CANADA MORTGAGE AND HOUSING CORPORATION

# SPROUT

## THE VERSATILE, DYNAMIC HOUSE

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# SPROUT:
## THE VERSATILE, DYNAMIC HOUSE

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# INTRODUCTION

The Sprout House is a new entry in the adaptable housing market. It allows first-time buyers to purchase a modest starter home without compromising their expectations for attractive, high-quality shelter.

While adaptable housing is not a new concept, the Sprout House is the most advanced, incorporating the best lessons of its design precedents and Victorian and Georgian townhouses.

This publication introduces the Sprout House to consumers, home builders and municipal administrators. Part 1 explains why the Sprout House is well positioned for the market of the 1990s. Part 2 describes its unique design and benefits. Part 4 presents the plans for three variations of the house and traces the evolution of each variation from the initial period of construction to its point of maximum habitable area. Each conversion is accompanied by cost estimates and a description of the household needs that precipitate the modifications. A set of dimensioned drawings of the prototype unit is given in Part 3.

Facing page: Two variations of the Sprout house

## THE AFFORDABILITY GAP

For many Canadians, the dream of owning a home is fast becoming just that—a dream. Housing costs across the country have risen faster than increases in household income, and homes have become steadily less affordable.

Between 1978 and 1986, the proportion of income spent on shelter costs increased for the majority of Canadians. By 1986, the average shelter cost-to-income ratio for lower income households rose above today's accepted norm of 30 per cent, resulting in a lower level of home ownership for many Canadians.

Worse in the west — While the affordability gap is a problem across Canada, it is most acute in British Columbia, Alberta and Saskatchewan and more prevalent among renters than home owners.

Victoria, Vancouver and Saskatoon have the highest percentage of renters paying 30 per cent or more of their income on shelter costs, while Edmonton, Vancouver and Victoria have the highest percentage of home owners paying 30 per cent or more of their income on shelter costs.

Home buyers in a squeeze — Particularly hard hit are first-time home buyers with no equity in any property.

Further, more than three out of every four first-time home buyers hope to buy an affordable home—one priced below the average for the market area. Fewer than one in four are seeking a house priced above the average.

The dream house for first-time buyers seeking an affordable home remains a single-family detached home; the most important elements on their shopping list are house and lot sizes. The average unit size this group expects to buy is about 175 square metres. Energy-efficiency and quality are also high on the list.

The expectation gap — With household income declining for the majority of the population, there is a gap between the housing expectations of first-time buyers seeking an affordable home and their ability to purchase a home.

Most first-time buyers realize they will have to settle for less. Moreover, most understand that their expectations with respect to space are too high and are prepared to settle for a house that gives a sense of spaciousness.

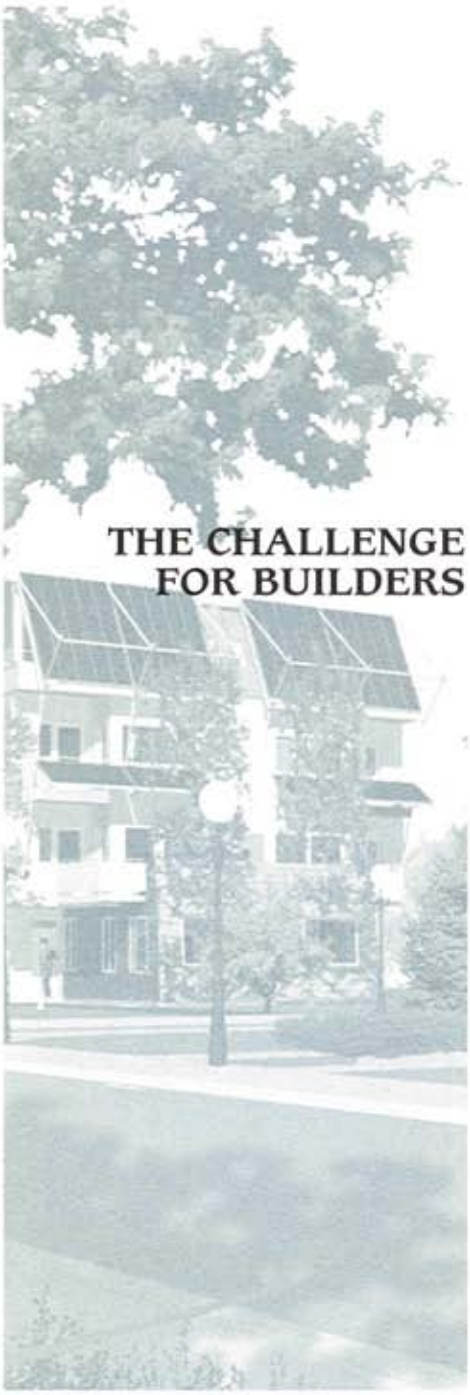
## CONSUMER TRENDS

While the affordability gap is a growing problem, Canadians continue to desire a home of their own, preferably with lots of space inside, outside and around the home, and with as many gadgets and toys as they can get.

Privacy, soundproofing, and control over heating continue to be in demand as Canadians seek more control over their home environments.

Canadians are also expressing a desire for balance, greater stability and calm. The values we remember from the 1950s—family, community and stability—are becoming increasingly attractive.

At the same time that Canadians want a home on their own little patch of land, they are increasingly aware of the need to protect agricultural land and urban woodlots.



## THE CHALLENGE FOR BUILDERS

The challenge for builders who want to develop and market a successful, affordable starter home is to meet the high expectations of first-time home buyers, given this group's financial constraints.

The Sprout House is an excellent way to satisfy the expectations, and the budgets, of this segment of the housing market. It provides first-time home buyers with high-quality, affordable housing that meets their immediate need for space while providing the potential for expansion as their families grow. A key element contributing to the affordability of this house is its initially small habitable space, which also lowers energy costs.

## TARGET MARKET

The target market for the Sprout House includes young families, lone parents looking for affordable housing and "empty nesters" who wish to supplement their incomes.

Young families — In 1988, about one in three family households in Canada were young families, and young families comprised about one out every four households overall.

Proportionally, young families rent more often than the general population and, because almost three quarters of all young family households have children, they are more likely to live in houses.

In addition, this group generally experiences higher shelter costs than average. They spend approximately 21 per cent of their income on shelter, compared with 17 per cent for families overall and 19 per cent for households in general.

Because affordability is a major factor for the majority of young families, it would help them greatly to be able to buy a house that can grow as the family's need for space increases. In this way, the initial purchase price could be kept to a minimum, while the house could be expanded over time as the household's ability to pay improves.

Lone parents — Eight per cent of young families are lone parents. While this group comprises the smallest portion of family households, it is the fastest growing segment. Between 1981 and 1986, the number of lone parent households increased by 20 per cent, almost three times the rate of family households overall.

Lone parents spend an average of about 36 per cent of their income on housing, while young couples without children spend only 19 per cent. Fifty-five per cent of lone parent families who are also renters spend 30 per cent or more of their income on shelter costs.

Empty Nesters — Empty nesters and seniors living in their own homes often need less space and more financial assistance. A house that can be readily converted to include an apartment can provide a welcome source of income.

## DESIGN PRECEDENTS

While adaptable housing is not new, the Sprout House goes beyond its forerunners by incorporating the best features of its design precedents. The result is a contemporary design, in line with today's need for high-quality, affordable housing but echoing the thoughtful and flexible designs of the past.

