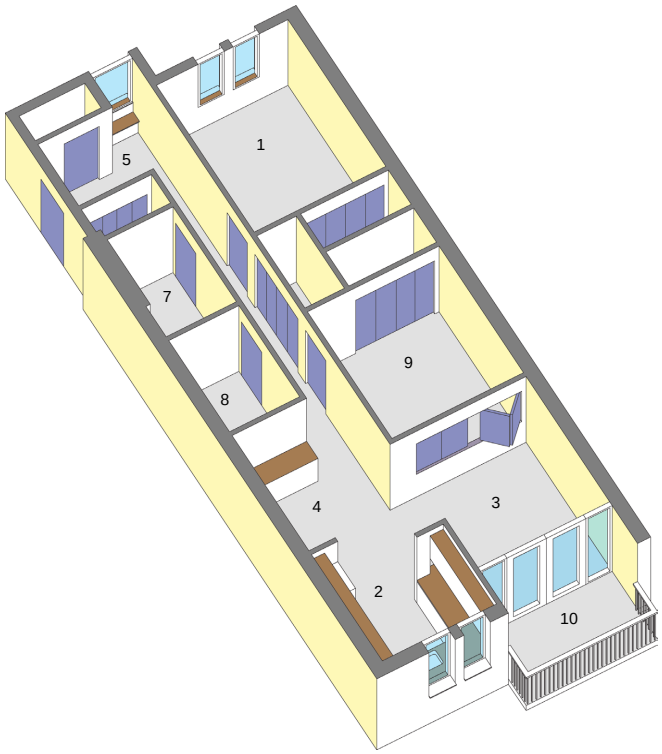
INTERIOR VIEW - LIVING AREA TO KITCHEN



INTERIOR VIEW - STAIR TO LIVING AREA

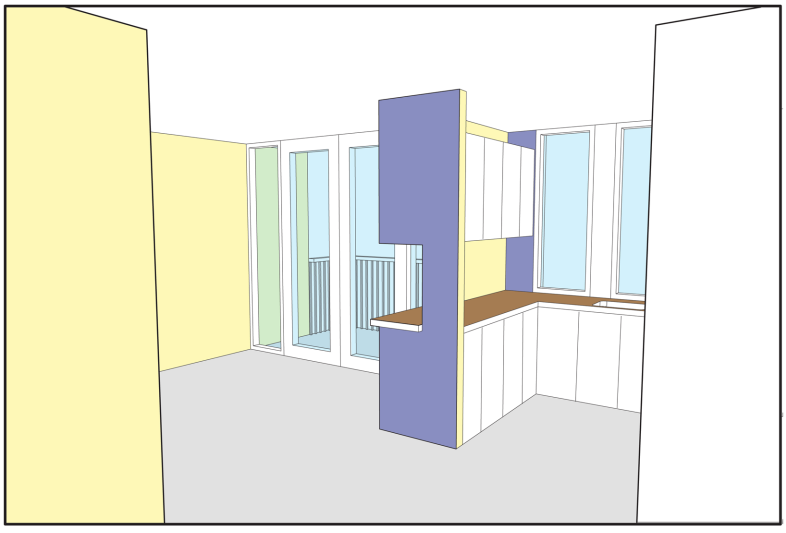
BUILDING 2A





1 (+1) Bedroom

1. Bedroom
2. Kitchen
3. Living
4. Dining
5. Vestibule
6. Corridor
7. Bathroom
8. Storage
9. Spare room
10. Terrace



BUILDING 2A (30m lot depth option)

Lot size:	15m x 30m (50' x 98')
Gross Floor Area:	1580 m^2 (17007 sf)
FSI:	3.5
Number of Units:	10
Unit Types:	1 & 3(+1) Bed
Common Amenities	Rooftop Terrace
Commercial Space	x2, single storey ground floor units
Type of Parking:	Underground self contained
Number of Parking Spaces:	7 (6 underground, 1 surface)
Spaces required by MCR:	7
Number of storeys:	5
Block Position:	Mid-block

MAIN STREET ELEVATION (N.T.S)

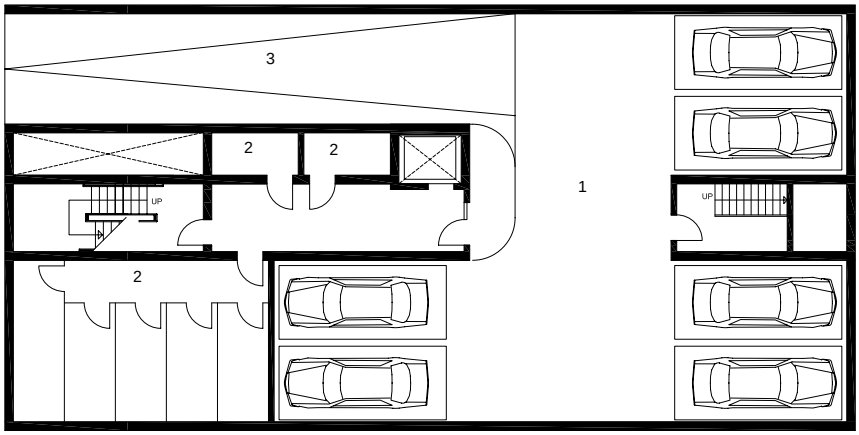
DESCRIPTION

-Rear stair and common corridors glazed to allow light and view and encourage stair use.
-Central link allows views of interior of the block; if connected to similar buildings, central zone connects visually to the entire length of block.
-All units cross ventilated with two exposures.
-2-storey units allow second entry and semi-autonomous workspace on upper level.
-Unit entries day-lit.
-7m interior court, enabled by only kitchens facing one another.

HYPOTHETICAL SITE PLAN

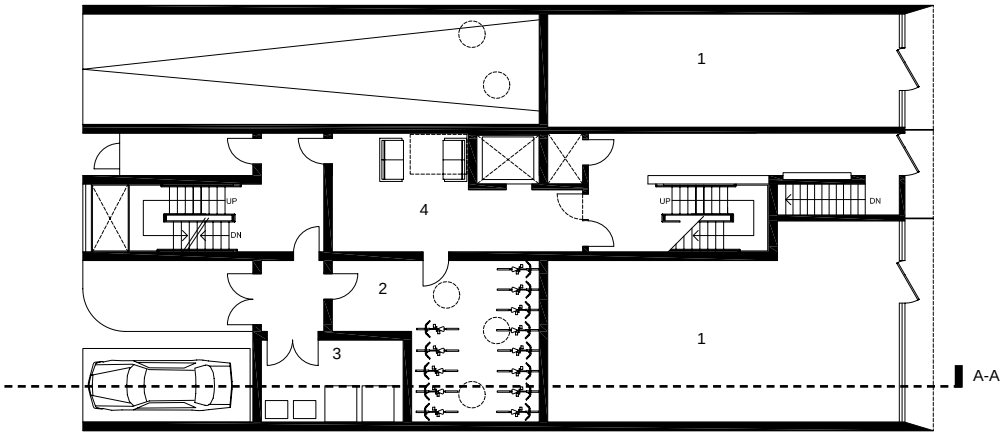
SCALE 1:2000

BUILDING 2B



BASEMENT LEVEL

1. Parking
2. Storage
3. 1-way ramp



GROUND FLOOR

1. Retail
2. Bicycle storage
3. Garbage room
4. Lobby

SCALE 1:150

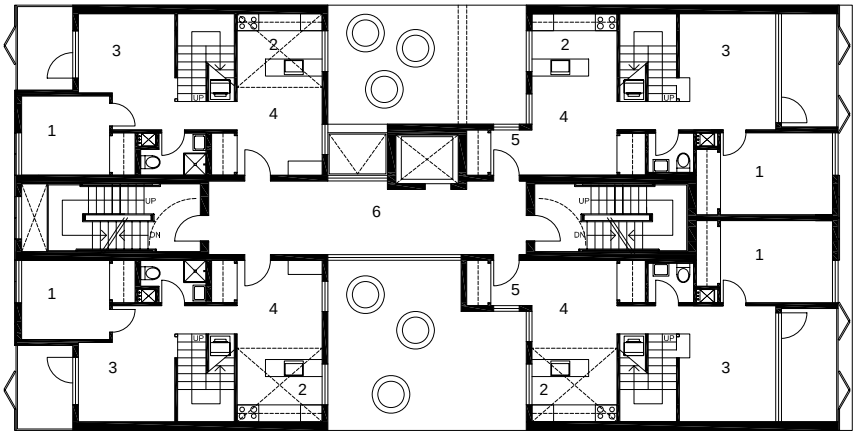
BUILDING 2B

A

B

C

D



SECOND FLOOR

A/B. 3 (+1) Bedroom unit
102m² (1100sf)

C/D. 3 (+1) Bedroom unit
116m² (1250sf)

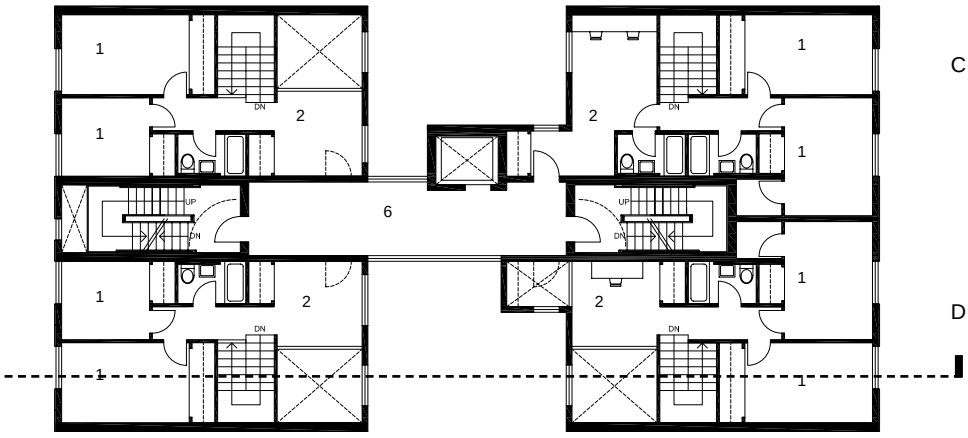
1. Bedroom
2. Kitchen
3. Living
4. Dining
5. Vestibule
6. Corridor

A

B

C

D



THIRD FLOOR

A/B. 3 (+1) Bedroom unit
(upper level)

C/D. 3 (+1) Bedroom unit
(upper level)

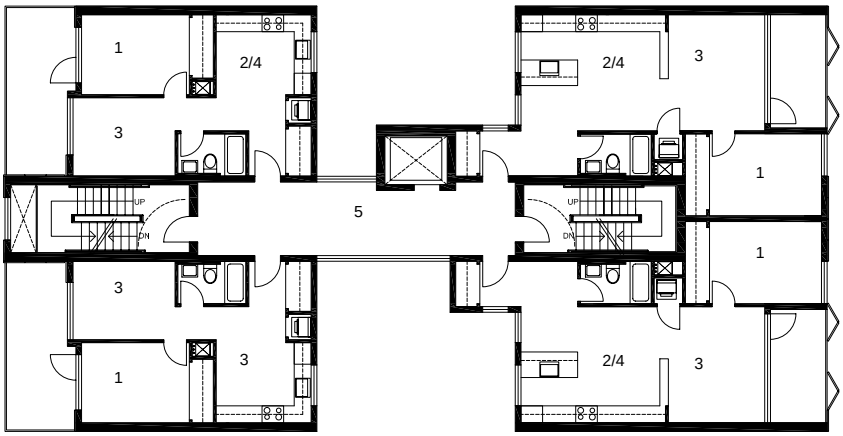
1. Bedroom
2. Extra room
(workspace)
3. Corridor

SCALE 1:150

BUILDING 2B

A

B



C

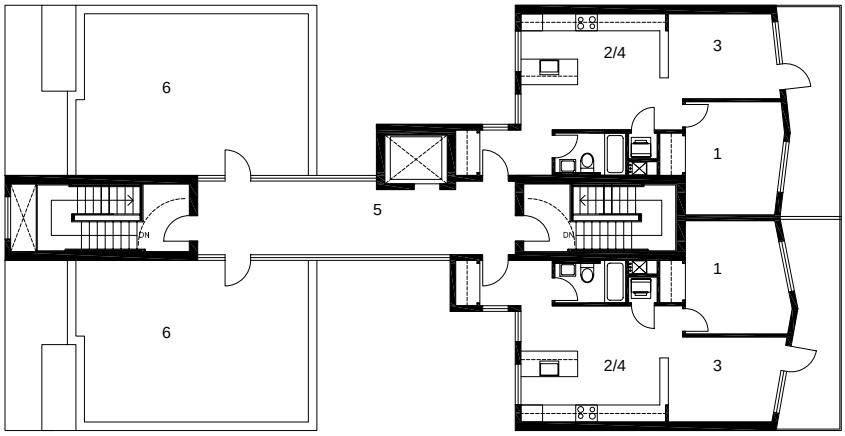
D

FOURTH FLOOR

A/B. 1 Bedroom unit
48m² (517sf)

C/D. 3 (+1) Bedroom unit
64m² (689sf)

