SUBMISSION ON MEDIUM DENSITY DESIGN GUIDE AND EXPLANATION OF INTENDED EFFECT

MEDIUM DENSITY HOUSING CODE

Introduction

Mirvac appreciates the opportunity to provide feedback regarding the proposed *Medium Density Design Guide* and draft *Medium Density Housing Code.*

Mirvac supports increasing the scope of permissibility and providing design principles for medium density housing types via the assessment streams available through State Environmental Planning Policy Exempt and Complying Development Codes 2008 (Codes SEPP).

The objectives of the policy are consistent with Mirvac's views regarding the need to facilitate greater housing choice and unlocking development potential in both established and Greenfield release precincts.

This submission provides feedback in regards to the application and administration of the proposed development types in addition to specific analysis of design parameters.

Codes SEPP 2008 site exemptions

The increased application of the Complying Development assessment stream continues to be limited due to the inflexible approach to land based exemptions are listed in Clause 1.19 of the SEPP.

Land use constraints mapping administered by Council and Government Departments (e.g bushfire, biodiversity, flood prone land) are only updated sporadically (in some cases years after adoption) notwithstanding the changes in site conditions and characteristics.

The lag in updating land use constraints mapping inhibits the use of the Complying Development assessment stream for proposals that otherwise meet the requirements.

Permissibility

It is unclear as to the permissibility of certain housing types due to contradictions within the exhibited documents. Section 1.5 of the Explanation of Intended Effect states that the development type proposed under the SEPP needs to be permissible within Councils LEP. Section 3.3 - 3.5 however does not replicate this requirement as

it only lists the applicable land use zones and lot size requirements as the test to determine permissibility.

Local Government adoption

The Department should consider implementing the permissibility of dual occupancies and semi-detached dwelling within all R2 Low Density Residential Zones regardless of whether an LEP considers these as permissible. The shortage of medium density housing is particularly prevalent across local government areas with overly restrictive LEP's.

If Councils are left to decide permissibility, the effectiveness of the policy will remain limited and the geographical imbalance of the supply of such housing types is likely to remain.

Councils that resolve not to permit medium density housing types and the associated design guidelines should be required to justify those decision to the Department. The need for such housing is exemplified in the recently released Greater Sydney Commissions Draft District Plans which contain significant evidence towards the demand for increased housing variety within the 'missing middle'.

It is assumed that the permissibility of certain medium density housing types via Schedule 1 Additional Permitted Uses also qualifies the application of the proposed housing types via Complying Development. The Department should provide clarification in this regard.

Affordability

The District Plans highlight the inequitable creation of lots across Sydney – Western Sydney being asked to increase substantial lot numbers at densities of over 20 dwellings per hectare, new releases closer to amenities such as Ingleside promoting lesser amount at only 12-13 dwellings per hectare. Further suburbs like Mosman and Willoughby only require modest increases in a few hundred homes. Policies and guidelines should promote and provide opportunity to create dwellings closer to amenity, transport and jobs.

The intent of this document is to promote diverse and varied typology in all infill areas. As discussed above Inclusionary permissibility across all areas will assist in addressing the diversity equity balance.

Another dwelling type that should be reviewed is the secondary dwelling design parameters. Currently limited to 60sqm there should be a push to increase this to 75sqm where secondary dwellings are attached to the principle dwelling.

The benefits include:

- Providing the public with another affordable entry product option,
- Integrating secondary dwelling providing flexibility in creating innovative home design solutions,
- Supports the designs of the multi-generational home concepts. Phases of establishment, growth and downsizing
- Ensuring impacts are minimised considering design controls such as building setbacks, POS, site coverage and minimum lot size compliance would still apply.
- The medium density design guideline currently supports attached dual occupancies on 400sqm blocks in any event. A principle dwelling and 75sqm secondary dwelling on small lots would also be considered appropriate in this context.

Mirvac has produced a number of these designs that directly address the critical industry issues of affordability, supply, and land use efficiency. Mirvac are happy to meet with the Department to discuss these options if needed.

Definitions

Whilst the draft Code suggests the need for amending definitions within the standard instrument and the existing Code SEPP, inconsistencies remain regarding the definition of a dual occupancy throughout the proposed Code. An attached dual occupancy is defined as one parcel of land with two dwellings as reflected within the existing Code SEPP. However, the draft Code highlights the opportunity to Torrens title subdivide this formation, which is currently defined as a semi-detached dwelling in the Standard Instrument. The Guide references this development as 'two dwellings side by side' which can either be construed as a dual occupancy or semi-detached dwelling.

