

PRIVATE OPEN SPACE DESIGN FOR RESIDENTIAL INTENSIFICATION
WITHIN OLDER RESIDENTIAL DISTRICTS;
A CASE STUDY IN SITE PLANNING OF TWO RESIDENTIAL
PROPERTIES IN OSBORNE VILLAGE, WINNIPEG

41

BY
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A Practicum Submitted to the Faculty of Graduate Studies in Partial Fulfillment
of the Requirements for the Degree of

MASTER OF LANDSCAPE ARCHITECTURE

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Chapter 1: Introduction and Methodology

1.1 Focus of the Study

The intent of this practicum is to examine, through the use of case studies, one type of residential intensification. Residential intensification can be defined as "residential development of a site at a density that is substantially higher than previously existed or was designated for that type of site" (Canadian Urban Institute 1991). The type of intensification examined is the addition of a new dwelling unit to an existing lot containing an older home. This addition may be either an addition to the existing structure or may form a separate structure. In either case the original home is to remain in tact. This type of intensification is explored in the hope that it may enable older communities to experience growth without compromising the qualities which make the neighborhood, particularly the streetscape, a desirable place.

The two case studies utilized focus on this one form of residential intensification and the areas of open space directly associated with it. These open spaces include the private outdoor living space of the residential back yards, and the more public open space of the front yards. A significant part of the overall streetscape image is formed by the front yards (Girling, Helphand 1994). The sites for the two case studies are both small lots containing older single detached dwellings. These sites are examined and redesigned to incorporate an intensified residential component within the overall context of their historic neighborhood. Bryce Street, in the Osborne Village area of Fort Rouge, Winnipeg is the location of these sites. This area was chosen because of a demand for increased residential densities demonstrated over the area's history. This street also retains a significant amount of the original building fabric. Although many of the homes on the street have changed to multiple family dwellings, many have retained their original main structures. One site was picked from each side of the street so that designs could respond to opposite sun exposures for both front and back yards.

This area of the city dates from the turn of the century, during a time when a large part of the city was undergoing rapid growth. The neighborhood has undergone a fair amount of redevelopment over the years.

Some positive, but mostly negative impacts are visually evident as a result of these changes. Particularly, an apparent lack of upkeep of both structures and yards as well as the simplification or elimination of architectural detail in many cases is evident. While the original neighbourhood contained mostly single family homes with some walk-up apartment blocks, it is now comprised of a much more diverse variety of residential dwellings including townhouse condominiums, highrise apartments, flats and rooming houses.

Varying forms of intensification have taken place within the neighborhood, but primarily two types of approaches have been taken. Commonly the original structures have been removed and replaced with newer and larger structures. Alternately many property owners have chosen to divide the original house into smaller dwelling units. An intensification option which allows the addition of an accessory unit while maintaining the integrity of the original home does not presently appear in this neighborhood. This study demonstrates one such option.

The form of residential intensification to be applied to each site in this study is the addition of a secondary dwelling unit to share the lot with the original dwelling. On both demonstration sites the question of where to locate this additional dwelling, or garden cottage on the site, as well as how to provide access to both dwellings will be examined. Particular attention will be paid to the provision of private outdoor living space for both units as well as the impact of the additional units on the existing streetscape. The provision of on site parking will also be included in the proposed designs.

1.2 Study Methodology

Methodology and Workplan:

1. Review literature and relevant site planning regulations and standards for case study sites. Research current demographic data and other community statistics or studies.
2. Search historical records, photos and maps to document development of the study sites.

3. Analyze existing streetscape and two study sites spatially and visually .
4. Establish design parameters, set program for study sites.
5. Apply design program to study sites
6. Assessment of the approach and the comparison of site plans, and where appropriate, make necessary adjustments .
7. Prepare final report, to include discussion, and design solutions with demonstration plans.

The result of this exercise is a set of open space designs for each of two residential properties containing single family dwellings. The case study designs illustrate strategies for adding one additional unit to each property by adding additional building mass on each site. Each design attempts to minimize impacts on the streetscape while maximizing the usable private open space for each dwelling unit, both the existing single family home and the additional unit. Issues of the location for the point of entry for the secondary unit as well as increased parking and outdoor living space requirements are also explored.

1.3 Residential Site Requirements, Goals and Objectives

The development of the following goals and objectives was guided by the review of literature on residential intensification and residential densities, and the site analysis and neighborhood historical perspective discussed later in this report. They are set forth to guide the design and siting of the garden cottage as well as the development of the private open space of the residential lot. This study does not explore all the forms of residential intensification which may be possible on these sites, but focuses on a single building form. Policy implications are not dealt with in this study as this task would require a study of its own.

Goals:

- ∞ To design an adaptable garden cottage to fit on the lot in conjunction with the main dwelling. The design must be flexible in terms of window and door locations so it may respond to a variety of site configurations and sun exposures. The design must also respect the architectural style of the main dwelling.

- ∞ To explore options for locating the garden cottage, as a rental unit, on each of the two study sites. The designs will explore the location and treatment of the cottage entrance as well as the design of outdoor living space for both dwellings, including parking requirements.

Objectives

1. To site the cottage in a manner so as not to overpower or compete with the main dwelling.
2. Create a separate entrance for the cottage with its own identity separate from the main house.
3. Respect the historic character of the streetscape with regards to front yard development.
4. Provide at least one patio area big enough for a dining or seating area for each residence.
5. Provide as much privacy as possible between the outdoor living spaces of the two residences and their neighbors.
6. Keep maintenance requirements low by reducing the amount of lawn as well as landscaping with hardy shrubs and perennials.
7. Provide small scale gardening opportunities through the inclusion of window boxes, container gardens and small herb or vegetable gardens.
8. Provide one year-round parking space for the main house as well as one winter-time parking space for the cottage.

Chapter 2: Residential Intensification

2.1 Introduction to Residential Intensification

Residential intensification, as mentioned earlier, can be defined as "residential development of a site at a density that is substantially higher than previously existed or was designated for that type of site" (Canadian Urban Institute 1991). Within older residential neighborhoods there can often be found areas of vacant space which may be for one reason or another, unused or under utilized. It is these spaces within the urban fabric, which may become the focus of growth in the future through a process of residential intensification. This study focuses on the older residential lot and its associated open space. Often as the older homes in urban areas are converted to multiple dwellings, the yards become neglected or simply converted to parking areas, without provision of outdoor living space for the residents.

Residential intensification may occur in a number of ways including conversion, infill, redevelopment, and adaptive re-use (C.U.I. 1991). With older inner-city neighbourhoods suffering decay and the ever-more-expanding suburbs becoming more and more expensive, both economically and ecologically, the time is appropriate to re-examine older residential areas.

In the postwar era, suburbia became the lifestyle of choice for most Americans. While this new way of living had many advantages, it also fragmented our society ... breaking down the bonds of community that had served our nation so well in earlier times (Katz, 1994).

These older neighborhoods have infrastructure in place as well as community amenities. Logically, in an age of re-use and re-cycling, these already urbanized areas should be used in the most efficient manner before we destroy an even greater amount of countryside surrounding our cities, building suburbs.

As well as providing an alternative to the typical suburban sprawl, residential intensification may be able to help the current residents of older deteriorating communities, by providing extra income through the addition of a rental unit. Such income could then be channeled toward maintaining the property. The transformation of a single family home on a private lot to accommodate an additional dwelling unit is becoming more desirable as the cost of maintaining a single detached home increases. With an increase in the

The affordability of housing is a major issue in most cities across Canada today as larger single family homes are falling into a state of disrepair because of rising maintenance costs. "Housing costs across the country have risen faster than increases in household income, and homes have become steadily less affordable" (Canada Mortgage and Housing Corporation 1995). Residential intensification can be a means of increasing the stock of affordable homes (Toronto Home Builders Association 1988).

In the past many of our oldest residential neighborhoods have been neglected and in many cases demolished in the name of urban renewal or large scale redevelopment. As well as ripping out large sections of the physical fabric of the city, this approach has also destroyed the social fabric of some neighborhoods it hoped to improve. It begins with the physical removal of the area's long term residents who may or may not return once the redevelopment is completed. Even if these residents choose to return, they are usually faced with an environment that is of a much larger, and more impersonal scale, than that which had previously existed. This, combined with the loss of long term neighbors and the influx of strangers into the community make rebuilding the social fabric difficult if not impossible in many cases.

Older neighborhoods which have managed to escape the redevelopment fury of the past few decades have faced other challenges. The cost of maintaining and repairing older homes is often too high for middle to lower income families. This is particularly true for older persons who are trying to maintain their family home, which served them well as they raised their families, but has become a burden on a pensioner's income. This segment of the community often sell off their homes out of economic necessity, and often at a low price reflective of the deteriorated state of the structure. As the neighborhood as a whole ages these sales can open up large groups of neighboring homes to developers eager to amalgamate and redevelop the lots for middle to upper income tenants or homebuyers, maximizing profits.

Another process which can actually improve the physical condition of the housing stock is gentrification. "Usually gentrification implies residential renovation rather than redevelopment" (CMHC 1985). This also can have detrimental effects, particularly if it occurs on a large scale, by raising the average income of the neighborhood, and through renovation, raising real estate values and taxes within the neighborhood. "Critics charge that since gentrification is primarily a middle-class phenomenon, it poses the treat of displacing lower-income people" (Bejelic 1991). The spin off effects of this may include higher taxes for long term residents and a reduction in the availability of affordable housing resulting in more lower income households leaving the neighborhood.

Environmental sustainability has also become an important issue in today's dialogue on community development. In the past as our cities grew no one seemed to care or even notice when larger and larger tracts of land were developed for new housing developments. Stripped of the components which make up their natural ecosystems, these once productive areas have been cleared to make way for the construction of homogeneous streets lined with almost identical houses and large scale shopping malls. This type of development once promised to combine the best of city and country life. It has instead, in most cases, eliminated the convenience of city life where services are easily accessible. It has also destroyed the ecosystems that sustained the pastoral qualities of the countryside which most suburbanites seek. The massive infrastructure needed to support this suburban lifestyle makes the automobile an essential component of everyday life for the residents. With endless expanses of maze-like crescents and cul-de-sacs, combined with large-scale regional shopping centers, it has become virtually impossible to live in today's suburban developments without owning at least one car. Typically, most amenities are beyond a comfortable walking distance, and often sidewalks are omitted. "The costs of suburban sprawl are all around us - they're visible in the creeping deterioration of once proud neighborhoods, the increasing alienation of large segments of society, a constantly rising crime rate and widespread environmental degradation" (Katz 1994).

Recently, alternative forms of development are being explored by groups of professionals such as those dubbed the "New Urbanists". These include Andres Duany, Elizabeth Plater-Zyberk and Peter Calthorpe among others. In many recent projects such as Seaside in Walton County, Florida, and Bamberton at Mill Bay, British Columbia, new communities are being designed with traditional footprints implementing grids and axial relationships instead of the more common curvilinear layouts which have become today's norm (Katz 1994). The spacial qualities which these designers employ are similar, if not the same, as those used to lay out most Canadian towns more than a hundred years ago and which still form the basic layout of most of our older residential neighborhoods (Duany, Plater-Zyberk 1991). These older areas may now be in decline, but they still possess many of the unique qualities which give them a sense of place. This is the same sense of place that architects such as Duany and Plater-Zyberk look to instill in their designs. With new designers looking back to more traditional schemes, perhaps the time is right to revive the districts which were first planned in this manner, and explore how they can be utilized to their fullest potential.

Well designed residential intensification projects have the potential to stabilize older neighborhoods by allowing residents to use a portion of their home to generate income, while ensuring that the quality of the residential neighborhood is preserved. "An increase in density need not necessarily

mean a decrease in the quality of the residential environment" (Simon 1985). Through proper design of both private and public open space perhaps the amenities we associate with an older, low density neighborhood may be preserved, while the needs of the non-traditional household are met through residential intensification.

2.2 Forms of Residential Intensification

Residential intensification may occur in a number of ways on both private and public property. Intensification on private property or open space may include a variety of approaches. Increasing the number of households accommodated in existing buildings, through conversion of, or additions to existing structures, as well as the building of new structures on vacant or near vacant land, may be included (T.H.B.A. 1988). Examples of these may include additional units in existing homes such as inlaw suites or accessory apartments. These may be included wholly within the existing residence or in some cases may constitute an addition to it. Additions to existing accessory buildings, apartments over garages, and conversions of accessory buildings to living units are other ways in which a private residential lot may be intensified. Private sector residential intensification may also occur through conversions of non-residential buildings, either commercial or institutional

Community level intensification may include re-developing vacant serviced land in already built-up parts of urban areas as well as conversion of, or additions to existing structures on near vacant public land. Residential additions to non-residential public buildings may also be considered. The public sector in conjunction with private land owners or community associations may also undertake the development of back alleys or interior block developments.

2.3 Impacts On Open Space

The impacts of residential intensification on adjacent public open space may include both those of an active nature such as increased use of existing parks and the possible need for development of new public and semi-public recreation spaces (C.U.I. 1991). On a more passive level, the encroachment of increased building mass and alterations to building facades which frame spaces, has an impact on the streetscape. This can change the scale and the sense of enclosure a particular street or block may possess. Still on a more private level the increase in street traffic, pedestrian load, and parking demand associated with an increased number of dwelling units can create a greater need for privacy and screening of private areas as well as accommodating additional parking areas on residential lots. Intensification of a single residential lot may have a two-fold impact on the property's private outdoor living space. First the existing yards may become significantly smaller due to additional structures being erected. Secondly, by increasing the number of households on a site, the demand for use of the remaining space increases. Additional privacy screening may also be required as previously private views may now be shared by two or more dwellings.

Chapter 3: Study Site Analysis

3.1 Introduction to Osborne Village Study Sites

Bryce Street is located in the northern portion of Fort Rouge, across the Assiniboine River from downtown Winnipeg, in an area known as Osborne Village or simply "the Village". While the center of the Village is the commercial strip along Osborne Street, there are substantial areas of older homes both to the east and to the west of this street. This study focuses on the residential neighborhood to the east of Osborne Street.

Bryce Street is one of several short streets running on a north-south axis that dead end at the public lane running behind Stradbrook Ave., with their main access being off River Ave. It is this configuration which gives each of these streets a strong sense of enclosure, and minimizes through traffic, creating quiet residential enclaves which are somewhat unique being this close to downtown (Figure D1.1). Although Bryce Street is actually two blocks long, this study focuses only on the southern block. The Northern block of the street is offset from the southern one and does not have any properties fronting onto it and therefore is not suitable for this study.

The location map shows that this section of the city is located in an area where two grid patterns meet. The small streets in the study area are derived from the original river lots that run perpendicular to the Assiniboine River, and are laid out on a north-south axis. This pattern is disrupted by Stradbrook Ave. where the blocks change their orientation to align with the original lots which ran perpendicular to the Red River.

3.2 Neighborhood Demographics

Bryce Street falls close to the center of the River-Osborne section of the Winnipeg Area Characterization Program for which the city of Winnipeg publishes selected demographic information and statistics. Those quoted are based on 1986 Statistics Canada census data which gives the most detailed categories, and are updated where possible with the 1991 census data which is somewhat more limited. Although specific information for Bryce Street alone, if available, would vary to some degree from the program area, the data is useful in giving an idea of the make-up of the neighborhood (see Appendix B).