A CHARLIE demonstration home

CHARLIE: the CHBA/CMHC demonstration home — One such design precedent is Charlie. This convertible house, built jointly by the Canadian Home Builders' Association and CMHC, is a large, two-storey home with a full basement and a footprint (area) of approximately 93 square metres.

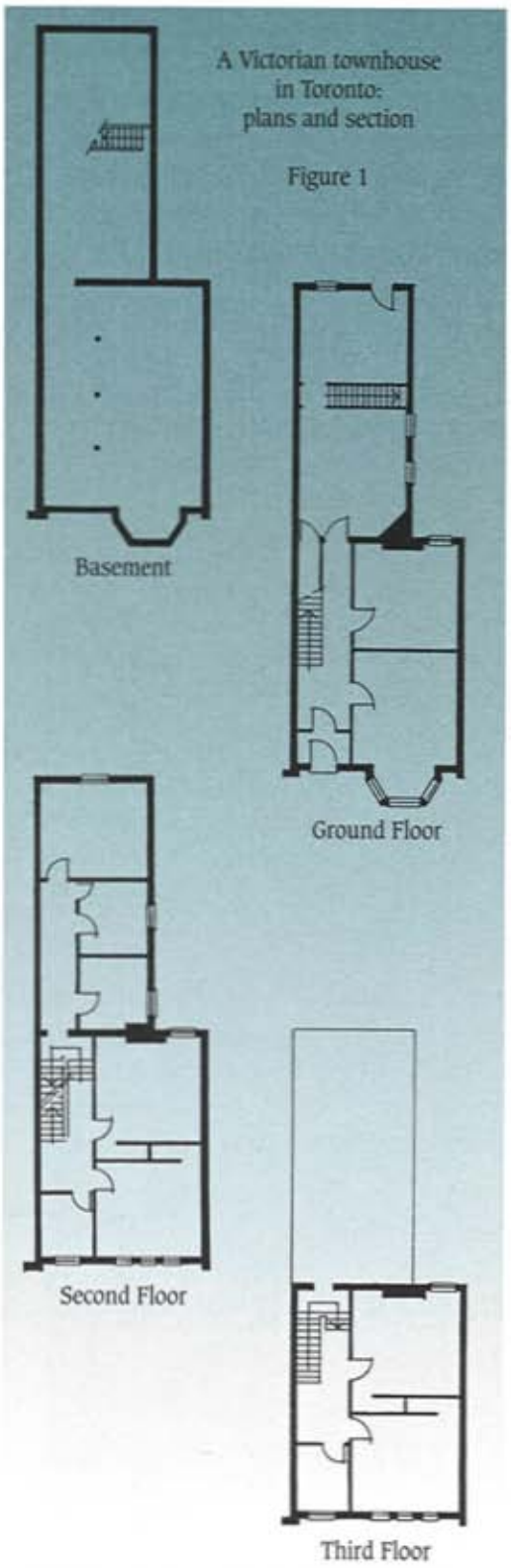
CHARLIE has second-floor space that can be converted to a rental apartment to provide income that can help reduce the monthly carrying costs of the house. When the need arises, it can be reconverted into a single family house.

The straightforward, low-tech flexibility built into CHARLIE's design is an intelligent and innovative approach to the problem of affordability.

A Grow Home development

The Grow Home — Another design precedent is the Grow Home. This house is a narrow two-storey unit with a width of 4.3 metres and an area of 93 square metres. Since the concept was developed at McGill University and successfully marketed, several builders in the Montréal area have constructed hundreds of Grow Homes.

The lesson of the Grow Home is that builders can reduce house prices by shrinking the overall size and frontage of the structure and simplifying the design. As the large number of units sold shows, this can be a successful strategy in today's market.




A Victorian townhouse in Toronto: plans and section

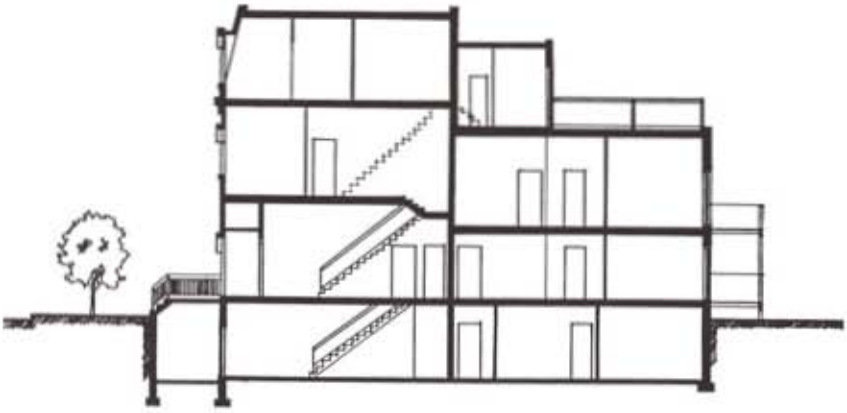
Figure 1

Georgian and Victorian townhouses — Contemporary homes often lack the thoughtfulness and flexibility of design found in many Georgian and Victorian townhouses.

These townhouses often have rooms organized in series rather than an "open plan," vertical circulation and basements with street access, natural light and ventilation.

They are more adaptable to change because they can easily and conveniently accommodate accessory apartments, professional offices and stores.

Georgian and Victorian townhouses also tend to have rear service lanes and, occasionally, coach houses—features that allow for parking and additions. The result is a dwelling that can accommodate many lifestyle changes while allowing occupants to remain in the same house over a long period of time.



| 7 Bedroom House | |
|---|---|
| Basement | 102.2m² |
| Ground Floor | 100.3m² |
| Second Floor | 99.2m² |
| Third Floor | 57.0m² |
| Total | 358.7m² |
| Width | 6.4m |
| Depth | 18.5m |

Figure 2

# THE SPROUT SOLUTION

The basic Sprout House is a small, four-level structure, approximately six metres wide and seven metres long. It has conventional wood frame construction and an unfinished basement and attic.

At first, the finished interior space is small, on two floors, with a living room, two bedrooms, kitchen and bathroom. The basement and attic are serviced with electricity and plumbing for future utilities when the owners need or can afford the additional space.

More than any other kind of adaptable housing, the Sprout House successfully combines the principles of flexibility, incrementalism, participation, non-disruption and anticipation of change to produce a starter home that's on target with today's market.

*Flexibility* refers to the structure's potential to change. *Incrementalism* is its evolution over time, and the owners' *participation* in altering the house sets this process in motion.

*Non-disruption* means that changes can be made to parts of the house without disrupting its occupants. When the changes to one area are complete, the owner simply opens the connecting door and moves in. *Anticipation of change* means that the house is framed, at no extra cost, to allow modifications in the future.

The Sprout House combines these principles in its sensible design. Its potential to expand is provided by a number of features, including its six-metre frontage, which allows freehold tenure and gives the occupant greater control over additions or modifications to the unit.

Moreover, Sprout's potential to grow and change are designed into the house from the beginning. For example, its main entrance can accommodate a second entrance directly into an accessory apartment, and exterior openings are co-ordinated with future additions. And the plumbing is in place from the start, making it easy to install a bathroom or kitchen addition later.

