

STATEMENT OF ENVIRONMENTAL EFFECTS

RE:

NEW DWELLING

FOR

DANIEL & ALEXIS CHEANG

AT

Lot 4 / DP229073

8 DEBORAH PLACE

EASTWOOD, NSW 2122

D.A. ISSUE

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TABLE OF CONTENTS

Contents

Introduction	4
Description of Site and Site Suitability	5
Proposed Use of Site	7
Description of Proposed Development	8
Development Compliance	10
Applicable Planning Legislation	11
Ryde Local Environmental Plan 2014.....	11
PART 2: PERMITTED OR PROHIBITED DEVELOPMENT.....	11
2.2 Zoning	11
PART 4: PRINCIPAL DEVELOPMENT STANDARDS	11
4.3 Height of Buildings	11
4.4 Floor space ratio	12
PART 6: ADDITIONAL LOCAL PROVISIONS	12
6.2 Earthworks	12
6.4 Stormwater management.....	13
Ryde Development Control Plan 2014.....	15
PART 3: DEVELOPMENT TYPE	15
PART 3.3 DWELLING HOUSES AND DUAL OCCUPANCY (ATTACHED)	15
2.0 GENERAL CONTROLS	15
2.1 Desired Future Character.....	15
2.2 Dwelling Houses	19
2.2.1 New Dwelling Houses	19
2.5 Public Domain Amenity	19
2.5.1 Streetscape	19
2.6 Site Configuration.....	22
2.6.1 Deep Soil Areas	22
2.6.2 Topography and Excavation.....	23
2.7 Floor Space Ratio (FSR)	25
2.8 Height.....	26
2.8.1 Building Height	26
2.8.2 Ceiling Height.....	26
2.9 Setbacks	27
2.9.1 Front Setbacks	27
2.9.2 Side Setbacks	28
2.9.3 Rear Setbacks.....	29
2.10 Outbuildings	30
2.11 Car Parking and Access.....	31
2.11.1 Car Parking	31
2.11.2 Semi-basement Car Parking	33
2.12 Swimming Pools and Spas.....	33
2.13 Landscaping.....	34
2.14 Dwelling Amenity.....	37
2.14.1 Daylight and Sunlight Access.....	37
2.14.2 Visual Privacy.....	38
2.14.3 Acoustic Privacy.....	39
2.14.4 View Sharing.....	40
2.14.5 Cross Ventilation	40
2.15 External Building Elements	40
2.15.1 Roofs.....	40
2.16 Fences	41
2.16.1 Front and return Fences and Walls	42
2.16.2 Side and rear Fences and Walls	42
PART: 7.1 ENERGY SMART, WATER WISE.....	44
1.0 INTRODUCTION.....	44
1.2 Objectives of this Part	44
2.0 DEVELOPMENT POLICIES	44
2.2 New Dwelling Houses	44
PART: 7.2 WASTE MINIMISATION AND MANAGEMENT	44

1.0 INTRODUCTION.....	44
1.4 Objectives of this Part	44
2.0 DEVELOPMENT CONTROLS	45
2.2 Aims and Objectives for All Developments.....	45
2.3 All developments	46
2.5 Residential Developments comprising 1 or 2 Dwellings	48
PART: 8.2 STORMWATER AND FLOODPLAIN MANAGEMENT	48
2.0 STORMWATER DRAINAGE.....	49
2.2 Property Drainage	49
2.3 Stormwater Discharge from Property	49
2.4 Community Stormwater Management.....	50
PART: 8.3 DRIVEWAYS	51
1.0 Introduction	51
1.1 Objectives	51
Compliance Table	52
Summary.....	53

Introduction

This statement of environmental effects has been prepared by Envirotexture for Daniel and Alexis Cheang, and describes a proposal for a new dwelling at 8 Deborah Place, Eastwood, NSW 2122.

It should be read in conjunction with:

- Architectural drawings prepared by Envirotexture;
- Survey Plan prepared by Donovan Associates;
- Arboricultural Impact Assessment prepared by Bradshaw Consulting Arborists
- Landscape plans prepared by Aspect Designs

The design of this dwelling proposal and preparation of this report has been developed in consideration of the following:

- Environmental Planning and Assessment (EP&A) Act, 1979;
- Ryde Local Environmental Plan 2014;
- Ryde Development Control Plan 2014;
- State Environmental Planning Policies, as applicable.

In this statement only the relevant clauses of the LEP and DCP have been discussed.

Description of Site and Site Suitability

The subject site is Lot 4, DP229073 located at 8 Deborah Place, Eastwood, NSW, 2122.

The land is zoned R2 Low Density Residential under the Ryde Local Environmental Plan 2014.

The land is;

- NOT bushfire prone;
- NOT within a flood planning area;
- NOT a heritage item;
- NOT within a heritage conservation area;

The site is located on the northern high side of Deborah Place, at the direct end of the cul-de-sac, and has frontage and address onto Deborah Place. The site is irregular in shape with a surveyed area of 581.6m². It has street frontage of 12.19m. The irregular shape of the lot results in a 'short' side boundary of 22.435m and a 'long' side boundary of 34.57m. The approximate average site depth is 25.3m.

The site rises away from the street towards the south approximately 3.3m from west to east boundary corners. The garage is orientated perpendicular to the street approximately 1m above street level. The site continues to rise towards the east approximately another 2.3m before reaching the eastern boundary corner.

Development within the immediate proximity of the site is characterized by single- and double-storey detached dwelling houses of varying age, scale and design with both regular and irregular lot patterns due to the cul-de-sacs in the area, and domestic landscaped settings.



Fig. 1: Aerial image of subject site. Source: SIX maps



Fig. 2: Streetscape, North side of street. Source: Google

Proposed Use of Site

This proposal is for a new single-family dwelling.

The Owners are keen to remain at this location with their growing family and seek approval for the works as described here and in the associated documentation. The proposed works are intended to improve the use of the site and greatly improve on the thermal performance of the existing building, through the new dwelling's appropriate glazing location, specification and increased insulation levels.

Description of Proposed Development

The application proposes a new dwelling as depicted on plans prepared by Envirotexture.

Specifically, the application provides for the following built form outcomes:

Overall:

- A two-storey dwelling primarily accessed from Deborah Place;
- with a total GFA of 211.98m²;

Garage:

- A GFA (excluding 2x 3x6m parking spaces) of approximately 11.82m²
- A two car garage at the location of the current garage, accessed via an altered existing driveway with direct connection to the Deborah Place cul-de-sac.

Ground Floor:

- A GFA of approximately 122.23m²
- Predominantly 'public' spaces
- at an RL of 73.8m, with level access to the rear garden, and a new, covered, pool-side cabana structure.
- Open plan Kitchen / Dining / Living spaces
- Double-height void over living space, adjacent to a staircase connecting to the first floor
- Laundry
- Small bathroom
- Guest bedroom/study
- Play room

First Floor:

- A GFA of approximately 77.93m²
- Predominantly 'private' spaces
- at an RL of 76.9m
- Master bedroom with ensuite
- Two additional bedrooms
- A landing with study space, with view over Deborah Place
- A three-way bathroom setup; with two basins externally accessible from both a separate WC and bathroom.

