

A. SCENARIO A FOR 828M² SECTION - ADVERSE CUMULATIVE EFFECTS

The diagrams on this page show a possible 3 unit development on 828m² (46m x 18m deep) section which could be developed under the proposed Medium Density Rules. This layout is based on 'scenario 1' in Kāinga Ora's Urban Design evidence. Each unit shown has:

- a 6x6m double garage
- a total ground floor of 88m² + 36m² garage
- a second floor of 72.m²
- dwellings shown are 196m² in size
- a balcony of 5.33m x 1.5m providing 8m² as per 16A.3.8 for a two or more bedroom dwelling.
- the floor to ceiling height on the ground floor is 3.075mm.
- the floor to ceiling height on the first floor is 2.850mm

THE PROPOSAL HAS:

- a 45% total site coverage;
- it does not exceed the 70% Impervious surface limit (16A3.7)
- the design 'sits' within the permitted building envelope created the Daylight Admission angles starting 3m above the ground level;

DESIGN CONCERNS:

- There are no controls on the placement of Outdoor Living Courts. This space does not have to be on the ground which could result in a poor design outcome with two adjacent spaces looking directly into each other.
- While this type of development (townhouse) is anticipated, the lack of ground floor outdoor living is a poor outcome, as is the lack of separation between balconies and/or first floor windows.

