

Ref: 16161-r1v1

8 June 2016

## Proposed 8-lot subdivision at 409 The Drive, Whangamata Traffic Assessment

### 1. Introduction

The purpose of this report is to provide a traffic assessment of a proposal for an 8-lot residential subdivision of a property at 409 The Drive, Whangamata. The resource consent application for the proposed subdivision was lodged with the Thames Coromandel District Council on 15 April 2016.

In particular, this assessment responds to a section 92 request from the Council for further information, dated 6 May 2016, and in particular the following:

- 1. The applicant proposes to form a 5.5m concrete right of way (Access Lot 9 and right of way), serving 7 lots and accessing the Drive. Please provide a traffic assessment from a suitably qualified professional. This assessment should examine the appropriateness of the access lot to serve the proposed development along with an examination of any potential traffic safety issues that may arise at the interface of the access lot with The Drive. Where traffic safety issues are identified the assessment should specify detailed measures to avoid, remedy or mitigate those effects.*

*The assessment should also provide a basic design of the intersection, which demonstrates the following:*

- Road marking;*
- Lighting;*
- Adequate sight lines;*
- Road widening.*

In assessing the proposed access arrangements in terms of the District Plan requirements and standards, the Council's Senior Policy Planner has advised that the provisions of both the Operative and Proposed District Plans need to be considered, with the most onerous provisions needing to be complied with.

### 2. The proposal

**Figure 1** shows the location of the proposed subdivision. It is located in the south western part of Whangamata, and is accessed from SH25 via Hilton Drive and The Drive.

**Figure 2** shows the proposed subdivision, which is to be accessed via an existing driveway off the turning head that is provided at the end of The Drive. The road does however continue on to form Estuary View, which serves another new small subdivision.

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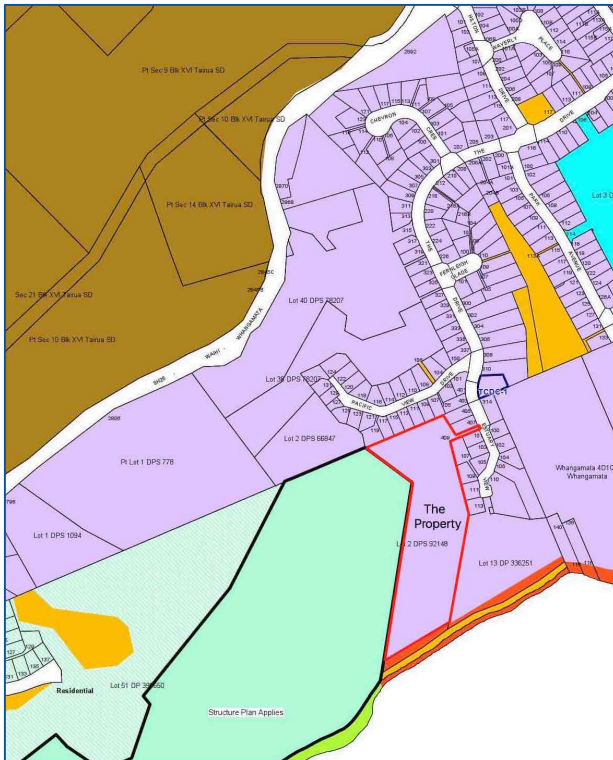


Figure 1  
Site location

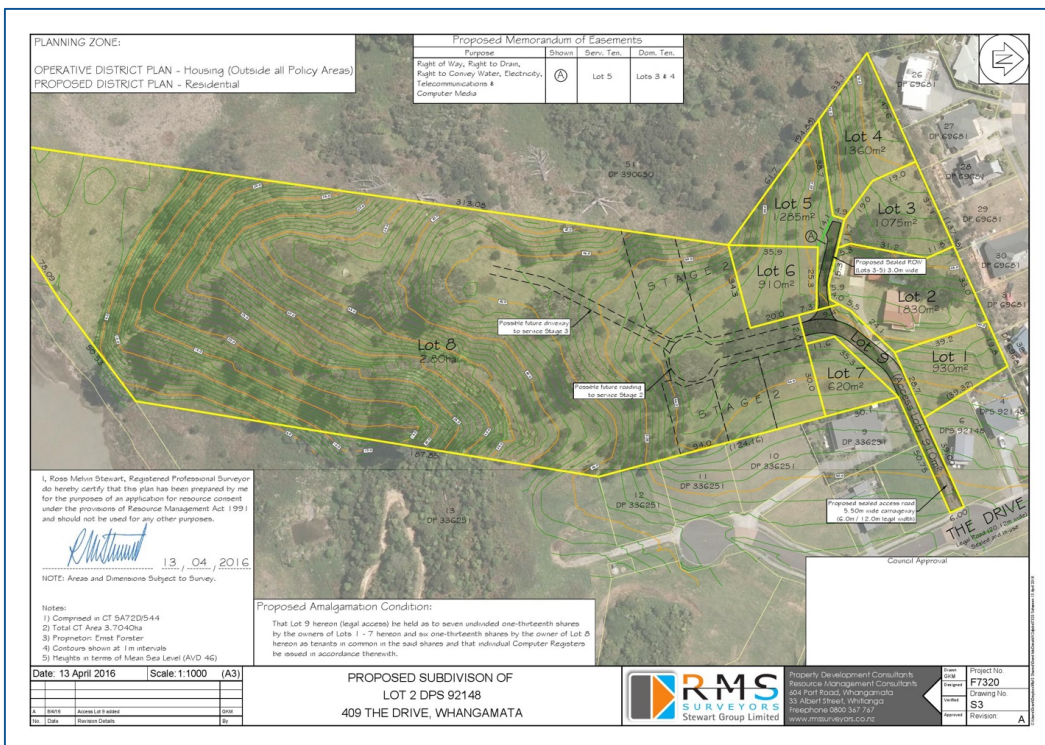


Figure 2  
Proposed development and layout on Lot 2

The traffic environment on The Drive is shown in [Figure 3](#), and the existing driveway access to the property is shown in [Figure 4](#).