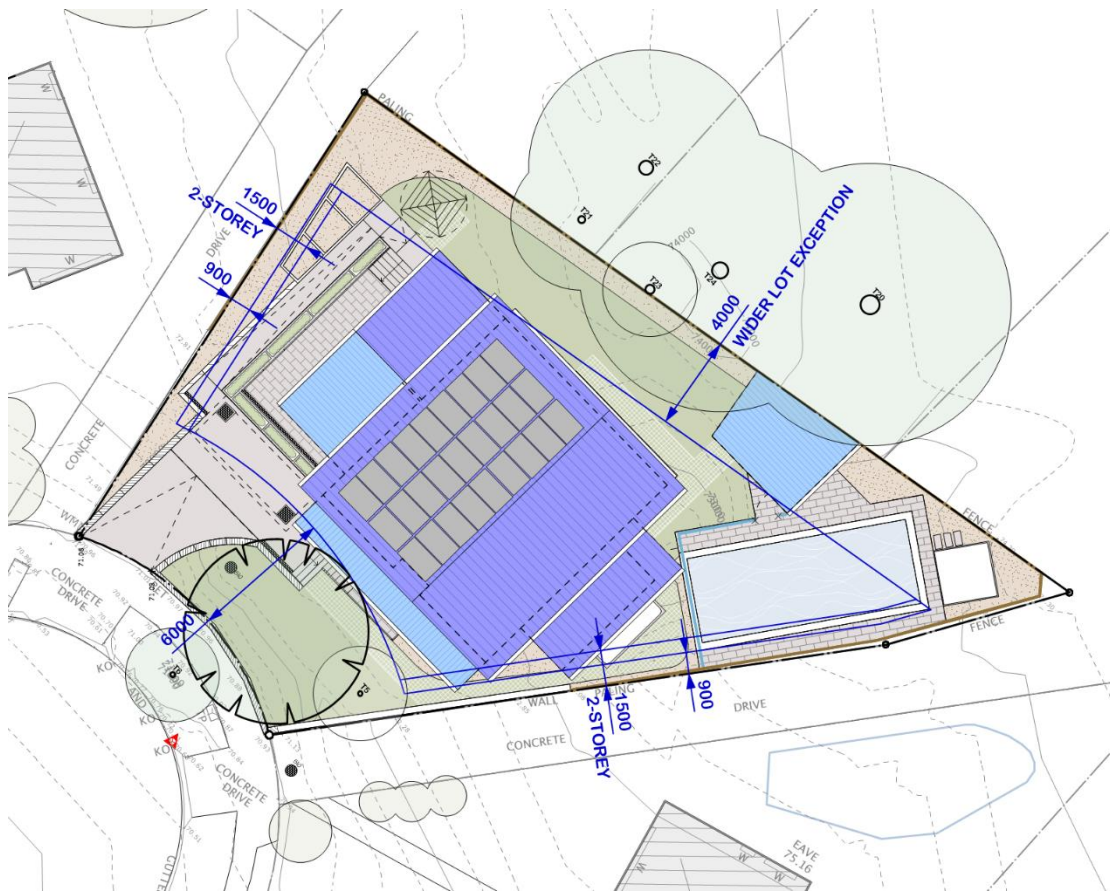


Fig. 3: Proposed site plan of subject site with DCP setbacks. Source: Envirotexture



Fig. 4: rendered view of subject site from Deborah Place. Source: Envirotexture

Development Compliance

The issues listed below are addressed in the following document. They are covered in the order in which they appear in the LEP and DCP.

Ryde Local Environmental Plan 2014

- Zoning
- Height of Buildings
- Floor Space Ratio
- Earthworks
- Stormwater Management

Ryde Development Control Plan 2014

- Desired Future Character
- General Controls for New Dwelling Houses
- Streetscape
- Deep Soil Areas
- Topography and excavation
- Floor Space Ratio
- Building Height + Ceiling Heights
- Setbacks
- Outbuildings
- Car Parking
- Swimming Pools
- Landscaping
- Solar Access
- Visual Privacy
- Acoustic Privacy
- View Sharing
- Cross Ventilation
- Roof forms
- Fences
- Energy Efficiency
- Waste Management
- Stormwater Management
- Driveways

Applicable Planning Legislation

Ryde Local Environmental Plan 2014

PART 2: PERMITTED OR PROHIBITED DEVELOPMENT

2.2 Zoning

The site falls within the R2 Low Density Residential Zone.

Objectives:

1. To provide for the housing needs of the community within a low density residential environment.
2. To enable other land uses that provide facilities or services to meet the day to day needs of residents.
3. To provide for a variety of housing types.

Dwelling houses are permitted with consent and the proposal is, therefore, deemed to satisfy the provision.

PART 4: PRINCIPAL DEVELOPMENT STANDARDS

4.3 Height of Buildings

Pursuant to clause 4.3 of the RLEP, the height of any building on this land is not to exceed a maximum height of 9.5m.

Objectives:

- (1) The objectives of this clause are as follows—
 - (a) to ensure that street frontages of development are in proportion with and in keeping with the character of nearby development,
 - (b) to minimise overshadowing and to ensure that development is generally compatible with or improves the appearance of the area,
 - (c) to encourage a consolidation pattern and sustainable integrated land use and transport development around key public transport infrastructure,
 - (d) to minimise the impact of development on the amenity of surrounding properties,
 - (e) to emphasise road frontages along road corridors.
- (2) The height of a building on any land is not to exceed the maximum height shown for the land on the Height of Buildings Map.

Pursuant to clause 4.3 and map HOB_001 of the RLEP, the building height of any building on this land is not to exceed 9.5m.

The proposal does not exceed the permissible height limit as shown on drawing 91.05 and, therefore, satisfies these objectives.

4.4 Floor space ratio

Objectives:

- (1) The objectives of this clause are as follows—
 - (a) to provide effective control over the bulk of future development,
 - (b) to allow appropriate levels of development for specific areas,
 - (c) in relation to land identified as a Centre on the Centres Map—to consolidate development and encourage sustainable development patterns around key public transport infrastructure.
- (2) The maximum floor space ratio for a building on any land is not to exceed the floor space ratio shown for the land on the Floor Space Ratio Map.

Pursuant to clause 4.4 and map FSR_001 of the RLEP, the floor space ratio of any building on this land is not to exceed 0.5:1.

The proposal has a floor space ratio of 0.36:1, as shown on drawings 11.02 and accompanying Compliance Table in this report, and, therefore, satisfies these objectives.

PART 6: ADDITIONAL LOCAL PROVISIONS

6.2 Earthworks

- (1) The objective of this clause is to ensure that earthworks for which development consent is required will not have a detrimental impact on environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land.
- (2) Development consent is required for earthworks unless—
 - (a) the earthworks are exempt development under this Plan or another applicable environmental planning instrument, or
 - (b) the earthworks are ancillary to development that is permitted without consent under this Plan or to development for which development consent has been given.

- (3) Before granting development consent for earthworks (or for development involving ancillary earthworks), the consent authority must consider the following matters—
- (a) the likely disruption of, or any detrimental effect on, drainage patterns and soil stability in the locality of the development,
 - (b) the effect of the development on the likely future use or redevelopment of the land,
 - (c) the quality of the fill or the soil to be excavated, or both,
 - (d) the effect of the development on the existing and likely amenity of adjoining properties,
 - (e) the source of any fill material and the destination of any excavated material,
 - (f) the likelihood of disturbing relics,
 - (g) the proximity to, and potential for adverse impacts on, any waterway, drinking water catchment or environmentally sensitive area,
 - (h) any appropriate measures proposed to avoid, minimise or mitigate the impacts of the development.

The design has largely been built to the footprint of the existing dwelling, and to similar floor levels to the garage and ground floors, in order to minimise earthworks.

The proposal has been considered to satisfy the provision.

6.4 Stormwater management

1. The objective of this clause is to minimise the impacts of urban stormwater on land to which this clause applies and on adjoining properties, native bushland and receiving waters.
2. This clause applies to all land in residential, business and industrial zones.
3. Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that the development—
 - a. is designed to maximise the use of water permeable surfaces on the land having regard to the soil characteristics affecting on-site infiltration of water, and
 - b. includes, if practicable, on-site stormwater retention for use as an alternative supply to mains water, groundwater or river water, and

- c. avoids any significant adverse impacts of stormwater runoff on adjoining properties, native bushland and receiving waters, or if that impact cannot be reasonably avoided, minimises and mitigates the impact.

The proposal includes 4000L of water storage under the driveway, and a 7000L rainwater tank fed by the roof gutters.

The proposal has been considered to satisfy the provision.

Ryde Development Control Plan 2014

PART 3: DEVELOPMENT TYPE

PART 3.3 DWELLING HOUSES AND DUAL OCCUPANCY (ATTACHED)

2.0 GENERAL CONTROLS

2.1 Desired Future Character

The desired future character of dwelling houses refers to the complete building, whether this is the result of the construction of a completely new house, or of an addition or alteration to an existing house.