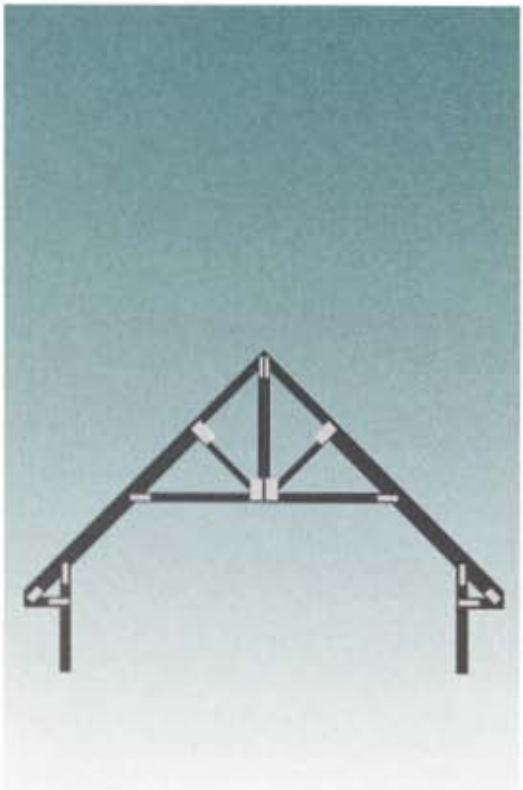
Moreover, since the alterations and additions can be made with minimum disruption to the existing structure, the costs of the modifications are reduced.

In addition, most of the work, such as the installation of partitions and the finishing work, can be done by the owners themselves, providing a great way for young home owners to convert their labour into capital in the form of home equity.

To enhance affordability, Sprout's footprint has been carefully optimized to approximately 43 square metres, and the unit's shape and form have been kept as simple as possible.

The result is a starter home that is affordable for many potential buyers. Its estimated construction cost is about $80,000. The price of the townhouse version would be approximately $105,000 to $115,000 (in 1993 dollars).

A household with an annual income of $36,800 can afford a $105,000 house, while a household with an annual income of $39,300 can afford a $115,000 house.



Truss with integral pony wall
Source: *Habitable Attics: New Potential for an Old Idea*, (Ottawa: CMHC, NHA 6565, 1991)
Figure 3

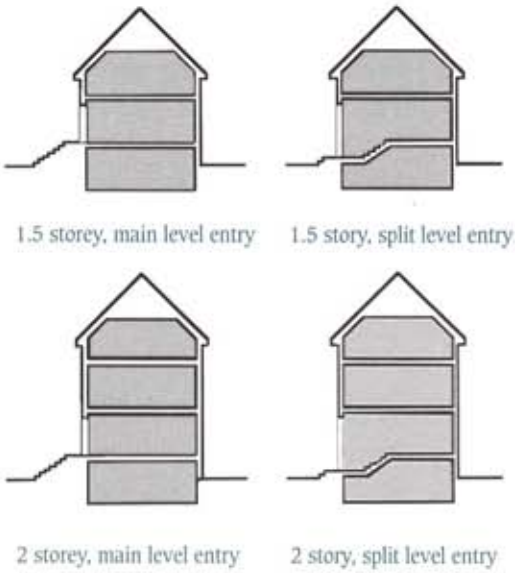
The habitable attic — One feature that distinguishes the Sprout House is the habitable attic. Like the narrow front townhouse, this common sense idea from the past has been brought back in the Sprout House design.

Habitable attics were common in houses built before the 1950s. But the introduction of the manufactured low-pitch roof truss, which speeded up construction and made more efficient use of lumber, eliminated the attic as a habitable space.

Over last two decades, advances in truss design and production have resulted in the manufacture of trusses that can once again yield habitable attics.

As described in the CMHC publication *Habitable Attics: New Potential for an Old Idea,* manufactured trusses available today can satisfy the need for construction efficiency while yielding a habitable attic. Figure 3 shows the truss system recommended as the best solution to roof framing. This is the system used in the Sprout House design.

Among its benefits are low cost and the ease with which it can be insulated, made airtight, transported, installed and finished. The trusses that incorporate the integral pony walls can be delivered to the construction site in two halves. And the steep slope of the top chords provides a suitably sloped roof for solar panels where the building orientation allows.




Four different sections, each used for a semidetatched and a townhouse design resulting in eight variations of Sprout
Fig. 4

Variations To Choose From — The Sprout House can be built as a townhouse, a semi-detached or detached home. The detached version is the least difficult to build, and if Sprout can work as a semi-detached or townhouse unit, it would work just as well as a detached unit; but, as a detached unit, the burden of additional costs for land would make it less affordable.

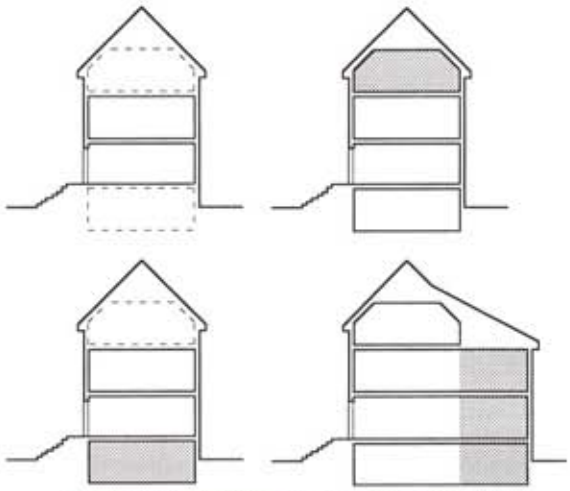
Part 4 of this document presents three variations of the Sprout House:

- The two-storey townhouse version
- The semi-detached one-and-a-half storey version
- The semi-detached two-storey version

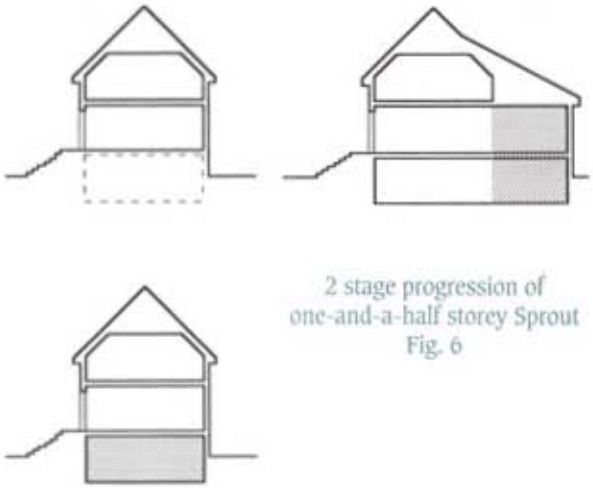
Eight variants have been explored, based on the sections that are illustrated in Figure 4. They can be found in the full report on the development of Sprout.

The two-storey — The stages of expansion for the two-storey unit are illustrated in Figure 5. In its initial phase, this version has 48 square metres of footprint, approximately 95 square metres of habitable area, two bedrooms, an unfinished basement and an unfinished attic.

After several phases of expansion and modification, this version in its final phase includes two units and a total habitable area of about 265 square metres — almost three times its original size.



3 stage progression of two storey Sprout
Fig. 5



2 stage progression of one-and-a-half storey Sprout
Fig. 6

The one-and-a-half storey — The stages of expansion for the one-and-a-half storey Sprout House are illustrated in Figure 6. In its initial phase, this unit has a 43 square metre footprint, approximately 85 square metres of habitable area including two bedrooms and an unfinished basement. The upper floor has a finished habitable attic.

