

HOUSE DESIGN GUIDELINES Part 2: Design Standards, Conventional Housing

CONTENTS

PART 2: DESIGN STANDARDS / CONVENTIONAL HOUSING

CHAPTER 1: Small Lot (350m ² - 450m ²) Detached House	
Site Planning	2
Streetscape and Compatibility	4
House Planning	6
Vehicle Access and Parking	9
Fencing	10
Soft Landscaping	12
Site Facilities and Accessory Structures	13
CHAPTER 2: Conventional Vacant Lot (450m² up to 1350)m²)
Detached House	
Site Planning	15
Streetscape and Compatibility	16
House Planning	17
Vehicle Access and Parking	18
Fencing	19
Soft Landscaping	21
Site Facilities and Accessory Structures	22
APPENDICES:	
Appendix 1 - The Lakes: Stage 1 Master Plan	24
Appendix 2 - References	25

This document has been prepared by:
Harrison Grierson Consultants Limited;
71 Great South Road, Newmarket;
PO Box 5760, Wellesley Street, Auckland





CHAPTER 1 - SMALL LOT (350M2 - 450M2) / DETACHED HOUSE

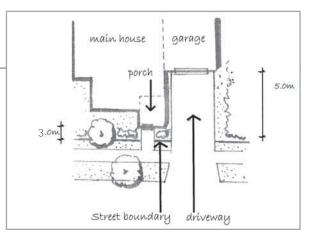
SITE PLANNING

PART 2: DESIGN STANDARDS

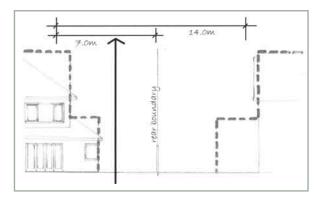
SMALL LOT (350m2 TO 450m2) DETACHED HOUSE

Building Setbacks

- 1. STREET SETBACK: A minimum distance of 3.0m from any part of the house including any porch, pergola, verandah or any other form of secondary addition to the main building shall be maintained between the house and any street boundary.
- 2. GARAGE SETBACK: Where a garage door faces a street boundary, a minimum distance of 5.0m from the front of the garage shall be maintained between the garage and the street boundary (to accommodate at least one additional car park outside the garage, to achieve desirable slope of the driveway to the garage if required and to reduce the visual impact of the garage) and the garage door shall be set back at least 1.5m from the front face of the house.
- 3. REAR SETBACK (for lots in a 'back to back' situation):
- For two storey design, a minimum distance of 7.0m between the rear site boundary and closest part of the rear wall of the house shall be maintained.
- For single storey design, a minimum distance of 3.0m between the rear site boundary and closest part of the rear wall of the house shall be maintained.
- 4. The dimensions stated in Standard 3 may be reduced (but not less than 1.5m) where the position of the house or houses on the adjoining property are known to be separated from the common boundary by a greater amount.
- 5. SIDE YARD: A minimum distance of 1.5m shall be maintained between any wall of the house and any side boundary.



^ Garage setback from front of house enables second car to be parked in the driveway.



^ This setback can be reduced, when setback for the adjacent house is greater than 7.0m, provided a total separation of 14.0m is maintained between the upper floors.



SITE PLANNING

PART 2: DESIGN STANDARDS

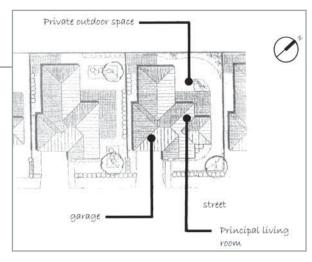
SMALL LOT (350m² TO 450m²) DETACHED HOUSE

Garage Position

 Garages shall be located beside the southernmost side boundary and shall have at least 1.5m setback from the front face of the house, unless an alternative position is necessary to achieve compliance with the 'streetscape' design expectations and considerations or topographical constraints.