1. Bedroom
2. Kitchen
3. Living
4. Dining
5. Corridor



A

B

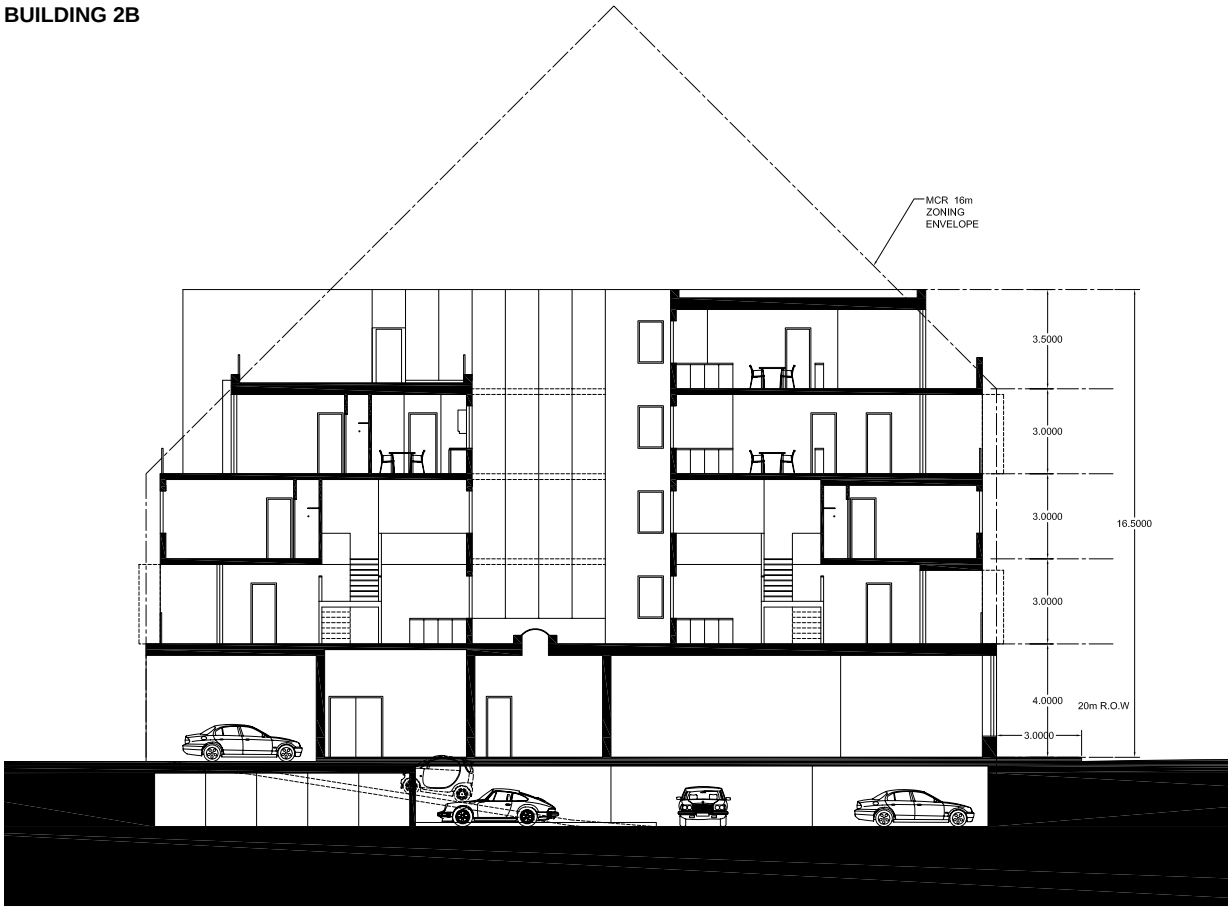
FIFTH FLOOR

A/B. 1 Bedroom unit
62m² (667sf)

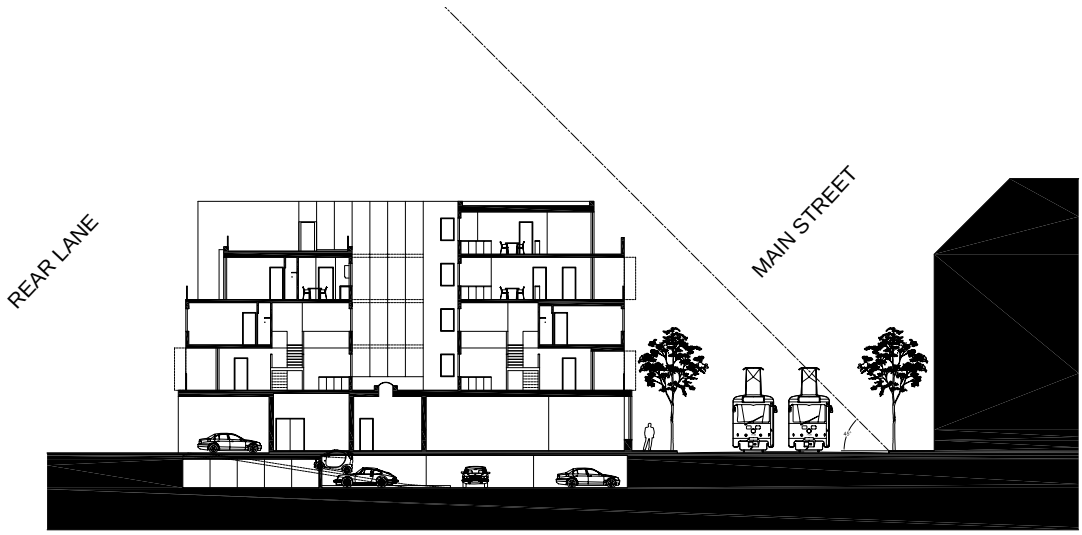
1. Bedroom
2. Kitchen
3. Living
4. Dining
5. Corridor
6. Roof terrace

SCALE 1:150

BUILDING 2B



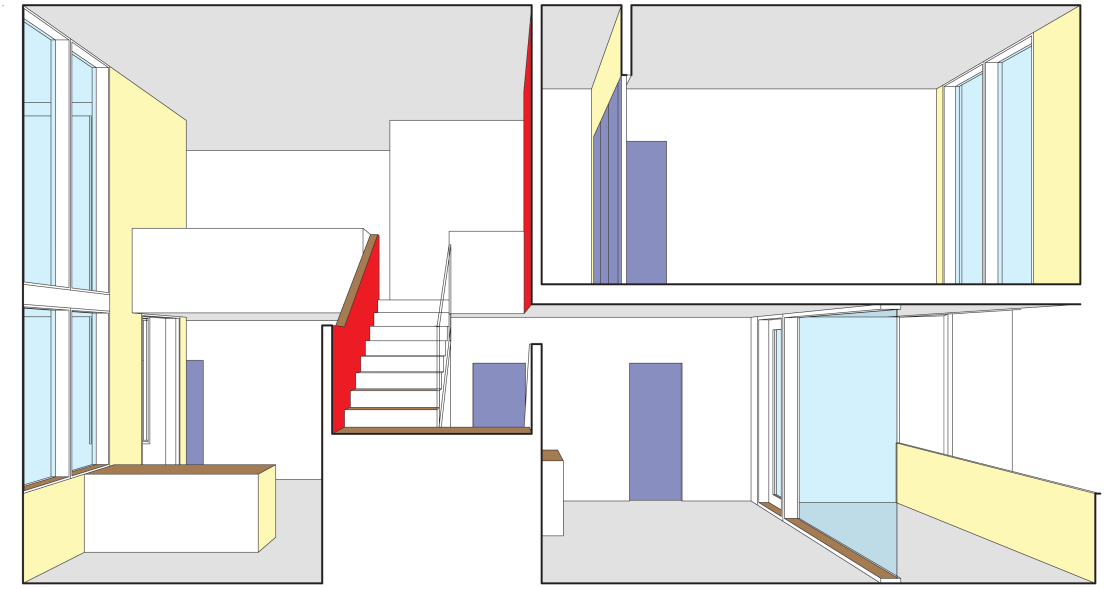
SECTION A-A SCALE: 1:150



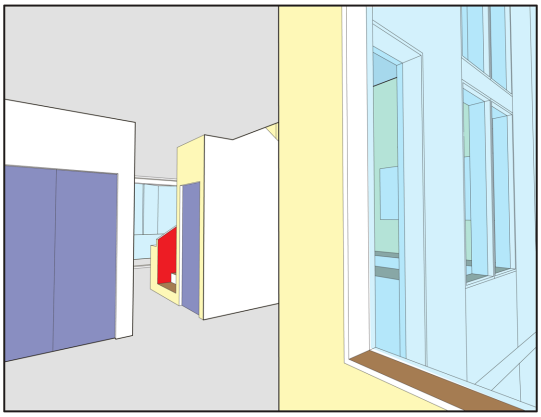
SECTION A-A SCALE: 1:500

BUILDING 2B

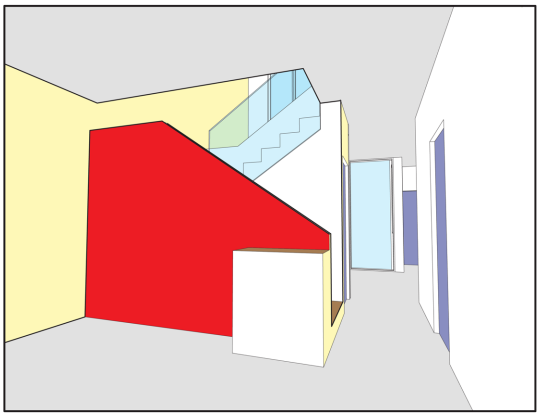
3 BEDROOM UNITS



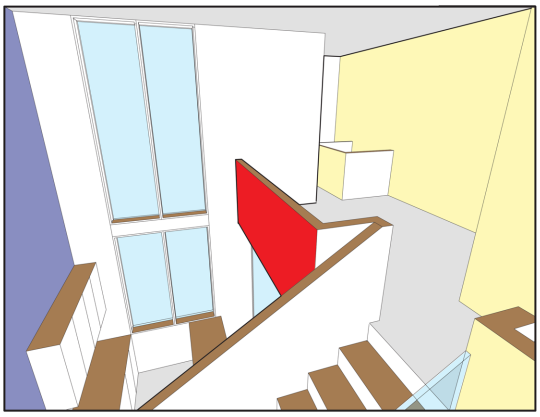
SECTION PERSPECTIVE A-A



VIEW FROM ENTRY

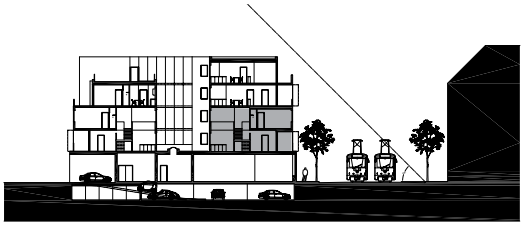


LIVING ROOM TOWARDS KITCHEN



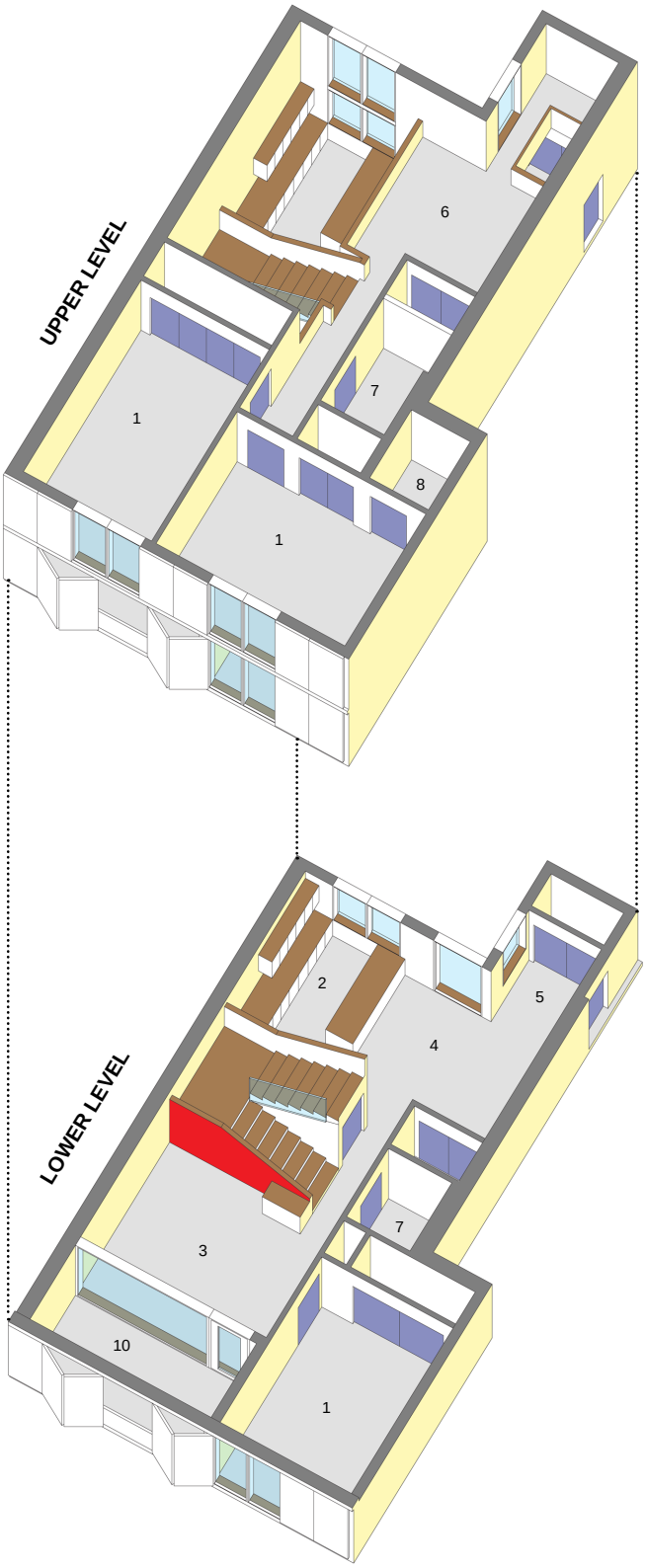
UPSTAIRS OVER KITCHEN

BUILDING 2B



3 Bedroom units

1. Bedroom
2. Kitchen (double height)
3. Living
4. Dining
5. Vestibule (double height)
6. Work area/family room
7. Bathroom
8. Storage
9. Closet
10. Terrace