After several phases of expansion, the structure in its final phase has two units and a total habitable area of approximately 180 square metres — an expansion of 100 per cent.

## SPROUT HOUSE FEATURES

Many features of the Sprout House make it a smart way to reach the market for affordable housing. These include:

- the potential for occupants to individualize their homes according to their own needs and desires;
- an ornamented main facade and high-quality exterior finishes that add to the character of the street;
- backyard privacy and, in semi-detached units, also a side yard;
- party walls having a sound transmission class of 63;
- suitability for infill developments and densification of already developed areas;
- the potential to keep families in the same community over a long period of time so that the household can become part of the community;
- the potential for extended family living arrangements with the addition of an apartment for an elderly parent; and
- an environmentally sound approach to expanding the housing stock. (In the townhouse version, thirty Sprout Houses can be built per hectare, as opposed to fifteen units per hectare for single-family detached homes.)

# EASE OF GROWTH AND CHANGE

The design of Sprout and its construction anticipate the direction of growth and include structural features that drastically reduce the amount of work at the time of expansion, as shown in Figure 7 & 8. For example:

- The dining room window is framed to anticipate a future door or passage to the new main floor living room.
- The main entry to the house can accommodate separate entrances to two future units — the main house and the accessory apartment.
- A common plumbing wall serves all four levels and all expansions and alterations.
- Basement and attic windows anticipate future connections and are framed as doors.
- The stairwell to the attic is framed, but no stair is installed initially.
- Connecting openings are made functional only after the work in the adjacent new space has been completed.
- The front attic window can serve as access for construction materials, especially drywall.

| | |
|---|---|
| Fixtures for future bathroom in addition | 1 |
| Basement window becomes connecting door | 2 |
| Patio door framed as entry door to new living room | 3 |
| Plumbing wall serves all four levels | 4 |
| Window framed as future door to new master bedroom | 5 |
| Anticipates entry to accessory apartment or office | 6 |
| Stairwell to attic floor framed anticipates stair to attic | 7 |


Fig. 7

| | |
|---|---|
| Connecting door opened after adcition is completed | 1 |
| New large family room or two additional bedrooms | 2 |
| Connecting door opens after completed addition | 3 |
| Roof over new space or private rcof deck | 4 |
| Attic window serves as access foı construction materials | 5 |


Fig. 8

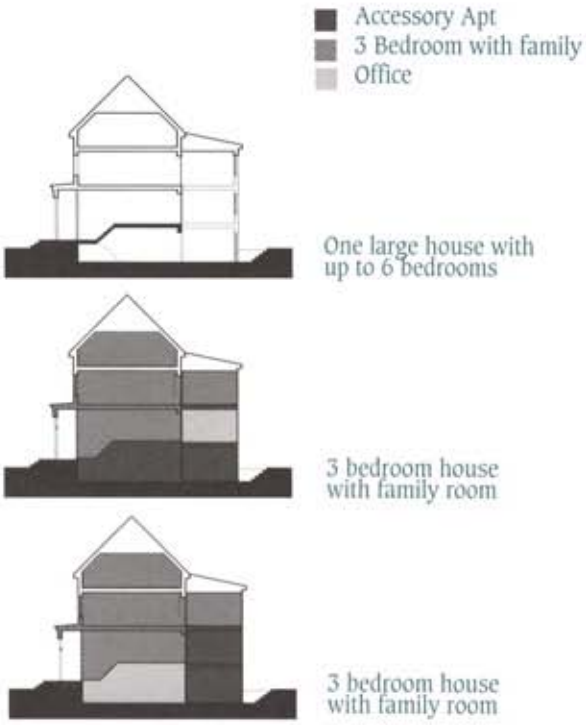



Fig. 9

The total space enclosed by the final envelope of Sprout can be used and subdivided in many ways. Some of them are shown in Figure 9.

1. It can be one large house with up to six bedrooms and a family room.
2. It can be a three bedroom house with a family room, a large one-bedroom apartment accessible from the street, and potential office space.
3. It can be a three bedroom house with a family room, a two-level accessory apartment accessible from the lane or sideyard, and an office space accessible from the street.
4. It can be a two-bedroom house with two additional one-bedroom units, both accessible from the street.
5. It can be an extended family home with self-contained spaces for parents or grandparents.

This uncommon flexibility renders Sprout adaptable to most circumstances of a family's life cycle.

## BENEFITS FOR BUILDERS

Easy to build — The Sprout House is as easy to build as conventional residential construction.

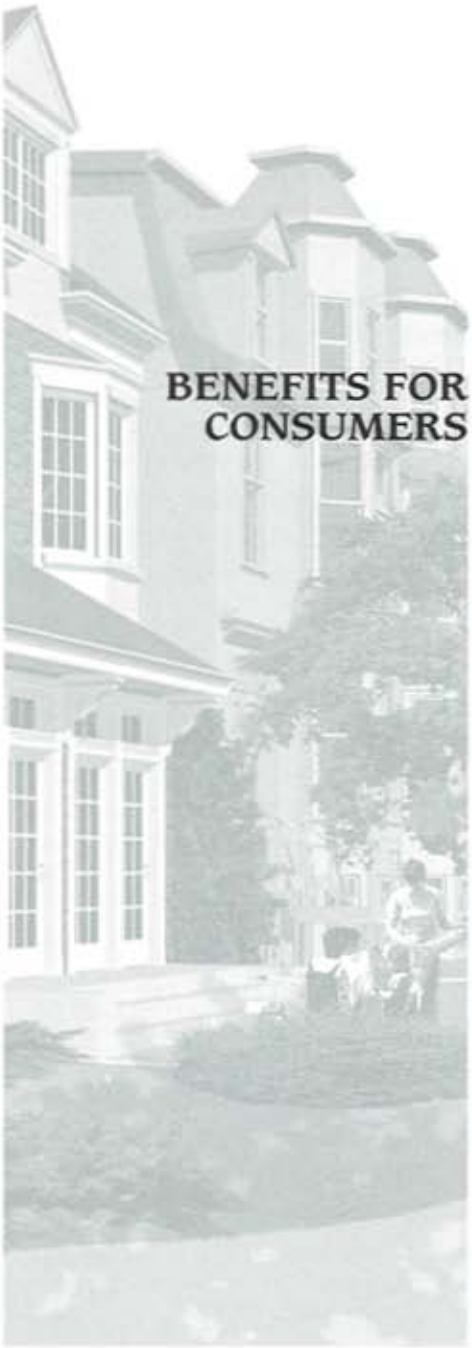
Easy to market — It is an ideal way to develop and market affordable housing. Its flexible design and capacity to expand and change along with the evolving needs of its occupants make it an excellent choice for many segments of the housing market, particularly young, first-time home buyers.

Flexible target market — In its initial phase, its target market is primarily young families seeking an affordable first home. As the Sprout House evolves and expands, its target market also changes.

Ideal for infill or tract — The Sprout House can form part of large tract developments or be built on small city sites. With its small initial footprint, it is perfect for infill developments.

A smart niche for small builders — A small site and relatively little capital are all that's needed to bring this home to the market. Small entrepreneurs can successfully build and sell this home to benefit both themselves and housing consumers.