Outdoor Space Location

- 1. Houses shall be located such that there is a flat, well proportioned usable private outdoor space at ground level which is directly accessible from the house. In this respect, a minimum area of 80m² with a minimum dimension of 3.0m and able to accommodate a circle of 6.0m diameter shall be achieved as a private outdoor space. If this space falls entirely to the south of the house, then a second outdoor space located to the north, east or west of the house with a minimum dimension of 3.0m and a minimum area of 10m², shall be achieved in addition.
- 2. Private outdoor space shall not be located solely between the house and any road boundary.





^ Locating private outdoor space between the house and the road creates pressure for high solid fencing along the road boundary, which is not acceptable.



STREETSCAPE AND COMPATIBILITY

PART 2: DESIGN STANDARDS

SMALL LOT (350m² TO 450m²) DETACHED HOUSE

Design of Front Door

- 1. Every house shall have a sheltered front door that is clearly visible from the street (or from where the development is entered, in the case of a dwelling not fronting a street).
- 2. Design devices shall be used to highlight the front door location (such as recesses in plan, paths and steps up to a front door, porches, cantilevered verandah, hanging roof etc).

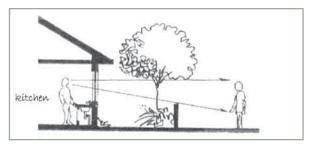
Treatment of Public Interface

- 1. Houses adjacent to a road or reserve shall have at least one window from a living room, dining room or kitchen with dimensions of not less than 1.5m width and 1.0m height that enables views to the road or reserve.
- 2. Not less than two windows shall be located on upper floor street elevations of two storey designs, and these windows shall have dimensions of not less than 2.0m in combined width and at least one shall have a dimension of not less than 1.2m in height.
- 3. Blank walls of greater than 3.0m in length shall not face a common boundary with a street or a reserve.
- 4. Houses on corner sites shall include similar public interface details (eg. window position and size, verandah/balcony placement, façade modulation) for both primary and secondary elevations.





^ Front door location which is highlighted on both street frontages in a corner lot situation.





^ Houses which have windows facing the street from main living rooms or kitchens also enable informal surveillance of the street.



Primary elevation Secondary elevation

STREETSCAPE AND COMPATIBILITY

PART 2: DESIGN STANDARDS

SMALL LOT (350m² TO 450m²) DETACHED HOUSE

Relationship Between Adjoining Buildings

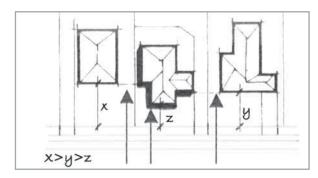
- 1. For two storey design, a transition in height and scale between adjacent buildings shall be provided when their separation distance is less than 3.0m.
- 2. When viewed from any public space, houses shall create visual interest through articulation, roof form, openings, and variation in façade setback, and by avoiding a continuous building frontage to the public space.
- 3. Elements of a street-facing house plan shall line up with one or both neighbouring houses on the street, even though their setback from the street boundaries may vary.
- 4. The Designer/Purchaser shall check if the dwellings on adjacent properties have been approved prior to commencing his/her own design.



^ Adjacent buildings adopt equal side yard spacing and steps down in height closer to the boundary.



^ Adjacent buildings adopt similar roof configuration, verandah forms and placement, and equal lot spacing on public frontage.



^ Elements of the house frontage plan line up with neighbouring houses even though it is built much closer to the street.

PART 2: DESIGN STANDARDS

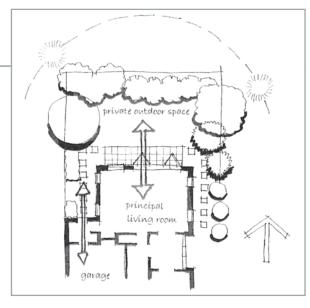
SMALL LOT (350m² TO 450m²) DETACHED HOUSE

House Plan

- 1. Where the private outdoor space is solely located at ground level, principal living areas (i.e. primary living room, dining and kitchen) shall be located at ground floor.
- 2. Direct access shall be provided to outdoor living areas from ground level internal living areas.
- 3. Garages shall be connected to outdoor service areas.
- 4. At least one living room shall be located on the northern or northwestern side of each house in order to receive adequate sunlight.