BUILDING 3

Lot size:	18m x 40m (59' x 130')
Gross Floor Area:	1941 m^2 (20893 sf)
FSI:	2.7
Number of Units:	10
Unit Types:	2 & 3 Bedrooms
Common Amenities	Rooftop Terrace
Commercial Space	x2, single storey ground floor units
Type of Parking:	Stacked parking
Number of Parking Spaces:	12
Spaces required by MCR:	9
Number of storeys:	5 (+1 on corner)
Block Position:	Corner

MAIN STREET ELEVATION (N.T.S)

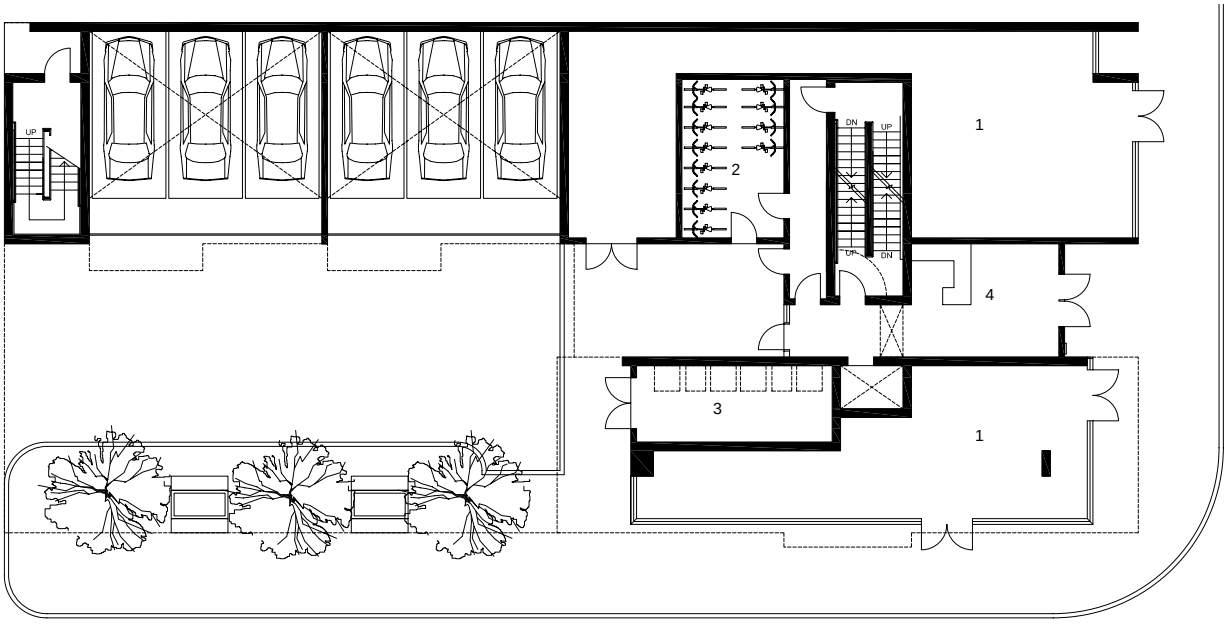
DESCRIPTION

-Designed for the corner of a block, can be used mid block with some modification.
-Circulation configuration allows for much higher possible height.
-Large common and private rooftop terraces.
-Massing emphasises street corner.
-One and two storey units offer a variety of unit orientations and spatial situations.

SITE PLAN

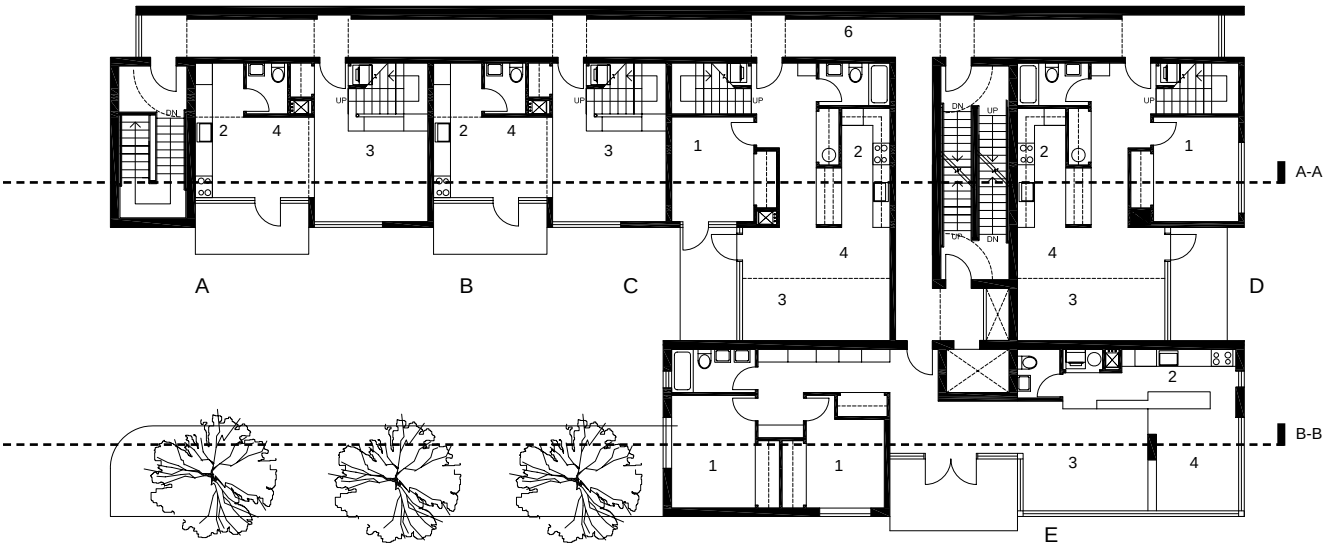
SCALE 1:2000

BUILDING 3



GROUND FLOOR

1. Retail
2. Bicycle storage
3. Garbage room
4. Lobby



SECOND FLOOR

A/B. 2 Bedroom loft unit
88m² (947sf)

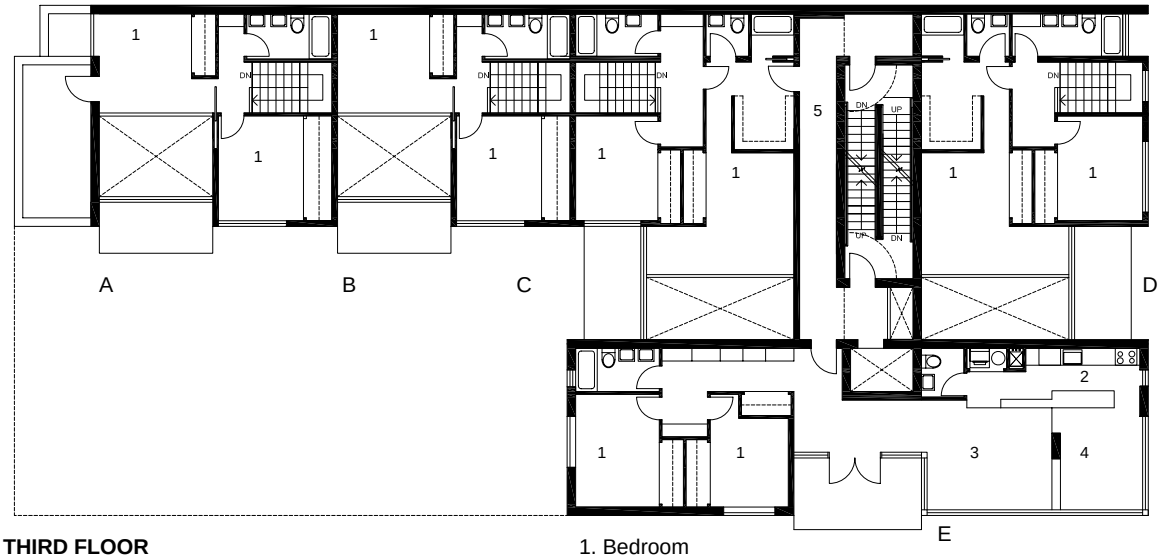
C/D. 3 Bedroom unit
136m² (1464sf)

E. 2 Bedroom unit
100m² (1076sf)

1. Bedroom
2. Kitchen
3. Living
4. Dining
5. Corridor

SCALE 1:150

BUILDING 3



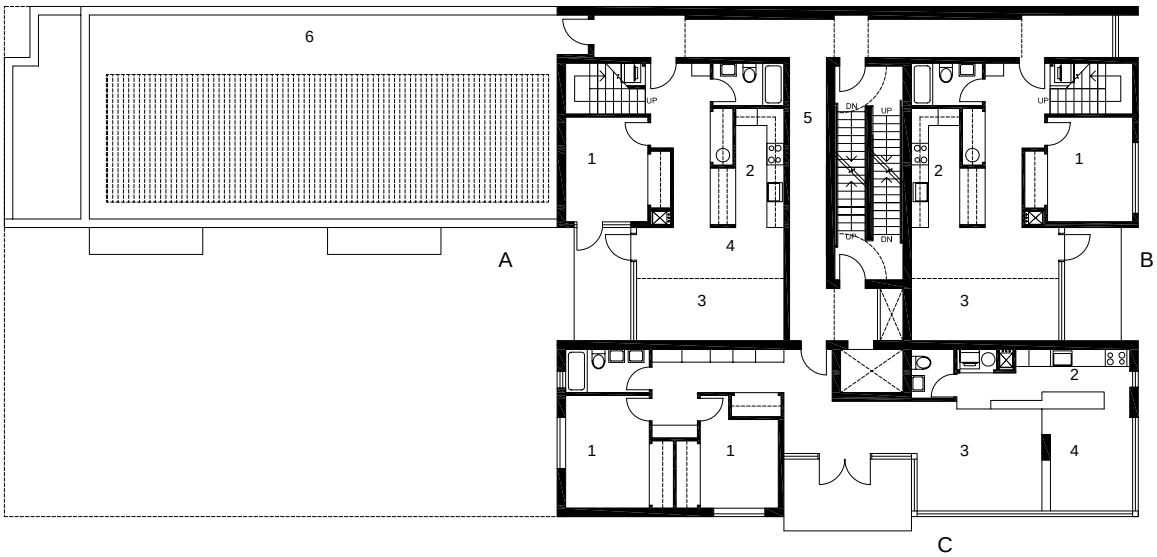
THIRD FLOOR

A/B. 2 Bedroom loft unit
(upper level)

C/D. 3 Bedroom unit
(upper level)

E. 2 Bedroom unit
100m² (1076sf)

1. Bedroom
2. Kitchen
3. Living
4. Dining
5. Corridor



FOURTH FLOOR

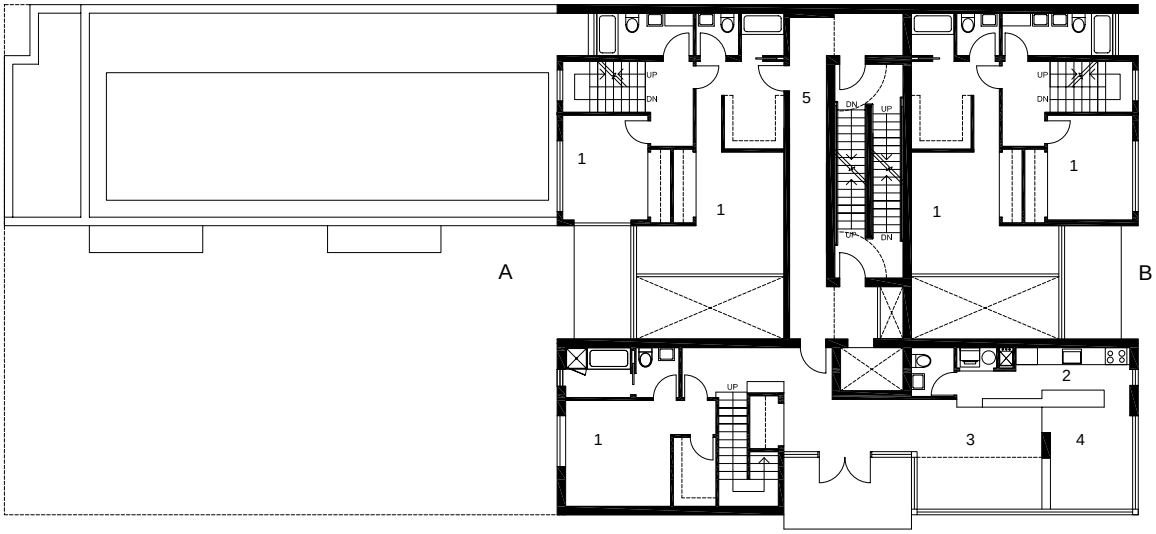
A/B. 3 Bedroom unit
136m² (1464sf)