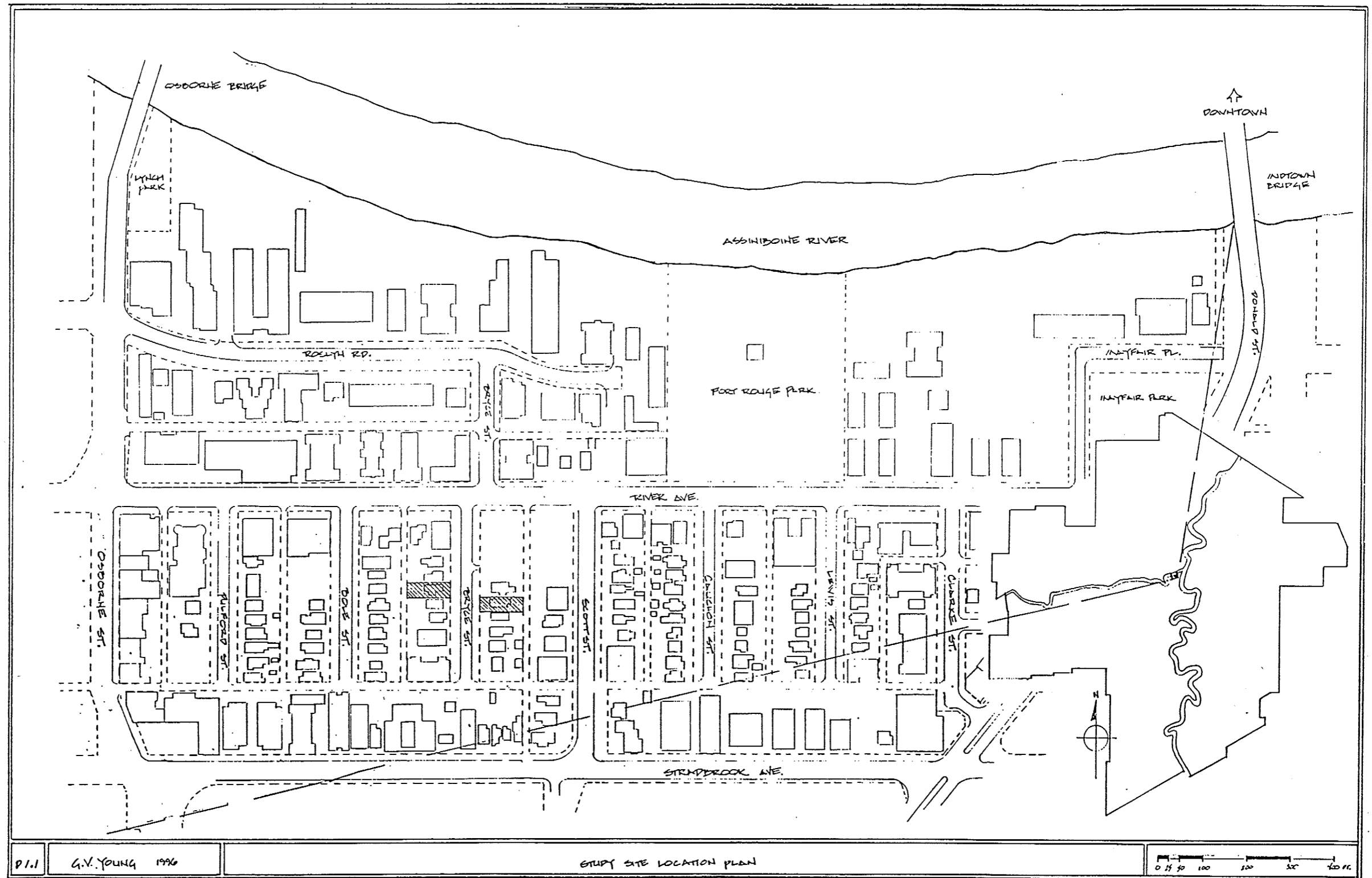


Figure D1.1. Study Site Location Plan

The demographics show the population of the area to be concentrated within the 20 to 34 age group. This comprised 48.8 percent of the total in 1986, significantly higher than the city average of 28.1 percent for this group. The 1991 data confirms this trend although the data is separated by sex and the age group categories are different. The area also contains a lower percentage of children, teen-agers, and middle aged persons while the over 60 population is slightly higher than the city average. The education levels for the area in 1986, show a higher percentage of persons with some university education when compared with the city average, this may reflect the number of university students living in the area, corresponding with the high percentage of young adults mentioned earlier. Figures for education levels in 1991 are not available. Employment rates are similar to the overall city with a slightly higher unemployment rate shown in both 1986 and 1991. The statistics on marital status, available for 1986 only, show a significant difference between the profile area and the city average. Married persons made up only 27.9 percent of the area population compared with 46.2 percent citywide.

Family status data shows a significantly higher number of non-family persons in this area, 54.5 percent as compared to only 17.5 percent for the city in 1986. There is no comparable data for the 1991 census. Mobility of the residents reflected the same trend with 74.5 percent of the population being termed movers, or non-permanent residents in the profile area and only 46.8 percent citywide. The average income for both households and families is substantially lower in the profile area, while the average individual income is only slightly lower than the city as a whole. This is true for both the 1986 and the 1991 data.

These statistics show that Bryce Street falls within an area that is populated by a large number of single, young people who are quite mobile, fairly well educated and of average individual income. There appear to be only a small proportion of traditional families with children in the neighborhood.

Data on dwelling units shows a very small number of single detached homes in the profile area, only 5.4 percent compared with 58.4 percent for the city in 1986. This disparity increases in 1991 as the percentage of single family homes in the profile area decreases to only 2.6. The highest percentage of dwelling units in the area, 54.9 percent, fall within the category of 'other', not being either apartments of 5+ stories, or single detached in 1986. The categories differ for the 1991 data and here the largest number, 96.3 percent, fall within the apartment designation. Ownership statistics show only 4.9 percent of the units in the area being owner occupied in 1986, compared with 59.9 percent citywide. By 1991 this number has dropped to only 3.9 percent. Household type also differs significantly between the profile area and the city in 1986, with 29.9 percent being one-family and 70.1 percent being non-

family in the profile area. These figures are almost reversed for the city as a whole. This category was not included in the 1991 data.

3.3 Site Observations and Visual Analysis

Bryce St. today is wholly a residential street containing a variety of dwelling unit types, within either of two main building types (Figure D1.2). The center portion of the block is lined with mostly older wood frame homes, eleven in all, while at both ends there are two-to-three-story brick apartment buildings. There are three such apartment buildings on the block, all on the west side of the street. The two of these that are located at either end of the block are of an early period and seem to fit well with the overall neighborhood, anchoring the block at both ends. The other is a newer building which occupies the second lot from the south end of the street. This building lacks the visual texture and detail which the others possess and appears out of place within the streetscape. All of these houses except the one at the south end of the eastern side of the block appear to be of about the same age and of a similar style, ranging in height from one and a half to two and a half stories. The newer house, just mentioned, is constructed as a duplex and appears to date from around the 1970s. Within the houses lining the center of the block, there can be found a number of dwelling unit types. There are some which are used as rooming houses, others divided into two or more apartments, and just two that are still maintained as single family residences. Within each of these three types there can also be found owners as residents, and properties which are totally rented. Most of these houses do however maintain the general appearance of single family homes. This information on tenure was gained through resident interaction and by reviewing the Henderson Directory for Winnipeg, 1995, which is discussed later in this text.

On the east side of the street it is evident that the original line of houses has been eroded at both ends. At the south end of the street is a vacant lot being used for parking. Two vacant lots on Bryce combine with two on River Ave. forming a meadow surrounded with overgrown hedge plants at the north end of the block. Just this last summer a portion of this space was used by a community gardening group with limited success.

Perhaps even more important to the streets character than the architecture of the buildings, are the grand rows of boulevard trees which meet to form a canopy overhead. This is particularly true during the summer. Most of these trees are about a hundred years old surviving in relatively good condition. Of the thirty one trees lining the block only five have been replaced in recent years. Unfortunately the replacement trees which are Green Ash will not fully replace the Elms which have been lost, particularly

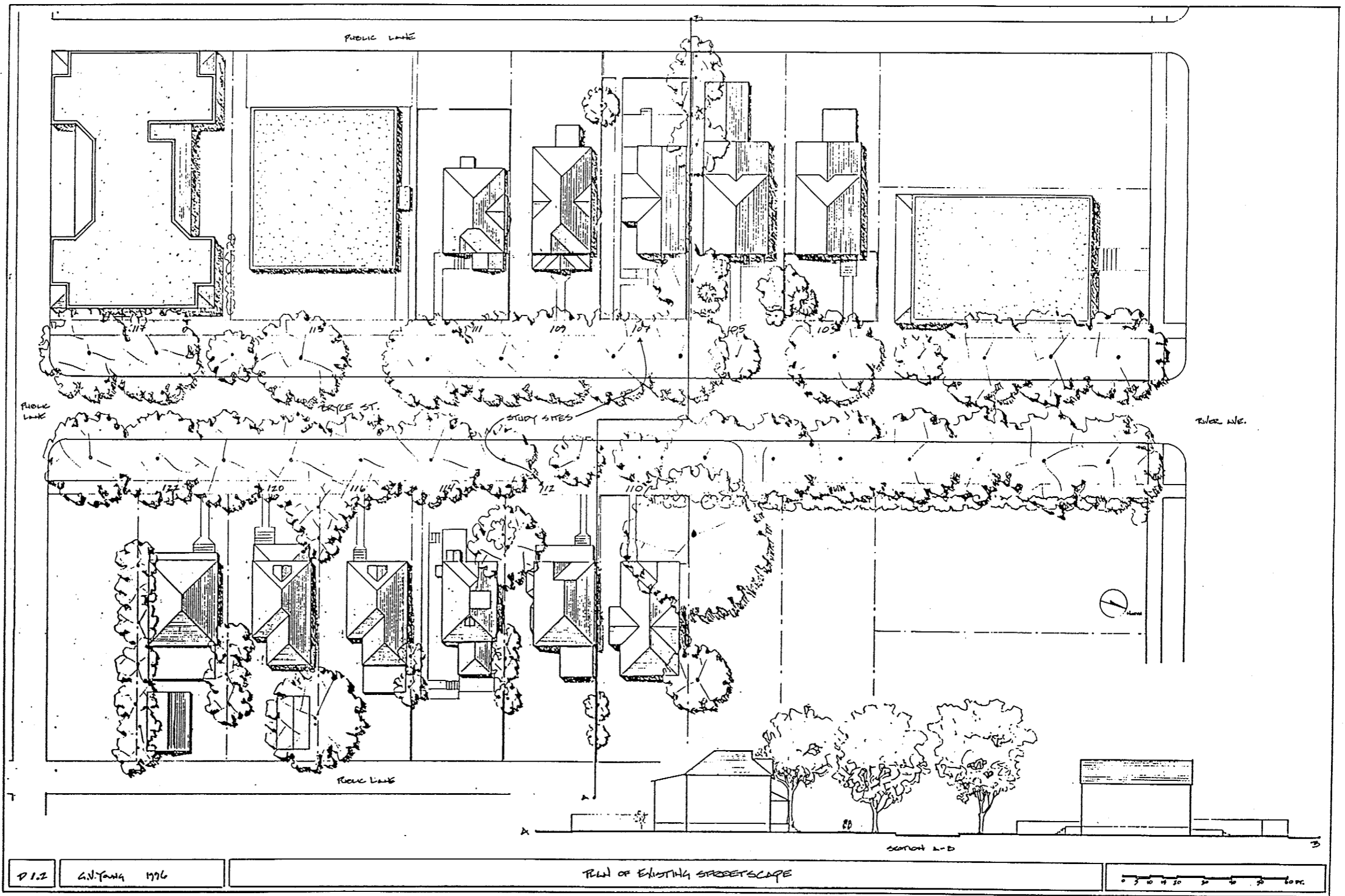


Figure D1.2. Plan of Existing Streetscape

in terms of their structure. It is also unfortunate that the vista created by these trees when looking south is terminated by a rather unseemly view of the back of an unattractive and poorly maintained apartment block. This condition exists on similar streets in the area but on others the placement of more attractive apartment blocks fronting on the lane enhances the overall streetscape by reinforcing the sense of enclosure. Unfortunately the treatment of these end lots lies mostly within the hands of private land owners who may not consider their impact on the street as a whole.

The rows of street trees are planted at intervals of approximately 25 feet from each other in the center of a 15 foot wide grass boulevard. While these broad strips of turf sometimes become quite an unsightly brown during late summer, they become lush green in the spring and during other wetter times. These boulevards add a sense of spaciousness to the street, providing a breathing space between the street and the front yards of the homes and apartment buildings. During the winter this boulevard space is important because it provides a space to pile snow. The pavement width of the actual street is 24 feet and accommodates a single lane of traffic in each direction, as well as a parking lane on the west side which is heavily used.

The two larger apartment buildings at either end of the west side of the block are both built close to the front property line leaving little or no front yard space. This helps to lend a sense of enclosure to the front yards of the other smaller buildings in the center of the block. These front yards are typically 19 to 25 feet deep, depending on whether the buildings have a front porch. The east side of the block has a much more open feeling due to the vacant lots at both ends. The front yards of almost half of the properties are fenced in a variety of styles of wood fence. Two of the older houses have short (two and one half foot) picket fences which appear to be fairly old while one other house has a newer 4 foot picket fence. The other two existing fences are similar to each other, built of solid boards 5 feet high. These fences stand adjacent to each other in the center of the west side of the block.

Many of the front yards on the block show little sign of maintenance or care beyond basic upkeep as is also the case with some of the houses themselves. Front yard plantings are limited to small flower beds along foundations, many with orange day lilies which seem to survive throughout the neighborhood with little or no sign of being cared for. Some shrubs exist on a few of the lawns and appear overgrown or worse, poorly cut back. These include honeysuckle, lilac, dogwood, caragana, cotoneaster, and bridalwreath spirea. Four of the houses have mature elm trees. These help further reinforce the image set by the boulevard trees. Another tree of note is the very large Cottonwood which stands in what would have been a front yard of the vacant lot adjacent to number 110 on the east side of the block. This is indeed a large tree towering to almost twice the height of the adjacent, two and

a half story house and whose canopy stretches more than 66 feet on just one side, spanning two lots. Two of the yards, next to each other at the north end of the west side have fairly young spruce trees growing which may have been planted to provide privacy for these houses which face the open lots at the corner of River Avenue. These lots appear to have been vacant for some time and are fronted by a hedge of mixed species which is greatly overgrown. This hedge does however add to the sense of enclosure helping to separate this part of Bryce Street from the higher traffic volume on River Ave.

Separation between the lots varies widely along the block. Some front yards are fenced from their neighbors while others are left open so that their lawn flows into the adjacent one. There can also be found a few older shrubs growing along property lines such as lilac, honeysuckle, and dogwood. Some of the fences have been offset from the property line either because of large trees or simply because a side yard, which is too small to be used by the owner, is fenced off at the front and rear of the house and left to the use of the neighbor.

Most of the properties on the block show little or no signs of active use of the front yard space. The two houses which have front verandas, one on either side of the street, do have people using them in the summer. Two houses also have uncovered or open decks in the front. One of these houses is located on each side of the street, however, only the one that faces west appears to be used as outdoor living space.

The back yards along the block are used primarily for parking; two having detached garages that are not being used as such, and one having an attached garage that does appear to be in use. Several of the houses have either one, two, or three adjacent parking spaces sited perpendicular to the lane. One house differs from the rest because the single parking space is situated parallel to the lane and separated from the rest of the back yard by a fence. Many of the houses have small patches of turf squeezed in adjacent to the parking area or situated between it and the house. For the most part, these rear yards are left unfenced and open to the lane. Two houses have decks built onto them, one of these is fenced and the other is not. The one that is fenced is situated low to the ground and receives a substantial amount of use when the weather permits. The other, an unfenced yard, is built fairly high off the ground and receives very little use. Some of the rear yards, covered mainly by parking spaces, are used for recreation by the residents for games such as frisbee or for sun tanning. Barbecues are also visible in two parking areas. One of the houses has a second floor balcony on the back which the residents tend to use for only short periods of time.

In summary, the block contains a good stock of older homes clustered in the center and anchored on the west side by two older apartment blocks. The

east side is more open due to the vacant lots at either end of the block. More important perhaps to the streetscape is the presence of mature trees lining the boulevards on both side which meet in the center to form a canopy over the street. Overall, there is a sense of enclosure that helps separate this residential enclave from the busier streets to the north and south. Although some of the buildings show a lack of maintenance and general upkeep, their original sense of scale has been maintained with only a couple of exceptions. The newer apartment building located second from the south end on the west side appears out of place as does the duplex of the same period across the street from it.