The desired future character of the low density residential areas of the City of Ryde is one that:

- Has a low scale determined by a maximum 2 storey height limit;
- Has a low density with free-standing dwellings;
- Has a limited number of dual occupancy (attached) buildings, and these buildings look similar to detached dwellings;
- Has dwellings located in a landscape setting which includes a clearly defined front garden and back yard;
- Has buildings which are well designed and have a high degree of amenity;
- Has streetscapes made up of compatible buildings with regard to form, scale, proportions (including wall plate heights) and materials;
- Has streetscapes with dwellings that have a generally consistent front setback and consistent street orientation;
- Has garages and other structures which are not prominent elements in the streetscape and which are compatible with the character of the dwelling;
- Requires minimal disturbance to the natural topography, which means that excavation is to be minimised;
- Has backyards, which are maximised in size;
- Has backyards which form a connected strip of vegetation in neighbourhoods and which include large trees;
- Has allotments with large deep soil areas which allow rainwater to be absorbed and trees to be planted;
- Has mature trees in streets, front gardens and backyards (existing mature trees are retained and new tree plantings encouraged); and

- Has character areas where special features are retained and enhanced.

Objectives

1. To ensure that development is consistent with the desired future character of the low density residential areas.

Controls

- a. Development is to be consistent with the desired future character of the low density residential areas.

The development proposes to work within the ongoing development of the residential area, and broadly within the architectural style of surrounding setting and compliments the streetscape. The dwelling is proposed clad in a lightweight sheet based cladding which has a linear board finish, in vertical and horizontal orientations, which also articulate the simple forms of the building while minimising the visual mass.

The proposal seeks to use a dark blue + light/white colour scheme, including light metal-clad PIR panel roofing, which serves as a neutral backdrop to landscaping around the dwelling.

Landscaping and planting will feature around the street-frontage peripheries of the site, including planter boxes for occupant use. Materials in the landscaped works are selected to suit the main dwelling, and provide a suitable backdrop for planting.

The dwelling is designed to meet Passivhaus standards; have passive solar orientation considerations; provide solar power panels; and both be constructed of sustainable materials, and to sustainable construction practices.

The proposal has been considered to satisfy the provision.



Fig. 5: No. 4 Deborah Place (adjacent Western neighbour). Source: Google



Fig. 6: No. 2 Deborah Place (2nd Western neighbour). Source: Google



Fig. 7: No. 12 Deborah Place (adjacent Eastern neighbour). Source: Google



Fig. 8: No. 14 Deborah Place (2nd Eastern neighbour). Source: Google

2.2 Dwelling Houses

2.2.1 New Dwelling Houses

Objectives

1. To be free-standing in landscaped lots.
2. To be well designed and compatible with the site's context.
3. To be of a low scale.

Controls

- (a) Dwelling houses are to have a landscaped setting which includes significant deep soil areas at the front and rear.

The proposed dwelling house is free-standing in its landscaped lot. The lack of significant deep soil areas to the rear of the existing dwelling, and the irregular lot shape, make significant deep soil areas at both front and rear impractical. However, the landscaping is considerate of the site, and improves the native flora stock of the area.

- (b) Residential dwellings are to be a maximum of two storeys high.

The proposal is a maximum of two storeys high.

The proposal has been considered to satisfy the provision.

2.5 Public Domain Amenity

2.5.1 Streetscape

Objectives

1. To ensure the existing landform and landscape setting of the street is retained and reinforced by new dwellings.
2. To ensure new development is compatible with the positive characteristics of the existing streetscape and the desired future character of the low density residential areas.
3. To encourage the design of well proportioned elevations.
4. To ensure streets provide a high level of pedestrian amenity, access and safety.
5. To ensure garages are not dominant elements in the streetscape.
6. To ensure that the orientation of dwellings, garages and carports is consistent with the existing streetscape.

Controls

- a. Site design, building setbacks and the location and height of level changes are to respect the existing topographic setting of the street and the relationship of existing buildings in the street to the topography.

The proposal positions its level changes largely to extant levels of the existing dwelling and landscape.

- b. The design of front gardens is to complement and enhance streetscape character by:
- providing soft landscaping; lawn, trees and shrubs, between the street boundary and the dwelling;
 - reflecting the character and height of fences and walls along the street, or the absence of front fences;
 - reflecting the character and layout of established front gardens of other allotments in the street, particularly the older or original front garden landscapes;
 - retaining, protecting or replacing existing vegetation and mature trees; and
 - ensuring no damage occurs to trees on neighbouring properties or on the street.

The proposal includes soft landscaping to the front garden space that includes more suitable native flora. The proposal's absence of a front fence reflects existing site conditions, and the character of the streetscape.

- c. Dwelling design is to enhance the safety and amenity of the streetscape by:
- having front doors and windows facing the street, or if the front entry door is located at the side of the dwelling, its location is to be clearly apparent from the street; and
 - having roof form and detailing that complements the proportions, massing and elevation composition of other buildings in the street.

The front door and windows face the street and provide good visibility to the street from the dwelling. The detailing, massing and elevation composition of the proposal has similarities to it's 2nd Western neighbour, at No.2.

- d. Carports and garages visible from the public street are to:
- be compatible with the building design; and
 - be set back behind the dwelling's front elevation.

The proposed garage is largely within the same position as the existing garage, utilising much of the same driveway space. It is visually compatible with the colour and cladding scheme of the house, and is minimised via its being used as a terrace, including planter boxes at the leading edge.

- e. Driveways and hardstand areas are to be minimised so as to maximise deep soil areas and the opportunity for soft landscaping in the front garden, and to reduce the visual impact of driveways and hard surfaces from the street.

The increase to a two car garage necessitates the minor increase to the driveway area. The removed trees and shrubs in the front landscaped area are to be replaced by more suitable planting, which softens front edge of the building. See Landscape Plans.

- f. Dwellings, garages and carports are to be orientated to match the prevailing orientation of such buildings in the streetscape.

The proposal reflects the prevailing orientation and relationship of other dwellings to the streetscape.

- g. Facades visible from the public domain are to be well designed by:
- having important elements such as front doors and building entry areas prominent in the building facade and clearly identifiable from the street;
 - co-ordinating and integrating building services, such as drainage pipes, with overall facade design;
 - integrating the design of architectural features, including stairs and ramps, and garage/ carport entries with the overall facade design, and by locating car parking structures on secondary streets where possible;
 - ensuring corner buildings have attractive facades which address both street frontages, and include the careful placement and sizing of windows;
 - ensuring entrance porticos are single storey;
 - the head height of doors and windows being preferably at a consistent level; and
 - ensuring street facades are articulated to provide visual interest.

The front entrance, and access to the site, are strongly delineated. The entrance porch is single storey. The head heights of windows and doors are consistent around the dwelling. The sheet junctions of the proposed cladding, as well as the groove orientation density + orientation of the claddings chosen, articulate well the

forms of the building and present strongly with regards the dwelling's position at the head of the street.

We believe the proposed dwelling sits well in its streetscape, suiting the character of the suburb and its location at the head of the cul-de-sac.

The proposal has been considered to satisfy the provision.

2.6 Site Configuration

2.6.1 Deep Soil Areas

Objectives

1. To ensure that land retains its ability to absorb rain water so as to reduce stormwater runoff and to increase the moisture level of the soil for the use of trees and other vegetation.
2. To ensure that each building allotment has a minimum deep soil area.
3. To retain and enhance vegetation corridors.
4. To provide space for mature tree growth and other vegetation.
5. To generally retain existing mature trees and vegetation.
6. To enable movement of fauna along vegetation corridors.

Controls

- (a) Sites are to have a deep soil area that is at least 35% of the area of the allotment.

The proposal has deep soil landscaping of 37.55%

- (b) The deep soil area must include:

- i. an area with minimum dimensions of 8 m x 8 m in the back yard; and
- ii. a front garden area which is to be completely permeable with the exception of the driveway, pedestrian path and garden walls.

The irregularly-sized and -shaped lot makes the inclusion of an 8x8m deep soil area to the rear impractical. The front garden area is completely permeable, with the exception of the driveway, paths, and garden walls.

- (c) Allotments with dual occupancies need only have one 8 m x 8 m deep soil area for the allotment. The area does not need to be shared equally with each allotment.
- (d) Deep soil areas are to have soft landscaping.

The shown deep soil areas have lawn or soft landscaping.

- (e) Deep soil areas are to be 100% permeable to water and cannot be covered by structures, paving or the like, or have below surface structures such as stormwater detention elements.

The OSD tank is positioned below the driveway.

The development proposes to work with the existing site characteristics to attain a well-planned site and landscape outcome.

A close working relationship between client, designer and the site was formed to understand the site and its context, to attain the best design outcome.

The proposal has been considered to satisfy the provision.

