

CITY OF NANAIMO

OFFICIAL COMMUNITY PLAN BYLAW 6000

INNOVATIVE HOUSING FOR NEIGHBOURHOODS:

**TRIPLEX AND QUADRUPLEX INFILL DESIGN
GUIDELINES**

**Guidelines for Development Permit Area No. 21 - Commercial, Industrial,
Institutional, Multifamily and Mixed Commercial/Residential Development**

**As adopted 1997-Sept.-22 as part of Bylaw 6000 "Plan Nanaimo" and
consolidated amendments as of 1997-Sept.-22.**

**APLIN & MARTIN CONSULTANTS LTD.
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These guidelines are referenced in section 8.2.21 “Development Permit Area No. 21 - Commercial, Industrial, Institutional, Multifamily and Mixed Commercial/Residential Development” of Plan Nanaimo, The Official Community Plan Bylaw 6000

**INNOVATIVE HOUSING FOR NEIGHBOURHOODS: TRIPLEX
AND QUADRUPLEX INFILL DESIGN GUIDELINES**

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THE CITY OF NANAIMO

INNOVATIVE HOUSING FOR NEIGHBOURHOODS

BACKGROUND INFORMATION

In January 1993, the City of Nanaimo was awarded an Affordability and Choice Today (A.C.T.) grant to develop design guidelines and promotional materials to encourage low density multiple-family housing in the City of Nanaimo's established single family neighbourhoods and new subdivisions. Aplin & Martin Consultants Ltd. and Elbe, Locke, Wall Architects Ltd. were retained to prepare the design guidelines and promotional material for the City of Nanaimo.

In July 1993, the City of Nanaimo adopted a series of housing policy documents (City Spaces Consulting Ltd.). The principle goal of the housing policy was to encourage the development of a range of housing choices with respect to type, size, density and cost. Subsequent to the adoption of the housing policies, the City received funding from the Federal Affordability and Choice Today (A.C.T.) Program for a design and regulatory reform project.

The federal Affordability and Choice Today (A.C.T.) Program is designed to improve housing affordability, choice and quality through regulatory reform at the Municipal level. A.C.T. is an initiative jointly funded by four key players in the housing sector: the Federation of Canadian Municipalities (F.C.M.), the Canadian Home Builders' Association (C.H.B.A.), and Canadian Housing and Renewal Association (C.H.R.A.) and the Canada Mortgage and Housing Corporation (C.M.H.C.)

Program Process

The Nanaimo A.C.T. Program design exercise has followed a collaborative participatory process which has included the following organizations:

1. City of Nanaimo Planning Staff
2. City of Nanaimo Steering Committee
3. Hulbert Group International Inc. Architects
4. Jerry Ellins and David Spearing, Nanaimo Architects
5. Aplin & Martin Consultants Ltd.