The wide boulevards add to the residential character of the street and provide important space for snow to be piled in winter. Many of the lawns on the block are open to the sidewalk while a few are fenced. Generally the yards show signs of minimal maintenance and a general lack of landscaping or any kind of planting with exception of the lawn. The front yards appear only to be used for recreation or living space where verandas or decks exist. The back yards are used more intensely when fenced, although some residents use the back yards regardless, especially on very warm days. Sometimes they park their cars sideways to provide privacy from the lane.

3.4 Neighborhood Historical Perspective

Bryce Street and most of its buildings date from around the turn of the century, shortly after the addition of Fort Rouge to the city in 1882. This period, 1881-1882, witnessed a boom in the growth of Winnipeg when, in this short period of time, the city's population more than doubled from just over six thousand to more than fourteen thousand residents (Artibise 1975). It was at this time that the residential patterns which can be seen today began to emerge. The lower classes were locating to the north of downtown while the middle and upper classes tended to build in the south and west. The area around Bryce would have been built primarily by the middle class as those people of higher economic standing were developing areas such as Crescentwood and Armstrongs Point.

Period photographs are often an important source of visual information regarding the history of an area. Unfortunately, early photographs of this area are not in abundance. Both the Manitoba archives, which includes the Hudson Bay Archives, and the Western Canada Pictorial Index, do not contain any photographs of Bryce Street or its immediate neighbors. It appears that photographers of the turn of the century tended to concentrate mostly on upper class residences and riverfront estates, or civic and commercial

buildings. There are two photographs which provide some clues as to what Bryce Street may have looked like during its early years. An early photograph of the sidewalk on Clarke Street, four blocks to the east (Figure P1.1), shows the immature street trees as well as fairly dense plantings along the edge of the front yards. It also appears that the sidewalk shown in the picture is wooden as was usually the case during the early years of the city. The other photograph of particular interest (Figure P1.2), shows the front view of a house on Bell Ave., close to Clarke Street. This clearly illustrates the use of a wooden picket fence to delineate the front yard. As well the detail of the front porch or veranda, a very common feature of homes of the turn of the century, is evident. Here the traditional foundation plantings also appear. The awning over the front window and the drapery on the veranda show some of the measures the residents have taken to block the heat of the sun.

Another source of valuable information on the physical appearance of the street during the early years of the century is the Fire Insurance Map of 1917-1918, held at the Manitoba Provincial Archives (Figure D1.3). This not only shows the footprints of the buildings, but also gives the height and type of construction for each building. The patterns which appear within the block today are evident in this early map. The west side of the block shows the three story brick apartment buildings at each end, anchoring the row of one and a half and two and a half story houses lining the center of the block. The east side of the block shows a longer row of houses, similar to those on the other side, than exists today. Interestingly, the last lot fronting Bryce Street at the north end appears vacant as it does today.

One of the most important differences between this 1918 footprint and that of today (Figure D1.3) is the reduction in the number of houses with covered front porches or verandas. In 1918 every house on the block except one had a veranda, some even wrapping around to cover two sides of the house. Today the trend is reversed with only three of the eleven houses currently on the block still retaining their veranda. Another structural element shown on the 1918 map which does not appear today is the two story garage on the rear of two of the lots. The comparison of this 1918 pattern with that of today shows the replacement of two of the original houses at numbers 113 and 122 with an apartment block and a duplex respectively. It can also be noted that the original houses at numbers 126 and 104, as well as those fronting River Avenue to the east of Bryce Street, have been demolished or destroyed leaving the lots vacant.

This fire insurance mapping also provides information on the changing of street names in the neighborhood at some point early in the area's development. Here Bryce Street was formerly called Tache Street, while neighboring Bole Street was once called Royal Street. Also Stradbroke Avenue was originally called Spadina Avenue and Pulford Street was called Rose Street.



Figure P1.1. Clarke St. Looking North c.1903
Photo courtesy Western Canada Pictorial Index

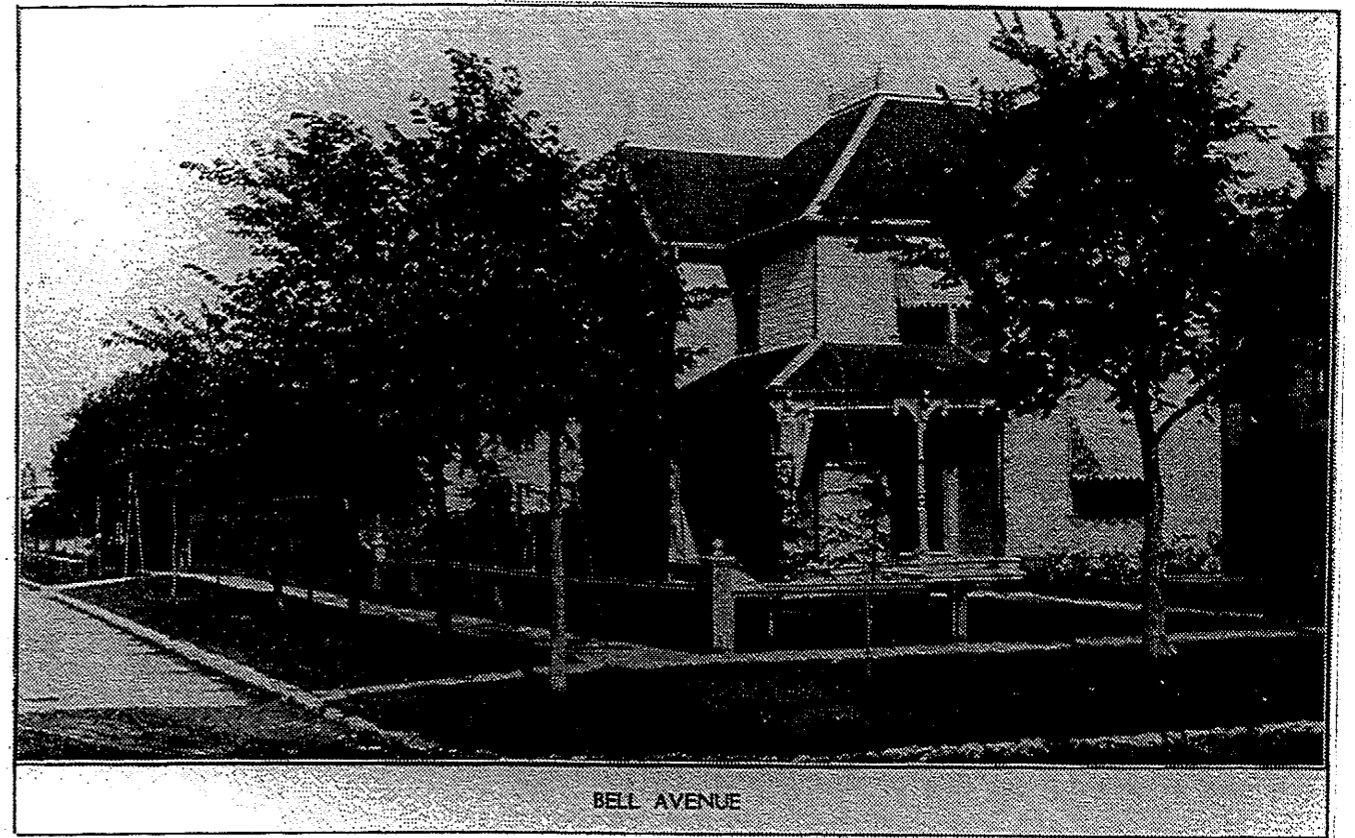


Figure P1.2. Bell Ave. c.1903
Photo courtesy Western Canada Pictorial Index



Figure D1.3. Historic and Present Building Footprints

The Henderson Directories for the City of Winnipeg from the present and dating back to the 1890's prove to be valuable in tracing the history of the residents of the street. It should be noted that these directories are compiled from information gathered directly from residents and is not verified in any way. However, they provide useful information on length of residency and tenure, as well as occupations in some cases. A full listing of these findings for Bryce Street can be found in Appendix A.

This data shows most of the street numbers appearing between 1895 and 1910. The directories for these years list some of the residents occupations. These included a barrister, an office clerk, a reverend, two engineers and two contractors, as well as a laborer. This further supports the idea of this area being developed for the middle class. The inclusion of two contractors may be a sign that at least some of these houses was built on speculation and not built to suit a particular person or family. Some names listed also appear at more than one address on the street in consecutive years. This may indicate that these individuals would build a home to sell upon its completion and then move to another near by lot to do the same.

The directories also show a high rate of turnover in residency and ownership. Long term residents of about fifteen years began to appear in the directory around 1920. Prior to this, most of the houses changed ownership four or more times. Other trends involving various forms of residential intensification also appear when comparing the listings. It appears that even from a very early date this street, originally developed for single family detached houses, has almost continually been modified to accommodate more dwelling units. This first appears around 1910 when the two houses at the south end of the west side of the street were removed and the lots combined in order to construct the apartment building which still occupies the site. Similarly, the house which occupied the double lot adjacent to this was removed in 1970 and replaced with a two story apartment building. Many of the houses have at some time or another been converted from single family dwellings to either duplexes, apartments, or rooming houses with little or no change to the exterior of the building. This first becomes evident around 1945, with the conversion of two homes. Other houses were converted at a rate of about one every ten years up until the present day. At present there are only two houses on the block that are still or once again being used by single families.

The Henderson Directories also list properties which are vacant each year. More than half the houses on the block have been listed as vacant at some point. These vacancies sometimes last only a year but in some cases properties are listed as being vacant for as long as thirty five years (number 110, vacant from 1920 to 1955). An idea of when demolitions have taken place can be found either by the replacement of the listing by one with apartment

or separate unit listings, or by the end or last inclusion of an address. It can be surmised that two of the original houses were demolished in 1910, as mentioned earlier, along with one in 1960, for the construction of apartment buildings. Two more houses were demolished or otherwise destroyed after 1970 when they were both last listed. These were both located on the east side of the block at opposite ends. The original house at number 122, with its large curved veranda, was also removed and replaced by a duplex around 1970. One particularly interesting finding from this research is that there is no directory listing or map reference to any dwelling on the lot located between number 104 and the lots fronting River Avenue. This lot is in the center of a larger vacant lot today. Although it seems unlikely, the lot appears to have remained empty for over one hundred years in a highly developed urban area.

3.5 Overview of Existing Regulations and Standards Regarding Building Size, Lot Coverage, Setbacks, And Landscape Elements

Building in the area is currently regulated by the City of Winnipeg Zoning By-law No. 6400/94. Bryce Street is divided between two zoning classifications under these regulations. The south end of the street falls within the R2-T classification while the northern end around River Avenue is classified RM-4.

The R2-T designation is a transitional zone allowing single and two-family structures as well as limited multiple-family structures. The multiple-family structures are conditional within this zone and are limited to a height of 30 feet or two and a half stories, the same as for the other two uses mentioned. Rooming houses are not permitted within this zone, and only one principal structure is permitted per lot.

Front yards are required to be 20 feet deep within this zone. An exception to this applies on existing, built up streets, where an average of the front yard setbacks for the existing buildings is used. The side yards are to be five feet in width except for existing lots narrower than the 50 feet presently required, for which 10 percent of the lot width may be used to a minimum of three feet. The current required backyard setback is 25 feet, which may be infringed upon by accessory structures to some degree. These accessory structures are required to maintain a two foot side and rear setback. These structures must not cover more than 12.5 percent of the total lot area and cannot exceed a height of 13 feet. There must also be a minimal distance clear between structures. Decks up to two feet in height are permitted in side yards providing they remain three feet from the property line. Balconies are

permitted to project into required yards to a maximum depth of four inches per foot of yard to a maximum of five feet.

The Rm-4 zone allows for the uses listed above as well as multi-family structures to a maximum of 45 feet in height. The minimum lot width in this zone is 75 feet with a minimum lot area per dwelling unit of 800 square feet. The required front yard setback is 25 feet, whereas the side yard must be 8 feet. The required rear yard is the same as in the R2-T zone, 25 feet.

In both zones the required setbacks for private garages is two feet from both, the side and rear property lines for the walls of the building, and only one foot for the roof overhang on both sides. The regulations regarding the height of fences are also the same for both zones. In the front yard, a fence may be only as high as four feet, while fences in the side and rear yards may reach a maximum of 6.5 feet. When used to produce a fence effect, landscape elements such as trellises, arbors, and hedges must also fall within these height guidelines.

Parking requirements for both of the zones discussed above are set at one required off street parking space per dwelling unit.

3.6 Selection Of Two Sites for Detailed Study

Site observations for the block indicate that there are only two houses on Bryce Street which are presently being used as single family dwellings. All of the other remaining houses are either being used as duplexes, apartments or rooming houses. The two which contain only single dwellings will be used as study sites. They are located on opposite sides of the street, giving an opportunity to work out design solutions for the different sun exposures for front and back yards. The two chosen properties are located near the center of the block, and are almost opposite each other. The site at #107 contains a house constructed in 1896, and which has been extensively renovated about ten years ago. The home now has a contemporary look and has lost both the original veranda and the back porch. Number 112 on the east side of the street has retained most of its original character including a veranda, still intact, across the front elevation. This house also retains an original back porch which is in poor condition and will be considered demolished for the purpose of this study.

3.7 Existing Conditions, 107 Bryce St.

The lot on which 107 Bryce Street is situated measures 33 feet wide and has a depth of 100 feet, backing on a public lane (Figure D1.4). It is located on the west side of the street, giving an eastern exposure to the front yard and a western exposure to the back yard. The existing two story house on this lot dates from around 1896. It is built on a raised foundation about three feet off the ground as is common for the neighborhood. It is currently maintained as a single dwelling unit and is rented. The wood frame structure is clad in stucco with decorative wood shingles on the front gable. The main house is rectangular in plan with a side bump-out rising to form a south facing gable, and a secondary axis at the roof line. The roof is relatively steep with a pitch of 10:12. During the 1980s the house was extensively renovated. This renovation removed most of the house's trim detail, replacing it with smaller more contemporary trim. All the windows were also changed, keeping their original vertical proportions. Either during this time or at some time previously, the original front veranda, which wrapped around the south-east corner of the house, was removed. This veranda has been replaced with an open deck which does not receive much use and is in a state of disrepair. The rear of the house also has a deck which does receive a fair amount of use but needs to be replaced as it is in poor condition.

The house has been sited closest to the north property line leaving a two foot side yard, fenced so as to relinquish it to the neighbor. The south side yard is 6.5 feet, and contains a sidewalk connecting the front and back yards. The front yard is fenced by a solid five foot wood fence. This fence provides a good sense of privacy as well as security for the residents, however its style and height appear out of place when viewed from the street, and detract from the overall appearance of the property. The neighbor to the south has erected a similar fence. On the North side, the fence is located one foot inside the property line in order to miss a large elm tree situated on the line.

The front yard is covered in lawn while the back yard has been entirely covered with crushed gravel. The parking area in the back is also gravel and is separated from the back yard by a fence. This fence, which is six feet high encloses the entire back yard and has one angled section built to accommodate a crabapple tree which is growing on the south property line.

There are no trees growing on this lot, however three trees on the edge of the north neighbor's property provide some shade to the north side of both the front and back yards. The mature boulevard trees also provide shade from the east. The house situated to the south is the major source of shade for the property as it is two and a half stories high and is located only 2 feet from the property line.