Design

Floor to Ceiling Height

Although the Design Guide has noted the National Construction Code (NCA) requirement of 2.4m, the required a minimum ceiling height of 2.7m in living areas has been retained. Noting the importance of solar access, lighting, ventilation and spatial quality, these outcomes may be achieved depending on design, location of fenestration and building orientation. The adoption of the National Construction Code will continue to provide adequate amenity in terms of natural light and ventilation,

provide adequate clearance for services such as air conditioning. It is therefore Mirvac's stance that the height requirement should be in line with the current stance within the BCA.

The attached extract of the Guide contains comments relating to inconsistencies and provision which may stifle the opportunities for the delivery of such housing.

Conclusion

In summary the following key recommendations are made in regards to the discussion paper:

- The Department consider expediting the process of updating land constraint data in line with the progression of development in order to limit unnecessary exclusion of development proposals from the Codes SEPP.
- Mandate the permissibility of smaller development types (e.g. dual occupancies, side by side dwellings across all R2 Low Density Residential zones.
- Permitting a minimum floor to ceiling high that is in line with the NCA
- Refining definitions for implementation through the Standard Instrument.

The key to the guide is the need to provide affordable housing solutions for first home buyers and families. The suggestions contained within this submission will enable the increases utilisation of the SEPP as well as realistic delivery of housing variety across all districts of the Sydney Metropolitan Area.

Theo Zotos

Development Manager

Clasue reference to be amended

Steps for Preparing a Complying Development Certificate

Check land zoning and minimum lot size
NSW Planning Portal to view the Local Environmental Plan)

www.planningportal.nsw.gov.au

Permitted uses can be found in the **Land Use Tables**

Minimum lot size can be found in **cl 4.1B**

cannot be found

Comply with land based requirements

State Environmentla Planning Policy (Exempt and Complying Development Codes) 2008 (Codes SEPP)

Land based requirements for complying development can be found in **cl 1.18 & 1.19**

Refer to Codes SEPP

Comply with principal standards

Part 10 - Medium Density Housing Code (Codes SEPP)

Refer to Codes SEPP for development standards on:

- Maximum Height of Building
- Floor Space Ratio
- Front, side and rear setbacks
- Landscaped Area
- Earthworks
- Bushfire prone land
- Flood prone land
- Tree removal

Refer to the **Part 6 - Subdivision** (Codes SEPP) for development standards on strata and torrens title subdivision.

Comply with Design Criteria

Medium Density Design Guide (Design Guide)

Comply with the Design Criteria in **Part 3** of the Design Guide

Prepare Design Verification Statement and submit complying development certificate application

Prepare a Design Verification Statement using the template in **Appendix 4**

Prepare documentation using guide in **Appendix 3**

cl reference to be amended

Steps for Preparing a Development Application if Council has adopted the Design Guide

NSW Planning Portal to view the Local Environmental Plan for zoning, land based restrictions and principal standards.

www.planningportal.nsw.gov.au

Permitted uses ~~can be found in the~~ **Land Use Tables**

Minimum lot size can be found in **cl 4.1B**

Principal standards:

- Maximum Height of Building **cl 4.3**
- Floor Space Ratio **cl 4.4**
- Landscaped Area
- Minimum lot size **cl 4.1**

Refer to local character guidance, envelope, parking and stormwater controls

Development Control Plan

The development control plan that applies to the land may contain ~~the following~~ guidance:

- Local character and building envelopes
- Landscaped area (if not in the LEP)
- Front, side and rear setbacks
- Car parking
- Stormwater
- Subdivision

Satisfy the Objectives

Medium Density Design Guide (Design Guide)

The development must satisfy all relevant objectives in **Part 3** of the Design Guide

Use Design Criteria as a measurable standard

Medium Density Design Guide (Design Guide)

The design criteria provide a measurable standard in **Part 3** of the Design Guide. Alternate solutions that are consistent with the objectives will be considered.

Use the guidance in **Part 2** for explanation of the objectives and design criteria.

Prepare Design Verification Statement and submit development application

Prepare a Design Verification Statement using the template in **Appendix 4**

Prepare documentation using guide in **Appendix 3**

Setbacks

Setbacks govern space between proposed buildings and other elements in the environment. Usually, setbacks are expressed as distance of building from property boundaries. However, they can also refer to the separation between multiple buildings on a single site. They relate to the height of the building.

Setbacks are important to the amenity of new development and buildings on adjacent sites.

Setbacks vary according to the building's context and type. Larger setbacks are usual in suburban contexts compared to higher density urban settings.

A transition between different land uses and building typologies is provided by setbacks. Side and rear setbacks can also be used to create usable landscape space, preserving part of the site for tree planting, landscaping and outdoor recreation.

Figure 2-4 Building height in renewal areas should reflect the desired future character of the streetscape

Street Setbacks

Street setbacks establish the alignment of buildings along a street frontage, spatially defining the width of the street. Combined with building height and road reservation, street setbacks define the proportion and scale of the street and contribute to the character of the public domain.