2.6.2 Topography and Excavation

Objectives

1. To retain natural ground levels and existing landform.
2. To create consistency along streetscapes.
3. To minimise the extent of excavation and fill.
4. To ensure that excavation and fill does not result in an unreasonable loss of privacy or security for neighbours.

Controls

- a. Building form and siting are to relate to the original topography of the land and of the streetscape.
- b. The area under the dwelling footprint may be excavated or filled so long as:
 - i. the topography of the site requires cut and/or fill in order to reasonably accommodate a dwelling;
 - ii. the depth of excavation is limited to 1.2 m maximum; and
 - iii. the maximum height of fill is 900 mm.

The building footprint is situated such that excavation and fill are minor within the building footprint.

- c. Areas outside the dwelling footprint may be excavated and/or filled so long as:
 - i. the maximum height of retaining walls is no greater than 900 mm;

- ii. the depth of excavation is not more than 900 mm;
- iii. the height of fill is not more than 500 mm;
- iv. the excavated and filled areas do not have an adverse impact on the streetscape;
- v. the filled areas do not have an adverse impact on the privacy of neighbours;
- vi. the area between the adjacent side wall of the house and the side boundary is not filled; and
- vii. the filled areas are not adjacent to side or rear boundaries.

The maximum height of any retaining wall is 800mm.

The maximum depth of excavation outside the footprint is approximately 600mm. This is in a small area for alterations to front path/driveway.

The maximum height of fill outside the footprint is approximately 300mm. This is due to landscape levelling etc.

- d. Fill is not allowed in areas of overland flow. Refer to Part 8.2 Stormwater Management under this DCP.
- e. Generally the existing topography is to be retained. The areas of excavation and fill are to be minimised.

Excavation and fill are minimal, and the existing topography is largely retained.

The development proposes to work with the existing site characteristics to attain a well-planned site and landscape outcome.

The proposal has been considered to satisfy the provision.

2.7 Floor Space Ratio (FSR)

Objectives

1. To ensure bulk and scale are compatible with the desired future character of the low density residential areas and of dwelling houses.
2. To define the allowable development density for sites.

Controls

- a. The floor space ratio must not be greater than 0.5:1 as per Ryde Local Environmental Plan 2014 Floor Space Ratio Map.

The proposed FSR is 0.36:1

- b. A floor area of 36 m² may be excluded from the gross floor area when this area accommodates 2 car parking spaces. An area of 18 m² may be excluded when the area accommodates 1 car parking space.

36m² has been excluded from the considered GFA

The proposal has been considered to satisfy the provision.

2.8 Height

2.8.1 Building Height

Objectives

1. To ensure that the height of development is consistent with the desired future character of the low density residential areas and is compatible with the streetscape.
2. To ensure that the height of dwellings does not exceed 2 storeys.

Controls

- a. Building heights are to be in accordance with the Building Height Table below.

	DWELLING HOUSE AND DUAL OCCUPANCY (ATTACHED) BUILDING	OUTBUILDINGS, INCLUDING GARAGES AND CARPORTS
Maximum building height	9.5 m	4.5 m
Maximum wall plate height	7.5 m or 8 m for a roof which has a continuous parapet	2.8 m
Maximum number of storeys	2, but a maximum of 1 floor level of the building including car parking level can be located above a garage which is attached to a dwelling, whether a semi-basement garage or a garage at grade.	1

The building height is under 9.5m. The building is a maximum of two storeys. There are not habitable spaces above the garage. The building is approximately 8m at the highest point of the ridge above the existing ground level - external to the footprint of the existing building.

The proposal satisfies the provision.

2.8.2 Ceiling Height

Objectives

1. To provide amenity for dwellings.

Controls

- a. The minimum ceiling height for habitable rooms is to be 2.4 m.

The ceiling heights for habitable rooms are over 2.4m

The proposal satisfies the provision.

2.9 Setbacks

2.9.1 Front Setbacks

Objectives

1. To create a transition between public and private space.
2. To provide consistent building setbacks along streets.
3. To provide for a front garden.
4. To ensure garages and carports are not prominent elements in the streetscape.

Controls

- a. Dwellings are generally to be set back 6 m from the street front boundary.

The proposed dwelling is setback 7.2m from the street front boundary.

The porch columns are setback a minimum of 6m from the street front boundary.

- b. On corner sites, the setback along the secondary street (the street to which the house has its secondary frontage) is to be a minimum of 2 m.
- c. Garages and carports, including semi-basement garages and attached garages, are to be set back a minimum of 1 m from the dwelling's front façade.

The garage is flush with the front wall of the primary façade. The entry porch protrudes forward of the garage façade by 1200mm to articulate the street elevation.

- d. The front setback is to be free of structures, and ancillary elements such as rainwater tanks and air conditioning units. The exception is car parking structures which comply with section 2.11.

The front setback is free of structures and ancillary elements.

- e. Attached garages, including semi-basement garages, on secondary street frontages do not need to be set back 1 m from the adjacent façade but are not to protrude forward of the adjacent facade. The exception is garages located on battleaxe (hatchet shaped) allotments. These garages do not need to be setback.
- f. The outside face of a wall built above a garage which faces the street is to align with the outside face of the garage wall below.

Calculation Rules

- Setbacks are measured from the allotment boundary to the outside wall, or the outside face of any deck balcony or the like, or to the supporting posts of a carport or verandah.

The proposal has been considered to satisfy the provision.

2.9.2 Side Setbacks

Objectives

- To enable building siting to be compatible with the streetscape.
- To provide car access.
- To provide access to the rear of the allotment.

Controls

- The outside walls of a one storey dwelling are to be set back from the side boundaries not less than 900 mm.

The outside walls of the one-storey portion of the dwelling are set back a minimum of 924mm from the side boundaries

- The outside walls of a two storey dwelling are to be set back from side boundaries not less than 1.5 m.

The outside walls of the two-storey portion of the dwelling are set back a minimum of 1719mm from the side boundaries

- The outside walls of a second storey addition to a single storey dwelling are to be set back not less than 1.5 m from the side boundaries.
- Allotments which are wider than they are long, are to have one side setback a minimum of 20% of the width of the allotment or 8 m, whichever is the greater.

8m is greater than 20% of the lot width, whether measured at the front or the back boundary. An 8m side setback on either side is impractical due to the highly irregular trapezoidal shape of the site, and significantly covers the footprint of the existing building.

Calculation Rules

- Side setbacks are measured from the allotment's side boundary to the outside edge of the building elevation. Setbacks are measured at 90 degrees to the allotment boundary and are measured to the outer most edge of the building elevation including balconies, terraces and porches.

- On allotments which are wider than they are long, and are of an irregular shape, the large side setback can be measured at the centre line of the allotment. In these cases, the side setback must be able to accommodate a deep soil area with the minimum dimensions of 8 m x 8 m.

The inclusion of an 8x8m deep soil zone area anywhere within the site is impractical due to the existing building layout and the highly irregular trapezoidal shape of the site.

The proposal has been considered, based on 900mm and 1500mm side setbacks, to satisfy the provision.

2.9.3 Rear Setbacks

Objectives

1. To provide an area for private outdoor recreation and relaxation.
2. To allow space for vegetation, mature trees and deep soil zones.
3. To separate dwellings to achieve privacy.
4. To enable contiguous vegetation corridors across blocks.

Controls

- (a) The rear of the dwelling is to be set back from the rear boundary a minimum distance of 25% of the length of the site or 8 m, whichever is the greater.
- (b) Allotments which are wider than they are long, and so cannot achieve the minimum rear setback requirement, are to have a minimum rear setback of 4 m.

The side is wider than it is long; the rear setback is 4m. There is a minor non-compliance where the internal garage access breaches the rear setback; this is due to the geometry of the Lot and is of minimal impact.

- (c) Dwellings on battle-axe (hatchet shaped) allotments are to be setback from the rear boundary of the front allotment. a minimum of 8 m. A single storey garage or outbuilding may be located within this setback.

Calculation Rules

- Rear setbacks are measured from the rear boundary to the outside edge of the rear wall including any articulation to the building, such as balconies, terraces and decks.
- Setbacks are measured at 90 degrees to the allotment boundary.

- The rear setback must be able to accommodate a deep soil area with the minimum dimensions of 8 m x 8 m.

The inclusion of an 8x8m deep soil zone area anywhere within the site is impractical due to the existing building layout and the highly irregular trapezoidal shape of the site.