Since many builders are small companies, the Sprout House provides a housing strategy that benefits a large portion of the industry.



## BENEFITS FOR CONSUMERS

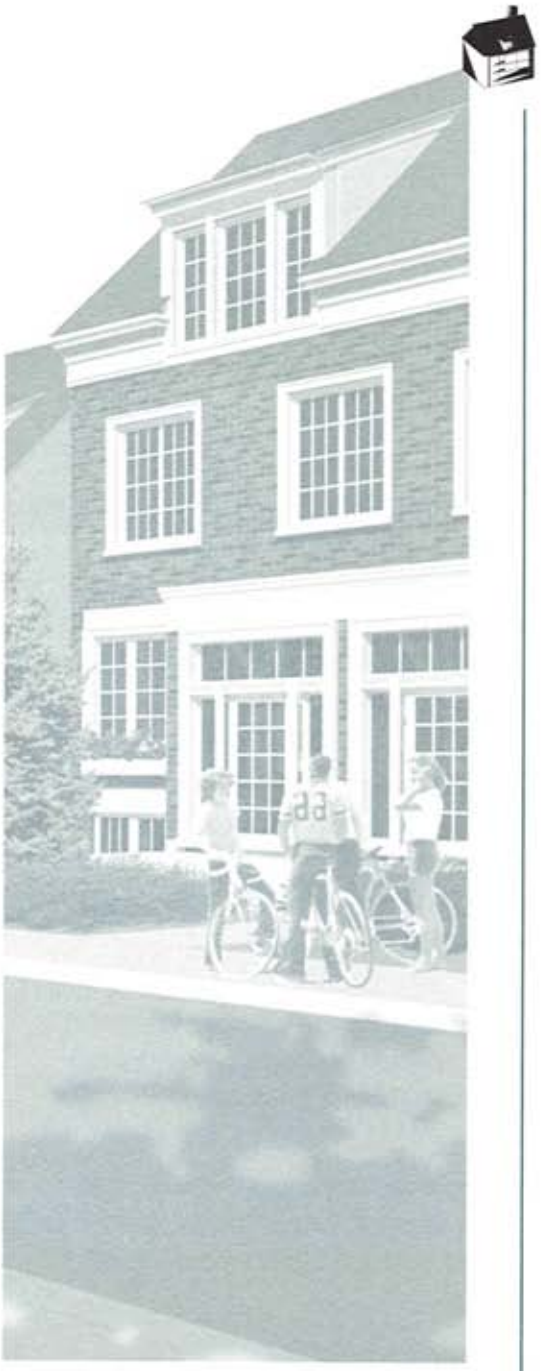
Greater choice for home buyers — The Sprout House is an innovative and viable alternative to the new housing stock currently offered to first-time buyers. It expands the choice of available, affordable homes for this neglected market segment.

Enhanced affordability — Low initial construction cost makes it easier for many first-time buyers to own homes. The Sprout House's small initial size (85 square metres), low construction cost and low selling price translate into a reduced down payment and smaller monthly mortgage costs.

Adaptable to changing household needs — Sprout's flexible design allows it to be easily adapted to the variety of spatial demands imposed upon it throughout a households life cycle.

An accessory apartment supplements income — Owners can easily create an accessory apartment. Rental income can be used to cover household expenses, or the space can be made available to an elderly parent.

## BENEFITS FOR MUNICIPALITIES



Revitalizes downtown neighbourhoods — The Sprout House provides young families with opportunities for home ownership, access to private outdoor space, privacy and the possibility of expanding their homes, without having to move to the suburbs. It can bring young families into downtown areas and revitalize old neighbourhoods.

Infrastructure and tax base — Filling vacant lots with Sprout Houses can gradually increase the population density of a municipality. That means more efficient use of a city's infrastructure and resources and a larger tax base.

In addition, as Sprout's habitable space is expanded, municipalities can reap tax benefits through the property's increased assessment value.

Stable neighborhoods and communities — The Sprout House promotes stable neighbourhoods and communities. Because it can be easily adapted to a household's changing needs, it allows families to remain in the same house and in the same community for a long period of time.

Preserves architectural traditions — Because it fits in almost anywhere, the Sprout House can preserve the architectural tradition of a neighbourhood. Its façade can be made to blend in with surrounding architectural styles, whether grey limestone and bay windows or cedar singles and clapboard.

Moreover, as the house grows, it does not disrupt the character of a neighbourhood since no modifications are visible on the main façade or building height.

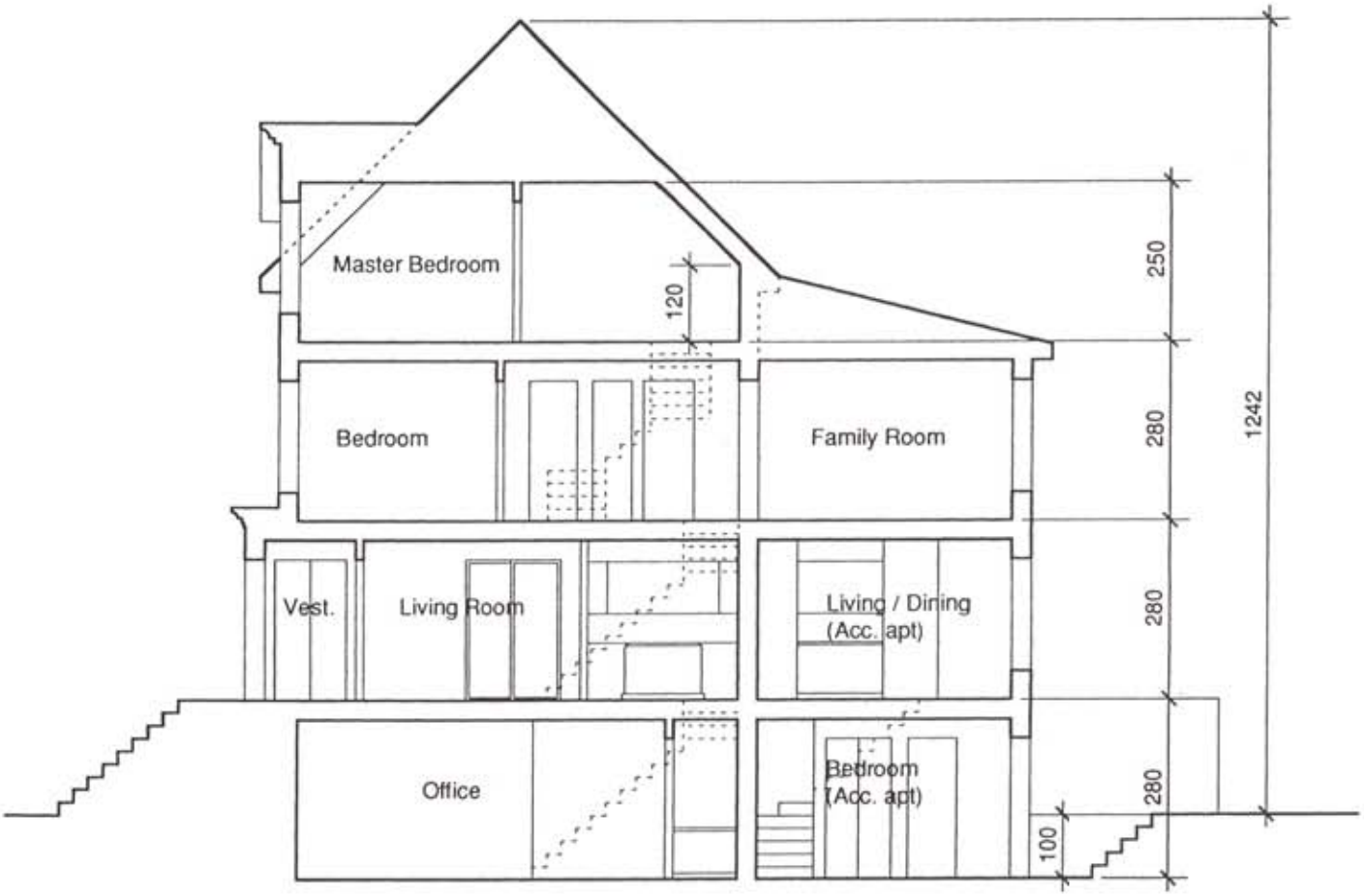
Enhances rental stock — Accessory apartments inside a Sprout House have high-quality health and safety features, including two exits, ample windows and easy compliance with the requirements of the National Building Code. These details allow owners to produce accessory apartments that increase the affordable rental stock.