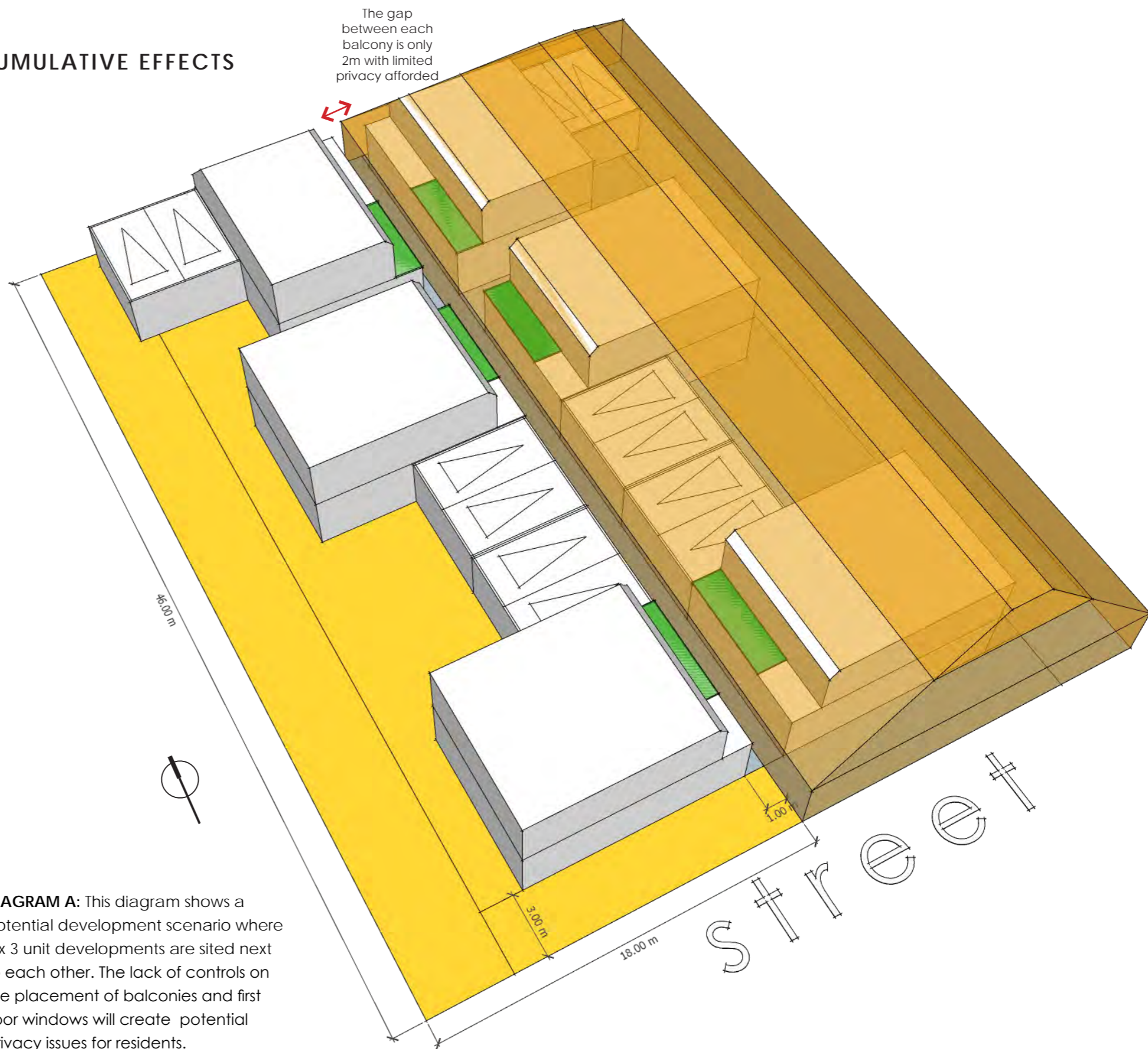


DIAGRAM A: This diagram shows a potential development scenario where 2 x 3 unit developments are sited next to each other. The lack of controls on the placement of balconies and first floor windows will create potential privacy issues for residents.

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A2. SCENARIO A FOR 828M² SECTION - LACK OF PRIVACY

The image shows a possible development scenario which could occur without controls on the placement of first floor balconies or windows and the resultant loss of privacy.

The image sits within the permitted 'building envelope' created by the recession plane and height limit. While it does not create a shading issue, the current set of rules allow for privacy issues and potential visual dominance to occur. Ground floor windows are not considered an issue as views are typically screened by boundary fencing. With only a 1m side-yard, it is not possible to plant this space.



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DIAGRAM A2.1:
With no controls on the placement of balconies and first floor windows the privacy of the adjoining property is compromised



DIAGRAM A2.2:
By controlling the placement of balconies and first floor windows within 4m of the boundary it is possible to provide sufficient space to improve privacy outcomes.



DIAGRAM A2.3: With sufficient space it is possible to plant medium sized trees which provide additional privacy for residents over time.

