BEFORE THE PALMERSTON NORTH CITY COUNCIL INDEPENDENT HEARING PANEL

UNDER The Resource Management Act 1991

IN THE MATTER OF Plan Change E: Roxburgh Residential Area

FOR Palmerston North City Council

REPLY EVIDENCE OF CHRISTOPHER MURRAY MCDONALD ON BEHALF OF PALMERSTON NORTH CITY COUNCIL

URBAN DESIGN

16 May 2025

INTRODUCTION

- 1 My full name is Christopher Murray McDonald. I am an Associate Director at McIndoe Urban Limited.
- 2 I am authorised by Palmerston North City Council to give this statement of reply evidence on their behalf.
- 3 My qualifications, my experience and my role in the preparation of Plan Change E are described in my primary statement of evidence dated 23 April 2025.
- I repeat the confirmation given in my s 42A Report that I have read and will comply with the Code of Conduct for Expert Witnesses in the Environment Court Practice Note 2023, and that my evidence has been prepared in compliance with that Code.

Scope of evidence

- I have provided my reply to the evidence of submitters under key topics. Specifically, I have addressed the following matters:
 - (a) Content of the Structure Plan including:
 - (i) Degree of specificity.
 - (ii) Local Street B.
 - (iii) Location of open space reserve.
 - (b) Maximum lot size.
 - (c) Stormwater management.
 - (d) Optimal urban design.
 - (e) Recommendations.

- 6 In preparing my evidence, I have referred to the following documents:
 - (a) Statement of Evidence of Katherine Johnson Blagrove and Jamie Mary Joan Devereux dated 5 April 2025.
 - (b) Statement of Evidence of Paul Norman Thomas dated 6 May 2025.
- The fact that this reply statement does not respond to every matter raised in the evidence of witnesses in the areas of masterplanning and urban design should not be taken as acceptance of the matters raised. Rather, I rely on my s 42A Report and the evidence of other Council witnesses to address these matters (particularly stormwater, transportation and reserves).

CONTENT OF THE STRUCTURE PLAN

Degree of specificity

- In his evidence, Mr Thomas states: 'The Structure Plan proposed is very detailed in nature given the small size of the redevelopment area' (paragraph 45). In their evidence, Ms Blagrove and Ms Devereux make a similar statement: "given the modest scale of the site (approximately 4.5ha), aspects of the structure plan are...disproportionately prescriptive' (paragraph 2.3). Ms Blagrove and Ms Devereux support 'a more flexible and proportionate implementation approach that better reflects the constraints on the site' (paragraph 2.1). I understand from their evidence that they consider those constraints to include 'fragmented ownership, land acquisition uncertainties, and inner-urban brownfield context' (paragraph 2.1).
- I do not agree that the proposed Structure Plan is very detailed or disproportionately prescriptive. In paragraph 30 of my primary evidence, I note that the Roxburgh Crescent Structure Plan is comparable in terms of content and complexity to those of Kikiwhenua and Mātangi / Whiskey Creek. Both these areas are somewhat larger than the Roxburgh Residential Area (RRA). Kikiwhenua's net site area is approximately 9.1ha, and Mātangi's residential zone measures approximately 13ha. However, all three locations share certain contextual features and associated planning challenges. These include urban edge locations, sensitive residential interfaces and limited opportunities for connection to existing streets

and open spaces. I consider the level of detail in the Roxburgh Crescent Structure Plan to be commensurate with the size of the RRA site and the complexity of its context.

In drawing this conclusion, I disagree with Ms Blagrove's and Ms Devereux' view that the RRA's site constraints require greater flexibility. Indeed, I consider that the reverse is true. The very specific conditions encountered at Roxburgh Crescent necessitate a particular planning response if good urban design outcomes are to be realised. In paragraph 27 of my primary evidence, I refer to these constraints as 'unique attributes' and I briefly describe their planning implications. These attributes include: an irregularly shaped plan change area; a poorly developed path network; an existing primary thoroughfare; a river corridor interface; and an existing open space reserve that offers little public amenity.