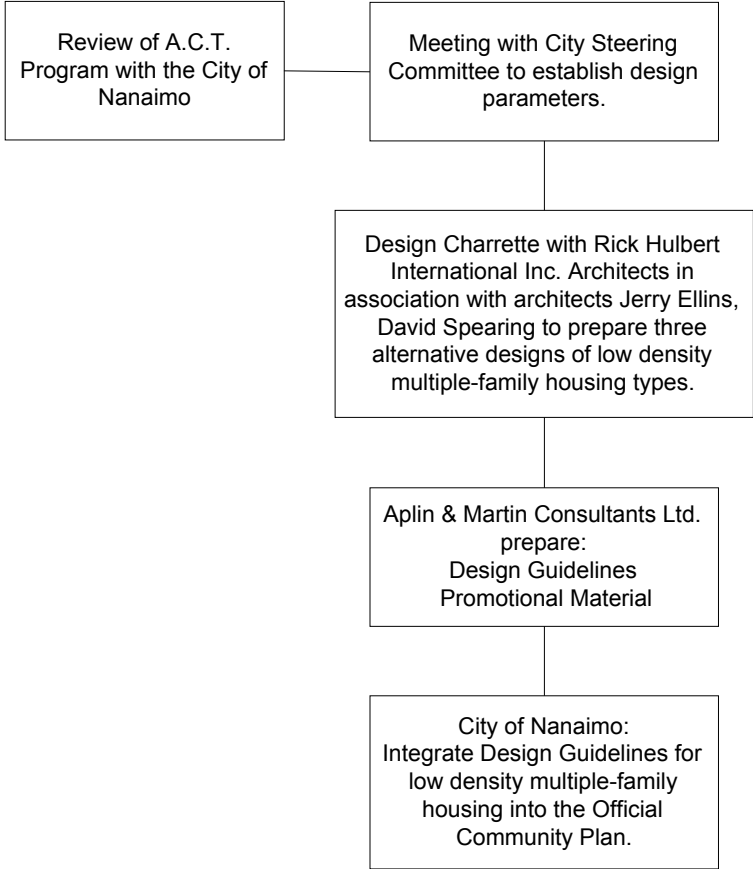
In September of 1993, Aplin & Martin Consultants Ltd. met with the City of Nanaimo Steering Committee in a workshop session to discuss the social and economic issues and considerations for the design of innovative triplex and quadruplex construction. The Steering Committee comprised representatives from the City of Nanaimo, the City Housing Committee, Vancouver Island Real Estate Board, Nanaimo Chapter of the Urban Development Institute, and the City of Nanaimo Non-Profit Housing Association.

The Steering Committee identified the following design parameters as critical to the integration of innovative housing forms into single family neighbourhoods:

- density,
- neighbourhood character,
- massing,
- residential livability,
- landscape treatment, and
- parking.

Rick Hulbert International Inc. Architects in collaboration with Nanaimo architects, Jerry Ellins and David Spearing were retained to prepare, during a one day design charette, three alternative designs of low density multiple-family housing types.

The following chart indicates the overall planning process with respect to the Innovative Housing for Neighbourhoods:



Design Context

The design charette produced design alternatives for three specific sites that were deemed typical of neighbourhood situations in Nanaimo. Although the sites are specifically located on three Nanaimo streets, they are considered sufficiently typical so as to represent a general Nanaimo situation.

The three sites were:

1. an internal lot without a lane,
2. an internal lot with a lane, and
3. a corner lot.