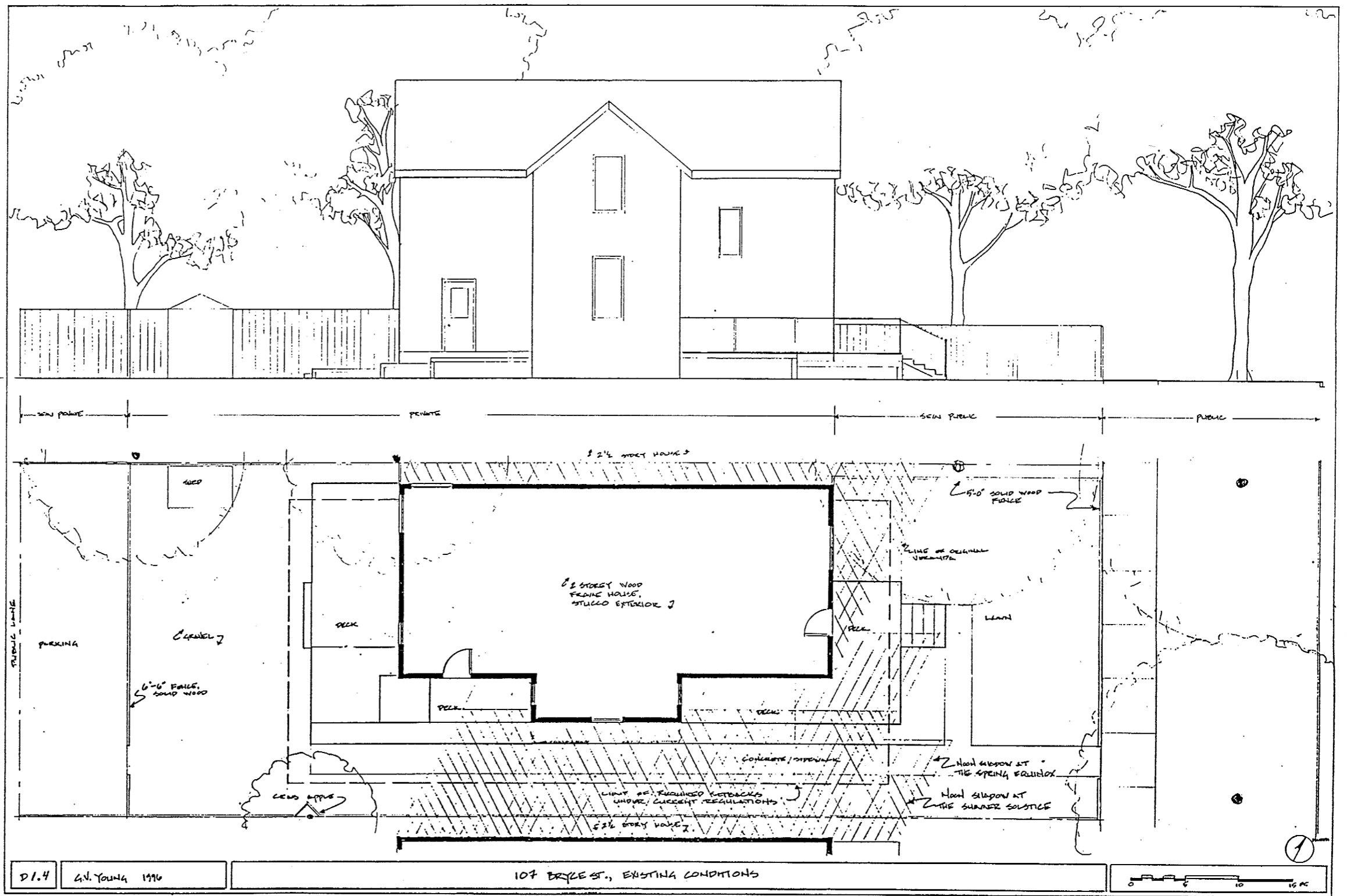


Figure D1.4. 107 Bryce St. Existing Conditions

There is no garage on the site at present, however there is a small garden shed in the back yard. The existing parking space is located parallel and open to the alley.

3.8 Existing Conditions, 112 Bryce St.

The lot on which 112 Bryce Street is situated, backs onto a public lane and measures 33 feet wide with has a depth of 100 feet (Figure D1.5). It is located on the east side of the street, giving a western exposure to the front yard and an eastern exposure to the back yard. The existing two and one half story house on this lot dates from around 1901. It is built on a raised foundation about three feet off the ground, a condition typical of the neighborhood. It is currently maintained as a single dwelling unit and is owner occupied. The wood frame structure is clad in wood clapboards with decorative wood shingles on the two front gables. The main house is rectangular in plan with two bays projecting from the south side on the first floor. There is a veranda on the front facade with most of its original ornate trim remaining. The back of the house has a poorly supported two story porch which will be considered removed for the purpose of this study. The roof is relatively steep with a pitch of 10:12, sloping on three sides with two gables in the front. The house has never been extensively renovated, and remains in close to original condition.

The house is situated closest to the north property line, leaving a two foot side yard which has been fenced off to become a part of the neighbor's side yard. The south side yard is six feet, and contains a sidewalk connecting the front and back yards. The front yard is not fenced across the front. The sides of the front yard are both defined by old fences which are falling over and need to be replaced. Both sides have planting beds overgrown with weeds. There is also a flower bed along the front of the veranda which contains day lilies and the only shrub on the property, a honeysuckle. The lack of a front fence eliminates any sense of privacy this front yard may have.

Both the front yard and most of the back yard are covered in lawn while the back yard also contains a gravel parking space. The back yard is open to the lane and separated from the south neighbor by a solid six foot wood fence.

There are two trees growing on this lot; one is a mature elm growing next to the south property line next to the corner of the veranda, and the second is a double trunk oak tree, also on the south property line but in the back yard. This tree is still quite young, measuring only about ten feet high.

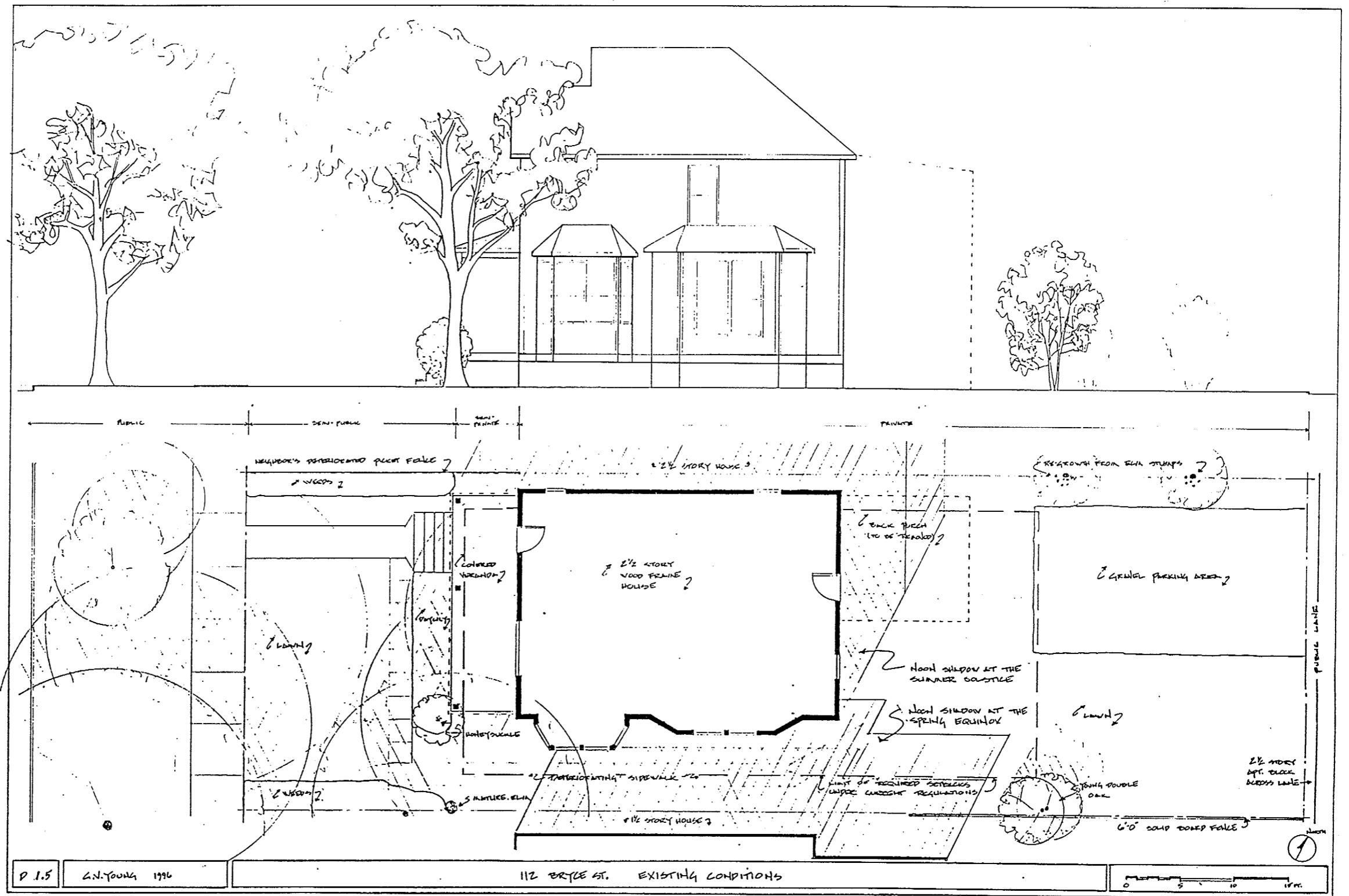


Figure D1.5. 112 Bryce St. Existing Conditions

The semi-mature boulevard trees also provide shade from the west. The house situated to the south is the major source of shade for the property, even though it is only one and a half stories high. This house is located only two feet from the property line.

Chapter 4: Study Site Demonstration Plans

4.1 Garden Cottage, Building Design

The garden cottage has been designed as an additional dwelling unit, accessory to the main dwelling (Figures D2.1 and D2.2). It could serve as a rental unit for the homeowner or perhaps be used by members of an extended family. The cottage could function as a granny flat but only for the well elderly due to the stairs and the second floor location of the bathroom.

The footprint chosen for the basic design is 14 by 20 feet. This is the same as garages typical of these lots both historically and today. At one time it was common to have two story garages on the rear of the lots in this area. This size allows for enough open space to be left on the small lots to accommodate the two parking spaces required for two dwellings.

The cottage is two stories in height with a total floor area of approximately 560 square feet. At this size the cottage is similar to a small one bedroom apartment. The size also compares favorably to CMHC demonstration models of granny flats ranging from 456 to 576 square feet, although they are all designed on one level. A comparable 560 square foot, two story dwelling can be found as an accessory apartment in the 'sprout house', a design for a flexible and versatile house published by CMHC in 1995.

The first floor elevation of the cottage should match that of the existing homes they are to be sited with. On Bryce Street, this is between two and three feet above grade. A full basement is required for laundry and mechanicals as well as storage. Any additional space in the basement could be utilized as an additional finished room.

The overall height of the two story cottage is reduced by using a dropped roof line so that the bulk of the structure will not compete with the main dwellings for visual dominance on their lots. Where space permits, the square footage of the cottage may be increased through the addition of shallow bays on either one or both floors, depending on site conditions. Second story balconies may also be added. The roof pitch used is 10:12, the same as most houses original to this area. Exterior finishes should match the original house whether it be stucco or wood clapboards. Vertical window proportions and either casement or double hung styles to match the existing houses help unify the new cottage with the older homes.