The proposal has been considered to satisfy the provision.

2.10 Outbuildings

Objectives

1. To provide for uses which are complementary and supplementary to the dwelling.
2. To complement the design and materials of the dwelling with which they are associated.
3. To have limited visibility from the street and other public spaces.
4. To ensure that the amenity of the dwelling or neighbouring dwellings is not adversely affected by outbuildings.
5. To ensure that outbuildings are of a small scale.

Controls

- (a) The use of outbuildings is to be ancillary to the residential use of the dwelling.
- (b) The total area for all outbuildings is not to exceed 20 m².

The proposed covered BBQ patio is 18.8m²

- (c) Outbuildings cannot be erected between the street alignment and the front building alignment of the dwelling.
- (d) The design and materials of outbuildings are to complement the existing dwelling.
- (e) An outbuilding may contain a toilet, shower and hand basin but cannot contain a bar, sink or any other kitchen facilities.
- (f) An outbuilding may be located on the side or rear boundary so long as the external wall is maintenance free and there is no eaves overhang.

There are no eaves overhangs to the boundary wall.

- (g) If an outbuilding is built closer than 900 mm from the side boundary a concrete dish drain is to be constructed between the external wall and the adjacent boundary.

- (h) The windows of outbuildings are to be at least 900 mm away from a boundary.
- (i) Outbuildings are not to adversely affect the privacy and/or amenity of neighbours.
- (j) Outbuildings are not to be located in view corridors to the water.
- (k) An outbuilding is not to be used as a dwelling.

The proposal has been considered to satisfy the provision.

2.11 Car Parking and Access

Objectives

1. To provide for off-street parking.
2. To ensure car parking structures and garage doors are not prominent features with regard to either the individual lot or the streetscape.
3. To ensure that car parking structures are consistent with the design of the dwelling.

2.11.1 Car Parking

Controls

- (a) Provision must be made for off street parking in accordance with Part 9.3 Parking Controls in this DCP. Note: Part 9.3 requires as follows: - dwelling house = up to 2 spaces/dwelling - dual occupancy (attached) = 1 space/dwelling
- (b) Parking spaces can be either in an enclosed structure (a surface or semi-basement garage) or a roofed open structure (a carport).
- (c) Garages are to be located at least 1 m behind the front building elevation.
- (d) A garage or carport may be located in front of an existing dwelling if:
 - i. there is no other suitable position on the allotment;
 - ii. there is no vehicular access to the rear or side of the allotment; and
 - iii. it is preferred that a garage or carport in front of a dwelling be a single car width.

The alignment of the garage to the front façade is as-per-existing in form and position. There is no vehicular access to the rear or side of the allotment and no more suitable position on the allotment for a driveway + garage.

- (e) Garage doors are to be solid. Open doors such as expanded mesh doors are not acceptable.

The proposed garage door is solid.

- (f) Garage and carport entries are preferably to be located off laneways and secondary street frontages where this is possible.
- (g) The width of driveways should be minimised. Driveways should be a single car width except where they need to widen to provide access to a double garage.

The driveway is altered to widen in order to provide access to the double garage.

- (h) Driveways cannot be roofed.

The proposed driveway is not roofed

- (i) Garages and carports facing the public street are to have a maximum width of 6 m or 50% of the frontage, whichever is less.

Garage width is 6.2m, 33% of the frontage.

- (j) The total width of garage doors visible from a public place, such as the street, is not to exceed 5.7 m.

Garage door width is 5.7m wide

- (k) Driveways for battle-axe allotments must be designed so that vehicles can enter and leave the site in a forward direction.
- (l) Garage doors are not to be recessed more than 300 mm behind the outside face of the building element immediately above.
- (m) Garage windows are to be at least 900 mm away from the boundary.

Garage windows minimum 2500mm from the boundary

- (n) Free standing garages are to have a maximum gross floor area of 36 m².
- (o) The design and materials of garages and carports are to complement the dwelling.

The material cladding of the garage matches the house.

- (p) Garages, whether free standing or incorporated into the house, are to be set back at least 1 m from the building's front façade.

The garage is aligned to the front façade. The massing of the garage is lessened by its arrangement alongside the main shape of the dwelling, and the use of a terrace above the garage space. To recess the garage further into the Lot impacts on the functionality of the site for no meaningful improvement to the urban design.

- (q) Carports must not be enclosed.

We consider the proposal to satisfy the objectives of the provision.

2.11.2 Semi-basement Car Parking

Controls

- (a) Ramps must start at least 2 m back from the street boundary. Ramps cannot be located on public land.
- (b) The walls of semi-basement car parks are not to extend beyond the walls of the dwelling above.

The existing garage sits below the entry patio to the existing dwelling.

- (c) Semi-basement car parking can only be used where it is appropriate with regard to the topography of the site.

The slope of the site and the existing positioning of the driveway and garage make the use of semi-basement car parking suitable for this location.

We consider the proposal to satisfy the objectives of the provision.

2.12 Swimming Pools and Spas

Controls

- (a) Swimming pools, pool fencing, gates and spas including indoor swimming pools and access to these pools, must comply with all relevant Acts, Regulations and Australian Standards.
- (b) Swimming pools must at all times be surrounded by a child-resistant barrier designed and located to separate the pool from any residential building and/or outbuildings (such as garages and sheds), situated on the site, with the exception of pool houses, and from any adjoining land. A child resistant barrier is one described in the Australian Standard for swimming pool fences.
- (c) The wall of a residential building may form part of the child resistant barrier so long as the wall contains no openable door, window or other opening through which access may at any time be gained to the swimming pool.

- (d) A spa pool is not required to be surrounded by a child resistant barrier provided that the spa pool is covered or secured by a child-safe structure (e.g. door, lid or mesh) that is fastened to the spa pool by a child-resistant device at all times when the spa pool is not in actual use.
- (e) Pools are not to be located within the front garden setback.
- (f) The finished coping level of the pool must not be higher than 500 mm above the adjacent existing ground level. This maximum height can only be achieved where it will not result in an unreasonably adverse impact on the privacy of neighbours.
- (g) Pools are to be setback a minimum of 900 mm from the boundary, measured from the outside edge of the coping, deck or pool surrounds including paving, to allow sufficient space for screen planting. Further setbacks may be required to preserve existing screening vegetation.
- (h) Screen planting is to be provided within a landscape bed, which is to have a minimum width of 900 mm and is to extend for the length of the pool. Planting is to take the form of dense hedging with a minimum height of 2 m and minimum spacing of plants of 1 metre.
- (i) Pools are to be located at least 3 m minimum from the trunk of a tree over 5 m in height that is to be retained on the site or is located on a neighbouring property.
- (j) The pool pump/filter is to be located as far away as practicable from neighbouring dwellings and is to be enclosed in an acoustic enclosure that will ensure the noise emitted from the enclosure is not greater than 5dB(A) above the background noise level, measured at the boundary.

Pool location and setbacks are as existing, with a minor alteration re: straightening the curved edge of the pool.

2.13 Landscaping

Objectives

- 1. To enhance the appearance and amenity of development.
- 2. To enhance the character of the locality and the streetscape.
- 3. To retain existing important landscape features.
- 4. To provide privacy between adjoining dwellings and their private open space.
- 5. To assist in the percolation of rainwater and reduction in stormwater runoff.
- 6. To improve microclimatic conditions on sites and the solar performance of dwellings.

7. To contribute to improving urban air quality.
8. To provide fauna and flora habitat.
9. To assist in the protection of urban bushland.

Controls

- (a) Major existing trees are to be retained in a viable condition whenever practicable, through the appropriate siting of buildings, accessways and parking areas and through appropriate landscape treatment. Refer to Part 9.6 Tree Preservation in this DCP.
- (b) On allotments adjoining bushland, protect and retain indigenous native vegetation and use native indigenous plant species for a distance of 10m from any lot boundaries adjoining bushland.
- (c) Provide useful outdoor spaces for liveability by coordinating the design of private open space, external living areas, driveways, parking areas, swimming pools, utility areas, deep soil areas and other landscaped areas with the design of the dwelling.
- (d) Where the ground floor level of a dwelling is above the finished external ground level reached through a door or doorways, there is to be a physical connection made between these levels. Examples of a physical connection include stairs, terraces, and the like.

The front access is clearly and visibly physically connected via stairs. The rear entrance is level to the landscaping.