Sprout represents an innovative housing solution that is appropriate for today in the many benefits it offers urban areas. As such, it offers ways for communities to respond to economic, ecological, and social pressures while creating pleasant and stable neighbourhoods.

Municipalities can move forward with the Sprout solution by adopting flexible zoning regulations, particularly as they relate to parking and accessory apartments.

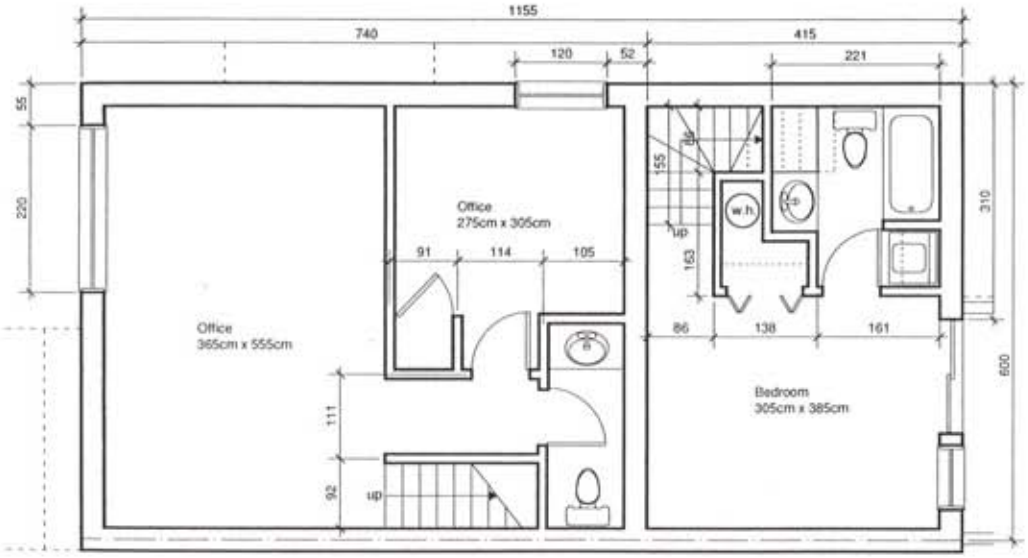
The removal of regulatory impediments will pave the way for housing that offers a wide range of benefits for buyers, developers and municipalities alike, and meets the challenge of providing affordable housing for Canada's young families.