GUIDELINES FOR INNOVATIVE HOUSING IN NEIGHBOURHOODS: TRIPLEX AND QUADRUPLEX INFILL DESIGN GUIDELINES

CRITICAL DESIGN PARAMETERS FOR SMALL LOT TRIPLEX AND QUADRUPLEX CONSTRUCTION

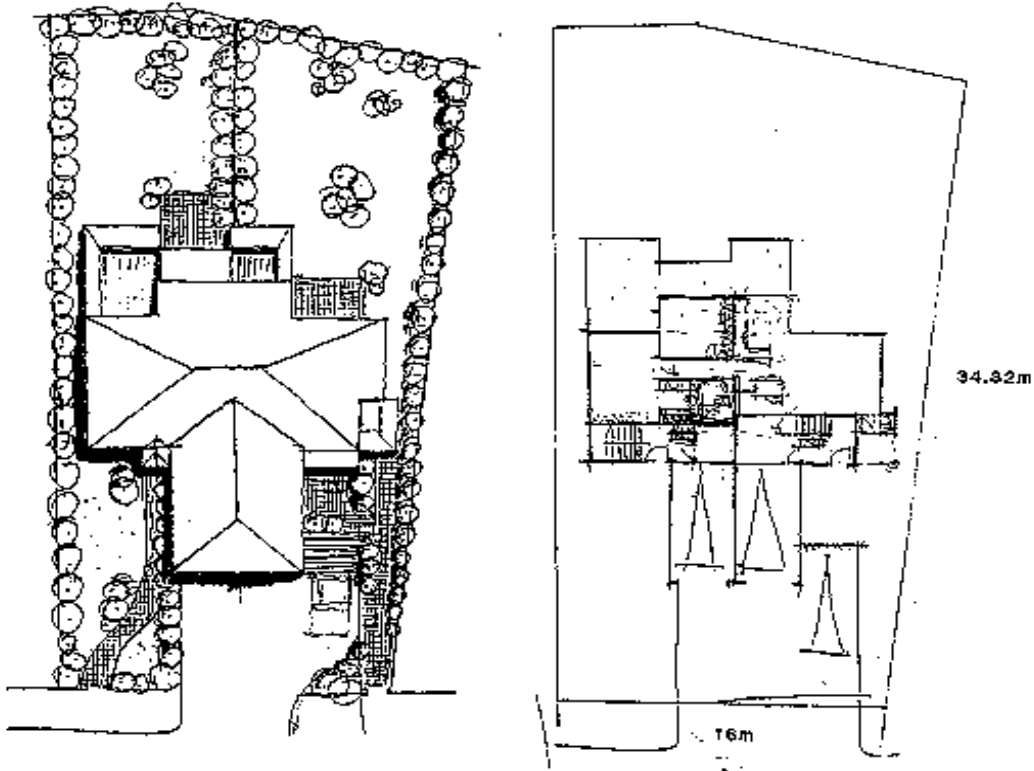
The following section outlines the design considerations of the three typical development sites, i.e. internal lot without lane, internal lot with lane, and corner lot. It should be noted that quadruplex (four unit) developments are only possible on lots with lanes or on a corner lot.

Internal Lot Without Lane

The site is represented by an internal lot without a lane in a single family neighbourhood. This site would be typical of an older Nanaimo grid-style subdivision. A triplex, or three unit development, should respond positively to the site context and the existing scale and character of the surrounding neighbourhood in the following manner:

Minimum Lot Size

The minimum lot width for a triplex is 16 m at the lot frontage. This would exclude cul-de-sac 'bulb' lots for triplex use. Minimum lot area required is 600 m².



Entrance to Units

All units should have private entrances located on the front elevation to promote a “frontage character”. Private entrances should be individually landscaped and lighted to create an identity for each unit. Two units should be located at grade, with the third unit located on the second floor.

Open Space

Rear yards for ground-level units should be divided into two separate open spaces by landscaping and fencing. Open space for the third unit could be in the form of a roof deck, a balcony, or provided in a portion of the front yard.