- (e) Provide a landscaped front garden. Hard paved areas are to be minimised, and at a maximum, are to be no more than 40% of the front garden areas.

The front landscaped area retains low level shrubs and planting as per existing. 50.66% of the front garden area is hard paving, primarily increased due to necessity to widen the driveway for a two-car garage. Non-permeable surfaces are otherwise as minimised as possible. The non-rectilinear geometry makes the underlying assumptions of the numerical component of this control difficult to achieve; the principles underpinning the control are considered to be met.

- (f) A pathway is to be provided along one side of the dwelling so as to provide pedestrian access from the front garden to the rear yard. This access is not to be blocked by such things as landscaping features, rainwater tanks, hot water heaters and retaining walls. The pathway does not need to be provided on allotments which have rear lane access or are a corner allotment.

Side access is provided on both sides of the dwelling.

- (g) Landscape elements in front gardens, particularly trees and other plants, are to be compatible with the scale of development.
- (h) The front garden is to have at least 1 tree capable of a minimum mature height of 10m with a spreading canopy.

An existing mature tree is retained to the front garden space.

- (i) Where the backyard does not have a mature tree at least 15 m high, plant a minimum of one large canopy tree in the back yard. The tree is to be capable of a mature height of at least 15 m and is to have a spreading canopy. The tree is to be located in the 8 m x 8 m deep soil area.

The irregular lot shape + size does not allow for an 8x8m deep soil zone to the rear. A 15m tree is proposed for the front yard. The existing rear yard already has significant tree cover provided by the trees in the rear yards of the eastern neighbours.

- (j) Locate and design landscaping to increase privacy between neighbouring dwellings.
- (k) Hedge planting on boundaries is to consist of plant species which have a mature height no greater than 2.7 m.
- (l) Retaining walls and other landscape elements are not to obstruct the stormwater overland flow path.
- (m) On site stormwater detention is generally not to be located in the front setback unless it is a underground tank located beneath the driveway.

OSD storage is positioned underneath the driveway.

- (n) Landscaping is to include ground level private open space for each dwelling.
- (o) Landscaping is to be designed to improve the energy efficiency of buildings and the microclimate of external living areas.

Calculation Rules

Private open space:

- is a private outdoor recreational and relaxation space for a dwelling; and
- is located adjacent to internal living rooms and may take the form of a paved area, deck, terrace, courtyard, lawn area and the like.

There is a non-compliance regarding the % of paved surfaces to the front garden area. The proposal has minimized paved area while increasing the amenity of the site. The non-rectilinear geometry, again, makes compliance challenging. We consider the proposal to achieve the objectives of the provision.

2.14 Dwelling Amenity

2.14.1 Daylight and Sunlight Access

Objectives

1. To maximise sunlight and daylight access.
2. To ensure that new development maintains appropriate sunlight access to neighbouring dwellings and neighbouring private open space.
3. To encourage the use of passive solar design.

Controls

1. Living areas are to be located predominantly to the north where the orientation of the allotment makes this possible.

Living areas are oriented to the north of the allotment.

2. Dwellings on allotments which have a side boundary with a northerly aspect are to be designed to maximise sunlight access to internal living areas by increasing the setback of these areas. In these cases a minimum side setback of 4 m is preferred.
3. Windows to north-facing living areas of the subject dwelling are to receive at least 3 hours of sunlight between 9 am and 3 pm on 21 June over a portion of their surface.

Living areas all get sunlight between the hours of 9am and 2pm

4. Private open space of the subject dwelling is to receive at least two hours sunlight between 9 am and 3 pm on June 21.

Rear private open space gets sunlight for all hours between 9am and 3pm

5. For neighbouring properties ensure:

- i. sunlight to at least 50% of the principal area of ground level private open space of adjacent properties is not reduced to less than two hours between 9 am and 3 pm on June 21; and
- ii. windows to north-facing living areas of neighbouring dwellings receive at least 3 hours of sunlight between 9 am and 3 pm on 21 June over a portion of their surface, where this can be reasonably maintained given the orientation topography of the subject and neighbouring sites.

The neighbouring dwelling is not affected by the proposal until after 1pm.

The proposal satisfies the objectives of the provision.

2.14.2 Visual Privacy

Objectives

1. To provide appropriate levels of visual privacy to internal living spaces and external private open space.
2. To facilitate outlook and views from principal rooms in dwellings and private open spaces without compromising visual privacy of neighbours.
3. To provide a level of surveillance over the street.
4. To minimise overlooking of neighbouring dwellings.

Controls

- (a) Orientate the windows of the main internal living spaces such as living rooms, dining rooms, kitchens, family rooms and the like, generally to the front or to the rear of allotments.

The living areas are oriented to the rear of the site.

- (b) Orientate terraces, balconies and outdoor living areas to either the front or the rear of allotments, and not to the side boundaries.

The covered BBQ area is located to the rear of the home.

The roof terrace to the side of the home is primarily orientated to the street in its focus although also to the side for northern aspect.

- (c) Terraces and balconies are not to overlook neighbour's living areas and private open space.

The focus of the terrace is towards the street. There will be planters along the side of the terrace to protect the privacy of both neighbours.

- (d) Living room and kitchen windows, terraces and balconies are not to allow a direct view into neighbouring dwellings or neighbouring private open space.

No living room or kitchen windows look directly into neighbouring dwellings or private open space.

- (e) Side windows are to be offset by distances sufficient to avoid visual connection between windows of the subject dwelling and those of the neighbouring dwelling.
- (f) Splayed walls with windows are not to be located above ground level where the windows will provide views into neighbouring allotments.

We consider the proposal to satisfy the objectives of the provision.

2.14.3 Acoustic Privacy

Objectives

1. To provide a high level of acoustic privacy.
2. To minimise the impacts of noise generating uses such as traffic, air conditioners, pumps, and other mechanical equipment.

Controls

- (a) The noise of an air conditioner, pump, or other mechanical equipment must not exceed the background noise level by more than 5dB(A) when measured in or on any premises in the vicinity of the item. This may require the item to have a sound proofed enclosure.
- (b) Dwellings located on arterial roads are preferably to have double glazed windows where these windows face the road and provide light to living rooms or bedrooms. This is the case whether or not the dwelling has a solid masonry wall to the arterial road.
- (c) Dwellings located on arterial roads are preferably to have an acoustic seal on the front door to reduce noise transmission.
- (d) Dual occupancies (attached) are to be designed to reduce noise transmission between dwellings. One way to achieve this is to locate noisy areas next to each other and

quieter areas next to other quiet areas, for example, living rooms with living rooms, bedrooms with bedrooms, kitchens with kitchens.

The proposal involves a high level of insulation and high-performance glazing, to Passive House standard. The proposal satisfies the objectives of the provision.

2.14.4 View Sharing

Objectives

1. To ensure new dwellings endeavour to respect important views from living areas within neighbouring dwellings.

Controls

- (a) The siting of development is to provide for view sharing.

The development does not impair current views of neighbours.

2.14.5 Cross Ventilation

Objectives

1. To optimise the comfort of a dwelling by ensuring good cross-ventilation.
2. To maximise ceiling heights.

Controls

- (a) The plan layout, including the placement of openings, is to be designed to optimise access to prevailing breezes and to provide for cross-ventilation.

The design allows for cross-ventilation through the house.

Ceiling heights include a double-height void connecting ground floor living areas with the first floor, and the first-floor ceilings predominantly follow the rake of the roof, encouraging air flow. Ceiling fans throughout the building also optimise cross-ventilation.

The proposal satisfies the objectives of the provision.

2.15 External Building Elements

2.15.1 Roofs

Objectives

1. To contribute to the design and performance of buildings.

2. To integrate the design of the roof, including roof elements such as dormer windows, into the overall elevation and building composition.
3. To contribute to a consistent and attractive streetscape.
4. To provide shading and weather protection.