C. 2 Bedroom unit
100m² (1076sf)

1. Bedroom
2. Kitchen
3. Living
4. Dining
5. Corridor
6. Roof terrace

SCALE 1:150

BUILDING 3

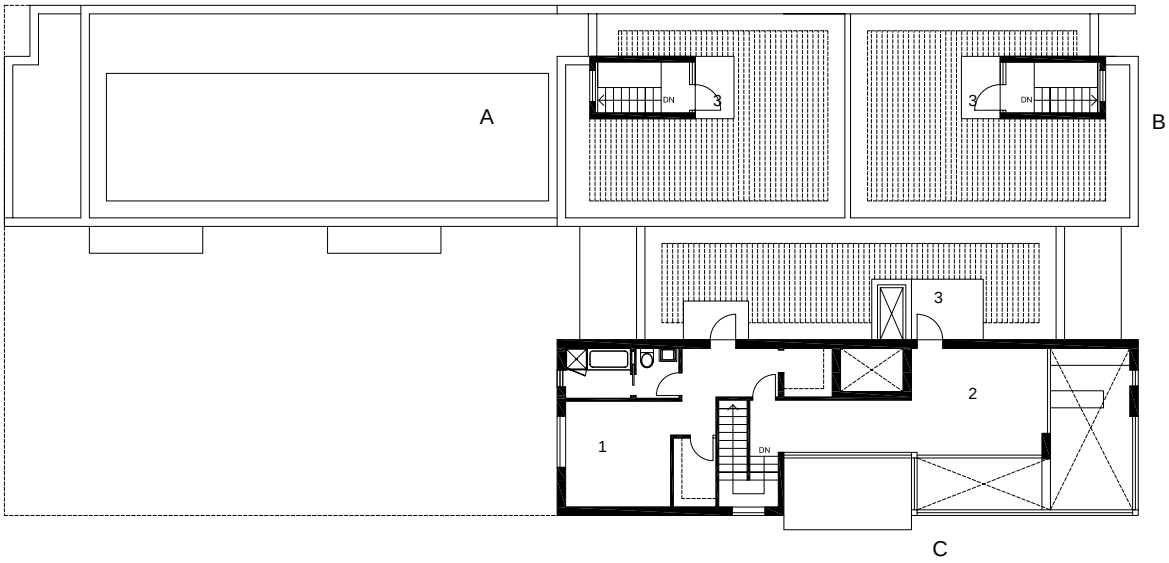


FIFTH FLOOR

A/B. 3 Bedroom unit
(upper level)

C. 2 Bedroom unit
178m^2 (1916sf)

1. Bedroom
2. Kitchen
3. Living
4. Dining
5. Corridor



SIXTH FLOOR

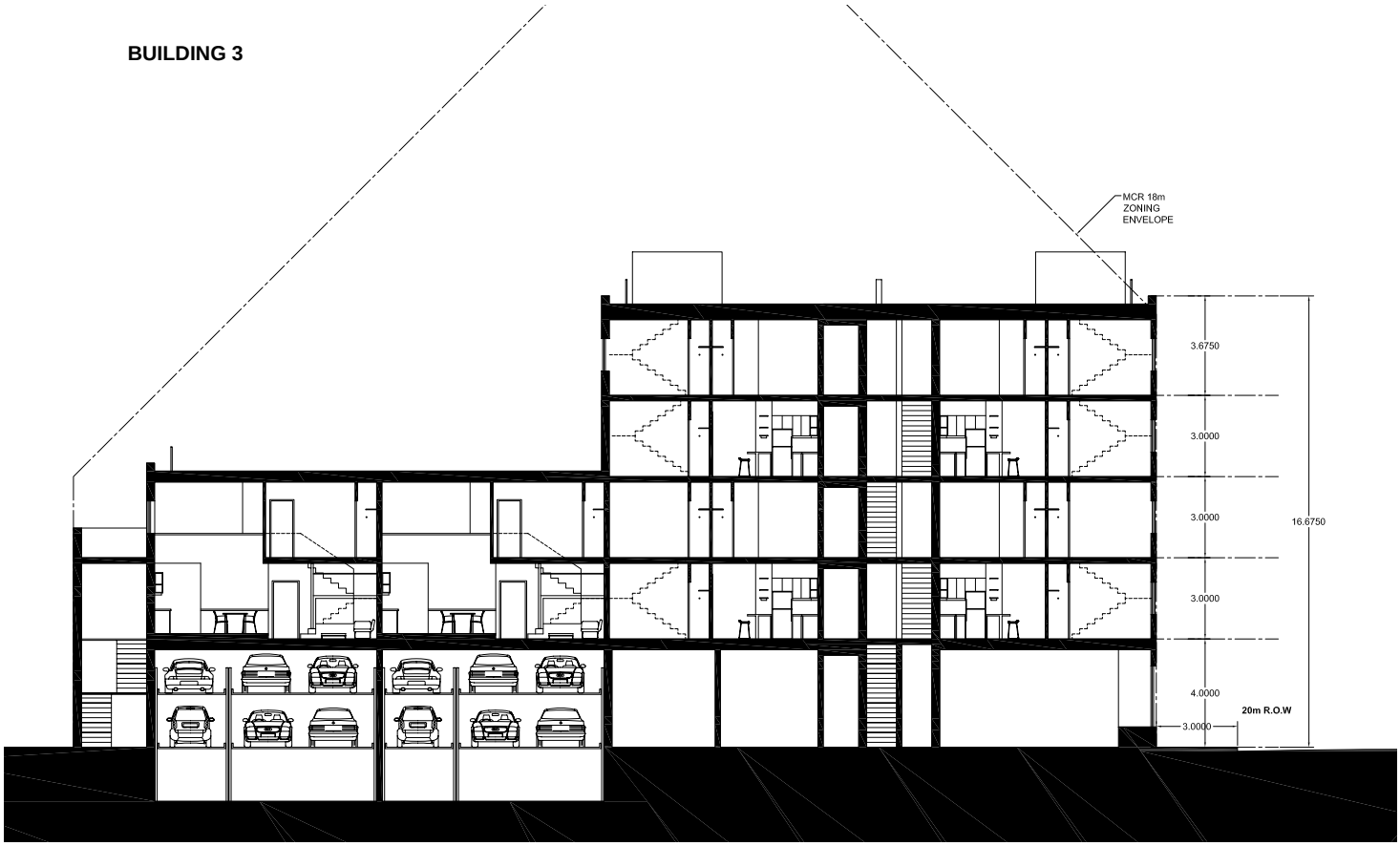
A/B. 3 Bedroom unit
(roof terrace)

C. 2 Bedroom unit
(upper level)

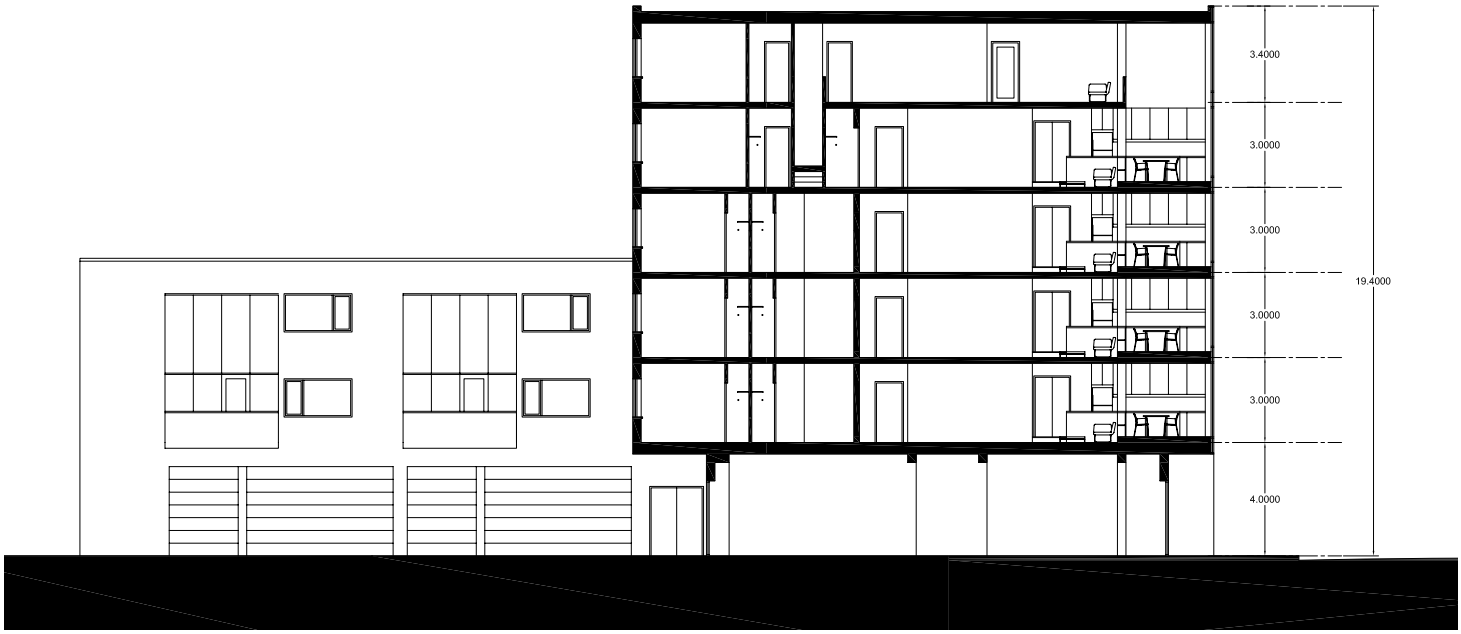
1. Bedroom
2. Den/family
3. Roof terrace