A street setback which accommodates front gardens, contributes to the landscape setting of buildings and the street. Street setbacks provide space for building entries, ground floor dwelling courtyards and entries, landscape areas

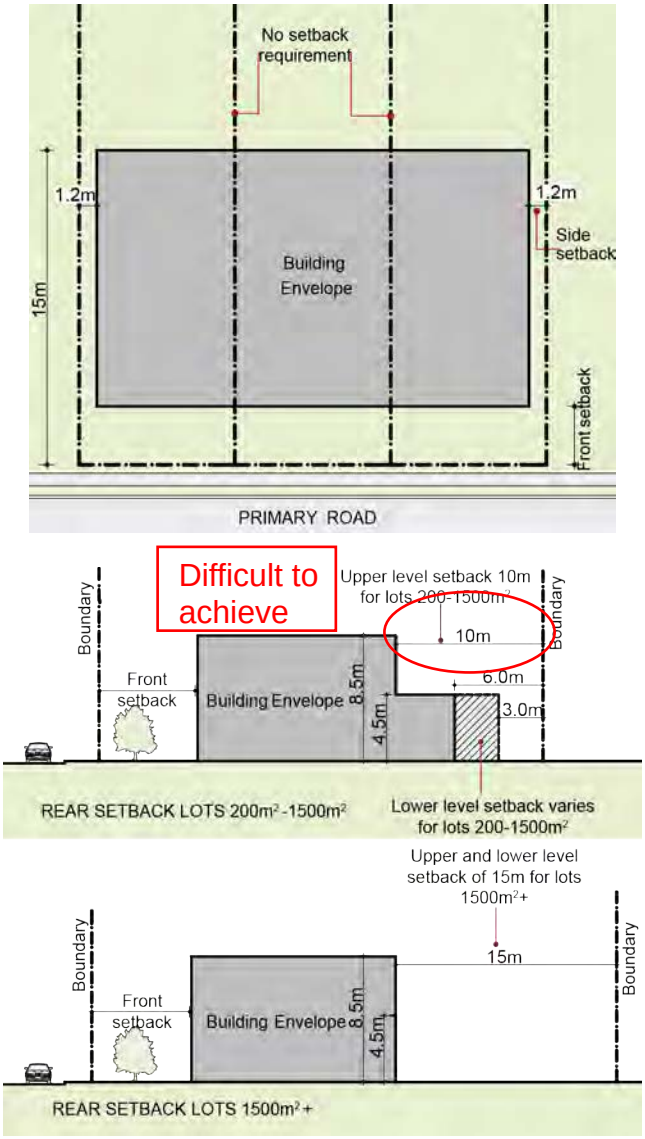

Figure 2-5 Rear setbacks vary according to lot sizes.

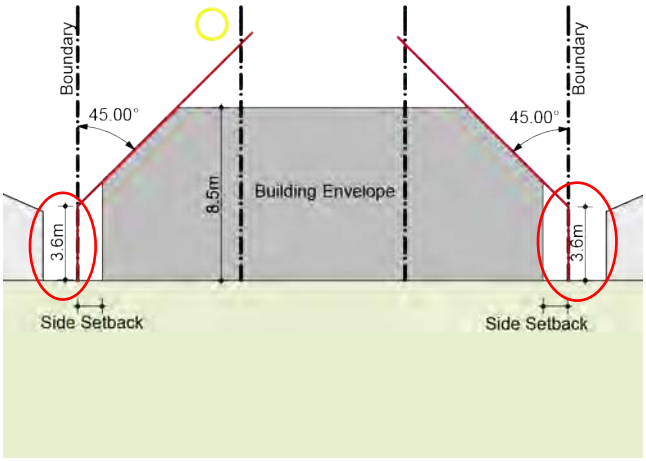

Figure 2-6 On steep slopes across sites, a varied height control can be applied that steps down towards the lower level of the site and helps create useful residential floor plates (12-18m) addressing the street