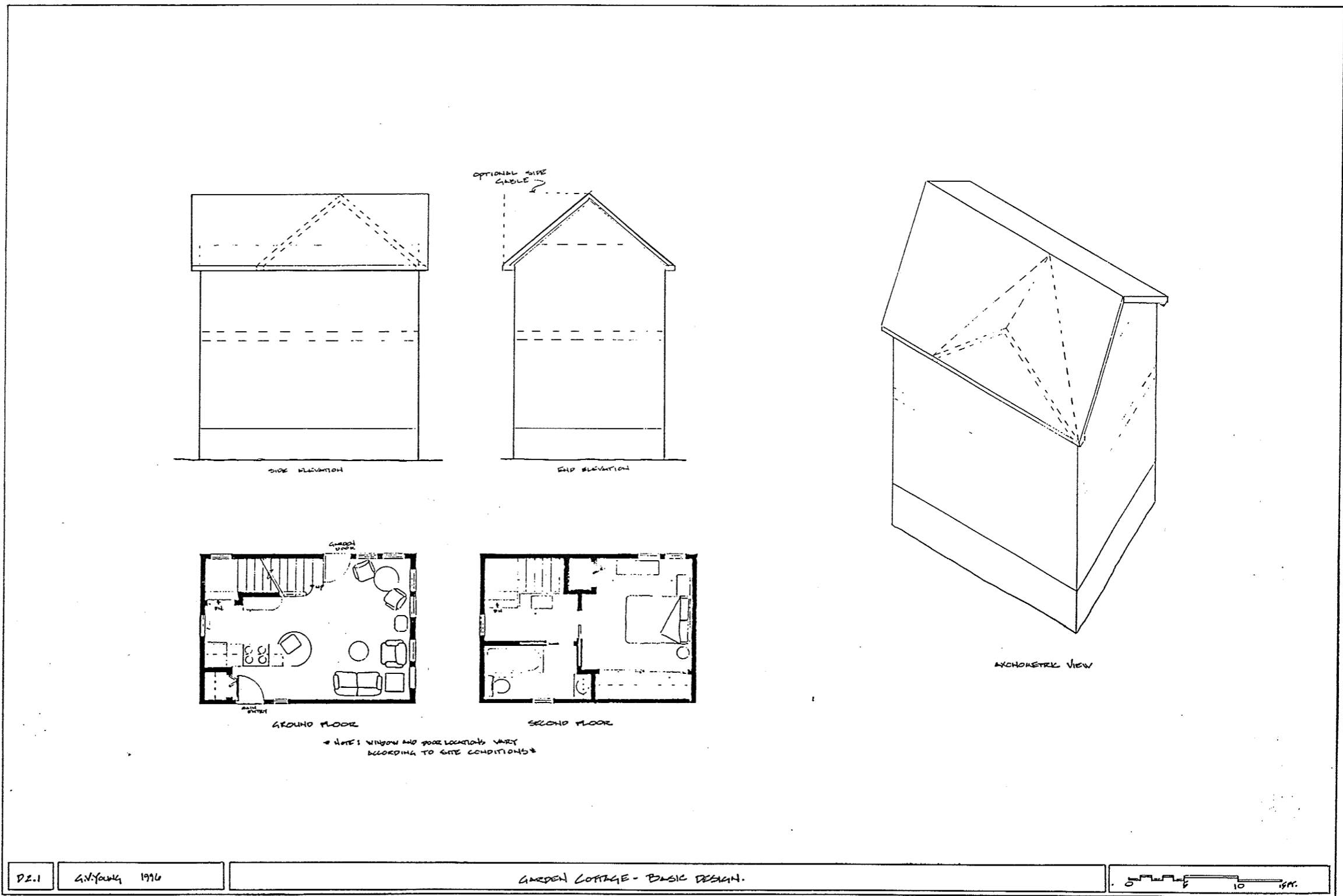


Figure D2.1. Garden Cottage Basic Design

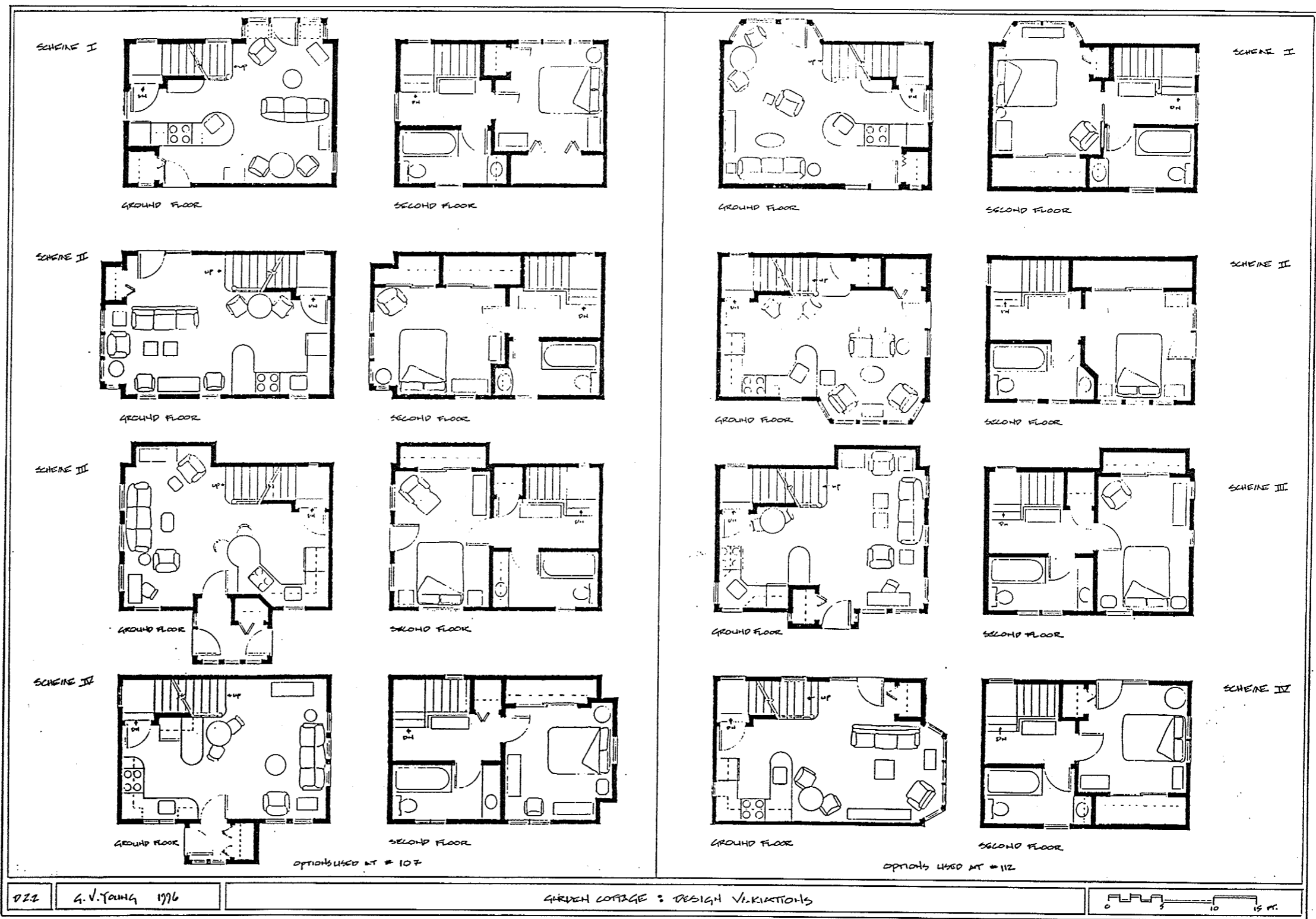


Figure D2.2. Garden Cottage Design Variations

The cottage is designed with the stairway tucked into one corner and the basement stairs under the stairs to the second floor. The kitchen is located adjacent to the stairs, and the entrance to the basement is located off the kitchen. This relationship is beneficial as extra storage space in the basement, and can be used for bulk food storage and a freezer, to supplement the small kitchen. In some instances where the siting of the cottage requires a separate front and back, or garden door, some kitchen space is sacrificed. This entry space does, however, double as kitchen floor space around the counter if more than one person is preparing meals. Where possible, the two entrances are combined to save space and improve traffic flow.

The living area occupies the other end of the first floor. The windows and garden door can move to either of the three exterior walls to gain the best access to the patio area, as well as to gain the best solar access. This area is also expanded where site conditions permit through the use of a bay.

The second floor contains the bedroom, located above the main living room, and the bathroom in the corner over the kitchen. Due to limited space in the bedroom, the upstairs hall can be utilized to provide extra space for the placement of a bureau or another piece of furniture. The closet area in the bedroom can be moved from one side of the room to the other in order to accommodate the placement of windows, gaining the best possible solar access. Because of the six foot high knee walls on both sides of the second floor, the addition of a gable on one side helps facilitate, in some cases, the placement of full height upstairs windows.

In many of the options illustrated, some windows are placed high on south or west facing walls. These are used where the view is poor or where privacy is a concern. These provide light to the cottage interior while being placed above eye level to provide privacy.

4.2 Four Basic Schemes for locating the Garden Cottage on the Study Sites

The garden cottage can only be situated in the back yards of the study sites due to both, the small size of the front yards and the nature of the streetscape. In this neighbourhood, it would be inappropriate to locate any building in front of the line established by the original houses. This open front yard space substantially adds to the overall streetscape, and combines with the wide boulevards and mature trees to create an overall sense of place.

Two variables in locating the cottage, within the confines of the back yard, are explored (Figure D2.3). Firstly, there are two options for locating the front entrance to the cottage; the first is from the street or from the public lane at the back of the property, and the second variable explored is the degree of physical separation from the main dwelling.

Locating the entrance to the cottage off the front street may be the simplest approach in terms of providing a street address. This approach also allows the users of the cottage to have direct access to the public space of the street. This type of site layout requires a long front yard approach to the cottage and may not be the best way to utilize the limited space available.

The second variable explored, the degree of separation between the cottage and the main dwelling, has two options: either the cottage can stand as a separate structure on the site, or it can be attached to the main dwelling. Attaching a new structure to a house as old as those in this neighborhood provides substantial technical difficulty. This is due to the instability of these homes which tend to move annually from the stress exerted by the frost on the stone foundations. Difficulties also arise when attaching the new structure without blocking windows in the original house. In some cases a window can simply be moved around a corner with little difficulty but it is the intent to avoid disruption of the original structure. Providing a built link between the two structures in the form of a porch, either enclosed or screened, is another approach utilized. In many cases this can allow for the retention of original windows.

4.3 Parking Requirements

City of Winnipeg by-law # 6400/94 requires one space per dwelling unit for single-family and two-family dwellings within the R2-T zoning designation. Because of the small size of the lots allowing barely enough room for two parking spaces along with the cottage, the one space, delegated for the cottage, is used only in the winter when it is needed the most. This area can then be used as a patio in the summer while the resident parks on the street. This transformation is achieved through the use of large gates which are operated seasonally. The tenant of the rental unit may not own a car, subsequently the second parking space would not be needed.

The CMHC parking areas advisory document (undated) recommends that, where the parking space has walls or fences on both sides, a size of 2.95 x 5.5 meters or 9.5 x 18 feet be used for standard cars. This assumes a vehicle is turning off of a 20 foot wide lane at 90 degrees. Since the back lanes are only

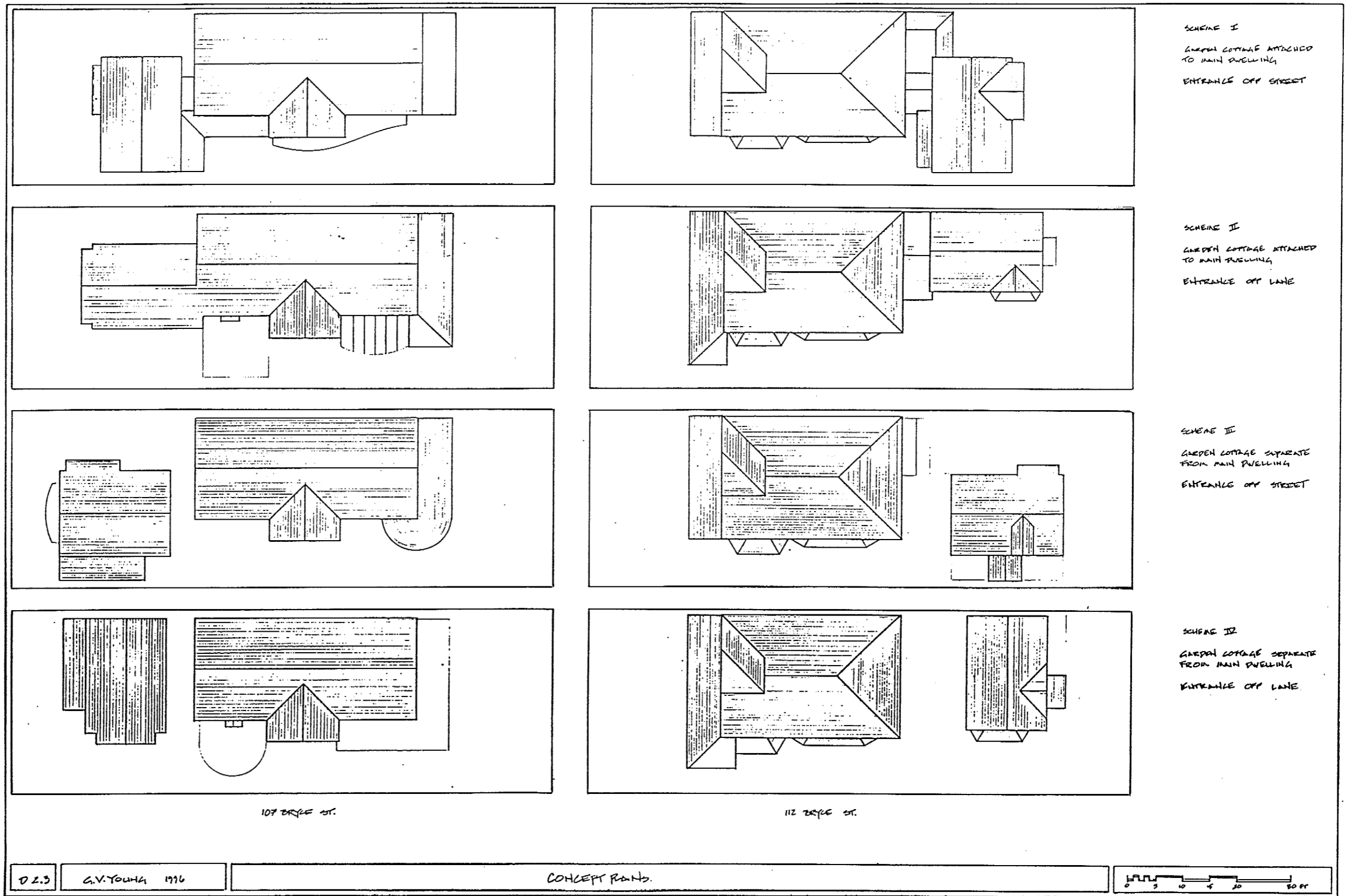


Figure D2.3. Concept Plans

12 feet wide, an additional eight feet is required to allow for a turning radius. This eight foot deep area also needs to widen to about 17 feet where the parking space joins the lane, allowing adequate turning space. Both parking spaces must have some adjacent space for snow storage, and be visible from the house or the cottage.

4.4 Front Yard Development

Development of the front yard space on both study sites is limited to passive living space established in two areas or zones. In some cases, this additional outdoor living space is needed for the main dwelling, due to the back yard becoming primarily occupied by the cottage and parking areas. The first of these zones is the veranda area which presently exists on the house at number 112, and which is re-created in the designs for number 107. The second area utilized is the front yard proper. This is only developed at ground level to increase its sense of privacy and to reduce the visual impact on the streetscape. Screening from the street becomes very important when this area is developed. Historically, both fences and hedges were used for this purpose. All of the designs use hedges to serve this purpose because they add a softer and greener element to the streetscape than fences. They also create a more open effect in the winter, and their bulk creates a wider physical barrier between a front yard patio and the public sidewalk. Hedges can also be allowed to grow taller than the four foot maximum height limit set for both fences and hedges in the front yard, to provide additional privacy. The height limit only tends to be enforced for fences at present. These patio areas remain as semi-public spaces even when screened by hedges, and as such retain a certain degree of formality.

4.5 Detailed Designs

4.5.1 Scheme I: Cottage Attached To Existing Dwelling, Entrance Off Street

Both of these designs use the south side yard as an entrance space for the cottage (Figures D3.1.1 and D3.2.1). Both also use a porch structure to connect the two dwellings so as not to block windows in the existing structures.

Figure D3.1.1 shows scheme I applied to number 107 Bryce Street. In this plan the connecting porch is used as a sun-porch for the main house, and also allows the movement of the backdoor to a north facing location near the parking area. The attached cottage is aligned on a north-south axis with the front door facing the street. This door location is separate from the cottage garden door and dictates the smaller kitchen option be utilized due to limited available space.

The main living area is located at the north end of the cottage where it gains a western exposure. The garden door is set into a solarium style bump-out in the west facade overlooking the summer patio area which is paved in and winter parking area is located on the west side of cottage with a footpath brick and surrounded on three sides with planting beds. This summer patio along the south side of the cottage for winter access to the front door from the parking area.

A graceful curving path from the street to the cottage front door helps to break the monotony of this linear front yard space. Shade tolerant ground covers are used on both sides of the walk because this part of the lot receives little or no direct sunlight.

In order to provide adequate outdoor living space for the main house, a front yard patio is developed in conjunction with a veranda built across the front of the house. The front yard of the house is separated by a hedge from the street and from the cottage front walk. Fencing and gates are used to create separate entrances for both dwellings as well as to provide some security from the street. A second floor balcony is incorporated into the design on the south side of the house to provide a sitting space for the main house and as an alternative to using the shaded front yard. In order to gain access to the balcony, a door must replace a bedroom window.

Figure D3.2.1 shows scheme I applied to number 112 Bryce Street. In this plan the connecting porch is used as a back porch for the main house. The second story deck on the roof of the porch is accessed through an existing

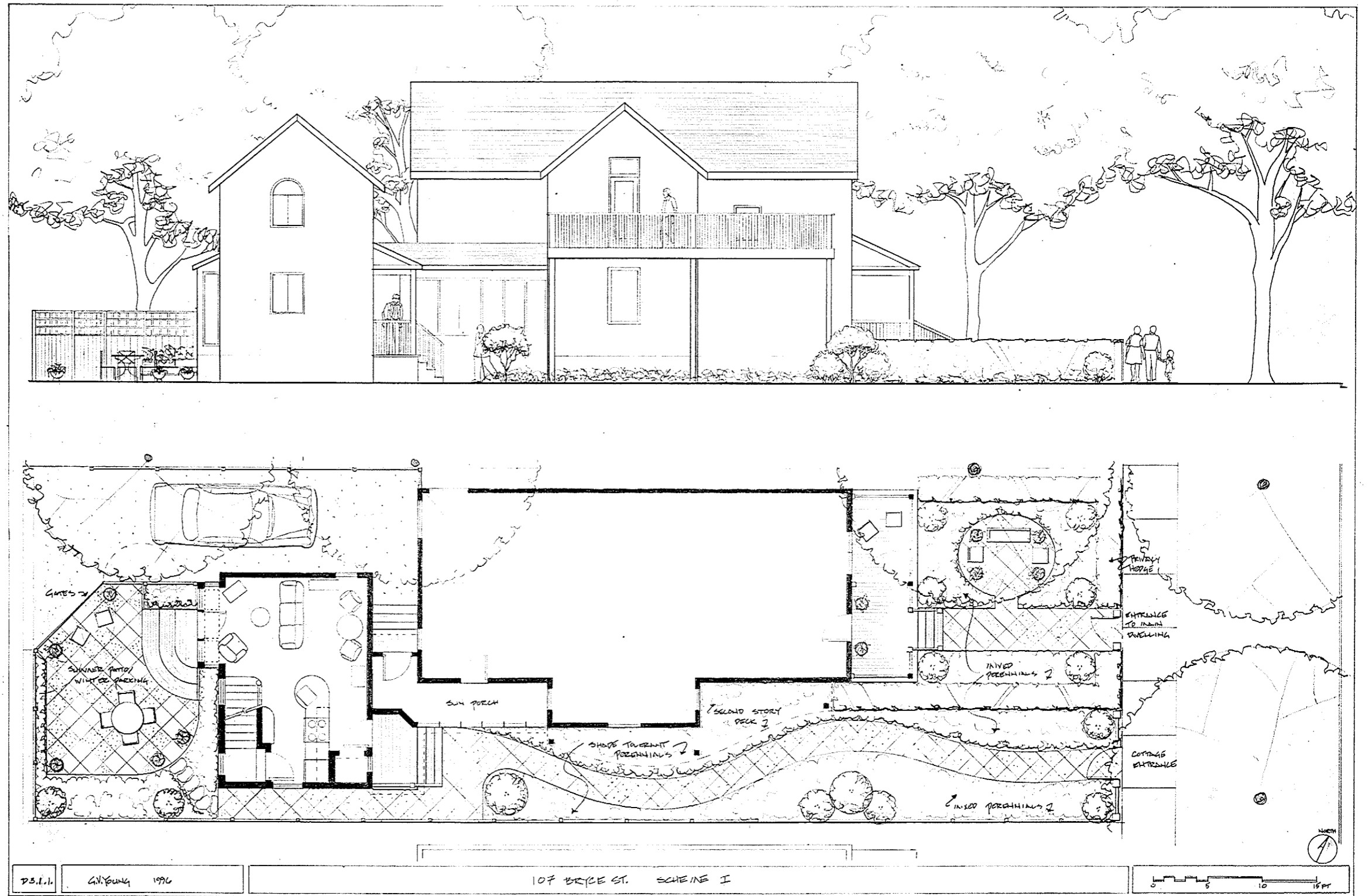


Figure D3.1.1. 107 Bryce St. Scheme I.