SCALE 1:150

BUILDING 3

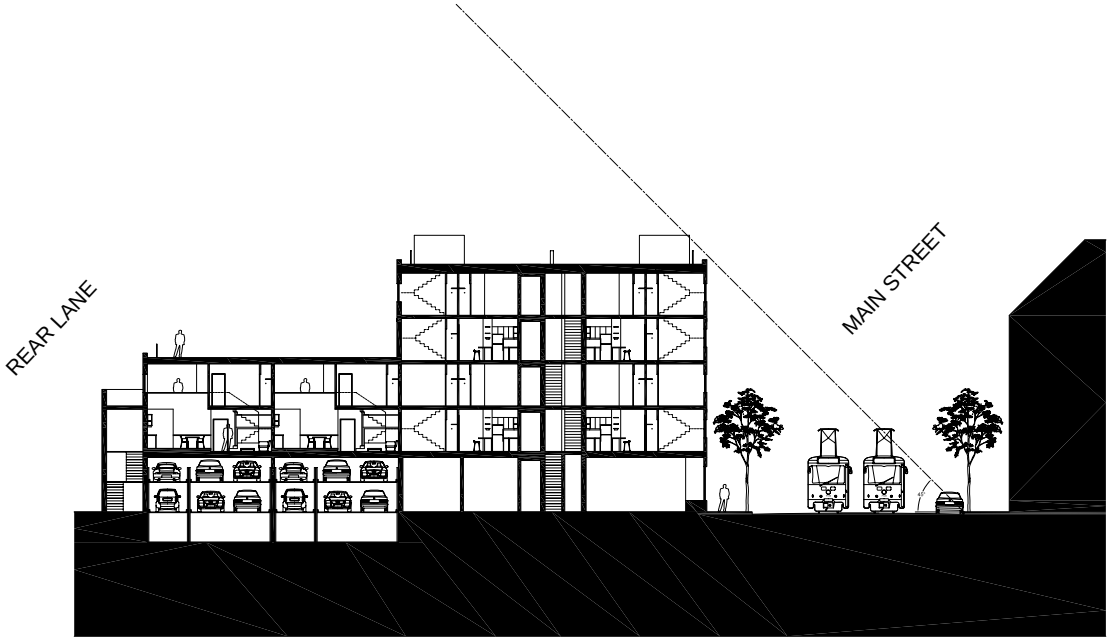


SECTION A-A SCALE 1:150

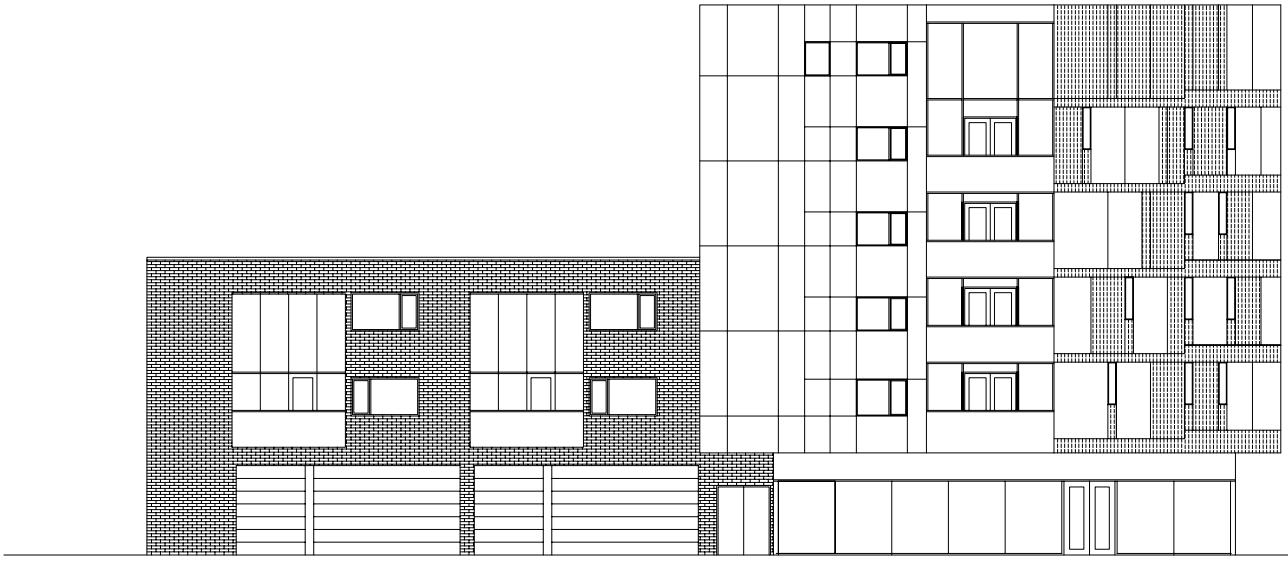


SECTION B-B SCALE 1:150

BUILDING 3



SECTION A-A SCALE 1:500

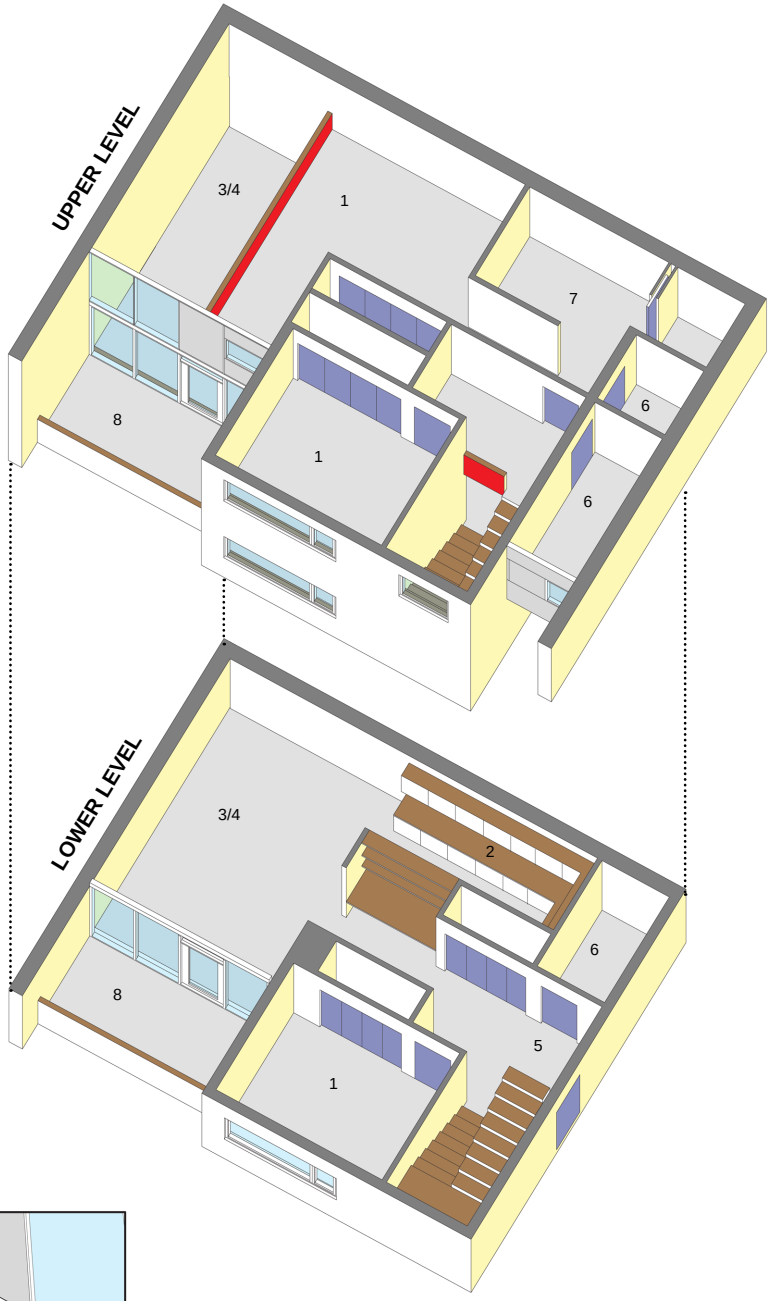


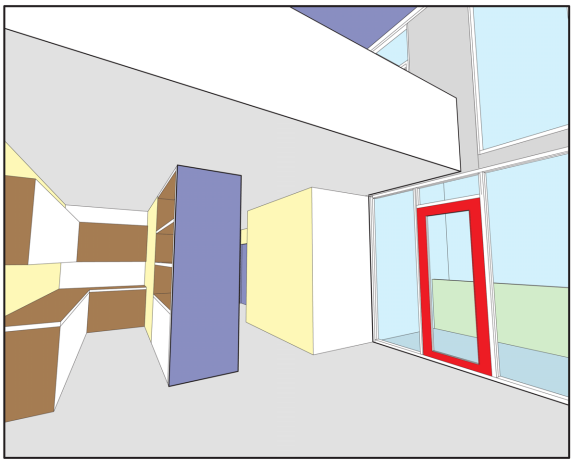
SIDE ELEVATION SCALE 1:150

BUILDING 3

3 Bedroom units

1. Bedroom
2. Kitchen
3. Living (double height)
4. Dining (double height)
5. Entry
6. Bathroom
7. Closet
8. Terrace

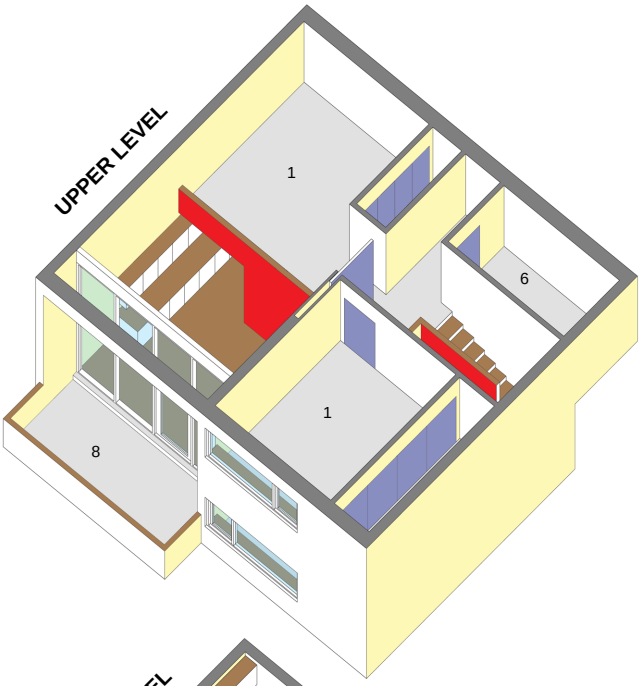


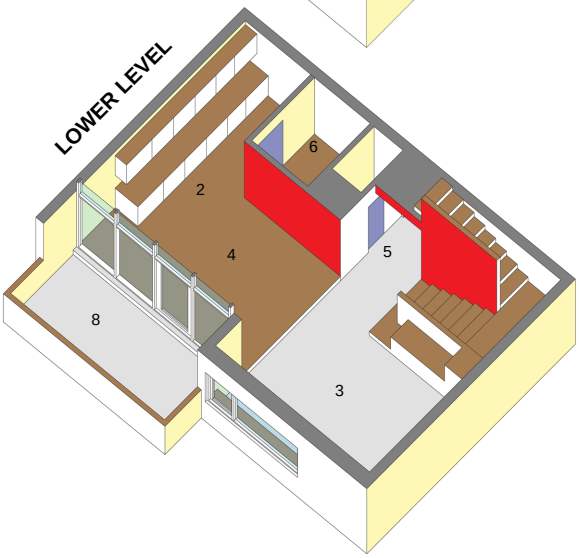


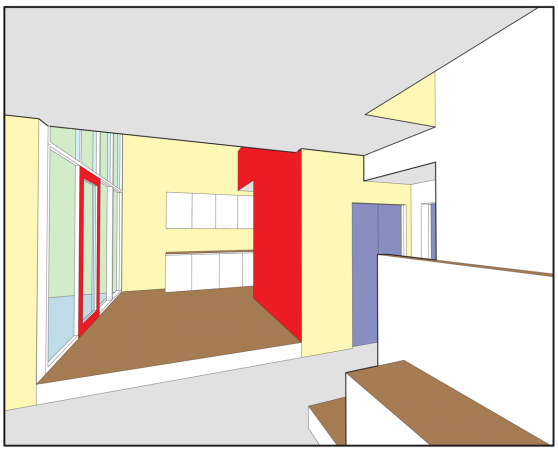
BUILDING 3

2 Bedroom loft units

1. Bedroom
2. Kitchen
3. Living
4. Dining (double height)
5. Entry
6. Bathroom
7. Closet
8. Terrace



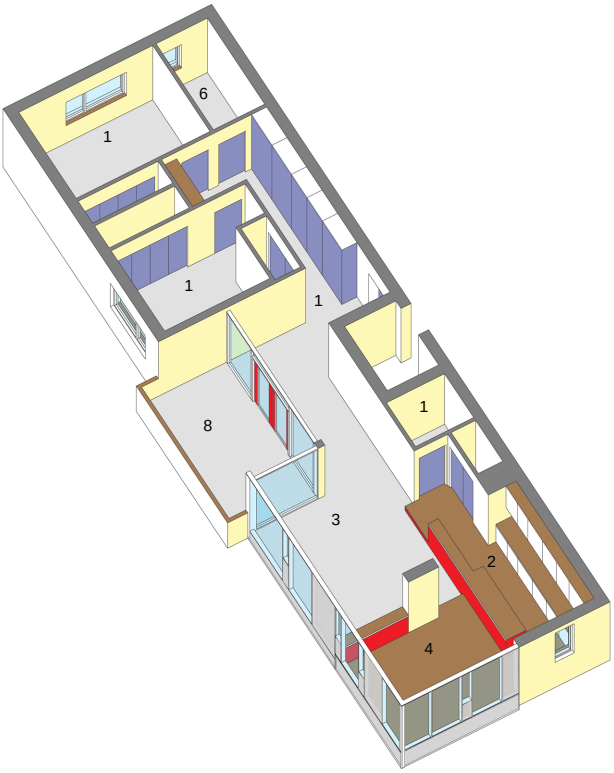


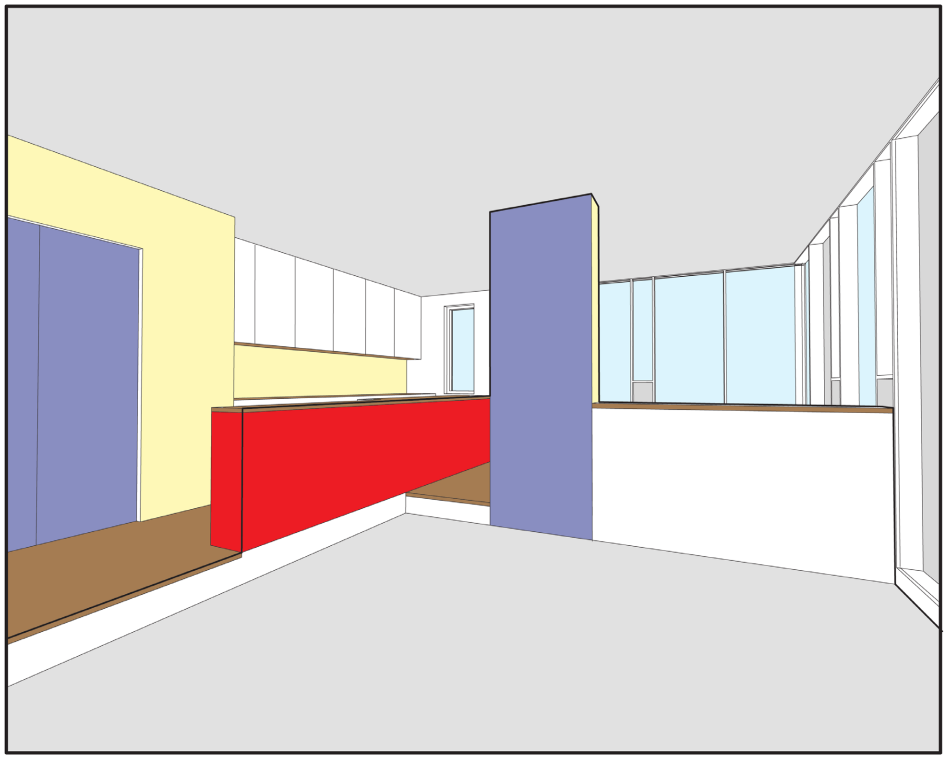


BUILDING 3

2 Bedroom units

1. Bedroom
2. Kitchen
3. Living
4. Dining
5. Entry
6. Bathroom
7. Closet
8. Terrace





QUEEN STREET
LOOKING EAST

Conclusion

Underdeveloped main streets provide tremendous potential for new housing, but what form that housing takes remains an open question. Main streets have so far resisted large-scale redevelopment by virtue of their fragmented and long-established patterns of ownership and their continued vitality in their present form. As pressures of growth eventually use up available undeveloped urban sites such as surface parking lots, former industrial sites and the like, and finally force long-awaited main street redevelopment, one of the most public and defining elements of Toronto's urban structure will come into question. While other worldwide cities that have reached the size of Toronto have historically evolved mid-rise, mid-density housing forms that allow an even spread of density over their urban areas, Toronto has largely developed -and continues to develop- the extremes of low-rise and high-rise housing options.