Parking

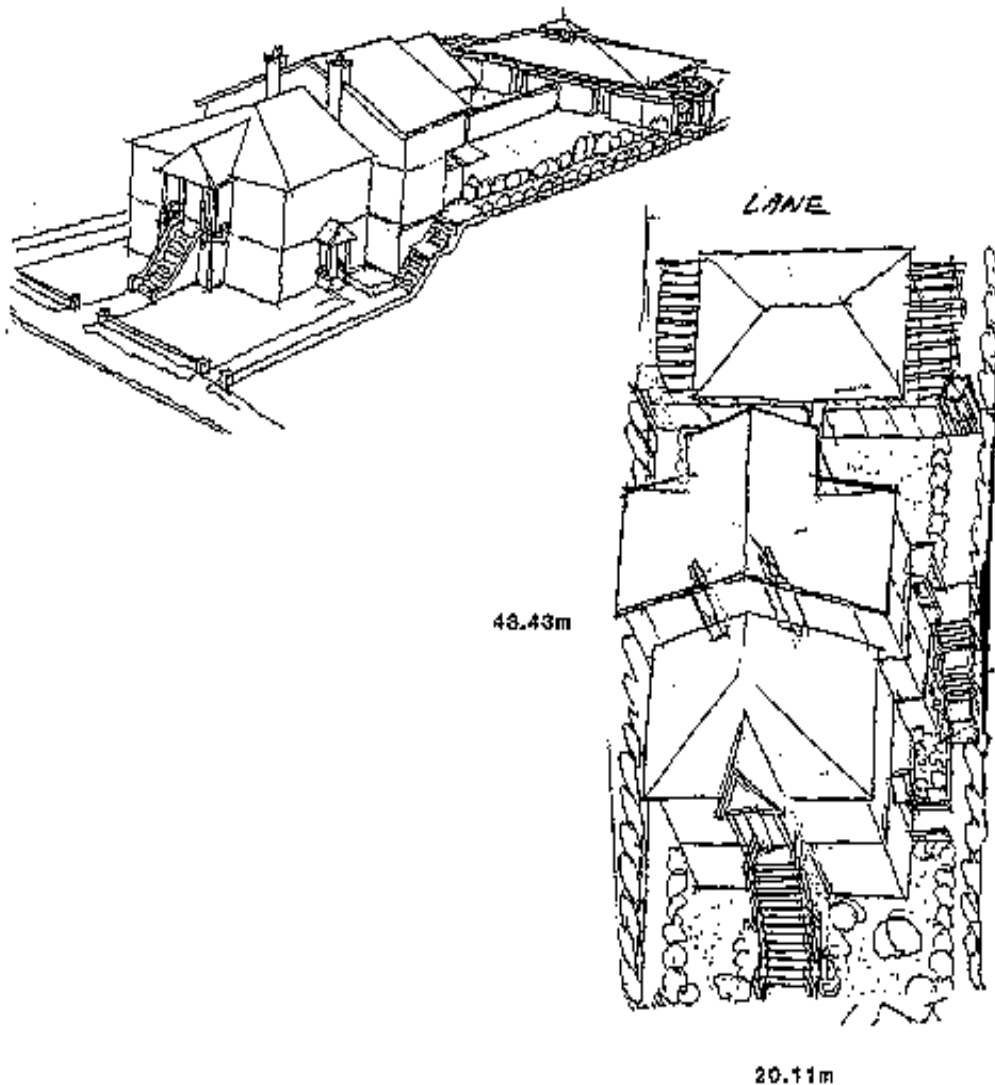
In order to reduce the impact of a higher density development in a single-family neighbourhood adequate off-street parking should be provided for the units.

The on-site parking requirement should accommodate two enclosed parking stalls. An additional parking stall should be situated to the side of the garage, with a tandem parking space provided directly behind the garage.

Internal Lot With Lane

This site would be typical of an older Nanaimo grid-style subdivision. This site could accommodate a quadruplex on an internal lot with a lane at the rear property line. On this particular site, the lot grade slopes up to the lane at the rear of the lot.

The following considerations should apply to development of this site: the exterior design of the building should incorporate similar design features of adjacent homes and should not exceed the typical housing mass of the neighbourhood.



Parking

1. All parking shall be on and/or accessed from the lane.
2. Automobile parking is accommodated by a four unit garage off the back lane. A further two parking stalls are provided in the driveway aprons on either side of the garage.
3. The rear yard setback must accommodate parking depth while ensuring safe vehicular movement onto the lane as stated in the amended RM-2 zone for the Internal Lot with Lane Quadruplex structures to the current RM-2 zone. See Section VII, page 13.

Entrances to Units

The quadruplex structure provides four units - each with a private entrance on either the front or side elevations. Landscaping, lighting and articulated roofs emphasize private entrance ways.