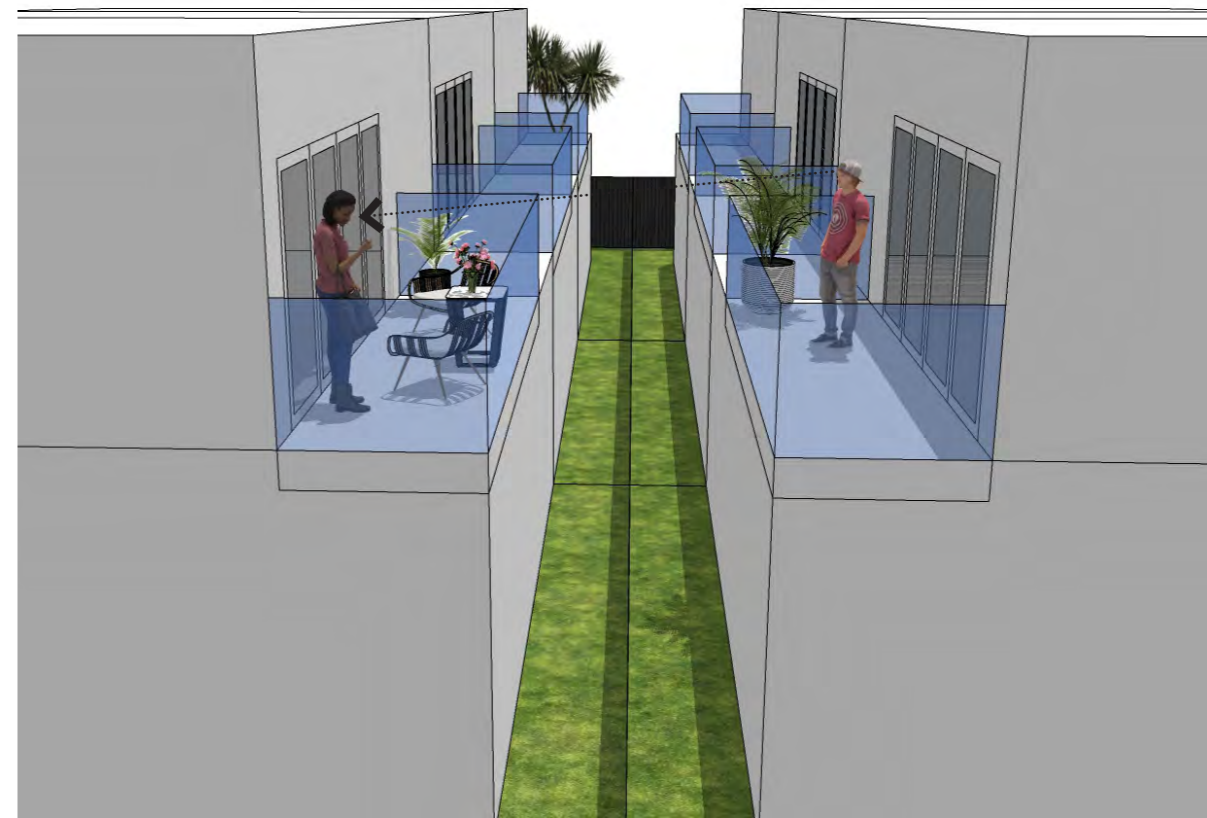


DIAGRAM A2.4:
With no controls on the placement of balconies with a 1m setback the privacy of both properties are severely compromised, where adjacent sites are developed as townhouses.

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B. SCENARIO B FOR 828M² SECTION - LACK OF DESIGN CONTROLS

The proposed rule package enables sites to 200m² net. The diagram on this page show a possible 6-unit development on 828m² (46m x 18m deep) section following a subdivision creating two 370m² lots, which could be developed under the proposed Medium Density Rules. Each unit shown has:

- a 3x6m single garage
- a total ground floor of 60m² including garage
- a second floor of 48m²
- a balcony of 5m x 1.6m providing 8m² as per 16A.3.8 for a two or more bedroom dwelling.
- the floor to ceiling height on the ground floor is 3.075mm.
- the floor to ceiling height on the first floor is 2.850mm

THE PROPOSAL HAS:

- a 45% total site coverage;
- it does not exceed the 70% Impervious surface limit (16A3.7)
- the design 'sits' within the permitted building envelope created the Daylight Admission angles starting 3m above the ground level;

DESIGN CONCERNS:

- Following subdivision, the proposal is a permitted activity with no urban design controls required.
- Each unit has limited Outdoor living space while it would be possible to create a dwelling with 3 or more bedrooms.