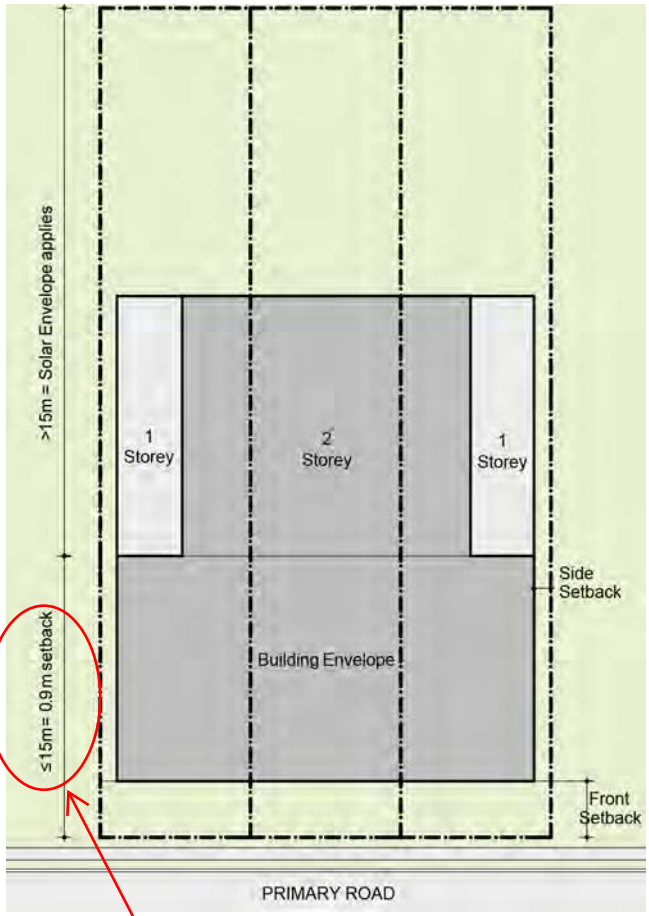

Figure 2-7 Setback to the first floor increase the longer the building envelope is to provide solar access to neighbouring properties

Contradicts section above as it needs to be clear - where the section is taken from

Guidelines

10. Building envelopes should take into consideration uses that have incentives which may increase the base floor space permissible. Test the envelope with the increased floor area to ensure optimal amenity can still be achieved.

11. It may be appropriate to determine heights by relating them to site-specific features such as cliff lines or heritage items. This may involve:
    - Defining an overall height or street wall heights to key datum lines, such as eaves, parapets, cornices or spires; and
    - Aligning floor to floor heights of new development with existing built form.

12. Building heights and setbacks should work together to allow for good daylight and solar access to key public open spaces, private living rooms and private open space.

13. Adequate setbacks between the building envelope and neighbouring properties allows for improved privacy avoiding the need for privacy screens.

14. Retain or create a rhythm or pattern of spaces between buildings to define and add character to the streetscape.

15. Achieve setbacks which maximise deep soil areas, retain existing landscaping and support consolidation of mature vegetation across sites.

16. Manage a transition between sites or areas with different development controls such as height, setbacks and land use.

17. Consider access around buildings for maintenance.

18. Consider secondary height controls to transition to built form, for example:
    - a street wall height to define the scale and enclosure of the street; and
    - a step down in building height at the boundary between two height zones.

19. When calculating existing ground level over existing structures and pools, draw a line between the edges of the structure.

2K Ceiling Heights

Related Design Quality Principle
Design Principle 6. Amenity

Ceiling height is measured internally from finished floor level to finished ceiling level. The height of a ceiling affects the amenity of a dwelling and the perception of space. Well designed and appropriately defined ceilings can create spatial interest and hierarchy in dwellings.

Ceiling height is directly linked to receiving sufficient natural ventilation and daylight access to habitable rooms. The ground and first floor levels of mixed use dwelling buildings should have increased ceiling heights to ensure their long term adaptability for other uses.

Although the BCA requires a minimum ceiling height of 2.4m, solar access, day lighting, ventilation and spatial quality is improved by higher ceiling heights.

Defining Ceiling Height

Ceiling height is measured from the finished floor surface to the underside of the finished ceiling.

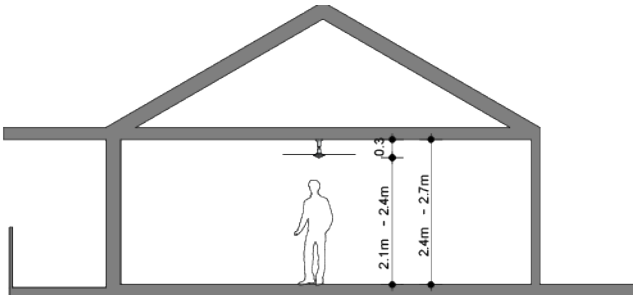

Figure 2-47 Operable louvres allow residents to regulate natural ventilation

Figure 2-49 Raked ceilings add visual and spatial interest and make a room feel larger.

with a normal construction its not practicable to have 2 different ceiling heights for bed-rooms and living rooms on level 1