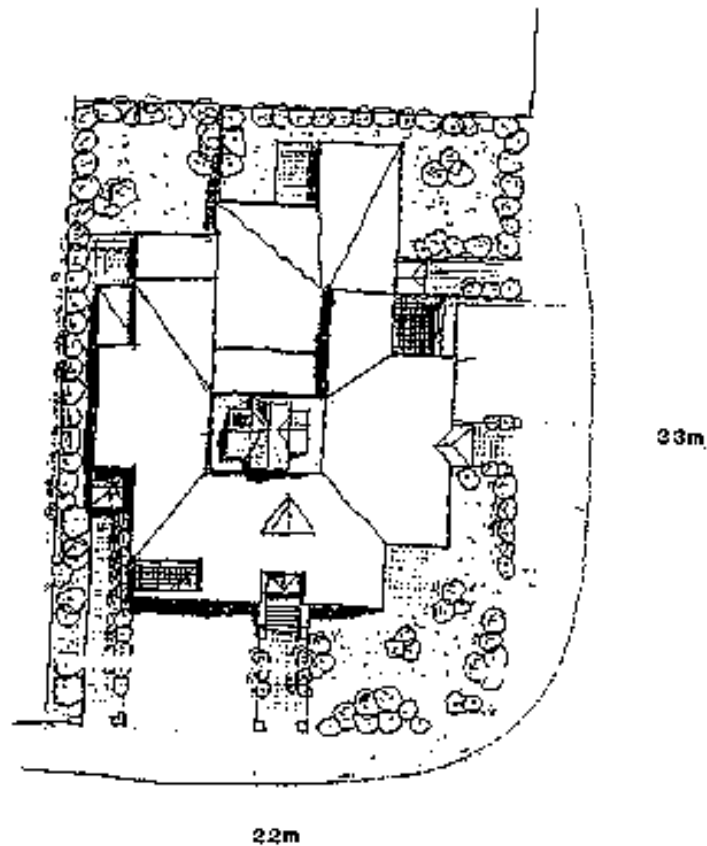
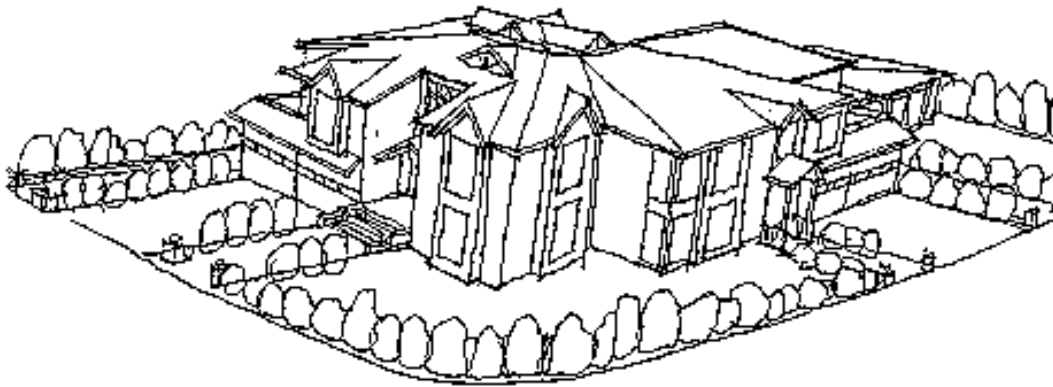
Open Space

For ground oriented units private open space is achieved by dividing the front and rear yards into two for the private use of each dwelling unit. Balconies and/or roof decks should be incorporated into the building design of second floor or stacked units.

Corner Lot - Quadruplex

This site is proposed to accommodate a quadruplex on a corner lot without a lane and features a driveway on both the principle and flanking streets.

The following design consideration should apply: the exterior massing should respect both the principle and flanking elevations in terms of height and building interest.



Open Space

Private open space is required for all four units. Patios are appropriate for units at-grade, while balconies and/or roof decks should be incorporated into the building design to meet the open space needs of above ground units.

Entrances to Units

There should be two private entrances off of the principle street and two off of the flanking street. Separate units are delineated by articulated roof treatments, walkways, lighting, and landscaping.

Architectural Treatment Of Flanking Elevation

Architectural style should reflect neighbourhood character. Flanking elevation should have the same attention to detail as the principle. The flanking elevation should offset two-story massing with articulated roofs, bays, and trim details.