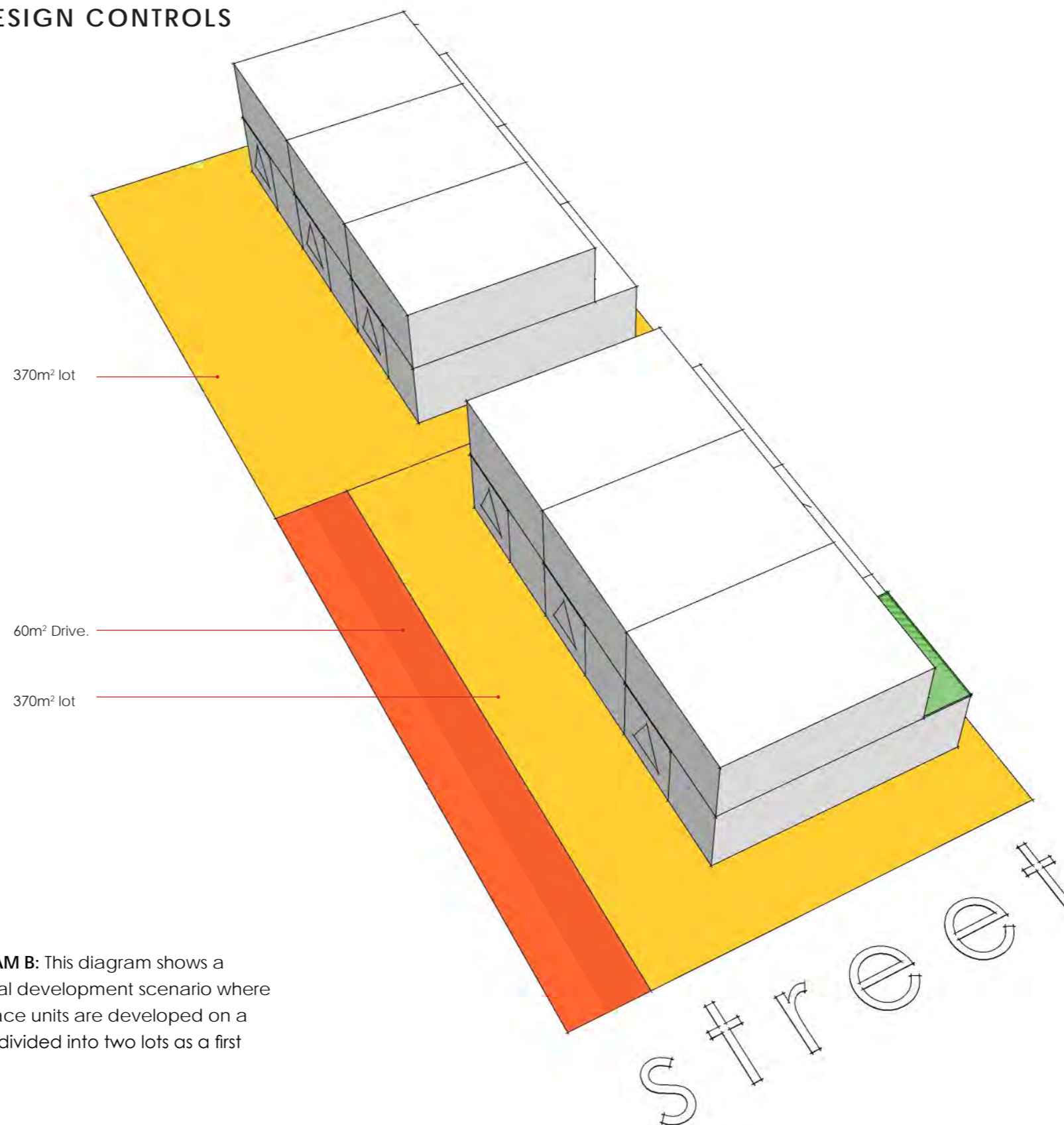


DIAGRAM B: This diagram shows a potential development scenario where 6 x terrace units are developed on a site subdivided into two lots as a first stage.

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C. SCENARIO C FOR 828M² SECTION - INSUFFICIENT OUTDOOR LIVING AND INAPPROPRIATE MASSING

The diagrams on this page show a possible 6 unit development on 828m² (46m x 18m deep) section which could be developed under the proposed Medium Density Rules controlling built form.

Each unit shown has:

- a 3x6m single garage
- a total ground floor of 60m² including garage
- a second floor of 48m²
- has a third storey of 35m²
- a balcony of 5m x 1.6m providing 8m² as per 16A.3.8 for a two or more bedroom dwelling.
- the floor to ceiling height on the ground floor is 3.075m.
- the floor to ceiling height on the first floor is 2.850m
- the floor to ceiling height on the second floor is 2.850m

THE PROPOSAL HAS:

- a 45% total site coverage;
- it does not exceed the 70% Impervious surface limit (16A3.7)
- the design 'sits' within the permitted building envelope created the Daylight Admission angles starting 3m above the ground level with a minor modification to the roof form;

DESIGN CONCERNS:

- There are no controls on the placement of Outdoor Living Courts. This space does not have to be on the ground floor which allows for a large terrace house to be developed with a substandard provision of outdoor living provided.
- The controls do not prevent the development of large dwellings on smaller sites with the design to the right considered an over-development of the site
- While this type of development (townhouse) is not necessarily a bad outcome, the lack of ground floor outdoor living is.
- The lack of ground level courtyards leads to excessive building mass located in close proximity to internal boundaries and balcony overlooking issues.

Providing only 8m² of outdoor living for a 147m² unit is considered insufficient given the number of bedrooms which could be potentially developed.

Minor modification of the roof form would be required to stay under the daylight admission angle but this would not affect the potential yield of a site.