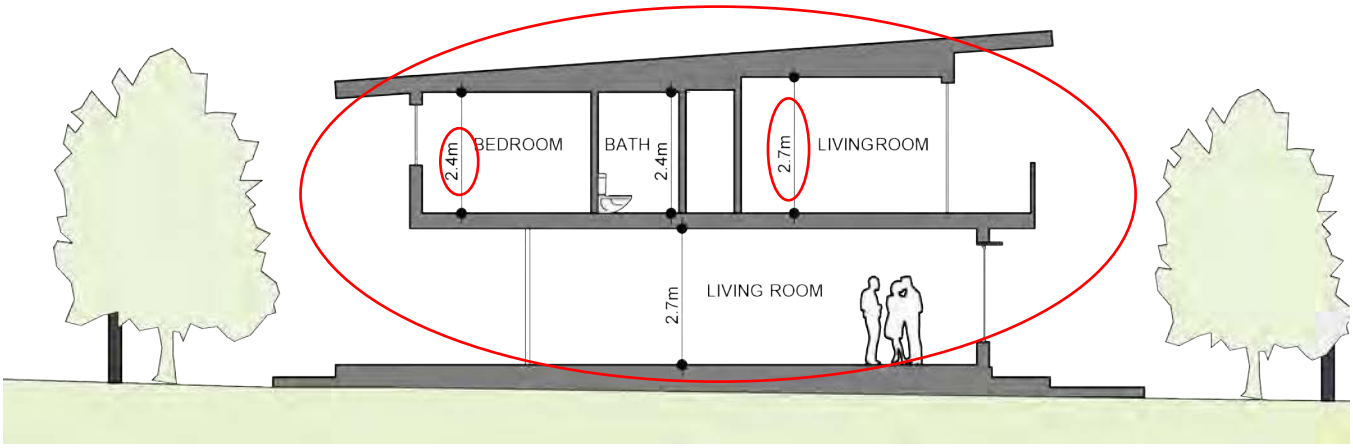

Figure 2-48 Operable louvres allow residents to regulate natural ventilation

subject to achievement to solar access

Design guidance

1. The size of private open space should be proportional to the size of the dwelling and allow all members of the household to sit around a table.
2. Primary open space and balconies should be located adjacent to the living room, dining room or kitchen to extend the living space.
3. Private open spaces and balconies should face predominantly north, east or west.
4. Private open space should not be located in the primary road setback where it has a negative impact on the streetscape (Refer to 2E Public Domain Interface). Private open space which faces the street should be within the articulation zone. Changes of level and landscaping can provide privacy. High fences are not permitted.
5. A large proportion of the primary private open space should be covered to provide shade and protection from rain.
6. Primary open space and balconies should be orientated with the longer side facing outwards or be open to the sky to optimise daylight access into adjacent rooms.
7. Solid, partly solid or transparent fences and balustrades allow views and passive surveillance of the street and communal open space while maintaining privacy.
8. Balconies should be integrated into the building design, with the design of soffits considered.
9. When located close to dwellings, increased communal open space can compensate for private open space being small.
10. Operable screens, shutters, hoods and pergolas can be used to control sunlight and wind.
11. Balustrades must be set back from the building or balcony edge if overlooking or safety are issues.
12. Downpipes and balcony drainage are integrated into the overall façade and building design.
13. Air-conditioning units and other equipment should be located on roofs, in basements, or fully integrated into the building design so as to not detract from Private open space.
14. Storage spaces should be provided to serve ground floor private open space.
15. Ceilings within a dwelling below a terraces or balcony should be insulated to avoid heat loss.
16. Water and gas outlets should be provided for primary balconies and private open space.

Figure 2-60 Private open space directly accessible from living rooms.

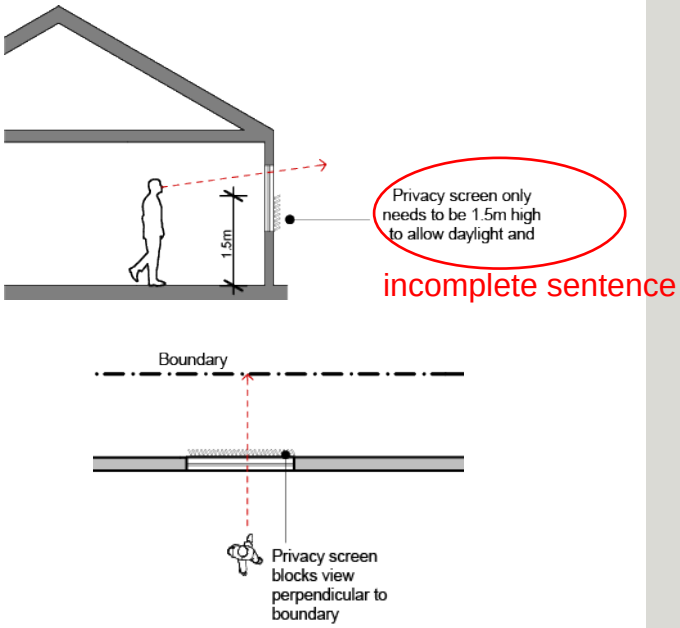

Figure 2-73 Privacy screens do not always need to cover the whole window.