Parking

Each driveway should have two enclosed garages, one of which should accommodate tandem parking. Three-car garages are not permitted.

DESIGN GUIDELINES FOR TRIPLEX AND QUADRUPLEX INNOVATIVE HOUSING

Design Guideline Objectives

[From Plan Nanaimo, section 8.2.21 “Area 21 Commercial, Industrial, Institutional, Multiple Family and Mixed Commercial/Residential Development” 1997-Sept.-22]

Objectives Specific to Innovative Housing for Neighbourhood Guidelines

- To ensure that triplex and quadruplex housing types are integrated into existing single family neighbourhoods.
- To provide more small unit housing of an appropriate size and cost to meet changing population structures, most particularly seniors, empty-nesters and declining family unit size.
- To ensure that new housing permits habitation by all income groups into single family neighbourhoods.
- To encourage “Lifetime Housing” design, i.e., housing that affords the inhabitant the ability to age and adapt to mobility constraints without having to change residences.
- To review and modify existing site coverage regulations to permit the development of triplexes and quadruplexes.
- To ensure a high level of design and quality of triplex and quadruplex construction.

Design Principles

The following design principles are statements of character that the development proposals for triplex and quadruplex are expected to exhibit.

1. *Development must respect the existing character of the neighbourhood.*

The design of innovative housing must respond to and be consistent with the existing character of the neighbourhood. Future development will model its building design, landscaping, and exterior finishes after the host neighbourhood.

2. *Development must respect the natural environment.*

The building and siting of innovative housing must be sensitive to natural amenities such as sunlight, views, and topography. The development should not negatively impact on the environment of the lot and surrounding neighbourhood.

3. Development must relate to the street.

To make the neighbourhood street an interesting and safe place, the development should not negatively impact on the street with high fences or bare concrete driveways. The use of landscaping, porches, windows that are oriented toward the street, and lighting can contribute to the security and neighbourliness of the street.

4. Development should include significant and appropriate landscaping.

The use of natural hedge landscaping between the private residence and the public neighbourhood is preferable to high fences. The use of low maintenance shrubs to delineate pathways and private entrances creates a green and attractive environment. Trees have air cleaning capabilities as well as providing shade and privacy.

5. Development must be accessible to the changing population structures *within the city.*

Smaller unit, low maintenance living spaces needs to be created for those active empty nesters who do not require the extra floor space of a single family home. Housing should also be available for an increasing number of senior citizens and physically challenged individuals who would choose to live in innovative housing. The design of ground floor units must respect the mobility constraints of certain groups. Low maintenance landscaping is encouraged.

Design Guidelines

The following design guidelines are recommendations stemming from the design charette. They are intended to serve as a bridge between the specific requirements of the City of Nanaimo Zoning Bylaw and the Housing Policy Statements of the City.

1. Design and Strata Subdivision

Triplex and quadruplex designs should enable stratification under the regulations of the Condominium Act of British Columbia, in terms of fire, building code regulations, access and other requirements.

2. Architectural Theme

The general architectural theme should always complement the surrounding building form.

Design elements are strongly encouraged to characterize these styles in terms of building facades, roof pitches, architectural era, and colours.

3. Building Entrances

Building entrances and front elevations in triplex and quadruplex designs should be oriented towards the principle or flanking streets to strengthen streetscape character.

The use of porches, staircases, entrance roofs and door detailing are encouraged to create visual interest and to emphasize individual entrances. Individual access at grade level should be encouraged for as many dwelling units as possible.

4. Building Siting, Orientation & Privacy

Buildings should be designed and sited to take maximum advantage of the natural characteristics of the specific parcel of land; for example, tree cover, sun angles, views, and relationship to adjacent homes and streetscapes. Where feasible, views should be opened up by articulating and providing breaks in roof lines.