Private Outdoor Space

1. Private outdoor space shall be at ground level as a whole if possible. Outdoor space may also be provided as balconies where overlooking of the private outdoor space of other units or neighbouring houses is avoided or limited.





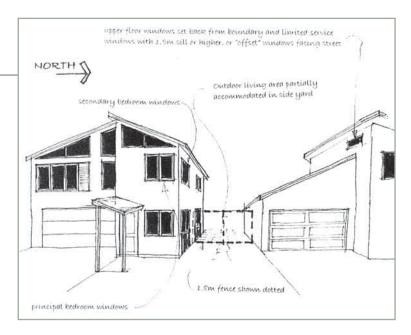
^ Street facing balcony is an acceptable location for upper level outdoor space.



PART 2: DESIGN STANDARD.

SMALL LOT (350m² TO 450m²) DETACHED HOUSE

- 2. Where the main part of the ground level outdoor space is close to the site boundary, the outdoor space shall be protected from being overlooked from windows and private outdoor spaces of adjacent household units through the use of the following design devices:
- · The shape and position of buildings, spaces and windows;
- Separation distance;
- Intervening screening, e.g.:
 - Fences 1.6m to 1.8m high (not on a road boundary);
 - Dense trees, planting or hedges;
 - Screening devices on balconies;
 - Offset and high sill windows;
 - Obscured and restricted-opening windows (service rooms only).







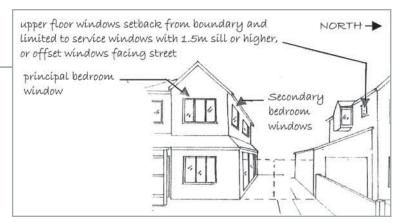
^ Flower box along upper floor balcony railing (Image 1) or upper floor side wall setback (Image 2) are good design solutions to minimise potential for overlooking of neighbouring private open space.

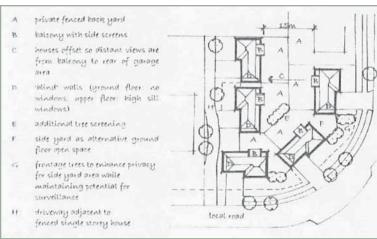
PART 2: DESIGN STANDARDS

SMALL LOT (350m² TO 450m²) DETACHED HOUSE

Opening Design

- 1. Direct views from the windows of one household unit into the windows of another shall be avoided or minimised through the use of the design devices included in the previous page (in Standard 2 under 'private outdoor space' element), as applicable.
- 2. In the two storey designs where houses are within 6.0m of each other, on the southernmost side wall of the upper floor there shall be no windows, except that the following may be provided:
- Windows to bathrooms and circulation spaces which is obscured glazing, and has a
 minimum cill height of 1.5m. (Note: This restriction shall not apply to corner sites
 where the southernmost side wall is adjacent to a public boundary).
- 3. Where there is no house or known design for the adjacent property, the requirement for the southernmost side wall on the upper floor shall apply where this wall is located within 3.0m of the side boundary.





^ The use of combination of design devices to ensure privacy is considered in plan and in elevation design



VEHICLE ACCESS AND PARKING

PART 2: DESIGN STANDARDS SMALL LOT (350m² TO 450m²) DETACHED HOUSE

Car Parking

- 1. A minimum of two on-site car parking spaces, with at least one garage space, shall be provided for every house.
- 2. Visitor parking shall be provided on the driveway in front of the garage door, where the garage faces the street.

Garage

- 1. Any garage shall be set back further than the front face of the house on all front lots by at least 1.5m.
- 2. The architectural style, material, colour and overall visual appearance of the garage roof, door and walls shall be consistent with the design of the house it is part of.

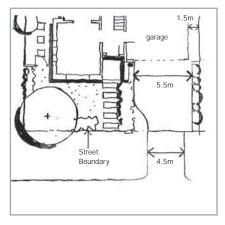
Driveway and Access

- 1. For a garage at the front of the house and accessed from the street, the driveway shall not be wider than 5.5 metres for a double garage door. It shall either be splayed from a crossing width of maximum 4.5 metres at the lot boundary, or split by a planting strip. A driveway serving a single garage door shall be a maximum of 3.5 metres wide.
- 2. The driveway shall not be exclusively plain white or grey concrete and shall include features such as exposed aggregate concrete, coloured concrete, or cobbles/pavers.