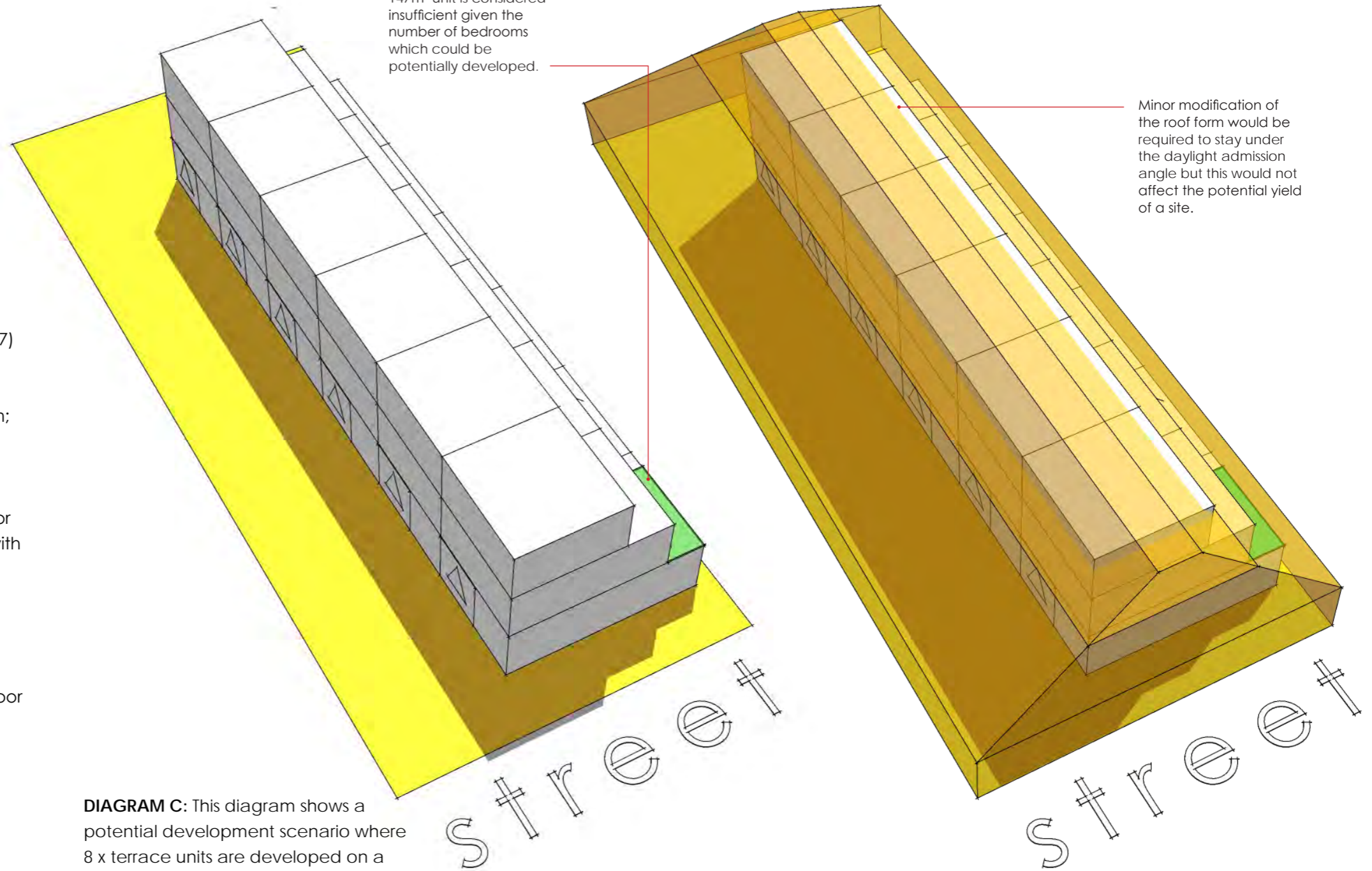


DIAGRAM C: This diagram shows a potential development scenario where 8 x terrace units are developed on a single 828m² site

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D. SCENARIO C FOR 828M² SECTION - LACK OF GROUND FLOOR HABITABLE SPACE