To maintain continuity with the character of main streets of the past, appropriate new building types for Toronto's main streets need to be developed. This represents an opportunity to develop a middle-ground for urban housing in the current polarized period of housing production. Rather than propose few ultra-high density projects to accommodate growth, a city-wide building up of main streets would be a logical next step in the evolution of Toronto's built form. What is proposed here is an as yet little-explored stage of growth between low and high-rise that could enhance the livability of the city with little impact on the older patterns of development.

Arguments for incremental redevelopment, mixed uses, human scaled buildings, lively and detailed streetscapes, access to different type and tenure of housing, and the desire to promote social and economic diversity and opportunity have been part of the rhetoric of the City's planning and development since the late 1960s. This acceptance of 'neo-traditional' approaches to urbanism brought about by the counter-reaction to large-scale modern urban renewal has not, however, been accompanied by a re-evaluation of the modern building types that accompanied the rejected modern urban planning. Today, the city is ostensibly planned on principles of neighborhood stabilization, mixed-uses, and residential intensification as a means to combat urban sprawl and reduce automobile usage, yet the current generation of urban housing continues to adapt modern housing forms of a limited typological variety, ill-suited to dense urban sites. These buildings fail to achieve those principles through their inappropriate scale and lack of diversity in terms of unit type, ownership, and spatial quality. While the current Official Plan calls for a mixture of housing types and a high quality of design, neither building code nor zoning bylaw currently encourages anything but the most basic forms of living space. The proliferation of such inflexible, small-unit

buildings, threatens the long-term viability of main streets, and the city as a whole.

The issues of redevelopment within existing urban fabric have been key aspects of Toronto's history. Past projects, policies and debates continue to define much of its planning and architectural discourse today, but many of the lessons learned about redevelopment over the last four decades risk being forgotten in the current pro-development climate. Revisiting the research and assertions of key redevelopment projects like the St. Lawrence, Ataratiri, and the Housing on Toronto's Main Streets Initiative, points to the need for smaller increments of building and a greater mix of housing type, tenure, form and scale than is typically provided in contemporary urban building. They provide a reminder that urban quality is linked to the quality of individual buildings and of the need to consider the quality of both urban and interior architectural environments together.

Toronto is undergoing an unprecedented level of interest and popularity in the concept of living in denser urban settings. Housing producers and planners are successfully marketing the convenience of location, access to transit, cultural, institutional and commercial amenities offered by urban living. Growing popular and political awareness of the environmental and economic consequences of low-density suburban development and accompanying automobile use, reinforce the perceived benefits of urban apartment living and alternative forms of mobility like car-sharing, cycling, walking and public transit. Such pro-urban sentiments coincide with the current emphasis in Official Planning on intensification, beautification and deregulation of zoning in key areas such as the waterfront, downtown, 'centres' and avenues, also aimed at economic competitiveness and civic improvement by attracting investment and redevelopment to the city. Despite the current interest in denser forms of city building, long-term apartment living for a full range of household types has, so far, not been a serious proposition in Toronto. Toronto's multi-family housing typically offers few of the benefits of single-family housing and has not become a true alternative for many households.

While some amount of larger-units were built in the post-war high-rise building boom in peripheral areas of the city, little of the privately developed apartment dwellings built since that time provide for larger households. It was hoped that maintaining the stable low-rise residential neighborhoods of the central city would maintain access to family housing in the city. A range of scales were needed however, and neither the old -now largely gentrified- single-family homes of the central neighborhoods, nor the current generation of high-rise and slab-type apartment buildings offer a real variety of housing options. The numerous small-unit apartment buildings

that dominate new urban housing today are instead, a temporary lodging for many. Inadequate living space will push many urban dwellers to seek housing in the detached homes of the suburbs as their life situation and needs change, or worse yet, it will cause overcrowding. Main streets offer an opportunity to correct this situation, but new approaches to designing these streets are needed.

To make the proposition of long-term apartment living a viable alternative, they must be designed to reflect the richness and complexity of domestic life. The character of multi-family housing today, rather than reflecting that complexity and dynamism, has become increasingly limited in its spatial richness. This lack of spatial character is not necessarily an issue of mere square-footage, but a lack of recognition of the potential role of built form to complement living patterns and encourage long-term dwelling. The benefits of visual, social and economic mixture are easily recognized at the urban scale: mixed uses and architectural detail and variation are commonly enforced through zoning and design guidelines at an urban scale. Even such cosmetic variation required of building façades has no equivalent requirement, however, in terms of interior space. The existence of such aesthetic requirements is reflective of a lack of actual variety being provided in current building forms. What is needed is real diversity at all levels of city design: a richer topography of urban and of interior space. This is accomplished both through smaller increments of building and through a reconsidering of the design of interior space.

The buildings that are proposed use the urban characteristics of existing main streets as a starting point for both appropriateness of building scale, and as a clue to an approach to the design of the interior space of dwelling units. These designs seek to increase urban and interior diversity while working within the yet unrealized goals of intensification of the original Main Streets Initiative of the early 1990s, and within the basic parameters of current main streets zoning and building regulations. They are informed by a comparison of the public spaces of main street buildings and the interior spaces of architects like Loos, Schindler and Hertzberger that each benefit from the bringing together of many heterogeneous individual elements. The richly articulated and individually distinguished settings of each, provides the flexible framework or terrain within which, ever changing and highly diverse activities and uses are readily accommodated.

Existing Toronto main streets have been home, work, shopping and play space of the city's neighborhoods for nearly two centuries and can potentially continue to operate this way –they are an asset worth maintaining. New approaches to building and regulating the form of these streets are needed to continue the tradition of flexible, accessible and vital main streets

while updating them for the present demands of the growing city, and to ensure the quality of their architecture and dwellings.

Main streets offer a unique opportunity to evolve a form of development as a middle ground between the usual extremes of high and low rise options, and to demonstrate a broader conception of denser patterns of urban dwelling. If successful, Main streets developed in this way might also provide a model for the eventual evolution of the low-rise central residential neighbourhoods, finally unlocking the greater growth potential of those highly protected areas. However, until it can be shown that denser, but equally desirable, flexible and inhabitable forms of housing can be provided as a real alternative, the first generation houses of the established central neighbourhoods and suburbs, will naturally be preferred. Their continued protection in planning policies has at least prevented their replacement by less versatile forms as was once threatened in the middle of the last century. Yet the demand for growth remains. More of the same small apartments, narrowly conceived in terms of flexibility and spatial richness that offer few of the advantages of houses do not seem a worthy substitute. The answer is not in smaller and cheaper apartments, but rather in more varied and nuanced dwellings in both size and character.

Before main streets become the setting for yet more of the typical and expedient housing forms seen anywhere in the city, there is a chance to establish a new pattern of development in keeping with the historic main street character; one that will provide distinctive new urban dwelling options -options that offer a richer series of spatial possibilities, a fuller scope for inhabitation and create true main streets in the process.

Appendix

The Queen Street Site: Physical and Historical Background

The site's history is largely that of the institution that resides there. In the early years of the city's development, the site was part of the Garrison Reserve lands for the use of the military, historically on the westernmost edge of the town. In 1845, a 50 acre site was granted by the British Ordnance department for the Provincial Lunatic Asylum. This site was on the northern edge of the military reserve and south of Queen Street. It was largely unused sparsely wooded and swampy due to small creeks that ran to nearby Garrison Creek.[29]

The original asylum building was begun in 1846 to the designs of architect John G. Howard, who won the commission through competition. The building was the third largest of its kind in North America at the time. It was a four-storey 584' long building in an understated classical style. It was by all accounts a remarkable building that included a large metal-clad dome, and incorporating numerous experimental technical innovations –including being one of the first on the continent to include hot and cold plumbing facilities.[30] Later in 1865, after the retirement of Howard, another architect –Kivas Tully- added east and west wings.[31]

These buildings remained until the early 20th Century, despite the gradual erosion of the property boundaries –the site's onsite vegetable gardens that actually helped to support the facility, were no longer adequate. There was a possibility of closing the Queen street facility and moving it to a larger site further out of town (by now the town had grown well around the hospital). However, the added demands on mental facilities from the First World War forced the hospital to remain open.[32] The conditions at the hospital continued to decline until the 1950s with overcrowding and decay within the building that had remained largely unchanged for a century. The building design no longer reflected contemporary treatment methods, and the image of the Asylum within the community had become stigmatized, a condition that was thought to be aggravated by the old and forbidding demeanor of the large old buildings. In 1954, new funds became available for new hospital building (not for renovation or rehabilitation), and a new reception wing was built from 1954-1956, designed by Mathers & Haldenby Architects. This new structure was 3 storeys, 600' long, and ran parallel to Queen Street directly in front of the old buildings. The placement of the new building pointed in the direction later development would take –it obscured and isolated the old building,

29 Pleasance Kaufman Crawford, "Subject to Change: Asylum Landscape." In Edna Hudson ed., *Provincial Asylum in Toronto : Reflections on Social and Architectural History* (Toronto: Toronto Region Architectural Conservancy, 2000), 59.

30 Eric Hounsom, "An Enormous Building for its Time." *Royal Architectural Institute of Canada Journal 42*, (June, 1965), 63-65.

31 For a comparison of the work of each architect see Crawford in Provincial Asylum in Toronto : Reflections on Social and Architectural History, 65.

32 Ibid., 71.

signalling its imminent demolition.[33]

The changes in treatment of mental illness in this period away from extended confinement towards pharmaceutical treatment and mental health units in general hospitals led to a decline in permanent resident population at the Queen Street site. To improve the image of the hospital, and to better reflect new functional needs, by 1967 the decision was made to demolish the 19th Century buildings entirely. The plan and building designs to replace it were undertaken by Sommerville, McMurrich & Oxley. The new facility included a Community Centre, with recreational facilities, a bank, beauty parlour, café and other services within an internalized shopping-mall model within a campus of buildings spread over the site connected by covered walkways. This integrated approach to treatment facilities and more normalized social activities aimed to allow the connection of patients and community within a controlled setting.[34]. The new buildings planned, are those currently on the site; they cover only 20% of the site area, surrounded by surface parking and green space.

The demolition and new construction took place between 1970 and 1976. The new facilities went some way to refreshing the image of the hospital, particularly among staff. However, there was also some disappointment over the loss of the old buildings and the little attempt made to rehabilitate or adapt them and maintain a significant landmark.[35] Thirty years later, however, treatment of mental illness has continued to change, the buildings of the 1970s have proven too functionally limited and difficult to adapt. In 1998 the hospital was amalgamated with the three other institutions that also deal with mental health and addiction into one umbrella organization: the Centre for Addiction and Mental Health. The new institution combines treatment, research, education, and health promotion and prevention; its current facilities include the Queen Street site and a number of satellite facilities throughout Toronto. As the institution has become a respected centre for excellence in mental health treatment, it wants to update its facilities. The resulting plans developed in the last 5 years, establish a broad vision for the facilities of the institution.

A new Master Plan for the Queen Street site is currently being implemented and is to be completed by 2018. It proposes the demolition of existing facilities on the site and their replacement with new, more flexible buildings along with a wider strategy to integrate the institution

33 John Court, “From 999 to 1001 Queen Street: A Consistently Vital Resource,” In Edna Hudson ed., *Provincial Asylum in Toronto : Reflections on Social and Architectural History* (Toronto: Toronto Region Architectural Conservancy, 2000), 183.