Local Street B

- In paragraphs 48 to 55 of his evidence, Mr Thomas seeks a more flexible approach to access in the northern portion of the RRA. In particular, Mr Thomas requests an amendment to the Structure Plan that would allow private rights-of-way or other alternatives to the northern part of Local Street B. Part of the rationale for this change is more efficient use of space (paragraph 51). In paragraph 2.18 of their evidence, Ms Blagrove and Ms Devereux make a similar recommendation. They request a 'more flexible framework' that allows 'different design responses...particularly in the northern part of the site'. As an example, Ms Blagrove and Ms Devereux refer to 'enabling the use of private roads' in this location. The modified Structure Plan provided as part of their evidence (at paragraph 3.5) depicts the northern portion of Local Street B as an 'Optional road'.
- In terms of access, the southern portion of the Structure Plan is more efficient than the northern portion. In the south, where the RRA is wider, both sides of the Roxburgh Crescent extension and for much of its length both sides of Local Street B can be fronted by narrow lots. In the north, where the RRA tapers, Local Road B deflects towards Roxburgh Crescent, and the developable area is restricted. Here, both streets can retain dual frontages. However, as the block narrows, lots are likely to become square in shape and therefore have longer street frontages. As a result, the area of street per lot increases.

An earlier version of the Structure Plan (circa. 2021) responded to these conditions by introducing an 8m wide lane to the eastern side of the plan change area (see Fig.1). This lane has a similar trajectory to that of Local Street B as notified as part of PCE. However, the earlier plan anticipated a single row of lots between Roxburgh Crescent and the lane. This meant that most lots on the eastern side of Roxburgh Crescent had both a street frontage and a rear boundary with the lane, which provided vehicle access.

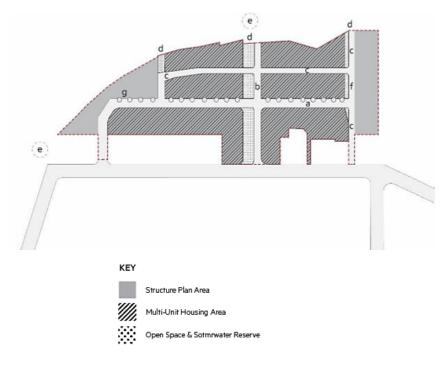


Fig.29 Roxburgh Crescent Structure Plan diagram.

Structure Plan content:

- a. Extension of Roxburgh Crescent (13m wide).
- b. East-west river connector (25m wide).
- c. New lane (8m wide).
- d. Public access to river corridor.
- e. Possible location for cultural interpretation.
- f. Stormwater management reserve.
- g. Indicative street trees.

Figure 1: Early version of Structure Plan from Urban Design Report dated 13 July 2021.

Subsequently, Francis Holdings Limited purchased a strip of land along the river corridor.

This acquisition widened the southern portion of the RRA and regularised the area's eastern boundary. Back-to-back lots became possible within the Structure Plan's rectangular block.

To facilitate these, a 13m wide street (now Local Street B) was substituted for the earlier lane. For the sake of spatial continuity and path legibility, the full length of the lane was upgraded, even though there was no change to the size or shape of RRA's northern area.

- In paragraph 52 of his evidence, Mr Thomas suggests that a lane could provide access to rear lots in the north-east portion of the RRA, i.e. the area served by the northern arm of Local Street B. If I understand the proposal correctly, Mr Thomas envisages a one-way loop connecting at each end with Roxburgh Crescent. Mr Thomas states that this 'may have better urban design qualities' than the shared rights-of-way indicated in FHL's Conceptual Plan.
- I do not regard a looped one-way lane as an appropriate outcome in this location. The route would make little if any contribution to the overall connectivity of the Structure Plan.

 Combined with a narrow cross-section, the loop's closed sightlines would reduce legibility and discourage casual use. Under these circumstances, I do not consider that the lane would be a meaningful extension of the public domain.
- 17 In my view, continuation of Local Street B is the preferred means for laying out the northeast portion of the RRA. In particular, I note:
 - (a) Continuity between the northern and southern arms of Local Street B contributes to the spatial integrity of the RRA.
 - (b) A street is unambiguously public and sends a clear message about freedom of access, 'address' and 'front-of-house' activities. Conversely, lanes can be communally owned and frequently express the private character of rear yards.
 - (c) As well as serving as a pathway, a street provides carparking and contributes to stormwater management. These ancillary functions are more difficult to accommodate on a lane.
 - (d) As a landscaped corridor, a street augments private open space especially within higher-density developments comprised of compact lots. Owing to its modest

- cross-section, a lane offers fewer opportunities for planting and makes less contribution to visual amenity.
- (e) As a 13m wide landscaped corridor, Local Street B mediates effectively between three-storey riverfront housing and two-storey dwellings elsewhere in the RRA. By comparison, a lane allows a more direct relationship between different scales and housing types.
- If a lane was to be considered for this area, I prefer the option set out in the earlier 2021 version of the Structure Plan. This structure plan option demonstrates that a well-designed lane could replace the northern arm of Local Street B, so long as:
 - (a) Connectivity is maintained by joining Roxburgh Crescent with Local Street B.
 - (b) Appropriate landscape and edge conditions ensure the lane appears to be an extension of the public domain. Provided the lane's trajectory is relatively simple, direct sightlines to adjoining streets would assist legibility and invite casual use.
- At the same time, owing to reduced width, a lane as set out in the earlier 2021 Structure

 Plan would increase land-use efficiency in the tapered portion of the RRA.
- Having regard to the benefits described in paragraph 17 associated with Local Street B, I remain of the view that this is the best option for the plan change area. However, so long as any lane was delivered as part of the development (not optional) and in the manner I note above, then, a lane could provide an alternative connection to the Northern Block.