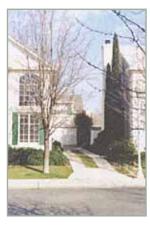




^ Side wall of the garage is on the boundary and its finishing matches the front of the garage, visitor parking is located in front of the garage and the visual appearance of the garage matches the design of the house it is part of.



^ Standard driveway layout where the garage faces the street.



^ Driveway paving is minimised by careful design and visual impact reduced by planted strip.



FENCING

PART 2: DESIGN STANDARDS

SMALL LOT (350m2 TO 450m2) DETACHED HOUSE

Front Fencing

- 1. Solid fences or walls along the street boundary and in the space between the street frontage and the line of front of the house are not permitted, and all other fences shall be avoided.
- 2. If front boundary definition is desired, either soft landscaping including a low hedge of maximum 1.0m height or permeable fencing (maximum 1.0m height) in conjunction with soft landscaping and low hedge, shall be used along the street boundary, with species selected to maintain views between the dwelling and public space.
- 3. A front fence of maximum 1.8m height may be used to provide visual screening between the semi-private front garden and private rear garden, and any such fence shall be located behind the front face of the building.

Side and Rear Fencing

- 1. A solid fence of 1.8m maximum height may be used to provide visual screening between adjoining properties.
- 2. Fencing on the rear or side boundary of a lot adjoining public reserve, public accessway or cycleway shall be a maximum of 1.2m in height with a maximum of the lower 0.6m being solid (with the balance permeable).
- 3. For providing privacy to private outdoor spaces on corner sites, fencing shall be a solid fence of maximum 1.8m in height located behind the adjacent line of houses (refer diagram).



lishind the adjaces



inexes falore
(should watch the
monitection character
of the lease)

Private

Ade yard

Sensiprivate

Frenk Yord Space

side frace

completely solid Insust he behind the palinces

stone of the house)

Ichouted matter the

of the nouse)

avoidizetural charact

maximum 1 Sm high

wild feare

^ Low permeable fence in conjunction with low hedge provides boundary definition, and at the same time addresses the front street positively.



^ Effective side fence treatment to provide privacy for the private rear court.



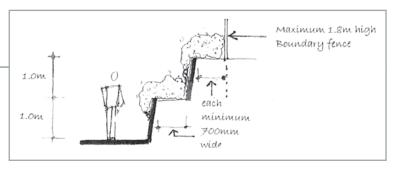
FENCING

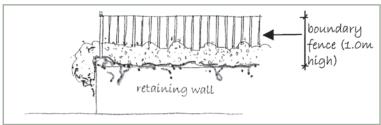
PART 2: DESIGN STANDARDS

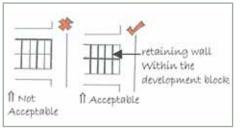
SMALL LOT (350m² TO 450m²) DETACHED HOUSE

Retaining Wall

- 1. Retaining walls shall be incorporated into the house structure if possible and feasible. Other retaining walls shall be located within the development lot and if possible and feasible not at the perimeter where they are visible from the street.
- 2. Where retaining will be required outside the building platform and where level changes are forced to be greater than 2.0m high, stepped retaining walls shall be utilised.
- 3. The visual appearance of any retaining visible from the public street shall be minimised by introducing soft landscaping, and/or fencing along the retaining wall.
- 4. Where there is retaining near a boundary between properties, the 1.8m maximum height referred to in 'side and rear fencing' shall apply to the upper property. Construction position shall be consistent with the top diagram to the right.
- 5. Retaining wall material shall complement the material, style and structure of the house it is part of, and also the landscape design principle applicable for the house.









^ Soft landscaping is a good option to minimise the visual appearance of the retaining wall.



SOFT LANDSCAPING

PART 2: DESIGN STANDARDS | SMALL LOT (350m² TO 450m²) DETACHED HOUSE

Landscaping in General

- 1. Plant species shall be selected for their suitability to the neighbourhood design themes based on valley setting.
- 2. All sites shall have a combination of grass, shrub and tree complementing the overall landscape theme of the development.