## SECTION
## FINAL PHASE

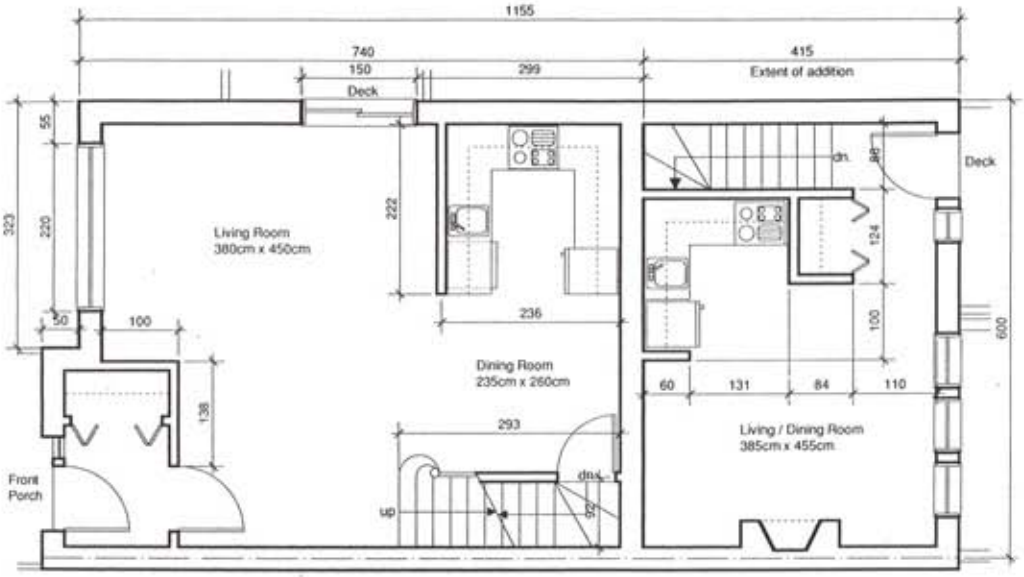



Page 16: Semi-detached variation of the Sprout house

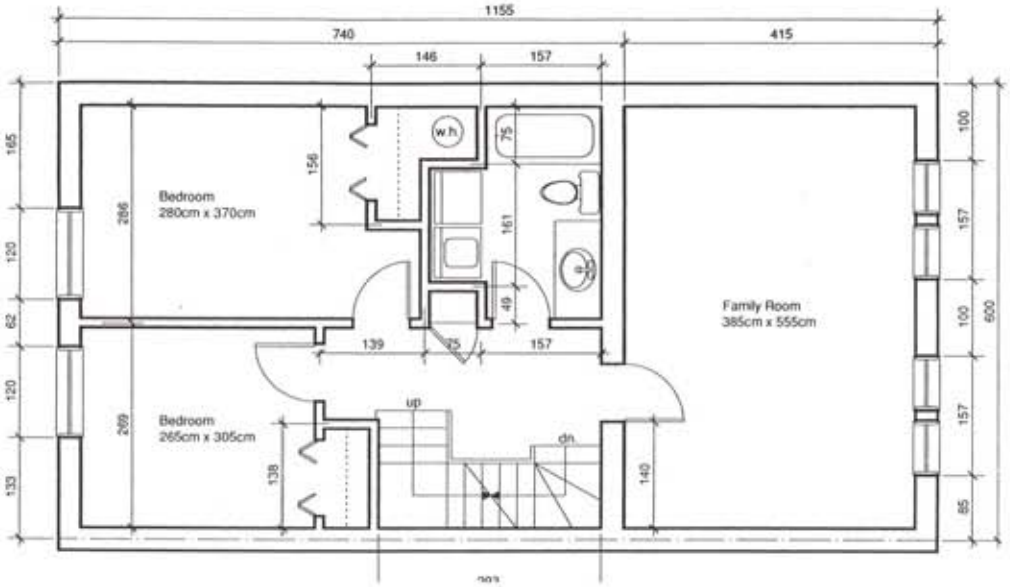
## BASEMENT
## FINAL PHASE



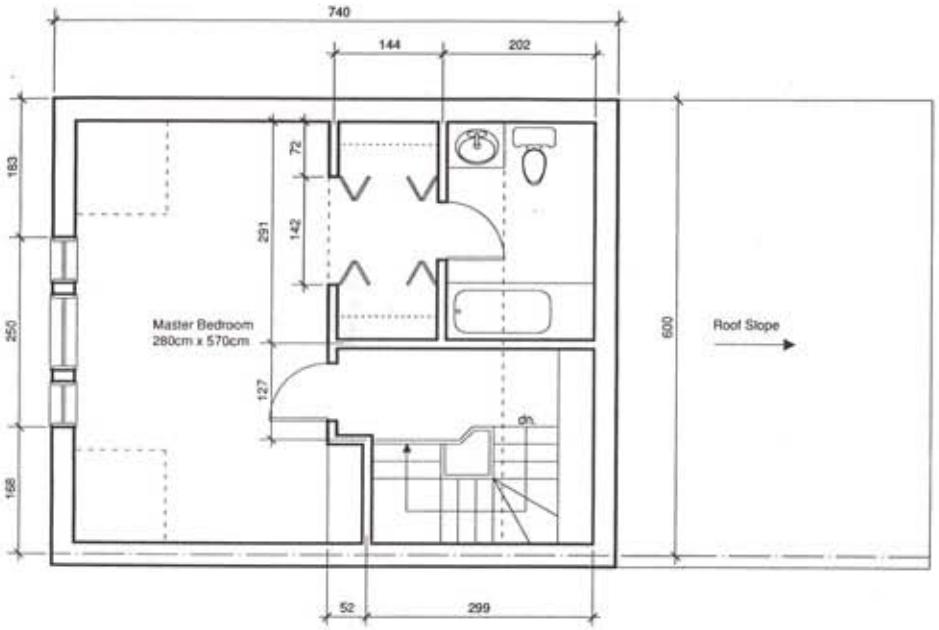

## MAIN FLOOR
## FINAL PHASE



## UPPER FLOOR
## FINAL PHASE




## ATTIC
## FINAL PHASE



# PLANS

## TOWNHOUSE: 2 STOREY, MAIN LEVEL ENTRY

### INITIAL PHASE

Scenario:
A young couple or a family with only one child buys this starter home. The home at this initial phase has only two bedrooms and a total habitable area of 107 m². The basement and attic remain unfinished until the need for additional space arises.

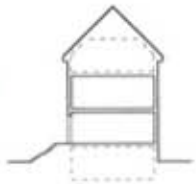
Description:

| | |
|---|---|
| Number of units: | 1 |
| Number of bedrooms: | 2 |
| Habitable area: | 107 m² |

Estimated Construction Cost: $80,520

Basement Main Floor Upper Floor Attic

Legend:
0 Future habitable area
1 Living
2 Dining
3 Bedroom



### INTERMEDIATE PHASE 1

Scenario:
The basement becomes habitable as the household converts this unfinished area into a family room.

Description:

| | |
|---|---|
| Number of units: | 1 |
| Number of bedrooms: | 2 |
| Habitable: | 160 m² |
| Change in area from previous phase: | +50% |

Basement expansion cost: $8,979

Legend:
1 Living
2 Dining
3 Bedroom
5 Family room

## INTERMEDIATE PHASE 2

Scenario:
With the arrival of a second child, the household appropriates the unfinished attic by converting it into a master bedroom. The two bedrooms on the upper floor thus become children's bedrooms

Description:

| | |
|---|---|
| Number of units: | 1 |
| Number of bedrooms: | 3 |
| Habitable area: | 212 m² |
| Change in area from previous phase: | +32% |
| Attic expansion cost: | $11,703 |

Basement Main Floor Upper Floor Attic

Legend:
1 Living
2 Dining
3 Bedroom
4 Master bedroom
5 Family room

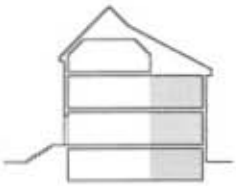
## FINAL PHASE

Scenario:
Several years after appropriating the attic, the household has the financial means to undertake the final phase of expansion. The unit expands 4.15 m into the backyard thus yielding a basement accessory apartment for an elderly parent. The new addition becomes, at the upper level, a master bedroom suite while the attic space is converted into a family room.

Description:

| | |
|---|---|
| Number of units: | 2 |
| • Principal unit: | |
| Number of bedrooms: | 3 |
| Habitable area: | 209 m² |
| • Accessory apartment: | |
| Number of bedrooms: | 1 |
| Habitable area: | 81 m² |
| Adddition Cost: | $54,728 |
| Initial area: | 107 m² |
| Total final area: | 290 m² |

Legend:
1 Living
2 Dining
3 Bedroom
4 Master bedroom
5 Family room



## SEMI-DETACHED: 1.5 STOREY, SPLIT LEVEL ENTRY

### INITIAL PHASE

Scenario:
A young couple or a family with only one child buys this starter home. The home at this initial phase has only two bedrooms and a total habitable area of 85 m². The basement remains unfinished until the need for additional space arises.

Description:

| | |
|---|---|
| Number of units: | 1 |
| Number of bedrooms: | 2 |
| Habitable area: | 85 m² |

Estimated Construction Cost: $81,743

Basement Main Floor Upper Floor Attic

Legend:
1 Living
2 Dining
3 Bedroom
5 Family room

### INTERMEDIATE PHASE 1

Scenario:
The basement becomes habitable as the household converts this unfinished area into a family room or an extra bedroom with a washroom and storage.

Description:

| | |
|---|---|
| Number of units: | 1 |
| Number of bedrooms: | 2 |
| Habitable area: | 128 m² |
| Change in area from previous phase: | +50% |

Basement expansion cost: $11,245

Legend:
0 Future habitable area
1 Living
2 Dining
3 Bedroom

## INTERMEDIATE PHASE 2

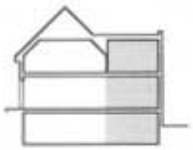
**Scenario:**
Several years after appropriating the basement, the household has the financial means to undertake an addition towards the rear, The unit expands 4.15 m into the backyard thus yielding larger living and dining rooms as well as a third bedroom in the basement.

**Description:**

| | |
|---|---|
| Number of units: | 1 |
| Number of bedrooms: | 3 |
| Habitable area: | 178 m² |
| Change in area from previous phase: | +39% |
| Addition cost: | $34,590 |

Basement Main Floor Upper Floor Attic

Legend:
1 Living
2 Dining
3 Bedroom
5 Family room
6 Office



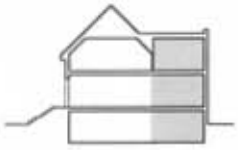
## FINAL PHASE

**Scenario:**
As the household's spatial needs decline, the unit is split in two and an accessory apartment is created.

**Description:**

| | |
|---|---|
| Number of units: | 2 |
| • Principal unit: | |
| Number of bedrooms: | 2 |
| Habitable area: | 128 m² |
| • Accessory apartment: | |
| Number of bedrooms: | 1 |
| Habitable area: | 50 m² |
| **Conversion Cost:** | **$16,599** |
| Initial area: | 85 m² |
| Total final area: | 178 m² |

Legend:
1 Living
2 Dining
3 Bedroom
5 Family room



## SEMI-DETACHED: 2 STOREY, MAIN LEVEL ENTRY

Basement Main Floor Upper Floor Attic

### INITIAL PHASE

Scenario:
A young couple or a family with only one child buys this starter home. The home at this initial phase has only two bedrooms and a total habitable area of 94 m². The basement and attic remain unfinished until the need for additional space arises.