Location of open space reserve

21 Mr Thomas seeks a more flexible approach to locating the RRA's central open space.

Specifically, he favours 'the possibility of locating the reserve on the north side of Road D as an alternative to the south' (paragraph 47). Mr Thomas also raises this issue in paragraph 55 of his evidence, where he states that alternate reserve locations could 'facilitate opportunities for medium-density development'. Ms Blagrove and Ms Devereux make a similar recommendation in paragraph 2.10 of their evidence.

- I support this recommendation. As the Structure Plan evolved, the reserve's location shifted from the north side of Road D to the south side. Figure 1 depicts the earlier arrangement. In my recollection, sun access was a decisive factor in the change. Adjoining housing is more likely to shade the reserve if the open space is located on the north side of Road D. However, sun access is a less critical issue for PCE than it was for earlier versions of the Structure Plan because these anticipated three-storey terrace houses along both sides of Road D. Given the proposed 9m height limit, I consider there is merit in allowing the reserve's exact location to be determined as part of a future subdivision layout.
- 23 If this is the case, two conditions should be met. First, the reserve should be co-located with public access to the river corridor. Second, there should be clear sightlines between Ruahine Street and the stop bank as well as spatial continuity between the two ends of Road D.

MAXIMUM LOT SIZE

- Mr Thomas seeks a maximum lot size of 600m² rather than 500m² as proposed (paragraph 32). He argues that this change will facilitate a broader variety of housing types and sizes within the RRA (paragraph 33). Similarly, Ms Blagrove and Ms Devereux state that an increased maximum 'enables greater typological flexibility' (paragraph 2.12) and provides 'greater diversity and typology opportunities' (paragraph 2.13). The two urban designers also state that a 500m² maximum lot size may preclude 'more adaptable typologies such as duplexes or multi-generational housing' (paragraph 2.11).
- Large lots are typically associated with free-standing houses. Semi-detached and fully attached dwellings are more compatible with narrow parcels of land i.e., smaller lots. Consequently, any increase in the number and / or size of large lots within the RRA must be accompanied by a reduction in opportunities for building semi-detached and fully attached housing.
- At the same time, traditional free-standing homes are not excluded from the RRA's potential housing mix. I consider that PCE presents no impediment to building generously scaled detached dwellings. At the proposed 45% site coverage, a 500m² lot can accommodate a 225m² detached single-storey dwelling. By comparison, a 600m² lot within the general

Residential Zone can accommodate – at most – a $210m^2$ footprint because maximum coverage is only 35%.

- These examples demonstrate that PCE provisions need to be considered together. In this case, increased coverage compensates for smaller parcels. PCE's more liberal Height in Relation to Boundary (HRTB) controls also expand the permitted building envelope and therefore increase options for the size and shape of individual dwellings.
- I note that PCE permits two dwellings on a 500m² lot thus enabling duplex housing to occur. For three or more units on a single parcel, a multi-unit residential development is possible.
- Ms Blagrove and Ms Devereux recommend keeping a 500m² maximum lot size within the Riverfront area where there is 'greatest opportunity for higher-intensity development' but allowing 600m² elsewhere (paragraphs 2.14 and 2.15).
- I agree that it is desirable to discourage large lots in the Riverfront area. Here, the restriction on lot size operates in combination with an 11m maximum building height and more permissive HRTB controls. These provisions incentivise building up rather than out on prime river frontage sites. I describe the benefits of this approach in my primary evidence (see paragraphs 87 and 97 to 101).
- I disagree with Ms Blagrove's and Ms Devereux' recommendation that a 600m² maximum lot size should apply outside the Riverfront area. In my primary evidence, I state that geometrically regular areas are more receptive to higher density (see paragraphs 60 and 61). The most regular part of the RRA is the rectangular block between the Roxburgh Crescent extension and Local Street B. In my view, this area offers the best prospect for delivering higher density. The Structure Plan's southern and western margins also contain regularly shaped areas that are receptive to smaller parcels. It is important to incentivise subdivision into small lots in all these locations rather than just within the Riverfront area.
- In paragraphs 70 to 74 of my primary evidence, I express the view that with one exception existing land parcels within the RRA can be subdivided into lots no larger than 500m². In other words, the geometry of the Structure Plan is receptive to this maximum. The

exception is a 1,050m2 (approx.) lot that lies outside the Frances Holdings Ltd (FHL) property.