Front Yard Landscaping

1. Front yard planting shall be defined by open space surrounded by shrubbery/trees. The open space, lawn or hardstanding shall be balanced in the appropriate proportions with the soft landscaping. (An indication of appropriate tree and shrub species can be viewed on the landscape planting plan for each particular landscape zone. It is expected that at least 2 or 3 of the trees or shrubs indicated are repeatedly used in the private plantings to provide linkage between private and planted areas).

Rear Yard Landscaping

1. Rear yard landscaping shall cover a minimum of 60% of the rear yard. (An indication of appropriate tree and shrub species can be viewed on the landscape planting plan for each particular landscape zone. It is expected that at least 2 or 3 of the trees or shrubs indicated are repeatedly used in the private plantings to provide linkage between private and planted areas.)



^ Appropriate soft landscaping along the front boundary enhances the public appearance of the development. The development establishes visual linkage with the road.





It is expected that detailed landscape design for individual rear yards will vary based on individual lot owners' choice and budget.



SITE FACILITIES AND ACCESSORY STRUCTURES

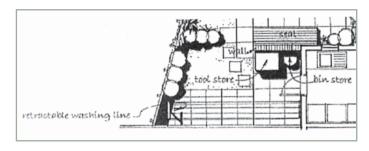
PART 2: DESIGN STANDARDS

SMALL LOT (350m² TO 450m²) DETACHED HOUSE

- 1. Where accessory structures/buildings are required, they shall be in keeping with the architectural style of the dwelling.
- 2. The clothesline shall be accommodated within a service court at the rear or side of the house and shall be screened from adjoining public spaces and screened from the main private outdoor space.
- 3. A suitable location for bin storage which is accessible from the public rubbish collection area (i.e. front road) shall be provided within the site with appropriate screening from adjoining properties and public spaces.
- 4. Visibility of antennas from the street is to be minimised and internal or under the roof antennas are encouraged. Aerials mounted on the roof shall be located to the rear of the house. Satellite dishes are not permitted in the front yard.
- 5. Garden sheds shall be screened from adjoining public spaces, and shall not exceed 2.0m in height and 5.0m² in floor area.



^ People passing in the street should not be able to see the clothesline.



^ A possible way of screening the service court which includes the clothesline and the bin store.





CHAPTER 2 - CONVENTIONAL VACANT LOT (450M2 UP TO 1350M2) DETACHED HOUSE

SITE PLANNING

PART 2: DESIGN STANDARDS

CONVENTIONAL VACANT LOT DETACHED HOUSE

Building Setbacks

- 1. STREET SETBACK: A minimum distance of 3.0m and a maximum distance of 6.0m from any part of the house (including any porch, pergola, verandah or any other form of secondary addition to the main building) shall be maintained between the house and any street boundary.
- 2. REAR SETBACK: A minimum distance of 3.0m between the rear site boundary and closest part of the house shall be maintained.
- 3. SIDE YARD: A minimum distance of 1.5m shall be maintained between any wall of the house and any side boundary.
- 4. GARAGE SETBACK: Where a garage door faces a street boundary, it shall be set back at least 1.5m from the front face of the house.

Outdoor Space Location

- 1. Houses shall be located such that there is a well proportioned private outdoor space at ground level which is directly accessible from the house. In this respect, a minimum area of 100m² with a minimum dimension of 6.0m shall be achieved as a private outdoor space.
- 2. Private outdoor space shall not be located solely between the house and any road boundary.



^ A maximum front yard setback has been required to avoid this type of situation where the house is sitting in the middle of the site and relates poorly with the front street.



^ Locating private outdoor space between the house and the road creates pressure for high solid fencing along the road boundary, which is not acceptable.



STREETSCAPE AND COMPATIBILITY

PART 2: DESIGN STANDARDS

CONVENTIONAL VACANT LOT DETACHED HOUSE

Design of Front Door

- 1. Every house shall have a sheltered front door that is clearly visible from the street (or from where the development is first entered, in the case of a dwelling not fronting a street).
- 2. Design devices shall be used to highlight the front door location (such as recesses in plan, paths and steps up to a front door, porches, cantilevered verandah, hanging roof etc.)