Description:

| | |
|---|---|
| Number of units: | 1 |
| Number of bedrooms: | 2 |
| Habitable area: | 94 m² |

Estimated Construction Cost: $89,552

Legend:
0 Future habitable area
1 Living
2 Dining
3 Bedroom

### INTERMEDIATE PHASE 1

Scenario:
The basement becomes habitable as the household converts this unfinished area into an office with a washroom.

Description:

| | |
|---|---|
| Number of units: | 1 |
| Number of bedrooms: | 2 |
| Habitable area: | 141 m² |
| Change in area from previous phase: | +50% |

Basement expansion cost: $9,460

Legend:
1 Living
2 Dining
3 Bedroom
6 Office

## INTERMEDIATE PHASE 2

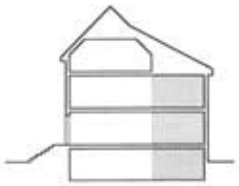
**Scenario:**
With the arrival of a second child, the household appropriates the unfinished attic by converting it into a master bedroom suite. The two bedrooms on the upper floor thus become children's bedrooms.

**Description:**

| | |
|---|---|
| Number of units: | 1 |
| Number of bedrooms: | 3 |
| Habitable area: | 186 m² |
| Change in area from previous phase: | +32% |
| Attic expansion cost: | $16,906 |

Basement Main Floor Upper Floor Attic

Legend:
1 Living
2 Dining
3 Bedroom
4 Master Bedroom
6 Office



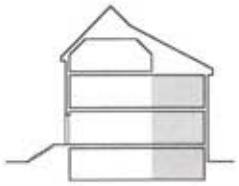
## FINAL PHASE

**Scenario:**
Several years after appropriating the attic, the household has the financial means to undertake the final phase of expansion. The unit expands 4.15 m into the backyard thus yielding a basement accessory apartment for an elderly parent.

**Description:**

| | |
|---|---|
| Number of units: | 2 |
| • Principal unit: | |
| Number of bedrooms: | 3 |
| Habitable area: | 191 m² |
| • Accessory apartment: | |
| Number of bedrooms: | 1 |
| Habitable area: | 72 m² |
| Addition Cost: | $55,224 |
| Initial area: | 94 m² |
| Total final area: | 263 m² |

Legend:
1 Living
2 Dining
3 Bedroom
4 Master Bedroom
6 Family room



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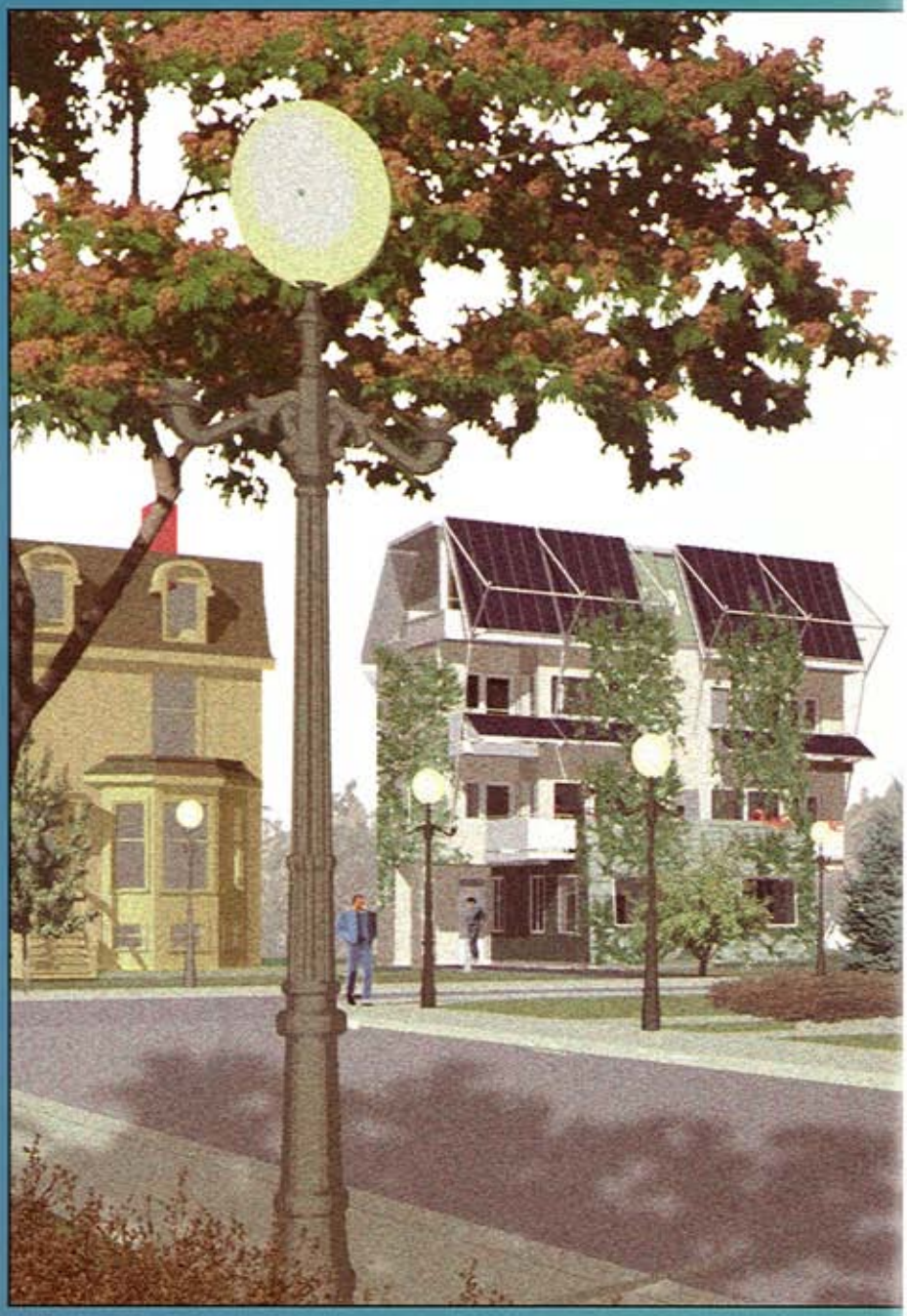
## A VERSATILE, DYNAMIC HOUSE

What is the most appropriate house for the '90s and beyond? A versatile house that can accommodate change economically and trouble–free …it's the SPROUT HOUSE.

This book details the Sprout house design, a design that can change to meet the evolving needs of the occupant. Each stage of the transformation is accomplished easily and without disruption; some of it can even be done by a handy homeowner. Whether there is a need for more bedrooms, a home office, a mother-in-law suite or an accessory apartment, this design has a place for each.

Find out how to incorporate versatility in your house design and make your house a dynamic, changing place.



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