- 33 Mr Thomas states that Plan Change I (PCI) will enable a significant increase in 'housing supply in the existing urban environment', and he points out that infill development within the new Medium Density Residential Zone (DRZ) will by its 'very nature' deliver 'small houses on small lots' (paragraph 36). Mr Thomas identifies a 'short term shortage of greenfield supply of residential land' (paragraph 34), which he associates with the supply of larger sections (paragraph 36). As a result, there is 'an evident shortage of larger sections in the urban area' (paragraph 37). Mr Thomas concludes that a maximum lot size of 600m2 is necessary within the RRA 'to respond to a gap in supply and increase the diversity of housing stock' (paragraph 39).
- I agree that many of the new dwellings enabled by PCI will be compact houses on small lots. However, I note that infill housing within MRZ will differ in character from the comprehensive residential development that will occur within the RRA. Infill housing typically comprises small numbers of dwellings in a context of older buildings and existing streetscape. In comparison, PCE delivers a total environment where a coordinated approach is taken to the design of public and private realms. In this sense, the compact dwellings on offer at Roxburgh Crescent will differ from those delivered by PCI. As a result, I do not agree that MDZ diminishes the need for small lots within the RRA.
- Taking the above factors into account (see paragraphs 24 to 34), I see no justification for increasing the maximum lot size to 600m². In my view, allowing 600m² lots would not add to the variety of dwelling types built within the RRA. On the contrary, the change could reduce development opportunities for semi-detached and fully attached dwellings because these housing types suit smaller lots.

STORMWATER MANAGMENT

In paragraph 18 of his evidence, Mr Thomas refers to my 'indicative plans for a range of dwellings on a 250m² lot'. These are depicted in Figure 2 of my primary evidence. Mr Thomas correctly states that I have not calculated the permeable area in these examples.

However, I did apply the 45% maximum building coverage standard. This means that 55% of

the lot $(137.5m^2)$ is available as a permeable surface. If a paved driveway $(6m \times 3.5m)$ and patio $(4m \times 4m)$ are excluded, the potential permeable area reduces to $100.5m^2$ i.e., 40% of the lot. This exceeds PCE's requirement for 30% permeable surfaces following a stormwater outlet upgrade. In the interim, the required 45% permeable surface can be achieved by constructing all or part of the driveway in permeable materials.

Earlier versions of the Structure Plan contained lots as small as 150m². The need to accommodate permeable surfaces prompted an increase in minimum lot size to 250m².

OPTIMAL URBAN DESIGN

- In paragraph 57 of his evidence, Mr Thomas states that I have placed 'considerable weight on [my] opinion that [I] have developed an optimal structure plan' (paragraph 57).
- I disagree with Mr Thomas's opinion that PCE embodies 'an optimal structure plan' or 'an optimal urban design scheme' (paragraph 57). In my view, an optimal design would have several features that are absent from the current proposal. These include:
 - (a) A central linear park extending from Ruahine Street to the river corridor.
 - (b) An additional street connection to Ruahine Street in the south of the RRA.
 - (c) Additional public access to the river corridor in the south of the RRA.
 - (d) Lot types and dwelling types matched to individual streets and open spaces.
 - (e) Lots as small as 150m2 in prime locations.
 - (f) Mid-block lanes providing vehicle access to most lots.
- Some of these features were removed from earlier versions of the Structure Plan to simplify implementation and avoid excessive variation among District Plan provisions. Other desirable features were never a realistic proposition because of existing ownership patterns and the difficulty of acquiring private property.

Under these circumstances, the proposed Structure Plan is 'optimal' only in the sense that it reconciles good urban design with multiple constraints and competing public and private interests. In my opinion, it is a pragmatic 'bare bones' structure plan, although the bones are good ones for intensive residential development and a range of housing types.

RECOMMENDATIONS

- I remain of the view that the level of detail in the Roxburgh Crescent Structure Plan is appropriate for the size of the RRA and the complexity of local context. This includes with regard to matters raised in submitter evidence regarding lot size and permeability requirements. However, further flexibility could be introduced in two ways:
 - 42.a.1 The central open space reserve could be located either north or south of Local Road D; and
 - 42.a.2 Although for the reasons I have explained I consider it preferable to retain Local Street B as proposed, the northern arm of this street could be replaced by a well-designed lane if considered necessary.

Christopher Murray McDonald

Associate Director, McIndoe Urban Ltd, 16 May 2025