The diagrams on this page shows a possible 5 and 8 unit development on 828m² (46m x 18m deep) section which could be developed under the proposed Medium Density Rules built form rules. Each unit shown has:

- a 20m² outdoor living space on the ground floor
- the floor to ceiling height on the ground floor is 3.075m.
- the floor to ceiling height on the first floor is 2.850m

THE PROPOSAL HAS:

- a 45% total site coverage;
- it does not exceed the 70% Impervious surface limit (16A3.7)
- the design 'sits' within the permitted building envelope created the Daylight Admission angles starting 3m above the ground level with a minor modification to the roof form;

DESIGN CONCERNS:

- The lack of a ground floor habitable space can result in garaging dominating the ground plane of a development, leading to CPTED issues and poor amenity;
- It can result in a poor relationship between internal and external living areas

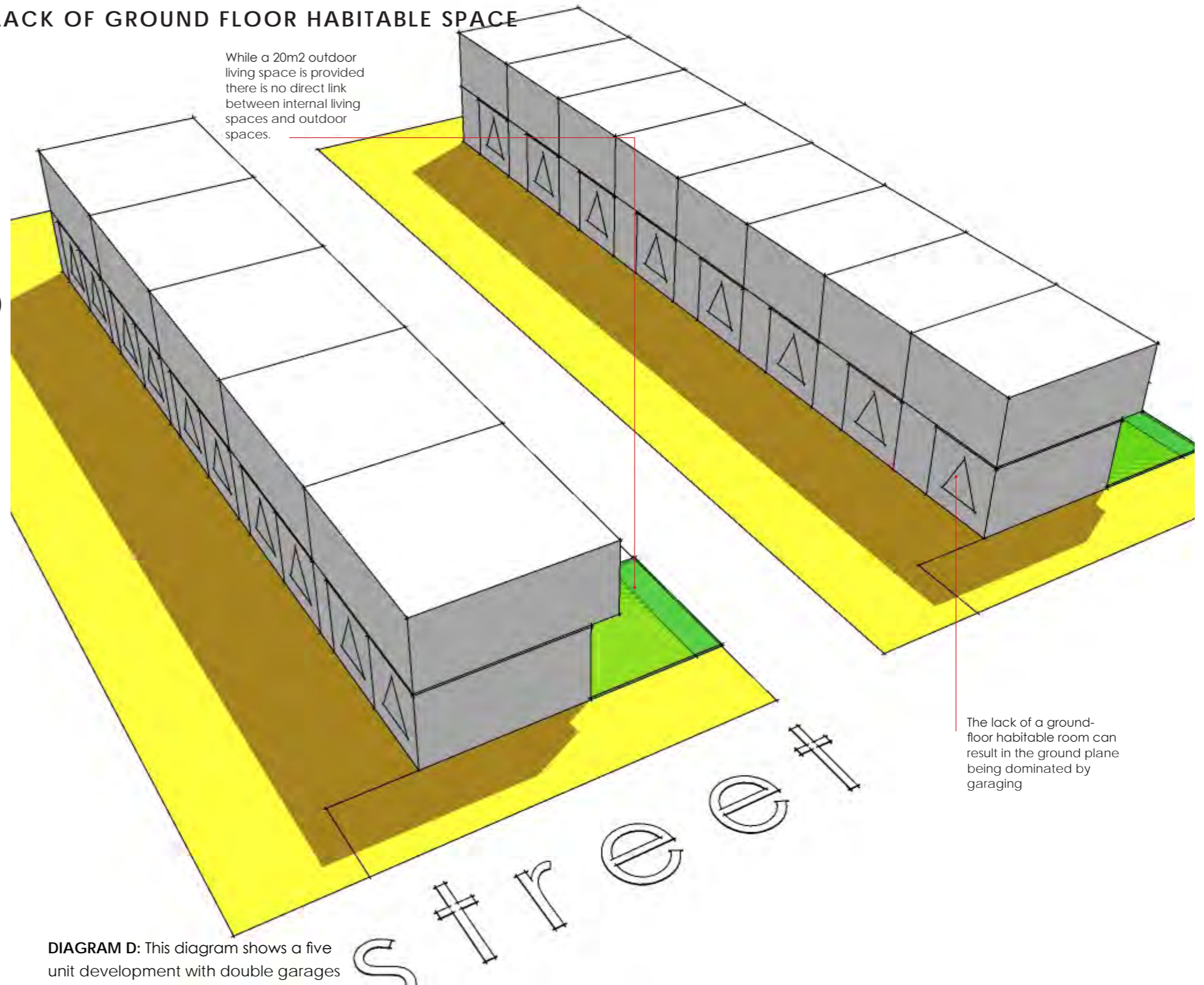


DIAGRAM D: This diagram shows a five unit development with double garages and a 8-unit development with single garages