Figure 2-74 Pop out windows low away from the boundary

Design guidance

1. Separation between windows and balconies is provided to ensure visual privacy is achieved. Minimum required separations from buildings to the side and rear boundaries are as follows:
   NOTE: Separation between buildings on the same site depends on the type of room.

2. Generally one step in the built form as the height increases due to building separations is desirable. Additional steps should be careful not to cause a 'ziggurat' appearance.

3. Privacy screens can be used to reduce privacy impacts. However, they should be used only where separation and orientation cannot achieve this.

   A privacy screen is a structure which provides a screen or visual barrier between a window of a habitable room or an outdoor area on a lot and an adjoining lot that:

   - has a total area of all openings that is no more than 30% of the surface area of the screen or barrier, or
   - a window, the whole of which has translucent glass and is fixed and cannot be opened.

4. New development should be located and oriented to maximise visual privacy between buildings on site and for neighbouring buildings. Design solutions include:

   - site layout and building orientation to minimise privacy impacts (see 2G Orientation and Siting); and
   - on sloping sites, dwellings on different levels have appropriate visual separations.

5. Direct lines of sight should be avoided for windows and balconies across corners.

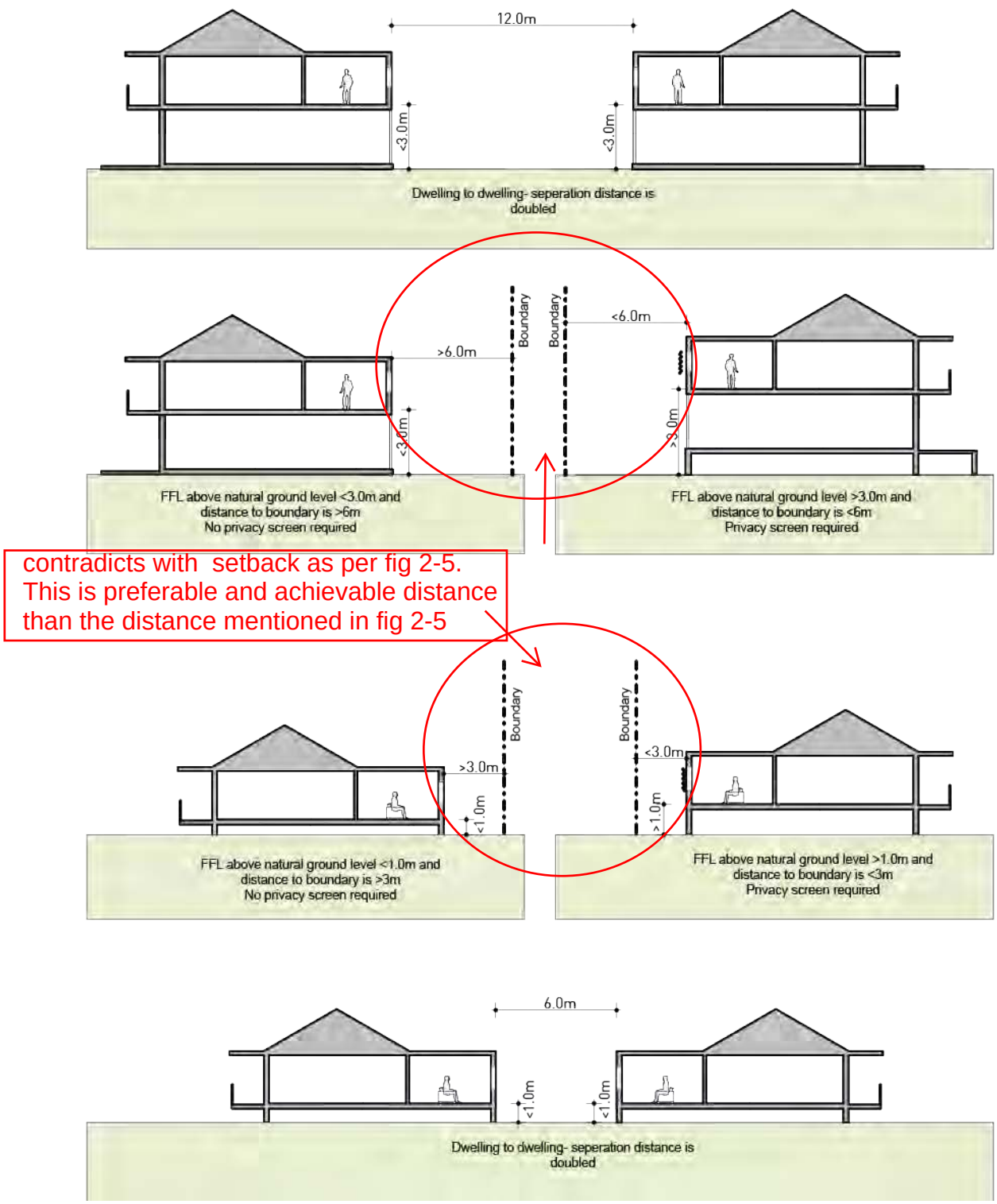

Figure 2-75 Diagrams showing different privacy interface conditions

Principal Controls

3.1A. Building Envelopes

Development Application

The local building envelope controls are to be found in the LEP and DCP that applies to the land. This may include:

- Maximum height of building; and
- Front, rear and side setbacks.

The DCP may also provide direction on the character of the precinct and siting of the building.

Complying Development

The building envelope standards for complying development can be found in Medium Density Housing Code within ***State Environmental Planning Policy (Exempt and Complying Codes) 2008 (Codes SEPP).*** A summary is in the table below.

Element	Summary Development Standard
Min lot size for each dwelling	200 m² 6m wide
Height of Building	8.5m
Primary Road Setback	Where existing dwellings are within 40m - average of two closest dwellings. Where no existing dwellings are within 40m then: **LOT AREA (m²) SETBACK** 200 - 300 3.5m >300 - 900 4.5m >900 - 1500 6.5m >1500+ 10m
Secondary Road setback	**LOT AREA (m²) SETBACK** 200 - 900 2m >900 - 1500 3m >1500+ 5m