Treatment of Public Interface

- 1. Every house shall address the front street positively by avoiding large blank walls on the front elevation and by incorporating design devices on the front façade such as a front porch or verandah.
- 2. Houses fronting the street shall include windows or doors to habitable rooms (not service rooms) on the front elevation.
- 3. Houses on corner sites shall include similar public interface details (eg. window position and size, verandah/balcony placement, façade modulation) for both primary and secondary street elevations.

Relationship Between Adjoining Buildings

1. Impact of the building bulk of large houses on neighbouring properties and the street shall be minimised by employing techniques such as reduced building height near the boundaries and modulation in building mass.



^ Front door location which is highlighted on both street frontages in a corner lot situation.



^ A semi-private entry porch and permeable fencing have been used here effectively to address the front street positively.



^ Modulation in building mass has been applied here effectively to reduce the visual impact of a large house.



PART 2: DESIGN STANDARDS

CONVENTIONAL VACANT LOT DETACHED HOUSE

Private Outdoor Space

- 1. Where the main part of the ground level outdoor space is close to the site boundary, the outdoor space shall be protected from being overlooked from windows and private outdoor spaces of adjacent household units through the use of the following design devices:
- The shape and position of buildings and spaces;
- Intervening screening, e.g.:
 - Fences 1.6m to 1.8m high (not on a road boundary);
 - Dense trees, planting or hedges.

Opening Design

1. Direct views from the windows of one household unit into the windows of another shall be avoided or minimised, by separation distance and/or through the use of the design devices included in Standard 1 under 'private outdoor space' element, as applicable.





^ Flower box along upper floor balcony railing (Image 1) or upper floor side wall setback (Image 2) are good design solutions to minimise potential for overlooking of neighbouring private open space.



VEHICLE ACCESS AND PARKING

PART 2: DESIGN STANDARDS CONVENTIONAL VACANT LOT DETACHED HOUSE

Car Parking

1. A minimum of two on-site car parking spaces with at least one garage space shall be provided for every house.

Garage

- 1. The architectural style, material, colour and overall visual appearance of the garage roof, door and walls shall be consistent with the design of the house it is part of.
- 2. Where a garage door faces a street boundary, the garage shall have at least 1.5m setback from the front face of the house.



^ An acceptable design of garage, where the garage complements the overall mass, visual appearance and architectural style of the main building.



FENCING

PART 2: DESIGN STANDARDS

CONVENTIONAL VACANT LOT DETACHED HOUSE

Front Fencing

- 1. Solid fences or walls along the street boundary and in the space between the street frontage and the line of front of the house are not permitted and all other fences shall be avoided.
- 2. If front boundary definition is desired, either soft landscaping including a low hedge of maximum 1.0m height or permeable fencing (maximum 1.0m height) in conjunction with soft landscaping and low hedge, shall be used along the street boundary, with species selected to maintain views between the dwelling and public space.
- 3. A front fence of maximum 1.8m height may be used to provide visual screening between the semiprivate front garden and private rear garden, and any such fence shall be located behind the front face of the building.

Side and Rear Fencing

- 1. A solid fence of 1.8m maximum height may be used to provide visual screening between adjoining properties.
- 2. Fencing on the rear or side boundary of a lot adjoining public reserve, public accessway or cycleway shall a maximum of 1.2m in height with a maximum of the lower 0.6m being solid (with the balance permeable).



^ Low permeable fence in conjunction with low hedge provides boundary definition, and at the same time addresses the street positively.