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E. RECESSION PLANE CHANGES AND 11M HEIGHT LIMIT

The diagram to the right show a comparison between a 45° recession plane starting at 3m above any internal boundary compared to a 2.5m high starting point which is the starting point in the Lower Density Residential Zone. There is a no noticeable difference between the two options. It is worth noting that the recession planes will have a greater influence on building design on narrower sections, potentially restricting the ability to build up to 3 storeys.

The current diagram shows a 18m wide residential lot allowing for a ~6m wide third floor which is acceptable but if the residential lot were only 14m which is common in older settlements it would not be possible to build a third storey.

The 11m height limit allows for the development of 3 storey housing typologies while this is not possible with an 8m height limit.

The proposed 3.0m starting point for recession planes combined with a 11m height limit is considered an appropriate building envelope for Medium Density developments without creating visual dominance issues on adjoining properties.

DESIGN CONCERNS:

- Nil

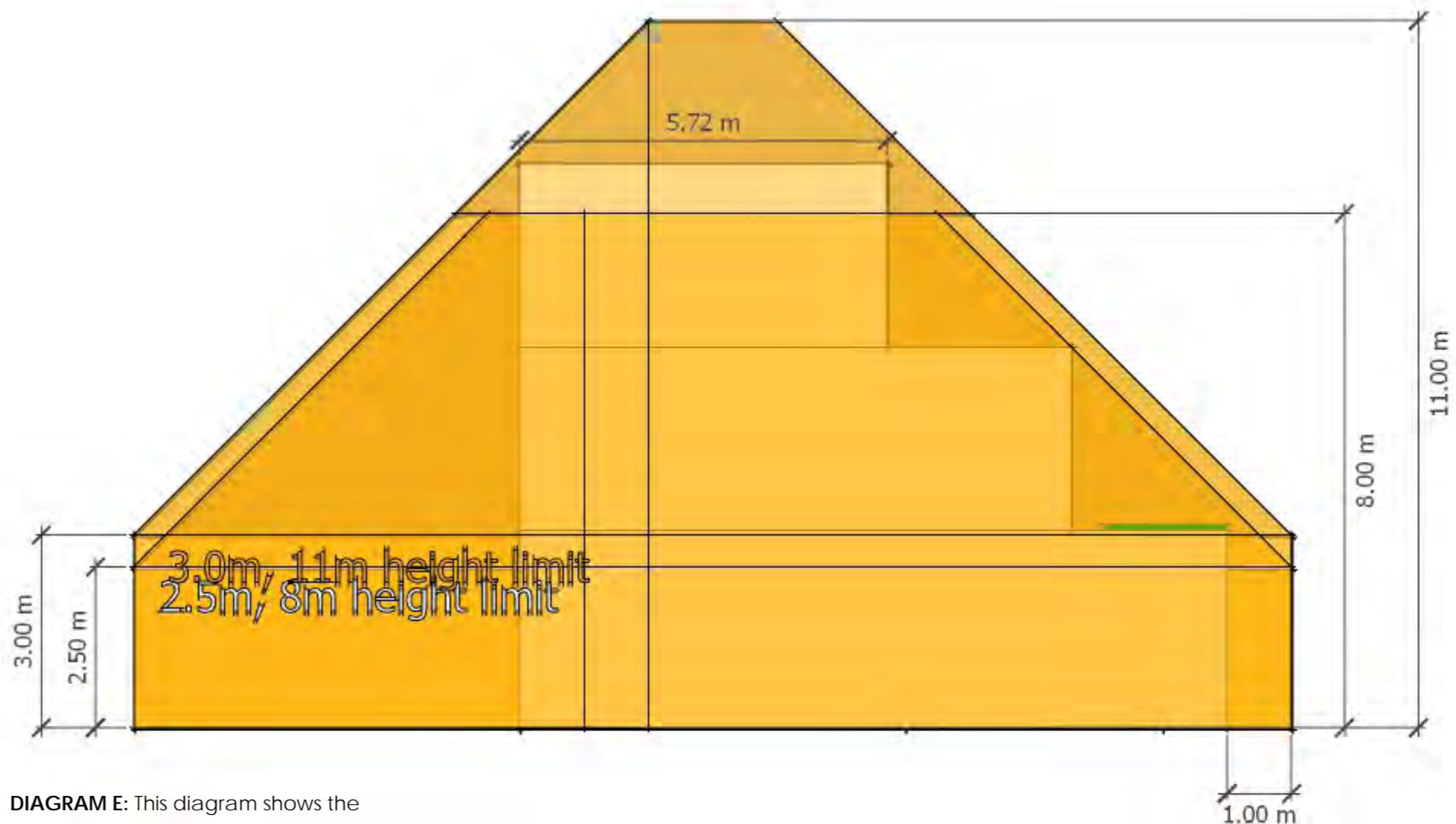


DIAGRAM E: This diagram shows the potential effects on the development envelope created by a 2.5m high recession plane or a 3.0m starting point.

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F. SCENARIO F FOR 828M² SECTION - RECOMMENDED DESIGN SOLUTIONS

The diagrams on this page show a series of design solutions, in addition to the proposed Rule package for Medium Density Development, which will improve the amenity of both existing and future residents:

SUGGESTED MODIFICATIONS TO RULE PACKAGE

- A** A requirement for a minimum 20m² of outdoor living is provided for each unit (minimum dimension of 4m).
- B** A habitable room is provided downstairs in each unit with direct access to the Outdoor Living Space.
- C** An offset of 4m from any internal (not road) boundaries is required for any balconies.
- D** A requirement that the OLS receives direct sunlight from either the north, west or east as an assessment matter.