34 Ibid., 194.

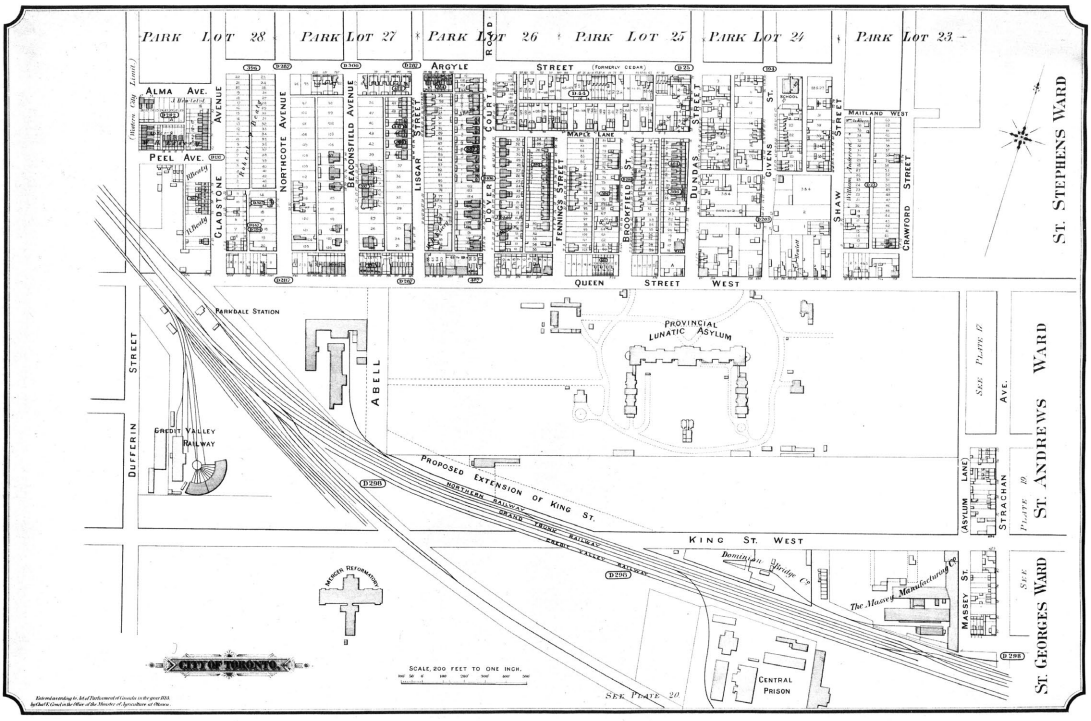
35 Ibid., 195-196

with the surrounding community. This strategy includes introducing new roads through the site, incorporation of other uses and programs within the institutional buildings themselves as well as a number of fully non-institutional buildings to be developed by outside interests. (see section p.180 for details of new master plan)

183.
Watercolour of original asylum with side wings

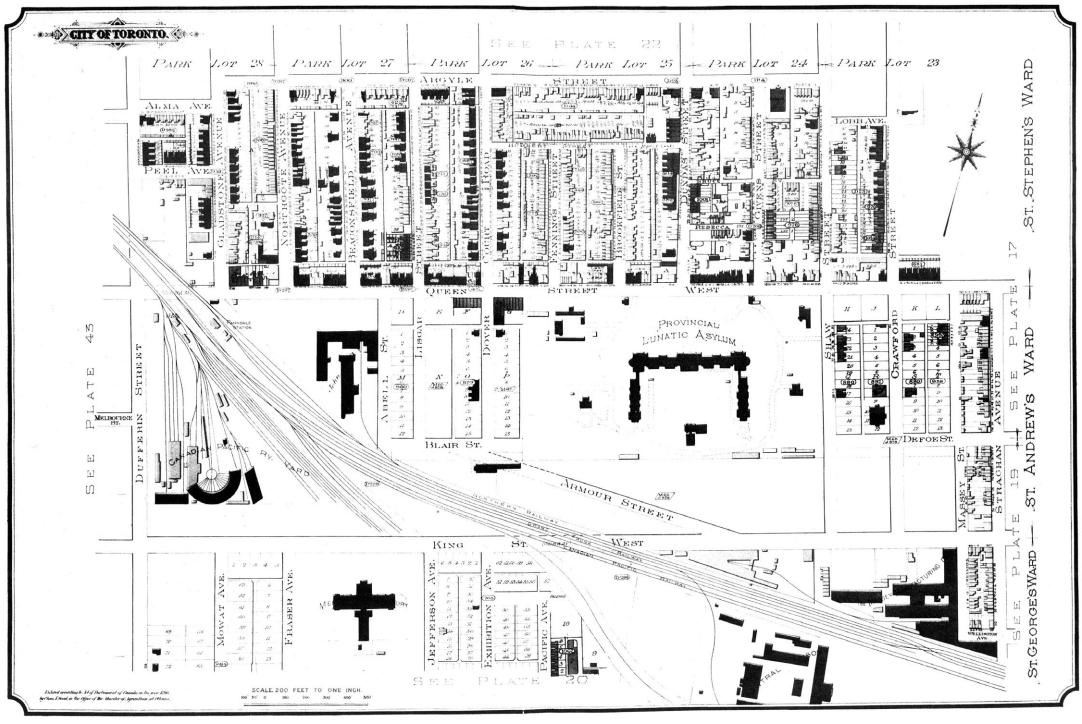
184.
View from queen street pre-1954

185.
Architect's rendering of the 1960s redevelopment plan that exists today



1884 PLATE 21

186.
The Queen Street Site before and after the sale of east and west land parcels



Bibliography

Toronto Form and History

Armstrong, Christopher and H.V. Nelles. "Suburban Street Railway Strategies in Montreal, Toronto, and Vancouver, 1896-1930." In *Power and Place: Canadian Urban Development in the North American Context*. eds. Gilbert Arthur Stelter. and Alan F. J. Artibise, 187-218. Vancouver: University of British Columbia Press, 1986.

Arthur, Eric Ross and Steven A. Otto. *Toronto: No Mean City*. 3rd ed. / revised by Steven A. Otto ed. Toronto; London: University of Toronto Press, 1986.

Berridge Lewinberg Greenberg Ltd. (Metropolitan Toronto Planning Dept.) *Study of the Reurbanisation of Metropolitan Toronto*. 1991: 1991.

Byrtus, Nancy, Mark Fram, and Michael McClelland eds. *East/West: A Guide to Where People Live in Downtown Toronto*. Toronto: Coach House Books [for the] Society for the Study of Architecture in Canada, 2000.

Canada Geographical Branch., Donald Kerr, and Jacob Spelt. *Changing Face of Toronto - a Study in Urban Geography*. Canada Geographical Branch Memoir. 1. 1965: 1965.

Careless, J. M. S. *Toronto to 1918: An Illustrated History*. Toronto: James Lorimer & Co., 1984

Dennis, Richard. "'Zoning' before Zoning: The Regulation of Apartment Housing in Early Twentieth Century Winnipeg and Toronto." *Planning Perspectives 15*, no. 3 (July, 2000): 267.

———. "Interpreting the Apartment House: Modernity and Metropolitanism in Toronto, 1900-1930." *Journal of Historical Geography 20*, no. 3 (July, 1994): 305.

Doucet, Michael. "Politics, Space, and Trolleys: Mass Transit in Early Twentieth-Century Toronto." In *Shaping the Urban Landscape: Aspects of the Canadian City - Building Process*. eds. Gilbert Arthur Stelter and Alan F. J. Artibise, 356-381. Ottawa: Carleton University Press, 1982.

Ganton, Isobel. "The Subdivision Process in Toronto 1851-1883." In *Shaping the Urban Landscape: Aspects of the Canadian City - Building Process*. eds. Gilbert Arthur Stelter and Alan F. J. Artibise, 200-231. Ottawa: Carleton University Press, 1982.

Goad, Charles Edward. *The Mapping of Victorian Toronto: The 1884 & 1890 Atlases of Toronto in Comparative Rendition*. Sutton West: Paget Press, 1984.

Goheen, Peter G. *Victorian Toronto, 1850-1900; Pattern and Process of Growth*. Chicago: University of Chicago, 1970.

Harris, Richard. *Unplanned Suburbs: Toronto's American Tragedy, 1900 to 1950. Creating the North American Landscape*. Baltimore: Johns Hopkins University Press, 1996.

———. "The Impact of Building Controls on Residential Development in Toronto, 1900-40." *Planning Perspectives 6*, no. 3 (Sept, 1991): 269-296.

Hulchanski, John David. *Evolution of Ontario's Early Urban Land use Planning Regulations, 1900-1920*. Land Policy Paper ; no.2 .Toronto: Centre for Urban and Community Studies, University of Toronto, 1982.

Lemon, James T. *Toronto since 1918 : An Illustrated History*. History of Canadian Cities. Toronto: Lorimer, 1985.

Moore, Peter W. "Zoning and Neighborhood Change in the Annex in Toronto, 1900-1970" Ph.D Thesis University of Toronto, Canadian Theses on Microfiche ; no.3878. Toronto: S.N., 1978.

———.. "Public Services and Residential Development in a Toronto Neighborhood, 1880-1915." *Journal of Urban History 9*, no. 4 (Aug, 1983): 445-471.

———. "Zoning and Planning: The Toronto Experience 1904-1970." In *Usable Urban Past: Planning and Politics in the Modern Canadian City*. eds. Gilbert Arthur Stelter. and Alan F.J. Artibise, 316-341. Toronto: Published by Macmillan of Canada in Association With the Institute of Canadian Studies, 1979.

Mulvany, Charles Pelham. *Toronto: Past and Present; A Handbook of the City*. Toronto: W.E. Caiger, 1884. (Toronto, Ontario Reprint Press, 1970.

Pursley, Louis H. *Street Railways of Toronto 1861-1921*. Los Angeles: Interurbans, 1958.

Toronto Planning and Development Dept. *City Patterns: An Analysis of Toronto's Physical Structure and Form*. Cityplan '91; 2. Toronto: Planning and Development Dept., 1992.

Waldheim, Charles, Brigitte Shim, Donald Chong, and Steffanie Adams. *Site Unseen: Laneway Architecture and Urbanism in Toronto*. Toronto: Faculty of Architecture, Landscape, and Design, University of Toronto, 2004.

Hernandez, Tony, Jim Helik, Philip Moore, and Ryerson University. Centre for the Study of Commercial Activity. *The Changing Character of Retail Strips in the City of Toronto, 1996-2005*. Research Report. Vol. 2006-07. Toronto: Ryerson University, Centre for the Study of Commercial Activity, 2006.

Lorinc, John. "Stripping Away Stereotypes: Toronto's Retail Plazas." In *UTOpia : Towards a New Toronto*. Toronto: Coach House Books, 2005.

Simmons, James W., Dan Montgomery, and Sara Simmons. *Retail Structure of the Greater Toronto Area 1997*. Toronto: Centre for the Study of Commercial Activity, Ryerson Polytechnic University, 1998.

Simmons, James W. and Sara Simmons. *Changes in Retail Strips : Metro Toronto, 1993-1996*. Research Report (Ryerson Polytechnic University. Centre for the Study of Commercial Activity) ; 1997-no. 12; Research Report. Toronto: Centre for the Study of Commercial Activity, Ryerson Polytechnic University, 1997.

Sinopoli, Teresa. *Diversity of Retail Strips in Metropolitan Toronto*. Research Report. Toronto: Centre for the Study of Commercial Activity, Ryerson Polytechnic University, 1996.

Toronto Planning Board. *Toronto's Retail Strips : A Discussion Paper on the Viability and Future of Strip Retailing in the City*. Toronto: the Board, 1976.

Toronto Planning and Development Dept. (Lorne Cappe). *Window on Toronto*. Toronto: Dept. of the City Clerk, Information and Communication Services Division, 1986.

Caulfield, Jon. *City Form and Everyday Life : Toronto's Gentrification and Critical Social Practice*. Toronto: University of Toronto Press, 1994.

City of Toronto Housing Department. *1974-1979: St. Lawrence*. Toronto: City of Toronto Housing Department, 1979.

Filion, Pierre. "Balancing Concentration and Dispersion? Public Policy and Urban Structure in Toronto." *Environment and Planning C: Government and Policy 18*. (2000): 163-189.

———. "Rupture Or Continuity? Modern and Postmodern Planning in Toronto." *International Journal of Urban and Regional Research 23*, no. 3 (September, 1999): 421-444.

Freedman, Adele. "A New Community Shaping up in Etobicoke," *Globe and Mail*, 2 October, 1993.

Fraser, Graham. *Fighting Back: Urban Renewal in Trefann Court*. Toronto: Hakkert, 1972.

Fulford, Robert. *Accidental City: The Transformation of Toronto*. Toronto: Macfarlane, Walter & Ross, 1995.

Hulchanski, John David. *Planning New Urban Neighborhoods: Lessons from Toronto's St. Lawrence Neighborhood*. U.B.C. Planning Papers. Canadian Planning Issues ; no. 28; U.B.C. Planning Papers. Canadian Planning Issues; Canadian Planning Issues. Vancouver: School of Community and Regional Planning, University of British Columbia, 1990.

———. *St. Lawrence & False Creek : A Review of the Planning and Development of Two New Inner City Neighborhoods*. U.B.C. Planning Papers. Canadian Planning Issues ; no. 10. Vancouver, B.C.: University of British Columbia, School of Community & Regional Planning, 1984.

Jacobs, Jane. *The Death and Life of Great American Cities*. New York: The Modern Library, 1993.

Kirkland Partnership Inc. *Ataratiri Site Plan: Final Report. [Prepared for City of Toronto Housing Dept.]* Toronto: The Kirkland Partnership Inc., 1990.

Lewinberg, Frank R. "Neighborhood Planning: The Reform Years in Toronto." in *Toronto the Next Ten Years: Papers Delivered at the Neighborhood Planning Conference, Toronto November 16-17, 1984*. Toronto: City of Toronto Planning and Development Department, 1985.

Machado, Rodolfo. *Residential Waterfront, Borneo Sporenburg, Amsterdam*. Cambridge, Mass.: Harvard University Graduate School of Design, 2005.

Myers, Barton, George Baird, Barry Sampson, and Donald McKay. "Vacant Lottery." *Design Quarterly*, Whole Issue no.108 (1978, 1978).

Polo, Marco Louis. "Downtown Prototype." *The Canadian Architect 44*, no. 8 (August, 1999): 19-21.

Regent Park Collaborative Team. *Regent Park Revitalization Study : Summary Report on Action Plan and Implementation Strategy : Submitted to the Toronto Community Housing Corporation.* Toronto: Regent Park Collaborative Team, 2003.

Rynnimeri, Val. "Deep Pockets." *Canadian Architect 40*, (March, 1995): 16-19.

Sewell, John. *Shape of the City: Toronto Struggles with Modern Planning*. Toronto: University of Toronto Press, 1993.