Siting of buildings should take into account location, height and form of adjacent developments, solar orientation, existing specimen trees, and points of access. The privacy of adjacent homes should be ensured through strategic design and landscape screening. Individual unit privacy should also be ensured, for example, by offsetting windows and balconies.

5. Building Setbacks

All setback requirements for each particular site, shall be in keeping with the proposed amendments to the RM-2 zone as outlined in the City of Nanaimo Zoning Bylaw.

Building setbacks that respond to existing yard rhythm and character of the neighbourhood should be incorporated in the design of the development.

6. Side Walls

Side wall massing should be off-set to avoid a “canyon” effect. This can be achieved when the second floor square footage is less than the main floor, allowing the upper floor to step back.

7. Height

The height of the buildings should be in scale with existing buildings in the neighbourhood, and there should be a visual transition to nearby single-family homes. Maximum height of buildings is governed by restrictions in the RM-2 zone of the City of Nanaimo Zoning Bylaw.

8. Volumetric Restrictions

To ensure that the size and massing of proposed triplex and quadruplex designs are in keeping with established neighbourhood character, gross floor area shall be determined through volumetric restrictions. As stated in the RM-2 zone:

The maximum permitted floor area of a second story and roof plan over for the principle building shall not exceed 80% of the floor area of the first story.

9. Massing

Roof slopes should be designed to reduce the apparent mass of the development and to minimize the difference in eave elevations between buildings which are beside each other. All elevations in excess of two stories should be visually broken up with

elements such as sloped roofs, balconies, stepped and faceted massing, to provide greater detail to the building elevations.

10. Special Design Consideration for Corner Lots

Buildings on corner lots should be designed to face both streets with roof elements that turn the exposed corner. Building massing should step down in profile at the side yard adjacent to a public street. All elevations facing corners are to have additional detailing, i.e. windows, roof treatments.

11. Frontage Character

Development should provide a frontage character which is compatible with existing single-family development. It should also create visual interest and avoid an anonymous box-like image by breaking-up the facades visually, into smaller individual components. The building facades should be articulated to express individual units to avoid townhouse-like repetition.

12. Roofs

Roofs should be compatible with the existing neighbourhood character and should create visual interest. A steeply pitched roof in excess of 6:12 is encouraged. Roofs which have flat elements must incorporate gables or other architectural features to break up the roof form. Integrating pitched roofs into the overall design provides “single-family residential character” as opposed to the traditional appearance of flat roofed apartments.

Dormers may be permitted to encroach into setback areas where they are allowed to create building interest.

13. Yards and Open Space

Natural privacy should be given to each outdoor space, through architectural design and landscaping.

Common open space should be usable, easily supervised, and compatible with the characteristic open space of the neighbourhood.

Alternatives to ground level open space should be included in the form of a roof garden, large balcony and articulated front porches.

Balconies should be oriented and screened to ensure a high degree of privacy from other units and neighbouring homes.

14. Landscaping

Low maintenance landscaping is encouraged.

Landscaping for the site should be consistent with existing vegetation and should emphasize local indigenous plant materials.

Landscaping should enhance and compliment the predominant landscape character of the neighbourhood. Efforts should be made to retain as many existing trees as possible.

Planters on balconies, patios and roof decks should be included in the building design.