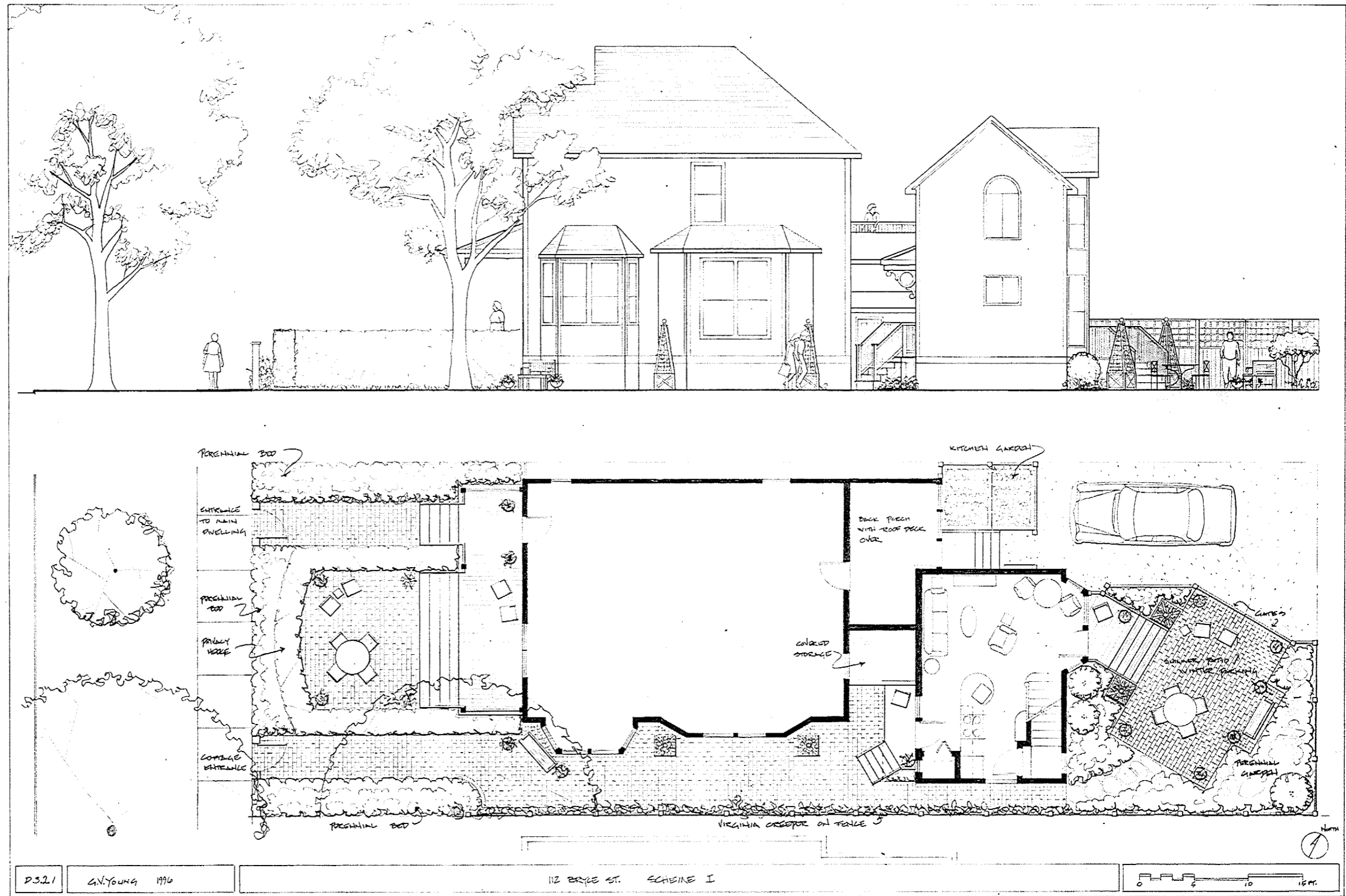


Figure D3.2.1. 112 Bryce St. Scheme I.

exterior door located in an upstairs bedroom. This porch structure also includes a storage shed area at grade level for the cottage. This part of the structure is built low, with its roof line running under an existing window of house. The cottage is attached to the porch and is situated on a north-south axis. The layout of the cottage is a mirrored version of the design used at number 107 and described earlier. In order to compliment the architecture of the main house, the protruding bay is designed with angled sides on this site.

The summer patio area is located on the east side of the cottage, adjacent to the living area bay which incorporates a garden door. This patio also serves as a parking area during the winter months, as is the case in all of the designs presented here. This brick paved area is angled to provide a fair amount of garden area which doubles as snow storage space in the winter. Access from this parking area to the front door of the cottage is gained through the placement of a foot path along the south side of the building.

The cottage front entrance is linked directly with the street through a brick courtyard running along the south side of the main house. Planter boxes with trellises, elevate plants to gain additional sun exposure. The fence along the property line is covered with virginia creeper to add another green element to this very shaded area. Fence posts and gates mark the separate entrances for the cottage and the main house from the street.

The center portion of the front yard is developed as a patio to serve as the primary outdoor living space for the main house. This patio is established at the existing grade level, and is screened from the street and both front walks with a hedge. Access to this area is from the veranda by stairs running the full width of the patio. These stairs can also be used as informal seating space.

While the cottage has access to a fairly substantial amount of garden space, the main house has only a very small garden area, located between the back porch and the parking area. This part of the lot receives only brief eastern and southern sun exposure. Constructing the garden as a raised bed increases this exposure to improve growing conditions. This garden space can also serve as snow storage space during the winter.

4.5.2 Scheme II: Cottage Attached To Existing Dwelling, Entrance Off Lane

Both of these designs connect the two structures on the site but separate the entrances with only the main dwellings having direct access to the street (Figures D3.1.2 and D3.2.2). The south side yard in both cases is utilized as living space for the main dwellings.

Figure D3.1.2 shows scheme II applied to number 107 Bryce Street. In this plan the cottage is attached directly to the house. This arrangement requires that two windows of the main house be relocated around the corner of the room to the south facade. The cottage is sited on an east-west axis and is located in the center of the back yard in order to clear the existing west facing window in the kitchen of the house. This option creates a massive south facing facade, making the combined structure dominate the small lot more than in any of the other options.

The cottage design employed uses a single entrance. This is made possible by the elimination of the front door facing the street. This floor plan best utilizes the ground floor space of the cottage. The additional space gained through the removal of the front door allows the largest kitchen option to be used. This option also uses large windows, located in a south-west facing bump-out on both floors.

The shaded, north facing dining deck has an open arbor overhead with virginia creeper to soften the space and enhance its cool enclosed nature. This deck is extended in front of the doors and incorporates a set of broad entrance steps. These lead down to a brick patio and winter parking area with good south and west exposure.

The main house has a small dining deck built off the back door. This receives western sun and includes a barbecue area by the back door. Raised planters, adjacent to the deck, eliminate the need for railings and in some cases allow for better sun exposure to planting beds.

Additional outdoor living space for the main house is provided by reconstructing the front veranda in a wrap-around style. The entrance steps are located to the north end of the veranda to maximize privacy at the south end. The portion of the veranda which runs along the front of the house is covered by a roof. The south side widens in a curve, and is covered by a pergola to provide partial shade. A second set of steps leads from the south side of the veranda to a lower deck along the south side yard which connects to the back deck.

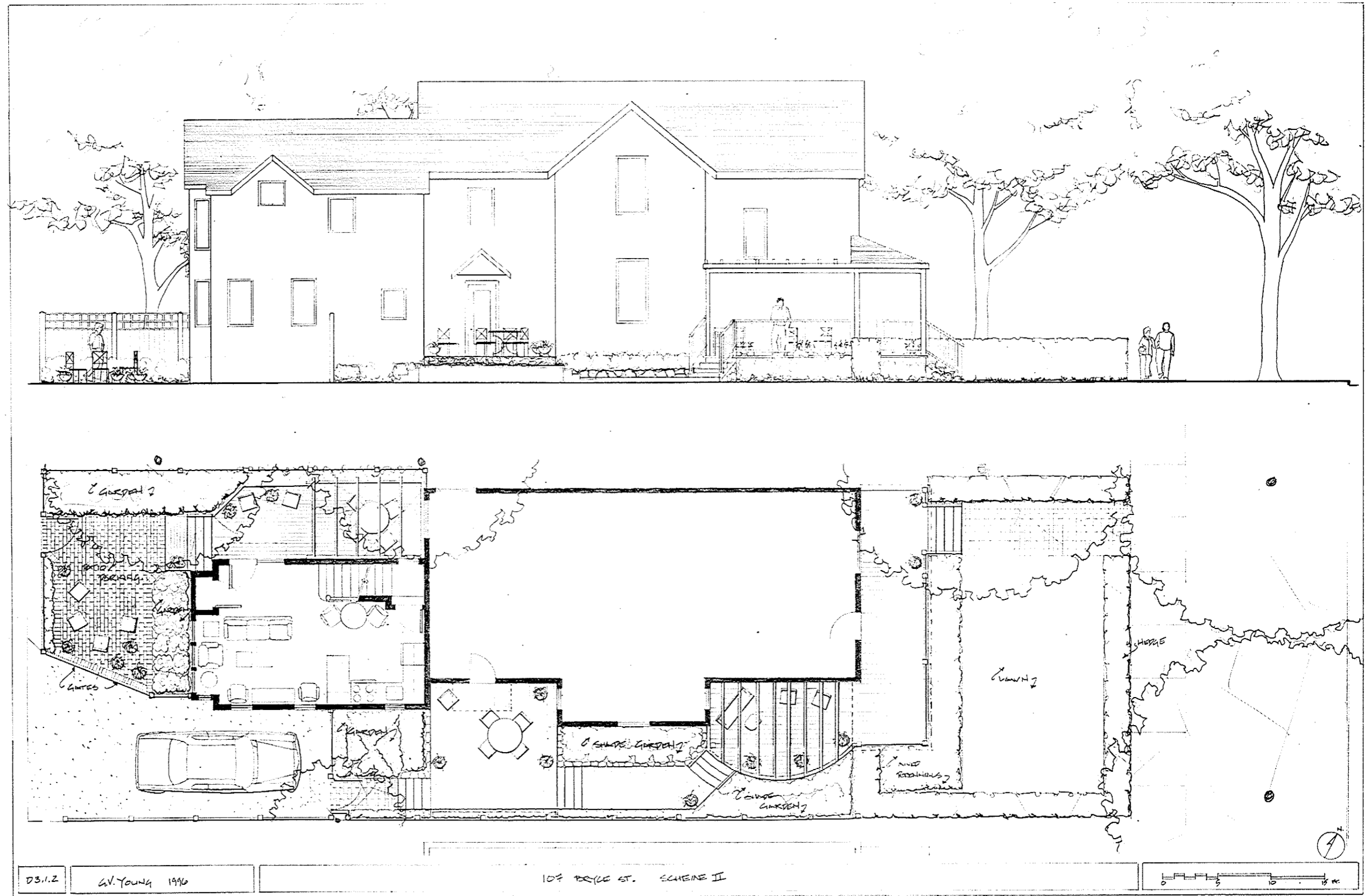


Figure D3.1.2. 107 Bryce St. Scheme II.

The front yard contains a small lawn and is surrounded by a hedge. A perennial bed is located along the veranda and could be extended around the perimeter of the lawn at the base of the hedge, in a traditional manner. This scheme allows the front yard to be developed as it may have been envisioned one hundred years ago when the original houses were established.

Figure D3.2.2 shows scheme II applied to number 112 Bryce Street. In this plan the cottage is connected by a traditional style of screen porch, used by the main house to access the back yard and the parking area. Here the cottage is placed on an east-west axis, on the north side of the property. The interior lay-out of the cottage is similar to that used for this scheme at number 107. The single entrance again allows for the largest possible kitchen option to be employed. Here though, a single story bay which reflects a more tradition style, is located on the south side of the cottage. A small shaded garden, with a stone path leading to a garden bench, is located outside this bay creating both a quiet place to sit outside and a pleasant view from inside. Above the bay, a south facing gable accommodates high windows, allowing the southern sun into the second floor bedroom.

The door is placed at the east end, allowing the space at the foot of the stairs to be used for closets. Outside, the door is sheltered by a small balcony which overlooks the brick patio area that becomes parking area during the winter.

The main house has two separate outdoor living areas. At the back of the house, a dining patio is in a shaded location, accessed through the screen porch. Adjoining this is the south side yard which is developed as a shade garden. Here planters with trellises and window boxes raise plants to gain as much exposure to the sun as possible. The ground here is paved in brick as the lack of direct sunlight makes ground-covers difficult to grow. The fence along this side property line is planted with virginia creeper to add an additional element of greenery.

The veranda in the front yard is extended to the south where a new front walk is located. The northern part of the front yard receives the most sun and therefore is used as a patio, accessed off the veranda by a separate set of stairs from the main entrance. Privacy for this low brick patio is established with a dense hedge.

4.5.3 Scheme III Cottage Erected As Separate Structure, Entrance Off Street

Figure D3.1.3 shows scheme III applied to number 107 Bryce Street. In this plan the cottage is constructed separately and maintains a direct connection to the street. The cottage is placed on an east-west axis to allow space for parking.

The veranda along the south side of the cottage provides visibility from the street and provides room for a foyer or mud-room with a coat closet. Access to both the front and back yard is gained through this area. This then allows for a single entrance into the main part of the cottage. As before, the single entrance plan allows for the most space to be used for the kitchen. The kitchen design here saves floor space by incorporating the dining area into the counter-top. A north side bump-out also extends floor space on both floors. The second floor bedroom has access to a west facing balcony overlooking the summer patio.

The west end of the cottage veranda steps down onto a south-west facing patio area which is also used for parking in the winter months. The east end of the veranda provides front door access to the brick front entrance walk leading to the street. This walk is offset in stages, to break the long horizontal line from the cottage to the street. It is also separated from the front yard of the main house by a hedge.

All of the outdoor living space for the main house is located in the front yard. The covered veranda across the front of the house wraps the south corner of the front facade, forming a semi-circle. The central front steps provide entry to the formal front courtyard which provides access to the street. Perennial borders and planter boxes with trellises add greenery to this area. This front courtyard area is enclosed by a hedge and gate. Another gate is also located at the cottage entrance from the street. The back yard of the main house is only large enough to accommodate a small back step and an alley leading to the parking space and a small garden area.

Figure D3.2.3 shows scheme III applied to number 112 Bryce Street. In this plan the cottage is constructed separately and maintains a direct connection to the street. The cottage is placed on an east-west axis to allow space for parking.