Spaziani, Michael, Steven Fong, and Toronto Housing Dept. *Ataratiri: Building and Block Study*. Toronto: City of Toronto Housing Dept., 1990.

Toronto Planning and Development Dept., Robert E. Millward, and Daniel Burns. *Ataratiri : Principles, Directions and Strategies*. Toronto: Produced for the Housing Department by the Dept. of the City Clerk, Information and Communication Services Division, 1990.

Trefann Court Working Committee, City of Toronto Planning Board, City of Toronto Development Dept. *The Trefann Court Urban Renewal Scheme*. Toronto: Planning Board, 1972.

Housing on Toronto's Main Streets Initiative

Baird/Sampson Urban Design Inc. and Hemson Consulting Ltd. *Economic Feasibility Study, Housing on Toronto's Main Streets*. Toronto: Hemson Consulting, 1990.

Barber, John. "Form & Content: City Hall crosses Main Streets," *Globe and Mail*, 30 April, 1992.

Berridge Lewinberg Greenberg Ltd. and Steven Fong Architect. *The City of Toronto: Building on Main Streets*. Toronto: Metropolitan Toronto Planning Dept., 1991.

Brown and Storey Architects and Michael Spaziani Architect Inc. *Housing on Main Streets Demonstration Project Feasibility Study: 1549 Danforth Avenue*. Toronto: Brown and Storey Architects and Michael Spaziani Architect Inc., 1992.

Christiaanse, Kees. "Urban Design for Architectural Diversity." *Places 7*, no. 2 (Winter, 1991): 66-69.

Dark, George, Ken Greenberg, Steven Fong, Mendel Greenberg, Ian Nicoll and Kim Storey. *Main Streets Review.* Toronto: Toronto Planning and Development Dept., 1992.

Farncombe, Andrew. "Chronicle of Descend: Housing on Toronto's Main Streets." *Intensification Report*, no.4 (Sept, 1993): 11-15.

———. "Housing on Toronto's Main Streets: A Case Study in Intensification." Master in Environmental Studies, York University, 1993.

Franklin, Mark. "A Modest Beginning: Housing on Toronto's Main Streets." *The Canadian Architect 35*, no. 9 (Sept, 1990): 37-41.

Gilbert, Richard. "The Imperative for Housing on Main Streets." *Places 7*, no. 2 (Winter, 1991): 74.

———. “The City of Toronto’s Main Streets Program.” *Intensification Report*, no. 2 (May, 1993): 6-8.

Gilbert, Richard, Metropolitan Toronto Executive Committee, and Toronto City Council Land Use Committee. *A Proposal to Redevelop the Main Streets of Toronto*. Toronto: City Hall, 1987.

Hume, Christopher. “Stairway to a better Toronto,” *Toronto Star* (Toronto), 22 January, 2004.

Jacobs, Jane. “Putting Toronto’s Best Self Forward.” *Places 7*, no. 2 (Winter, 1991): 50-53.

Marshall, Macklin, Monaghan Limited. *Housing on Main Streets Residential Parking Study*. Thornhill, Ont. : Marshall Macklin Monaghan Ltd., 1990.

Toronto City Council, Robert E. Millward, Daniel Burns, and R. M. Bremner. *Housing on Toronto’s Main Streets: Proposals Report, July 1989*. Toronto: The Council, 1989.

Toronto Planning and Development Dept. *Principles and Proposed Strategy for Implementing the Main Streets Initiative*. Toronto: Toronto Planning and Development Department. 1991.

———. *Final Report and Recommendations - Housing on Toronto’s Main Streets*. Toronto: Toronto Planning and Development Dept., 1992.

———. *Main Streets: Report on Deputations and Submissions and Recommendations for Next Steps*. Toronto: Toronto Planning and Development Dept., 1993.

———. *City of Toronto Official Plan Part 1: Cityplan By-Law 423-93*. Toronto: City of Toronto, Planning and Development Department, 1993.

———. *Sun, Wind, and Pedestrian Comfort: A Study of Toronto’s Central Area*. Cityplan ‘91; 2. Toronto: Planning and Development Dept., 1990.

Toronto Planning and Development Dept., Art Eggleton, Allan Tonks, and John Sweeney. *Housing on Toronto’s Main Streets - a Design Competition*. Toronto: Toronto Planning and Development Dept ,1990.

Toronto City Council Land Use Committee / Commissioner of Planning and Development. *“Fine-Tuning” The Final Recommendations for Housing on Toronto’s Main Streets*. Toronto : City of Toronto Planning and Development Dept., 1993.

Toronto Survey and Mapping Services. *Office Consolidation of Zoning By-law 438-86*. Toronto: City of Toronto Survey and Mapping Services, 1999.

Valpy, Michael. “Plenty of planning but where’s the vision?,” *Globe and Mail*, 2 December, 1992.

Zeidler, Eberhard. “The Single Stair and Housing on Main Streets Blues.” *Intensification Report*, no.4 (1993): 1-3.

Bedford Paul. “When They Were Kings: Planning for Reinvestment” *Plan Canada.* vol.38, no.4 (1997): 18-23.

Policy and Research, Toronto City Planning Division.*Profile Toronto: How Does the City Grow?* (April 2007), www.toronto.ca/planning/pdf/grow.pdf

———. *Profile Toronto: Mid-rise Residential Housing Information Bulletin*. (November 2005). www.toronto.ca/planning/pdf/profile_tor_midrise.pdf

———. *Profile Toronto: Living Downtown Information Bulletin*. (October 2007), http://www.toronto.ca/planning/living_downtown.htm

Desfor, Gene, Roger Keil, Stefan Kipfer, and Gerda Wekerle, “From Surf to Turf: No Limits To Growth in Toronto?” *Studies in Political Economy 77* (Spring 2006): 131-155.

Freedman, Robert, “A City of Great Avenues,” symposium overview paper City of Toronto Mid-Rise Symposium, November 2005. http://www.toronto.ca/planning/midrise_symposium.htm (Accessed January 16, 2007). Also published in the Fall 2005 Toronto Society of Architects Newsletter, pp. 5-16.

Gadd, Jane. “A Housing Plan That’s Just Right.” *Globe and Mail*, 22 July, 2005.

Kipfer, Stefan and Roger Keil. “Still Planning to be Different? Toronto at the Turn of the Millennium.” *DISP* no.140, (2000): 28-36.

Kipfer, Stefan and Roger Keil. “Toronto Inc? Planning the Competitive City in the New Toronto.” *Antipode 34*, no.3, (2002): 227-264.

LeBlanc, Dave. “Former Top Planner Sees Plenty of Housing Space.” *Globe and Mail*, 30 March, 2007.

Lewinberg, Frank R. “Neighborhood Planning: The Reform Years in Toronto.” *Plan Canada.* vol. 26, no. 2, (April 1986): 40-45.

Ley, David. “The New Middle Class in Canadian Central Cities.” In *City Lives and City Forms: Critical Research and Canadian Urbanism*. John Caulfield and Linda Peake, eds. Toronto: UofT Press, 1996.

Mays, John Bentley. “Mid-rises Should Top the Agenda: Development Discussions are Missing a Vital Housing Component.” *Globe and Mail*, 9 December, 2005

Toronto City Planning Division. Proceedings of November 2005 City of Toronto Mid-rise Symposium www.toronto.ca/planning/midrise_symposium.htm

Toronto Planning and Development Dept. *Toronto Official Plan*. Toronto: City of Toronto, Planning and Development Department, 2006.

Tossel, Ivor. “High Stakes” *Globe and Mail*, 1 September, 2007.

Urban Design Associates. *West Don Lands Block Plan and Design Guidelines*. Toronto: Urban Design Associates Ltd., Prepared for the Toronto Waterfront Revitalization Corporation, 2006.

Typology and Dwelling Unit Design

Baird, George, Joost Bakker, Bruce Kuwabara, and John Van Nostrand. "Criticism, the OHC Design Competition 1972 : Towards Better Housing?" *The Canadian Architect 17*, (July, 1972): 38-52.

Baird, George, Donald Clinton, Bruce Kuwabara, and Barry Sampson. *Built-Form Analysis*. Toronto: City of Toronto Planning Department, 1975.

Garwood Jones+van Nostrand Architects. *New Designs for Multi-Family Housing in Ataratiri and the Railway Lands: Final Report*. Toronto: Garwood Jones+van Nostrand Architects, 1990.

Holl, Steven. *Alphabetical City. Pamphlet Architecture; no. 5*. New York: Pamphlet Architecture, 1980.

Le Corbusier. *The Athens Charter*. New York: Grossman, 1973.

Ontario Building and Development Branch. *2006 Building Code Compendium.* Toronto: Queen's Printer for Ontario, 2006.

Plunz, Richard. *A History of Housing in New York City: Dwelling Type and Social Change in the American Metropolis*. New York: Columbia U. Press, 1990.

Schneider, Friederike, ed. *Floor Plan Atlas: Housing*. Basel: Birkhauser, 1997.

Sherwood, Roger. *Modern Housing Prototypes*. Cambridge: Harvard U. Press, 1978.

Design Themes and Strategies

Colomina, Beatriz. "Intimacy and Spectacle." in *Strategies in Architectural Thinking*. John Whiteman, Jeffrey Kipnis, Richard Burdett eds. Cambridge: MIT Press, 1992. 68-88.

Cullen, Gordon. *Townscape*. London: Architectural Press, 1961.

Duzer, Leslie van and Kent Kleinman. *Villa Müller: A Work of Adolf Loos*. New York: Princeton Architectural Press, 1994.

Frampton, Kenneth. "The Structural Regionalism of Herman Hertzberger." in *Labour, Work and Architecture: Collected Essays on Architecture and Design*. London: Phaidon, 2002. 289-297.

Hertzberger, Herman. "Didicato a Schindler: Some Notes on Two Works by Schindler." *Domus*, no.454 (Sept, 1967): 2-7.

———. *Lessons for Students in Architecture.* Rotterdam: 010 Publishers, 1991.

———. *Space and the Architect*. Rotterdam: 010 Publishers, 2000.

———. "Architecture for People." *Architecture and Urbanism 75* (Mar, 1977): 125-146

Heynen, Hilde. “Architecture between Modernity and Dwelling: Reflections on Adorno’s Aesthetic Theory.” *Assemblage*, no.17 (Apr, 1992): 78-91.

———. *Architecture and Modernity: A Critique*. Cambridge.: MIT Press, 1999.

Leatherbarrow, David. *The Roots of Architectural Invention*. New York: Cambridge U. Press, 1993.

———. *Topographical Stories: Studies in Landscape and Architecture*. Philadelphia: U. Pennsylvania Press, 2004.

———. *Uncommon Ground: Architecture, Technology, and Topography*. Cambridge: MIT Press, 2000.

Lewinberg, Frank. “Some Thoughts about Intensification.” *Intensification Report*, no.1 (March, 1993): 3-5.

Loos, Adolf. *Spoken Into the Void: Collected Essays 1897-1900*. Cambridge.: MIT Press, 1982.

Luchinger, Arnulf. *Structuralism in Architecture and Urban Planning*. Stuttgart: Kramer, 1981.

Safran, Yehuda and Wilfred Wang, eds. *The Architecture of Adolf Loos: An Arts Council Exhibition*. London: Arts Council of Great Britain, 1985

Sarnitz, August, ed. *R.M. Schindler, Architect : 1887-1953 : A Pupil of Otto Wagner, Between International Style and Space Architecture*. Translated by David Britt. New York: Rizzoli, 1988.

Sheine, Judith. *R.M. Schindler*. London: Phaidon, 2001, 70.

Smithson, Alison, ed. *Team 10 Primer*. Cambridge Mass.: MIT Press, 1968.

Sola-Morales, Ignasi. “Architecture and Existentialism.” In *Differences: Topographies of Contemporary Architecture*. Writing Architecture. Translated by Graham Thomson, edited by Sarah Whiting. Cambridge Mass.: MIT Press, 1999. 41-55.

Queen Street Site

C3 Community Care Consortium. *Rethinking the Queen Street site facilities master plan*. Toronto : Centre for Addiction and Mental Health ; C3 Community Care Consortium, 2002.

Court John. “From 999 to 1001 Queen Street: A Consistently Vital Resource,” In Edna Hudson ed., *Provincial Asylum in Toronto: Reflections on Social and Architectural History.* Toronto: Toronto Region Architectural Conservancy, 2000.

Hounsom, Eric. “An Enormous Building for its Time.” *Royal Architectural Institute of Canada Journal 42*, (June, 1965): 63-65.

Office for Urbanism [Prepared for City of Toronto Planning Division, Heritage Preservation Services]. *Queen Street West Heritage Conservation District Plan*. Toronto: Office for Urbanism, 2006.

Pleasance Kaufman Crawford, “Subject to Change: Asylum Landscape.” In Edna Hudson ed., *Provincial Asylum in Toronto: Reflections on Social and Architectural History.* Toronto: Toronto Region Architectural Conservancy, 2000.

Urban Strategies, Inc. *Master plan for the Centre for Addiction and Mental Health,1001 Queen Street West Toronto, Ontario*. Toronto : Centre for Addiction and Mental Health ; Urban Strategies, 2002.

Email interview with R. Christopher Edey, Communications and Urban Planning Manager Redevelopment Office Centre for Addiction and Mental Health, regarding plans for the site and draft guidelines for redevelopment of non-CAMH sites in the plan.