DIAGRAM F: This diagram shows a potential development scenario where 6 x terrace units are developed on a single 828m² site but an appropriate level of amenity is provided for both existing and future residents

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QUALIFICATIONS AND EXPERIENCE

- 1 My full name is David John Compton-Moen. I am the Director of DCM Urban Design Limited and am a qualified Urban Designer / Landscape Architect
- 2 I hold a Bachelor of Resource Studies (Planning), Bachelor of Landscape Architecture (Hons) and a Master of Urban Design(Hons). I am a Full Member of the New Zealand Planning Institute and a Registered Landscape Architect.
- 3 I have over twenty years' experience working as a Landscape Architect/Urban Designer/Planner with a strong track record in Medium Density Development, including the preparation of a Medium Density Design Guide for Hutt City Council which was awarded a NZPI Best Practice Award in 2020. I have worked in both the private and public sectors, in both Hong Kong and New Zealand.
- 4 I am currently working on several large-scale residential developments in Christchurch, Wellington, Auckland and Queenstown where I am providing design and assessment services. Some highlights include:
 - a. 33-unit development at 256 Armagh Street, Christchurch for Balance Developments;
 - b. 8 super lot sites for Mike Greer Commercial in Mangere and Mt Roskill, Auckland;
 - c. Residential Intensification Design Guide for Hastings District Council;
 - d. 33-unit development at Harewood Road, Papanui, Christchurch;
 - e. 70-unit development for Wolfbrook at 317 Lincoln Road, Christchurch;
 - f. 50-unit development for Con tech Building Limited, at Wigram Christchurch.

1.2 CODE OF CONDUCT

- 5 I confirm that I have read the Code of Conduct for Expert Witnesses in the Environment Court Practice Note 2014 and that I have complied with it when preparing this report. Other than when I state that I am relying on the advice of another person, this evidence is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.
- 6 I am authorised to give this evidence on the Council's behalf to the Proposed District Plan hearings commissioners.

1.3 CONFLICT OF INTEREST

- 7 To the best of my knowledge, I confirm that I have no real or perceived conflict of interest.

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