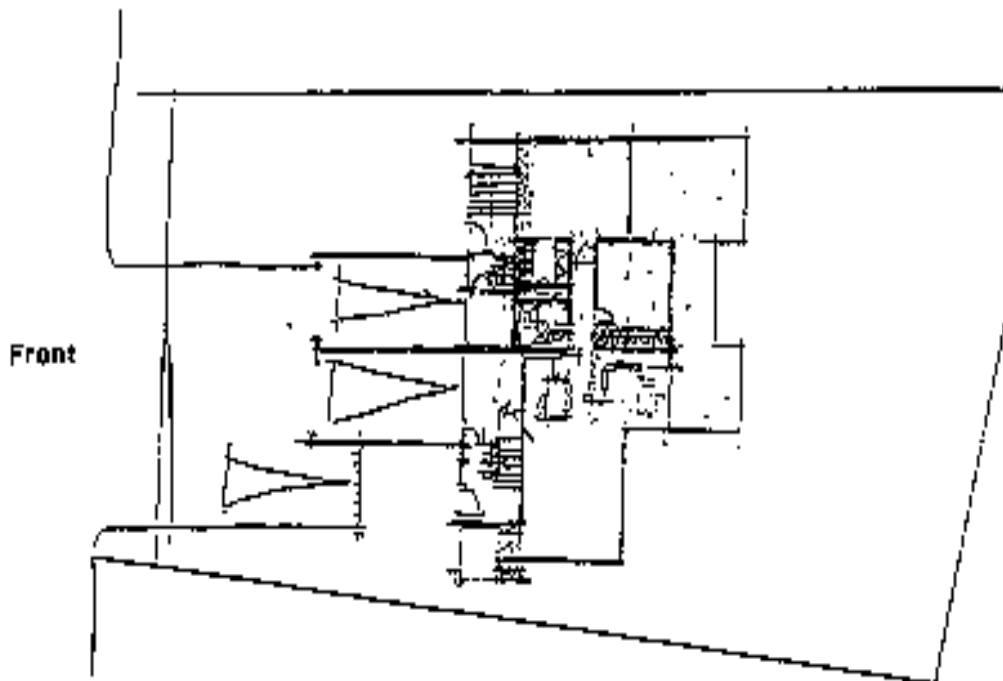
Landscaping of the front yards (and the side yards on corner lots), and those elevations visible from a street or park, should be designed to enhance the development and to accentuate street plantings, to create a cohesive streetscape.

Landscaping should be designed at the front door and along entrance walkways, to identify individual units. Porch lights and lighting along private pathways should also be used to articulate individual units while providing safety and security.

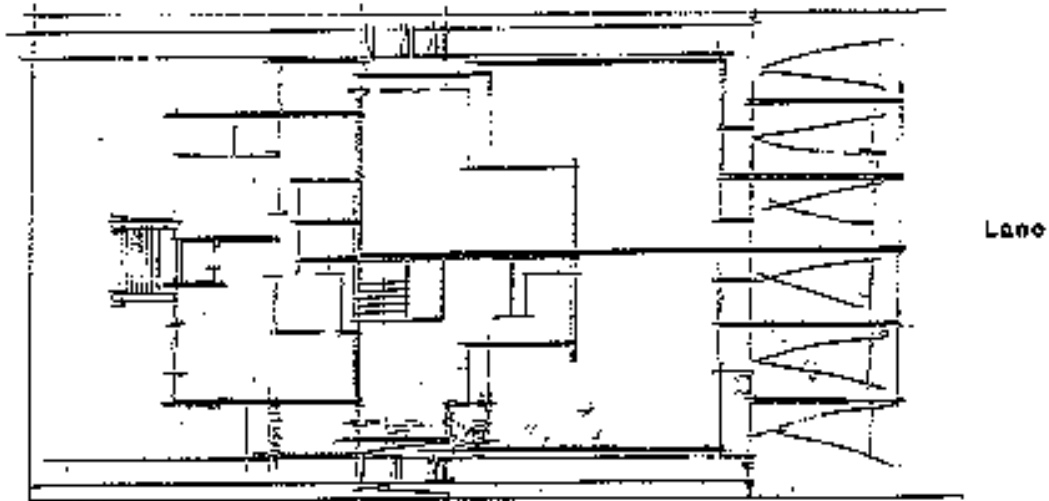
15. Driveway Access and Parking

Driveway, parking access is specific to each housing model.

The internal lot without lane has only one access to parking, from the street.



The internal lot with lane has only one access to parking from the lane.



Corner lots should have two, two-car garages. One is located on the front elevation, while the other is located on the flanking elevation.