As in this scheme applied to number 107 above, the veranda along the south side of the cottage provides visibility from the street and provides room for a foyer or mud-room with a coat closet. The cottage floor-plan then becomes a mirror image of the one just described with the exception of the inclusion of a balcony. Here the end wall of the bedroom receives morning

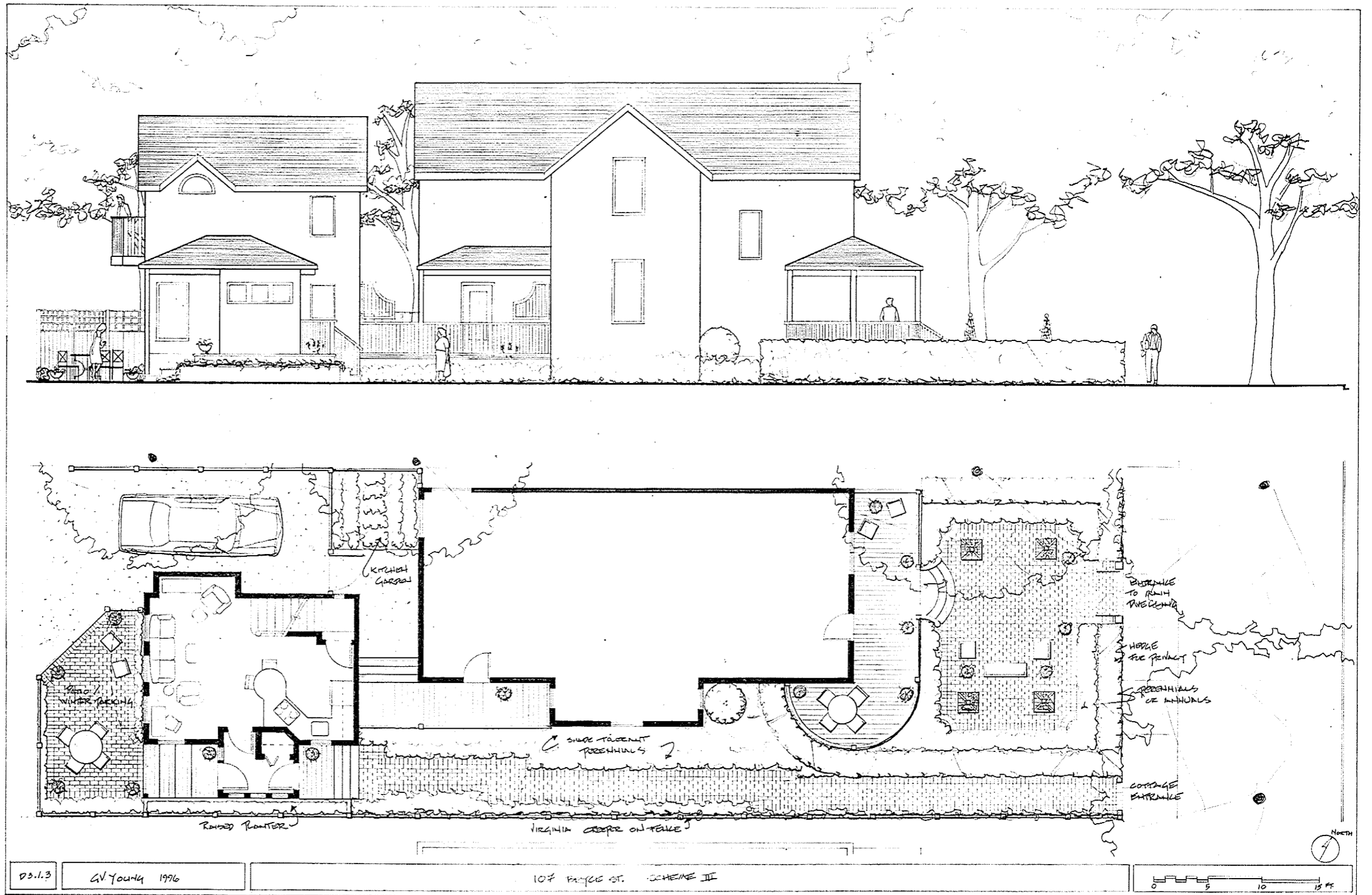


Figure D3.1.3. 107 Bryce St. Scheme III.

sun and is not a suitable balcony location.

The front entrance walk to the cottage here is treated as an entry courtyard with benches and planters. Trellises on the planter boxes and the addition of window boxes allow for plant material to be elevated and thus gain greater sun exposure.

The main house has a back deck, set between the house and the cottage which steps down past raised garden planters to the parking area. The small garden planters get some morning and noon sun. This deck is separated from the cottage entry court by a fence topped with lattice. A small second floor balcony overlooks the deck area and provides rain cover for the back door. The front yard retains some lawn surrounded by perennial beds and a garden bench placed in a sunny location next to the front walk. A hedge is used for privacy and to separate the cottage walk from the front yard of the house.

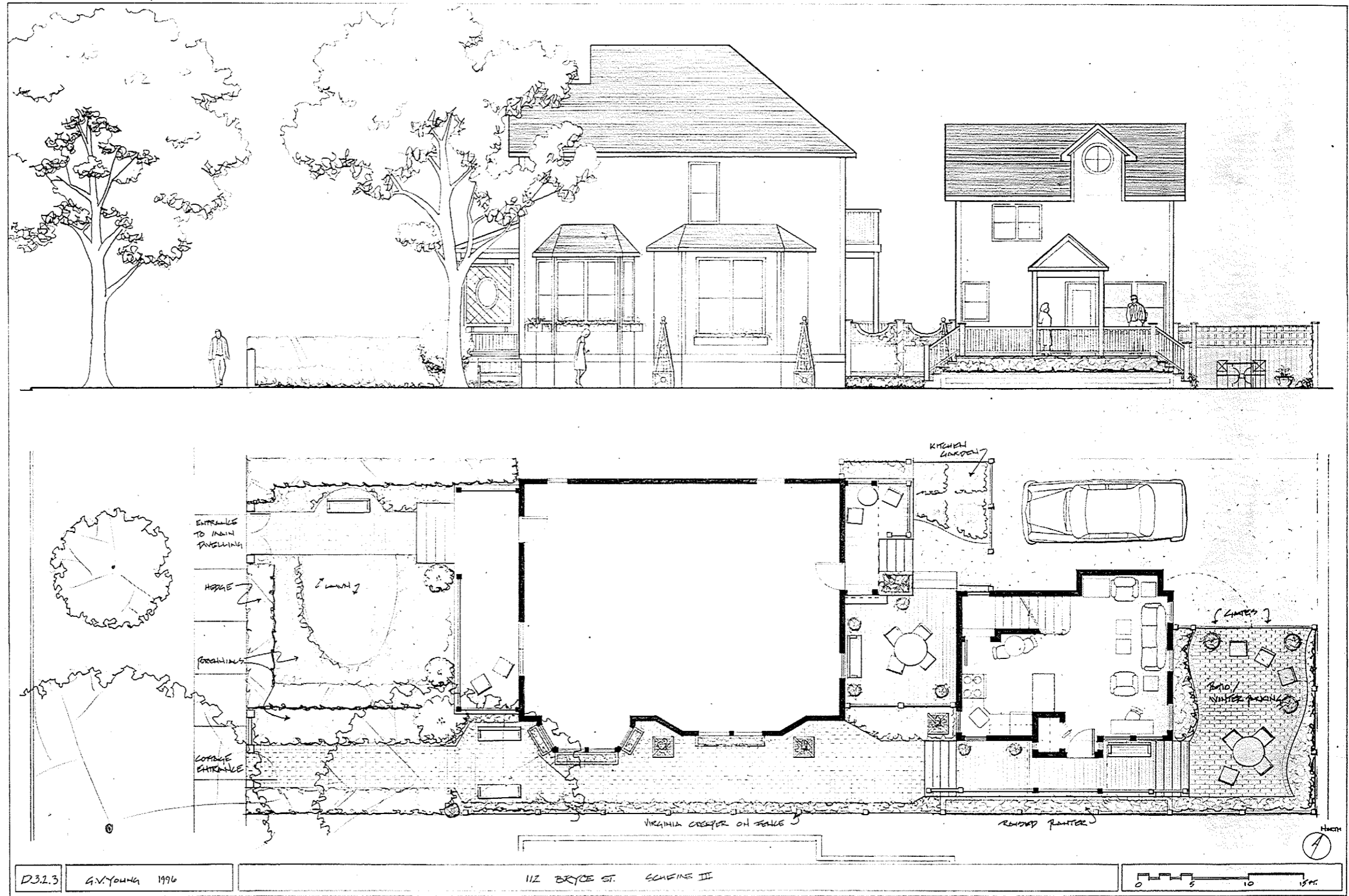
4.5.4 Scheme IV: Cottage Erected As Separate Structure, Entrance Off Lane

Figure D3.1.4 shows scheme IV applied to number 107 Bryce Street. In this plan the cottage is constructed separately and does not maintain a direct connection to the street. The cottage here is placed on a north-south axis against the north side of the property.

The veranda along the west side of the cottage provides room for a foyer or mud-room with a coat closet. Access to the patio/parking area is gained through this area. This then allows for a single entrance into the cottage, and the implementation of the largest kitchen option. Due to space limitations, the bay or bump-out is only on the second floor where it overhangs the parking area.

The main house has a small deck off the back door, and receives south-western sun exposure. Steps from this deck lead to a narrow shaded area between the buildings which is used as a grotto area with a water feature. Stepping down in the opposite direction leads to the parking area and the side yard garden. The side yard contains a garden established in planter boxes with trellises to gain the maximum sun exposure. A path from the side yard connects to the front yard.

This option has a two story veranda, wrapping around the front of the house to maximize the outdoor living space. Access to the second level of the

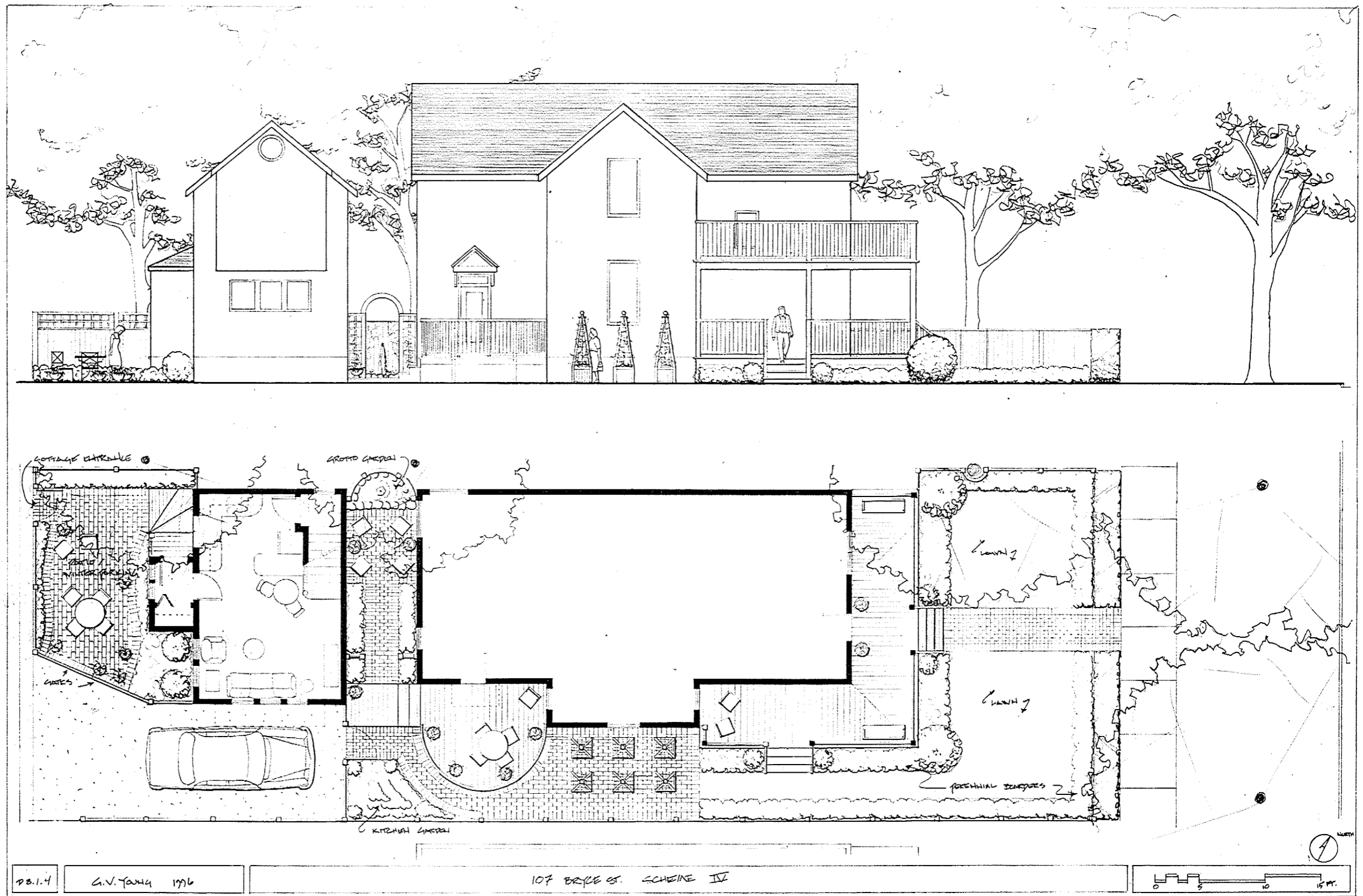


D3.2.3 G.V. YOUNG 1996

112 BRYCE ST. SCHEME III

0 5 10 15 FT

Figure D3.2.3. 112 Bryce St. Scheme III



D3.1.4 G.V. Yang 1996

107 BRYCE ST. SCHEME IV

0 5 10 15 FT. NORTH

Figure D3.1.4. 107 Bryce St. Scheme IV

veranda requires the installation of a door in one of the upstairs rooms. The front yard remains very traditional with a lawn and foundation plantings. A hedge is extended across the front of the yard to provide separation and privacy from the sidewalk.

Figure D3.2.4 shows scheme IV applied to number 112 Bryce Street. In this plan the cottage is constructed separately and does not maintain a direct connection to the street. The cottage here is placed on a north-south axis against the north side of the property.

The deck along the east side of the cottage, arranged in two levels, provides room for a couple of chairs or a barbecue. A second story balcony shelters the front door area. Access to the patio/parking area is gained by broad steps from the lower portion of the deck. This then allows for a single entrance into the cottage and the implementation of the largest kitchen option. The main living area is extended by a south-facing traditional bay window. On the second floor an east facing dormer allows the placement of a garden door opening to the balcony.

The main house has a back deck which receives a fair amount of noon time sun. A lower shade garden behind the deck provides a cool quiet place to sit and relax. An angled balcony off the second floor also gets a fair amount morning sun and provides shelter for the back door. The deck has a set of steps leading down to the side garden and the parking area. The side garden is paved with brick and visually softened with shade tolerant plants.

The front veranda is extended at the south end to include a larger sitting area and steps to the side yard. The remainder of the front yard is developed in a traditional style, with a lawn, hedge and perennial beds.

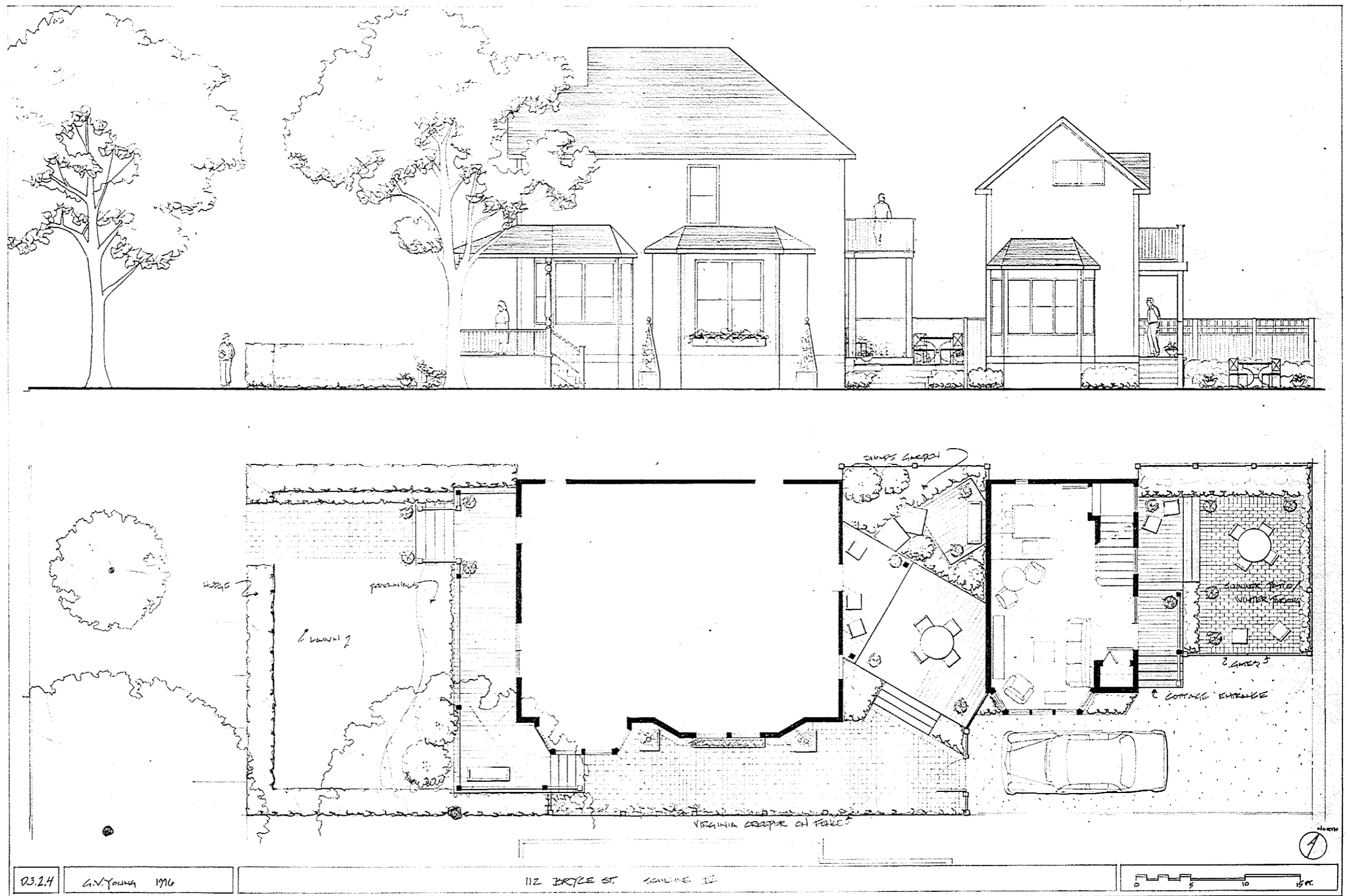


Figure D3.2.4. 112 Bryce St. Scheme IV.