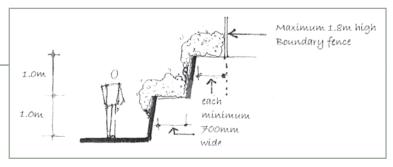
FENCING

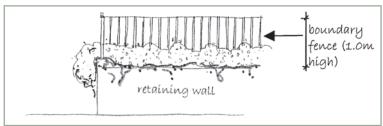
PART 2: DESIGN STANDARDS

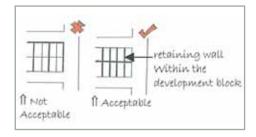
CONVENTIONAL VACANT LOT DETACHED HOUSE

Retaining Wall

- 1. Retaining walls shall be incorporated into the house structure if possible and feasible. Otherwise retaining walls shall be located within the development lot and not at the perimeter where they are visible from the street.
- 2. Where retaining will be required outside the building platform and where level changes are forced to be greater than 2.0m high, stepped retaining walls shall be utilised.
- 3. The visual appearance of any retaining visible from the public street shall be minimised by introducing soft landscaping, and/or fencing along the retaining wall.
- 4. Where there is retaining near a boundary between properties, the 1.8m maximum height referred to in 'side and rear fencing' shall apply to the upper property. Construction position shall be consistent with the top diagram to the right.
- 5. Retaining wall material shall complement the material, style and structure of the house it is part of, and also the landscape design principle applicable for the house.









^ Soft landscaping is a good option to minimise the visual appearance of the retaining wall.



SOFT LANDSCAPING

PART 2: DESIGN STANDARDS

CONVENTIONAL VACANT LOT DETACHED HOUSE

Landscaping in General

- 1. Plant species shall be selected for their suitability to the neighbourhood design themes based on valley setting.
- 2. All sites shall have a combination of grass, shrub and tree complementing the overall landscape theme of the development.

Front Yard Landscaping

1. Front yard planting shall be defined by open space surrounded by shrubbery/trees. The open space, lawn or hardstanding shall be balanced in the appropriate proportions with the soft landscaping. (An indication of appropriate tree and shrub species can be viewed on the landscape planting plan for each particular landscape zone. It is expected that at least 2 or 3 of the trees or shrubs indicated are repeatedly used in the private plantings to provide linkage between private and planted areas).

Rear Yard Landscaping

 Rear yard landscaping shall cover a minimum of 60% of the rear yard. (An indication of appropriate tree and shrub species can be viewed on the landscape planting plan for each particular landscape zone. It is expected that at least 2 or 3 of the trees or shrubs indicated are repeatedly used in the private plantings to provide linkage between private and planted areas.)



^ Appropriate soft landscaping along the front boundary enhances the public appearance of the development. The development establishes visual linkage with the road.



^ Rear yard landscaping should complement the recreational use of the rear private court.



SITE FACILITIES AND ACCESSORY STRUCTURES

PART 2: DESIGN STANDARDS CONVENTIONAL VACANT LOT DETACHED HOUSE

- 1. Where accessory structures/buildings are required, they shall be in keeping with the architectural style of the dwelling.
- 2. Swimming pool, decks and pergolas shall be of a similar quality and style as the main building.
- 3. Garden sheds shall not exceed 2.0m in height and 5.0m² in floor area and be suitably screened.





APPENDICES

APPENDIX 1



APPENDIX 2

PART 2: DESIGN STANDARDS / CONVENTIONAL HOUSING

REFERENCES The following are the principal documents reviewed in the preparation of this document and their inspiration is duly acknowledged:

Christchurch City Council

New Housing in Living 3 Zones - A Design Guide

Ministry for the Environment

People, Places and Spaces: A Design Guide for Urban New Zealand

North Shore City Council

Good Solutions Guide for Intensive Residential Developments

Papakura District Council

Plan Change No. 3, Medium Density Housing Development Design Assessment Criteria

State Government of Victoria

Victorian Code for Residential Development

Waitakere City Council

Developers Design Guide for Residential Subdivision and Medium Density Housing

Waitakere City Council

Operative District Plan, Medium Density Housing Criteria

Wellington City Council

Operative District Plan, Multi-Unit Housing Design Guide

Western Australian Planning Commission

Liveable Neighbourhoods - Edition 2

Edgewater on the Maribyrnong

Edgewater Housing Establishment Requirements - Allotments 242 to 365

Ellenbrook: The New Town in the Swan Valley

Design Guidelines

This document has been prepared by: Harrison Grierson Consultants Limited; 71 Great South Road, Newmarket; PO Box 5760, Wellesley Street, Auckland