Controls

- (a) Relate roof design to the desired built form by:
 - i. Articulating the roof;
 - ii. Ensuring that the roof form is consistent with the architectural character of the dwelling;
 - iii. Providing eaves with a minimum overhang of 450 mm to pitched roofs;
 - iv. Using a compatible roof form, slope, material and colour to adjacent buildings; and
 - v. Ensuring the roof height is in proportion to the wall height of the building.
- (b) The main roof is not to be a trafficable terrace.
- (c) An attic, where provided, is to be contained within the volume of the roof space.
- (d) The number of skylights is to be minimised on roof planes visible from the public domain. Skylights are to be arranged symmetrically.
- (e) The front roof plane is not to have both dormer windows and skylights. Dormers are preferred.
- (f) Balconies and terraces are not to be set into roofs.
- (g) The scale of the roof is to be in proportion with the scale of the walls below.
- (h) Attics may be located in the garage roofs if the garage is located next to the dwelling. Garages located within the front or rear setbacks, are not to have attics.

The main roof is not trafficable or featuring skylights. The roof form is proportionate to, and in consistent character with, the rest of the dwelling.

The proposal satisfies the objectives of the provision.

2.16 Fences

Objectives

1. To define the boundaries between public and private land.
2. To define the boundaries between neighbouring properties.

3. To contribute to the streetscape appearance.
4. To enhance the usability of private open space.
5. To offer acoustic and visual privacy on noisy roads.

2.16.1 Front and return Fences and Walls

Controls

- (a) Front and return fences are to reflect the design of the dwelling.
- (b) Front and return fences and walls are to be constructed of materials compatible with the house and with other fences and walls within the streetscape.
- (c) A solid front or return fence is to be no higher than 900 mm. An open lightweight fence, such as a timber picket fence may be up to 1 m high.
- (d) A return fence is to be no higher than the front fence.
- (e) Fences may have a maximum height of 1.8 m so long as the fence is an open fence with an openness ratio of at least 50%. The fence may have a solid base so long as the base is no higher than 900 mm.
- (f) Fences along arterial roads may be solid masonry up to a maximum height of 1.8 m.
- (g) Front and return fences are not to be Colorbond or timber paling.
- (h) Retaining walls which are part of a front or return fence are to have a maximum height of 900 mm.
- (i) In areas of overland flow, fencing shall be of open construction so that it does not impede the flow of water.
- (j) Fence piers are to have a maximum width of 350 mm.

The proposed development continues with the existing front landscaping and does not feature front fencing. Existing topography and front yard landscaping clearly delineate the boundaries of the property.

The proposal satisfies the objectives of the provision.

2.16.2 Side and rear Fences and Walls

Controls

- (a) The maximum height for side and rear fences is to be 1.8 m.
- (b) In areas of overland flow, all fencing shall be of open construction so that it does not impede the flow of water.

- (c) Barbed wire, broken glass and other dangerous elements must not be used in the construction of fences.
- (d) Any fencing located forward of the foreshore building line shall be of open, permeable construction.

Calculation Rules

- The height of a fence on the street alignment is to be measured above the level of the adjacent footpath or verge. The level of the footpath or verge may be obtained from Council's Development Engineers.

Existing fences are to be retained, or rebuilt as necessary in similar construction.

PART: 7.1 ENERGY SMART, WATER WISE

1.0 INTRODUCTION

1.2 Objectives of this Part

Objectives

1. To encourage the design of energy efficient buildings in the City of Ryde;
2. To ensure site planning and building design optimise solar access to land and buildings;
3. To decrease the total energy use in buildings through reductions in heat loss and energy consumption for the purposes of heating and cooling; and
4. To encourage the construction and use of buildings that reduce the current level of attributed greenhouse gas emissions and natural resource consumption.

The dwelling is designed with high levels of insulation, high-performance glazing, and to fulfill Passive House standards regarding MVHR, heating and cooling.

2.0 DEVELOPMENT POLICIES

2.2 New Dwelling Houses

- The requirements of BASIX applies to these developments, see www.basix.nsw.gov.au for more information.

The dwelling fulfills the requirements of BASIX as per included certificate.

PART: 7.2 WASTE MINIMISATION AND MANAGEMENT

1.0 INTRODUCTION

1.4 Objectives of this Part

Objectives

Waste minimisation:

1. To minimise resource requirements and construction waste through reuse and recycling and the efficient selection and use of resources.
2. To minimise demolition waste by promoting adaptability in building design and focussing upon end of life deconstruction.
3. To encourage building designs, construction and demolition techniques which minimise waste generation.
4. To maximise reuse and recycling of household waste and industrial/commercial waste.

5. To assist in achieving Federal and State Government waste minimisation targets in accordance with regional waste plans.
6. To minimise the overall environmental impacts of waste and foster the principles of ecologically sustainable development (ESD).

Waste management:

1. To assist applicants in planning for sustainable waste management, through the preparation of a site waste minimisation and management plan.
2. To assist applicants to develop systems for waste management that ensure waste is transported and disposed of in a lawful manner.
3. To require source separation, design and location standards which complement waste collection and management services offered by the relevant service providers.
4. To provide guidance in regards to space, storage, amenity and management of waste management facilities.
5. To ensure waste management systems are easy to use and access.
6. To minimise risks associated with waste management at all stages of development.

The proposed dwelling uses recycled and/or sustainable materials where possible. A waste management plan is provided with this Development Application.

2.0 DEVELOPMENT CONTROLS

2.2 Aims and Objectives for All Developments

Objectives

1. To ensure new developments and changes to existing developments are designed to maximise resource recovery (through waste avoidance, source separation and recycling).
2. To encourage source separation of waste, reuse, and recycling by ensuring appropriate storage and collection facilities for waste, and quality design of waste facilities.
3. To encourage techniques in demolition and construction which minimise waste generation, and which maximise the reuse and recycling of materials.
4. To ensure appropriate, well-designed waste storage and collection facilities are provided and are accessible to occupants and service providers.
5. To ensure that wastes are handled and stored appropriately in order to minimise risk to health and safety associated with handling and disposal of waste and recycled material, and ensure optimum hygiene.

6. To minimise adverse environmental and amenity impacts associated with waste management (including odour from waste and noise from collection activity).
7. To discourage illegal dumping by providing on-site storage for waste awaiting collection by removal services.
8. To ensure waste and recycling storage areas and handling systems for residential properties are designed to meet minimum requirements for Council's domestic waste collection services.

The proposed dwelling uses recycled and/or sustainable materials where possible. A waste management plan is provided with this Development Application.

2.3 All developments

Controls

- (a) Developments must provide space on-site for the sorting and storage of waste in containers suitable for collection.
- (b) The size of storage areas and number of storage containers required must be sufficient to handle and store the waste likely to be generated and stored on the premises between collections. The space is to be calculated using information in Schedule 1 Indicative Bins Sizes, Schedule 2 Standard Waste and Recycling Bins for Residential Developments and Schedule 3 Commercial Waste/ Recycling Generation Rates attached to this Part. The type and requirements of storage spaces may differ depending on development or land use type (refer Sections 2.4, 2.5, 2.6, 2.7, 2.8 and 2.9 in this Part.)
- (c) Additional space must be provided for the storage of bulky wastes where appropriate.
- (d) Allowance must be made for the storage of green waste where relevant.
- (e) All waste containers must be stored within the boundaries of the site unless otherwise approved by Council under Section 68 of the Local Government Act 1993.
- (f) All applications for development, including demolition, construction and the ongoing use of a site/premises, must be accompanied by:
 - i. a Site Waste Minimisation and Management Plan (SWMMP);
 - ii. location and design details of waste storage facilities on the site. Relevant details of waste storage, waste facility design and access thereto proposed as part of the development must be clearly illustrated on the plans of the proposed development accompanying the development application. Details of waste storage rooms/areas should include floor plan, elevations and cross section

drawings of the room, and details on materials and finishes. Drawings are to be submitted to scale clearly indicating the location of and provision for the storage and collection of waste and recyclables during: - demolition - construction - ongoing operation.