Side Setbacks Applies only to the side boundary of the development site – not each individual lot.	Front half of the lot • up to 15m - 1.2m • if adjoining property is built to boundary - 0m Rear half of the lot, or distance >15m from front boundary; • Building envelope defined by 45° plane projected from a height 3.6m above the boundary.

The range of Lot Area is too big for the proposed setback

for 200-300 m2 - should allow 1.5m setback

Same comments to be repeated for other dwelling types

proper sentence structure or table format as above needed to avoid confusion

Rear setback	Where the part of a development has a height of building less than 4.5m **LOT AREA (m²) SETBACK** 200 - 600 3m >600 - 1500 6m >1500+ 15m Where the part of a development has a height of building of 4.5m or more: **LOT AREA (m²) SETBACK** 200 - 1500 10m >1500+ 15m Difficult to achieve
Lane Setback	0m

3.1B Floor Space Ratio

Development Application: Refer to LEP or DCP that applies to the land.

Complying Development: Refer to *Codes SEPP* and summary table below:

Standard	Summary Development Standard
Maximum floor space ratio for each lot	**LOT AREA (m²) FSR** 200 - 300 0.75:1 >300 - 400 0.70:1 >400 - 500 0.65:1 >500 + 0.60:1

Amenity

3.1I Solar and Daylight Access

Objective 3.1I-1	Design criteria
To optimise the number of dwellings recieving sunlight to habitable rooms and private open spaces. Solar access enables passive solar heating in winter and provides a healthy indoor environment	34. A living room or private open space in each dwelling is to receive a minimum of 2 hours direct sunlight between 9 am and 3 pm on the winter solstice. 35. Direct sunlight is achieved when 1m² of direct sunlight on the glass is achieved for at least 15 minutes. To satisfy 2hrs direct sunlight, 8 periods of 15 minutes will need to be achieved - the periods do not need to be consecutive.

Objective 3.1I-2	Design criteria
To provide good access to daylight suited to the function of the room and to minimise reliance on artificial lighting and improve amenity	36. Every habitable room must have a window in an external wall with a total minimum glass area of not less than 15% of the floor area of the room. 37. Daylight may not be borrowed from other rooms, except where a room has a frontage to a classified road. 38. No part of a habitable room is to be more than 8m from a window. 39. No part of a kitchen work surface is to be more than 6m from a window or skylight. 40. Where courtyards are used : • Courtyards are fully open to the sky • the courtyard is to have a minimum dimension of one third of the perimeter wall height, and area of 4m².

Needs to be reworded in single sentence to avoid confusion

Repeat the same comment for all other dwelling types

3.1J Natural Ventilation

Objective 3.1J-1	Design criteria
All habitable rooms are naturally ventilated	41. Natural ventilation is available to each habitable room. 42. Each dwelling is to be cross ventilated.