Chapter 5: Summary and Discussion

This study demonstrates four approaches to adding an additional dwelling unit, in the form of a garden cottage, to an older residential lot while maintaining the original home in tact. This form of residential intensification can allow the owner of an older home to add a rental unit to their property without giving up a portion of the original home. By carefully siting the cottage in the back yard it is possible to create useable outdoor living space for both dwellings while diminishing the impact of the new structure on the streetscape.

The determination of the best option for each particular site relies both on the property owner's personal preferences, and on the flexibility of present regulations. The owner's choice would have to include decisions based on preferences for the amount of space allocated to each dwelling. The choice of entry points and personal preferences for interior layouts would also be important factors. Choices preferring the retention of some lawn area may be desirable for some people, while reduced maintenance due to the elimination of the lawn may be of more importance to others.

Whether or not a strong connection between the cottage and the front street is desired or required is an issue that must be addressed. This connection benefits the cottage but reduces the amount of usable space on the site. In order for the cottage to be entered only from the back lane, the issue of addressing back lane entrances would have to be resolved. This may be partly resolved by naming the lanes and then assigning numbers. Other issues such as the overall poor condition of the lanes, and the lack of visual appeal they possess, must be addressed if residences on the lane are to be successful.

None of the schemes presented fit entirely within the present required setbacks. The side setbacks used for the designs are based on those of the existing houses, and would require zoning variances to be smaller than the three foot width presently required. Three foot setbacks would not allow enough room for siting the cottage plus the two required parking spaces on these small lots. Two separate houses are not currently permitted on a single lot, however the attached units would be permitted as duplexes if they fit the required setbacks.

The separate cottage fits the footprint and the setbacks required for garages, although only one story accessory structures are permitted. There is historic evidence of two story garages on this street around 1917. The separate cottage options demonstrated in schemes III and IV, create a greater sense of identity for each dwelling. In some cases, particularly where the cottage is

joined directly to the house as in scheme II at number 107 (Figure D3.2.1), the overall mass of the combined structure tends to overpower the site.

Locating the cottage entrance off the back lane allows for the greatest separation between the outdoor living spaces of the two dwellings. These options also allow for circulation around the main dwellings which is lost when the side yard is used for the cottage. These options usually allow for the best possible cottage floor plan to be utilized by eliminating one of the exterior doors. These single entrance options are also used in conjunction with verandas in some of the front entry plans.

Snow storage is another problem arising from the limited space of the lots. As much space as possible, adjacent to the parking spaces, has been left open for snow storage in the designs. This may still cause some difficulty in particularly severe winters.

All of the designs presented earlier include shade gardens. Due to the maturity of the trees and the close proximity of the homes in this neighborhood, a large portion of these lots are in deep shade most of the time. It is best to develop these spaces with shade tolerant plants such as ferns and hostas, and to create cool and inviting spaces in which to escape hot summer days. Because of this existing condition, greater attention has been given to gaining sun exposure for the dwellings, than for the yards.

All four of the schemes present provide workable solutions to the spatial limitations of the sites. Some, however, work better than others, due to different reasons. Schemes I and II, with the cottage attached to the main dwelling, most closely fit the existing zoning regulations. Although schemes III and IV would be more difficult to implement due to existing regulations, they have their own merit from a site planning standpoint, particularly because they create the greatest separation and autonomy for each dwelling.

The street entrances for the cottage used in schemes I and III, are the easiest to physically address. This approach also gives the cottage better access to the green space of the street. The use of a large amount of square footage for travel space, and the separation of the front and back yards of the main houses, are two negative results of this approach.

The cottage designs with single entrances are better able to utilize the available interior space. The cottage design is also further enhanced where a bay can be included to increase the floor area. This is also true where a foyer or mud-room has been included as part of a veranda structure.

The options which retain the most yard space for the main dwelling as well as provide access around the house, would probably be most desirable for

an existing home owner. At both study sites, scheme IV, with the detached cottage entering off the back lane, allows for these conditions.

Second story decks can add sunny outdoor spaces on these shaded lots. In several of the options these have been employed to provide additional deck space for both the cottages and the main houses.

The schemes which retain a front lawn have the least impact on the existing streetscape. Patios are kept low when placed in the front yards and are screened from the street to minimize their impact on the streetscape, as well as to maximize privacy for users of the space. These front yard courtyards can work but they remain to some degree, semi-public. As such they cannot fully replace the traditional back yard. They can, however, supplement a small back yard. Re-building the veranda at number 107 is an important element in establishing comfortable and useable outdoor space in the front yard.

These study sites, typical of the neighborhood, are very small. Fitting even a tiny cottage along with the two required parking spaces is a difficult task and leaves little space available for gardens or other uses. The summer patio adjoining the cottage is an important element of all the plans. This serves double duty during the winter months as a parking space when the need for off-street parking increases and the patio is not in use. Combining the two is a logical solution. The designs here demonstrate four separate options for siting the garden cottage at the rear of a main house. All of the options presented are workable, providing that planning approval can be attained. Each option also succeeds without significant changes to the original structure of these turn of the century homes.

The next step may be to examine other building options, such as a carriage house which would include an accessory apartment over two parked cars. This structure, however, may simply be too big for these small lots, especially if joined to the original houses. Other options to explore include the use of zero-lot-lines to maximize usable space. The amalgamation of the back yards of adjacent properties for the purpose of constructing a third dwelling unit, using space from both original lots, can also be considered.

This type of residential intensification has not been utilized in this neighborhood to date. The small size of the original lots combined with the current setback requirements do not allow in most cases, for the construction of an addition large enough to contain a dwelling unit. Furthermore, the current zoning designation does not allow for two dwellings to share a lot. This study demonstrates that it is physically possible to locate a garden cottage in the rear yard of the typical homes around the Bryce Street area, while providing outdoor living space for both residences. The study further

demonstrates how this may be done with minimal disruption to the historic streetscape. Before any of these schemes presented can be implemented further study is required to examine the policy implications of such additions to existing neighborhoods, including the danger of over-intensification. Issues of ambiguity between the front street and the rear lane created when residences are located fronting the lane must also be carefully examined.

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Other Sources

Manitoba Provincial Archives
200 Vaughan St.,
Winnipeg, Manitoba
R3T1T5
(204) 945-3971

Of particular interest are the photography collection and the 1917 Fire Insurance Maps. The Hudson Bay archives are also located here.

Western Canada Pictorial Index
404 - 63 Albert St.,
Winnipeg, Manitoba
R3B 1G4
(204) 949-1620

Collection contains numerous historic photographs of Winnipeg and the surrounding area.

City of Winnipeg Planning Department,
Land and Development Services
395 Main St.,
Winnipeg, Manitoba
R3B 3E1
(204) 986-6487

Planning and zoning documents as well as some mapping and statistics are available to the public.

Appendix A

Henderson Directory, selected findings for Bryce Street

The following lists of owners/residents of Bryce Street were compiled from Hendersons Directory of Winnipeg (R. L. Polk Co., Vancouver, publisher) from the present, back to the 1890's. In order to narrow the task only certain years were selected for reference. The last twenty years were searched chronologically to detect any recent trends. The listings for the years previous to this were referenced in five year intervals to detect long term trends. The years between 1895 and 1905 were examined individually because this is the period during which most of the street was developed.

103 Bryce - c.1901

- 3 owners up to 1915
- same owner until 1930
- 2 more owners by 1945
- 1945 first listed as rooming house
- 1955 current owners arrive, still rooming house

104 Bryce - c. 1905

- 2 owners prior to 1915
- same owner 1915 to 1970
- last listing 1970, lot now vacant

105 Bryce - c. 1901

- 4 owners until 1925
- vacant 1930 - 1940
- 1940 - 1945 converted to rooming house
- 4 more owners up to 1960
- 1960 current owners arrive and continue to rent rooms

107 Bryce - c. 1896

10 owners averaging less than 10 years each up to 1989
listed as vacant in 1970
renovated by owner 1980 - 1989
current owner since 1989

109 Bryce - c. 1900

5 owners of relatively equal length until 1950
1950 listed as a rooming house
vacant in 1993 -1994
1995 listed as a rooming house again

110 Bryce - c.1898

4 owners until 1920
vacant 1920 - 1935
not listed again until 1950
3 more owners 1950 - 1965
same owner 1965 - 1986
vacant 1986 - 1989
1989 current owners take over, convert to duplex

111 Bryce - c. 1905

3 owners until 1920
3 more owners to 1970
vacant 1970 - 1989
currently rented as duplex

112 Bryce - c. 1901

4 residents until 1920
1920 - 1960 same family
converted to duplex 1945 and passes to wife's name
1960 - 1993 another family, passes from mother to son 1976
1993 - 1994 sold twice and converted back to single family home
1995 current owner moves in

113 Bryce - c. 1900

4 owners until 1920
1920 - 1930 single owner
1 short term owner then another 10 year owner up to 1955
1960 original house replaced by 10 unit apartment building

114 Bryce - c. 1898

8 owners up to 1945
a 15 year owner until 1965
4 more owners to 1985, renovated
4 more owners between 1985 and 1995

115 Bryce - c. 1900

3 owners until 1910
1910 replaced by apartment block (#117)

116 Bryce - c. 1901

2 owners until 1905
single owner until 1925
15 year owner until 1940
20 year owner until 1960
2 more owners until 1970
1970 converted to 4 apartments
1975 listed as being vacant
1989 - 1995 rooming house

117 Bryce - c. 1900

one owner until 1910
1910 replaced by apartment block

118 (120) Bryce - c. 1900

2 owners until 1905
1905 - 1930 single owner
4 more owners until 1950
1950 - 1970 single owner
1975 vacant
1980 converted to 4 apartments

122 Bryce - c. 1910

8 owners until 1975
vacant in 1915
vacant in 1975
1980 new duplex listed
1985 current owners listed

126 Bryce - c. 1902

3 owners until 1920
1925 - 1950 single owner
1955 - 1960 single owner
1970 new owner, last listing
lot now vacant

Appendix B

Selected Demographic Data for the River-Osborne area from the Winnipeg Area Characterization Program, City of Winnipeg
(Source: Statistics Canada 1986 and 1991 Censuses)

Population Totals (1986)

	Total Number	% Profile Area	% City Wide
	4715		
AGE 0 - 5	265	5.6	8.2
6 - 11	140	3.0	7.7
12 - 19	265	5.6	11.2
20 - 34	2300	48.8	28.1
35 - 59	880	18.7	27.7
60 +	880	18.7	17.1

Education (+15 Population) (1986)

	Total Number	% Profile Area	% City Wide
	4210		
High School Certificate	320	7.6	10.0
No High School Cert.	1485	35.3	44.5
Trade/Diploma	895	21.3	22.0
Some University	1515	36.0	23.5

Employment (+15 Population) (1986)

	Total Number	% Profile Area	% City Wide
	4155		
In Labour Force	2820	67.9	68.3
Not In Labour Force	1330	32.0	31.7
Employed	2510	89.0	92.1
Unemployed	315	11.2	7.9

Marital Status (1986)

	Total Number	% Profile Area	% City Wide
	4715		
Single	2435	51.6	42.4
Married	1315	27.9	46.2
Widowed	405	8.6	5.8
Divorced	305	6.5	3.0
Separated	260	5.5	2.5

Mobility Status (1986)

	Total Number	% Profile Area	% City Wide
	4375		
Mover	3260	74.5	46.8
Non-mover	1115	25.5	53.2
Migrant	1270	38.9	28.0
Non-migrant	1995	61.1	72.0

Family Status (1986)

	Total Number	% Profile Area	% City Wide
	4615		
Husbands and Wives	1255	27.2	46.2
Lone Parents	240	5.2	3.9
Children	600	13.0	32.4
Non-Family Persons	2515	54.5	17.5

Average Income (1986)

	Profile Area	City Wide
Household	19,365	33,294
Family	22,854	38,647
Individual	14,671	15,235

Household Size (1986)

	Profile Area	City Wide
Single Detached	2.1	3.0
Apartments	1.5	1.5
Total Households	1.6	2.6

Dwelling Units (1986)

	Total Number	% Profile Area	% City Wide
	2880		
Single Detached	155	5.4	58.4
Apartment 5+ Stories	1145	39.8	13.2
Other	1580	54.9	28.4
Owned	140	4.9	59.5
Rented	2740	95.1	40.4

Household Type (1986)

	Total Number 2880	% Profile Area	% City Wide
One-Family	860	29.9	67.3
Multi-Family	0	0.0	0.8
Non-Family	2020	70.1	31.9

Age of Dwelling (1986)

	Total Number 4155	% Profile Area	% City Wide
1920 or Earlier	290	10.1	8.5
1921 - 1945	400	13.9	14.3
1946 - 1960	690	24.0	23.2
1961 - 1970	625	21.7	19.5
1971 - 1980	705	24.5	26.5
1981 - 1986	170	5.9	8.1

Population (1991)

	Total Number 4540	% Profile Area	% City Wide
Male total	2115	46.6	48.5
0 - 4 years	130	2.9	3.6
5 - 14 years	100	2.2	6.5
15 - 24 years	440	9.7	7.4
25 - 34 years	720	15.9	9.2
35 - 49 years	390	8.6	10.6
50 - 64 years	175	3.9	6.2
65 years and over	160	3.5	5.2
Female total	2425	53.4	51.5
0 - 4 years	120	2.6	3.5
5 - 14 years	125	2.8	6.2
15 - 24 years	605	13.3	7.4
25 - 34 years	630	13.9	9.1
35 - 49 years	300	6.6	10.7
50 - 64 years	195	4.3	6.7
65 years and over	440	9.7	8.0

Occupied Private Dwellings (1991)

	Total Number 2685	% Profile Area	% City Wide
Owned	105	3.9	60.6
Rented	2580	96.1	39.4
Single-detached house	70	2.6	59.1
Semi-detached house	25	0.9	4.2
Row house	0	0.0	3.7
Apartment (total)	2585	96.3	32.7
Other	5	0.2	0.3

Labour Force (1991)

	Total Number 4060	% Profile Area	% City Wide
In labour force	2705	66.6	68.1
Employed	2310	85.4	91.2
Unemployed	400	14.8	8.8
Not in labour force	1355	33.4	31.9

Average Income (1991)

	Profile Area	City Wide
Males 15+	\$20,151	\$28,146
Females 15+	\$16,089	\$17,235
Family Income	\$31,300	\$49,261
Household Income	\$24,908	\$42,169