- (g) In all development, waste and recycling storage areas and facilities should be provided and be located in positions that:
- i. provide easy, direct and convenient access for the users of the facility;
 - ii. permit easy transfer of bins to the collection point if relocation of bins is required;
 - iii. permit easy, direct and convenient access for collection service providers;
 - iv. do not intrude on car parking, landscaping, access and turning areas required for the type and scale of development;
 - v. do not reduce amenity (minimises the potential for noise, odour and other amenity and environmental impacts on residents and other occupants);
 - vi. maximize protection of trees and significant vegetation.
- (h) In cases where the waste storage areas and facilities are likely to be visible from the street, the design and location of waste storage areas/facilities should be such that they compliment the design of both the development and the surrounding streetscape. Design elements such as fencing, landscaping and roof treatments may be used.
- (i) No incineration devices are permitted.
- (j) A collection point for waste collection is to be identified on the plans submitted with the development application. The collection point must be conveniently located for users and services purposes and sited so that waste collection vehicles do not impede the access to the site or car parking facilities when servicing the bins so that waste can be safely and easily collected.
- (k) The path for wheeling bins between the waste and recycling storage room/area and the vehicle collection point must be free of steps and kerbs and, in the case of residential development, of a gradient of less than 14:1, and for all other development types, of a grade to the satisfaction of Council. The waste storage area must be as close as practicable to the collection point.
- (l) Access driveways and service areas for waste collection vehicles must be designed in accordance with Australian Standard AS 2890.2-2002 Parking Facilities – Part 2: Off-street commercial vehicle facilities.

- (m) All waste facilities must comply with the Building Code of Australia (BCA) and all relevant Australian Standards (AS).
- (n) Heritage conservation considerations may alter requirements of this Part in the refurbishment of existing buildings. Designs should be discussed with Council's Heritage Advisor.
- (o) Any equipment, such as volume reducing equipment, will be required to be installed in accordance with the manufacturer's instructions.
- (p) Where commercial food preparation is carried out on the premises, the waste storage area is to be designed with a cover to exclude rainwater and a floor to be graded and drained to the sewerage system. The area is to be readily accessible for servicing and suitably screened from public view.

2.5 Residential Developments comprising 1 or 2 Dwellings

Controls

- a. Space must be provided inside each dwelling for receptacles to store garbage and recycling material. The area is to have the capacity to store two day's worth of materials.
- b. Space must be provided outside the dwelling/s to store the minimum number of Council's garbage, recycling and green waste bins required to meet Council's standard collection services applicable to the development. The space provided should be screened from the street with easy access for the householder to wheel the bins to the kerbside for servicing. Indicative dimensions of bins and numbers of bins are provided in Schedule 1 Indicative Bin Sizes and Dimensions and Schedule 2 Standard Waste and Recycling Bins for Residential Developments attached to this Part.

A waste management plan is provided with this Development Application. Waste and recycling temporary storage will be provided for ongoing use, and bin storage areas are provided within the garage space, for owner transport to the base of the driveway for council garbage collection.

The proposal satisfies the objectives of the provision.

PART: 8.2 STORMWATER AND FLOODPLAIN MANAGEMENT

2.0 STORMWATER DRAINAGE

2.2 Property Drainage

Objective

1. To ensure the collection and conveyance of stormwater runoff on property is undertaken in a manner to preserve the amenity of the land, prevent damage to property and without jeopardising public safety.

Controls

- (a) Stormwater runoff draining from impervious/ hardstand areas must be collected and conveyed via pipe or an engineered open channel to a discharge point in accordance with this Part and the Stormwater and Floodplain Management Technical Manual
- (b) Stormwater runoff from soft landscaping or turfed areas should be conveyed to a discharge point in accordance with this Part and the Councils Stormwater and Floodplain Management Technical Manual or otherwise dealt with in a manner to mimic state of nature conditions and avoid long-term ponding.
- (c) The property drainage network must be designed with sufficient capacity to safely convey stormwater run-off generated from design storm events listed in the Stormwater and Floodplain Management Technical Manual.
- (d) Stormwater runoff, including overland flows entering the site from upstream properties, must be managed to provide fail-safe protection to buildings, properties and persons either on private property or in the public domain.
- (e) Where a multi dwelling housing development is proposed on a site that consolidates two or more lots and any adjoining upslope properties do not have the benefit of a drainage easement, the development must be designed to potentially accommodate a new drainage easement benefitting upstream properties.
- (f) The design and location of all drainage components must be visually unobtrusive and integrated with site landscaping to ensure they do not detract from the streetscape appearance of the development.

2.3 Stormwater Discharge from Property

Objective

1. To ensure that the discharge of a stormwater runoff from property is undertaken in a controlled and sustainable manner that is not detrimental to downstream areas.

Controls

- (a) Stormwater runoff from property must be directed to either public drainage infrastructure, a natural watercourse or public reserve under gravity feed wherever possible, with the point of connection designed in accordance with Section 1.4.1 of the Stormwater Technical Manual.
- (b) Stormwater discharge from multi-residential dwellings, commercial, retail and industrial development on sites greater than 1000m² and within 30 metres of inground public drainage infrastructure, must extend this drainage infrastructure to the site, so as to enable a direct connection be made to this infrastructure.
- (c) For sites that fall to a public reserve and are within 30m. of public drainage infrastructure, a direct connection to this must be made and will require the extension of the infrastructure to the site, unless an exemption is granted by Council after consideration of the scope of development relative to the cost of the exercise as well as construction logistics and affectation to the reserve.

2.4 Community Stormwater Management

Objective

- 1. To ensure that the collective impact of stormwater runoff from development to the public drainage network and waterways, in terms of environmental impacts and capacity to convey stormwater, is minimised or prevented wherever possible.

Controls

- (a) Onsite stormwater detention must be incorporated in the property stormwater drainage system for all development unless the development can satisfy a condition of exemption as listed in Section 1.4.1 of the Stormwater and Floodplain Management Technical Manual.
- (b) The design of the onsite detention component must comply with the requirements specified in Section 1.4 of the Stormwater and Floodplain Management Technical Manual.
- (c) All stormwater runoff from impermeable areas must be routed through the onsite detention system where possible. Where this cannot be readily achieved, the design of the onsite detention must be revised to compensate for the uncontrolled discharge utilising the method stated in the Stormwater Technical Manual.
- (d) Below ground onsite detention system storages located at the front of the site must be located under driveway and vehicle access ramps where possible.
- (e) Titles of encumbrance must be placed on all on-site detention systems.

See stormwater engineering plans from NB Consulting.

The proposal satisfies the objectives of the provision.

PART: 8.3 DRIVEWAYS

1.0 INTRODUCTION

1.1 Objectives

Objectives

1. To set standards and minimum requirements for vehicular access/ egress to and from off street parking areas in domestic, residential and commercial areas within the City of Ryde.
2. To ensure that parking areas are readily accessible useable and adequately provide for circulation and manoeuvring of vehicles.
3. To ensure smooth transition between the public road and the access driveway and parking areas to prevent scraping of vehicles using the driveways.
4. To encourage the efficient flow of traffic through carparks to minimise the potential for pedestrian and vehicular conflict.
5. To ensure that off-street parking facilities do not interfere with traffic flow and safety in adjacent streets or endanger pedestrian traffic on or off the site.
6. To ensure that parking areas and associated facilities are of an acceptable appearance by imposing construction standards and landscaping requirements.

The existing crossing of the driveway is re-used.

The driveway is proposed to be progressively widened to allow easy access to the double garage.

The proposal satisfies the objectives of the provision.

Compliance Table

Site Area	581.6m ²
Zone	R2 Low Density Residential

	LEP/DCP requirement/s		Proposed
	Min.	Max	
Site Coverage		50% = 362.75m ²	245.21m ²
Height of Building		9.5m	8m at maximum
Floor Space Ratio		0.5:1	0.36:1
Primary Setback	6m		irregular lot, varies. Minimums: 6m at porch post 5.17m at porch stairs
Rear Setback	8m or 25% of length (varies) 4m (for lots wider than long)		irregular lot, varies. Minimums: 3.65m at garage entry 4.37m at double storey
Side setback	0.9m (single storey) 1.5m (double storey)		irregular lot, varies. Minimums: 0.924m single storey 1.720m double storey 1.017m porch
Private Open Space	25m ²		67.65m ²

Summary

The proposal has been designed to comply with the provisions of the RLEP and RDCP as far as practicable. Where it does not comply with some of the numerical controls in the DCP it has been designed to optimize the balance between compliance and practical or functional outcomes in the building, while fully satisfying the objectives of each control.

Therefore, in assessing the detail of the application against the applicable statutory controls it is considered that the proposed works are permissible, consistent with the zone objectives and other statutory considerations applicable to the subject site.

It is considered that the proposed development will not have any negative impacts on the streetscape, residential amenity, or other environmental impacts; and will be complimentary and compatible with the existing and desired future character of the area.

We recommend this application for approval.

A large, bold, handwritten signature in black ink, which appears to read 'Andy Marlow'.

Andy Marlow

Architect

8/9/2022