3.1K Ceiling Height

Objective 3.1K-1	Design criteria
Ceiling height achieves sufficient natural ventilation and daylight access and provides spatial quality	43. Measured from finished floor level to finished ceiling level, minimum ceiling heights are: • 2.7m to ground floor habitable rooms • 2.7m to upper level living rooms • 2.4m to upper level habitable rooms (excluding living rooms)

3.1L Dwelling Size and Layout

Objective 3.1L-1	Design criteria
The dwelling has a sufficient area to ensure the layout of rooms are functional, well organised and provide a high standard of amenity	44. Dwellings are required to have the following minimum internal floor areas: • 1 bed 65m² • 2 bed 90m² • 3+ bed 115m²
	45. The minimum internal areas include only one bathroom. Additional bathrooms increase the minimum internal area by 5m² each.
	46. A fourth bedroom and further additional bedrooms increase the minimum internal area by 12m² each.
	47. Kitchens should not be part of a circulation space, except in 1 bedroom dwellings.
	48. A window is visible from any point in a habitable room.

review minimum areas to be approx. 80m2 as per our current product design at Googong

Objective 3.1L-2	Design criteria
Dwelling layouts are designed to accommodate a variety of household activities and needs and is appropriate for the number of occupants	49. One bedroom has a minimum area of 10m² and other bedrooms 9m² (excluding wardrobe space).
	50. Bedrooms have a minimum dimension of 3m (excluding wardrobe space).
	51. Combined living and dining rooms are to have a minimum area of: • 1 and 2 bed 24m² • 3+ bed 28m²
	52. Living room or lounge rooms are to have a minimum width of 4m (excluding fixtures).

Difficult to achieve in some of our products

'Primary' private open space to be referred to as 'Principal' private open space to avoid confusion

3.1M Private Open Spaces

Objective 3.1M-1	Design criteria
Dwellings provide appropriately sized private open space and balconies to enhance residential amenity	53. All dwellings are required to have a primary private open space of at least 16m^2. 54. The minimum dimension of the included area is 3m, and excludes any storage space.

Objective 3.1M-2	Design criteria
Primary private open space and balconies are appropriately located to enhance liveability for residents	55. The primary private open space is to be located adjacent to the living room, dining room or kitchen to extend the living space. 56. 50% of the primary private open space should be covered to provide shade and protection from rain.

3.1N Storage

Objective 3.1N-1	Design criteria
Adequate, well designed storage is provided in each dwelling	57. In addition to storage in kitchens, bathrooms and bedrooms, the following storage is provided: • 1 bed 6m^3 • 2 bed 8m^3 • 3+ bed 10m^3 58. At least 50% of the required storage is to be located inside the dwelling. 59. Storage not located in dwellings is secure and clearly allocated to specific dwellings if in a common area.

3.1O Car and Bicycle Parking

Objective 3.1O-1	Design criteria
Car parking is provided appropriate for the scale of the development	60. Where parking is provided above ground, at least one car space is to be provided per dwelling. 61. [Development applications only] Car parking is to be provided at the rate required for a dual occupancy within a Development Control Plan that applies to the land. If there is no rate in a DCP - 1 space is to be provided.

Objective 3.1O-2	Design criteria
Parking and facilities are provided for other modes of transport	62. Covered space is to be provided for the secure storage of at least 1 bicycle per dwelling.

3.3W Pools and Ancillary Development

Objective 3.3W-1	Design criteria
The location of swimming pools and spas minimise the impacts of adjoining properties	101. Swimming pools and spas must be located in the rear yard
	102. The coping around a swimming pool or spa must not be more than 1.4m above ground level (existing)
	103. The decking or paved area around a swimming pool or spa (excluding a coping less than 300mm wide) must not be more than 0.6m above ground level (existing)
	104. Water from a swimming pool or spa must be discharged in accordance with an approval under the Local Government Act 1993 if the lot is not connected to a sewer main.
	105. The pump must be housed in an enclosure that is soundproofed.

Note: A child-resistant barrier must be constructed or installed in accordance with the requirements of the Swimming Pools Act 1992.

Objective 3.3W-2	Design criteria
Detached studios, and outbuildings should not dominate the rear garden. They are useful to activate rear lanes providing visual surveillance	106. A detached studio or outbuilding must not have a building height of more than: • 3.6m or • if the studion is located within 0.9m of a lane - 6m 6m will create to be flat roof 7.5m would allow for normal roofs
	107. The side and rear setbacks for an outbuilding or detached studio are: • if the building is located within 0.9m of a lane - 0m to side and rear boundaries, otherwise, • 0m to side boundaries, and 3m to rear boundaries
	108. The floor area of a detached studio or outbuilding must not be more than 36m² and is included in the overall gross floor area of for the site.
	109. Any window in a detached studio where the floor level is more than 1.5m above ground level must not be greater than 2m² in any wall face.

Note: Privacy and building separation and other design criteria still apply