Figure 3  
The Drive looking south to the Estuary View extension, with subject property access on the right

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Figure 4  
Existing property access from The Drive

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### 3. Access assessment

The proposed subdivision is to be served by a driveway which has a carriageway width of 5.5m, a legal width of 6m for the first 60m or so from The Drive, and a legal width of 12m thereafter.

In terms of the Operative District Plan, [Section 7](#) sets out the rules applicable to subdivision, including [Rule 702.2.5 Private Ways](#) which states the following:

1. *Maximum number of lots served - there is no limit to the number of lots which may be served by a private way, provided that where more than the specified number of lots to be served as set out in the subdivision standards for the respective zones (see Sections 710-750), the road design and construction standards in Section 473.6 and 473.7 shall apply. The private way shall take on the classification of "local road" for the purpose of applying these standards.*

[Section 710 Housing Zone](#) includes [Rule 712 Standards](#) as follows:

*The following requirements apply to lots created by subdivision under the foregoing rules:*

**.1 [Access to individual lots](#)**

- 1.1 maximum gradient – 1 in 4;
- 1.2 geometric and construction standards – in accordance with the Council's Engineering Code.

**.2 [Private ways serving up to four lots](#)**

- 2.1 minimum legal width – 6m;
- 2.2 minimum carriageway width – 3.5m;
- 2.3 maximum gradient – 1 in 5;
- 2.4 passing bays – 1 per 100m or bend;
- 2.5 geometric and construction standards – in accordance with the Council's Engineering Code.

**.3 [Private ways serving more than four lots](#)**

*Section 473.6 (Road Design Standards) and Section 473.7 (Road Construction Standards) shall apply. (Refer 703.6).*

For the proposed 8-lot subdivision, [rule .3](#) above applies, requiring the private way to be designed to meet the standards of [Section 473.6](#) and [Section 473.7](#).

In [Section 473.6 Road Design Standards, Terms and Conditions, Table 1 Urban Rooding Standards](#) requires a 5.5m carriageway within a minimum legal width of 12m for residential cul-de-sacs carrying less than 100 vehicle movements per day (vpd). Based on the trip rate of 5 vpd/household unit as defined in [Table 1](#), this is equivalent to 20 household units. The subdivision access as proposed is able to meet the standard in terms of the required carriageway width (5.5m), but is unable to provide the 12m legal road width over the first 60m from The Drive. The effects of this are discussed below.

In terms of the Proposed District Plan, [Rule 39.2 Permitted Activities](#) includes [Rule 4 Internal access, private way](#) as follows:

1. *An internal access, private way is a **permitted activity** provided it meets the standards in Table 1 or Table 2.*
2. *An internal access, private way that is not permitted under Rule 4 is a **restricted discretionary activity**.*
3. *The Council restricts its discretion to matters 1, 6, 7 and 8 in Table 7 at the end of Section 39.*

In Residential areas, [Table 1](#) requires the following:

<b>Table 1 - Internal access, Private way Design Standards for Residential, Commercial and Industrial Areas</b>					
Area served	Max/Min Grade	Min legal width	Traffic lane	TOTAL	Passing bays
1-4 lots or dwellings	20% max 0.5% min	3.3 m	2.7 m	2.7 m	Passing bays must be provided at maximum 100 m intervals or on bends, whichever is the lesser distance.
5-8 lots or dwellings	16.7% max 0.5% min	6m	2.7 m with passing bays	2.7- 5.0 m	Passing bays must be provided at maximum 100 m intervals or on bends, whichever is the lesser distance.

For the proposed 8-lot subdivision, the access as proposed is able to meet this standard in terms of both the minimum legal width (6m) and the required carriageway width (2.7m with passing bays or 5.0m total width). The maximum gradient of 1-in-6 is also able to be achieved. In terms of the Proposed District Plan, the proposed access would therefore be considered to be a Permitted Activity.

In considering the proposal in the context of both the Operative and Proposed District Plans, the minimum required carriageway width can be provided, either as a single carriageway (2.7-3.5m wide) with passing bays, or as a two-way carriageway (5.0-5.5m wide). The only substantial difference relates to the legal width that can be provided to accommodate that carriageway, so from an actual operational point of view, the proposed private way must be considered to be acceptable. Within a width of 6m which presumably will have fences along the boundaries, a carriageway width of 5.4m would be the practical maximum to enable a minimum of 300mm clearance on either side.

**Table 7** in the Proposed District Plan (referred to in **Rule 4.3** above) provides a series of restricted discretionary activity assessment criteria appropriate for situations which do not comply with **Table 1** above. Whilst the proposed driveway does comply, the assessment criteria are considered to be helpful and appropriate in the context of the non-compliance with the Operative District Plan. The most relevant are as follows:

**6. Internal access, private way**

- a) *Whether the internal access or private way allows for access by double axle trucks including emergency vehicles if the lot or activity is more than 50m away from the road.*

The private way is more than 50m long, with the first 60m having a legal width of 6m. However, the proposed driveway will be able to accommodate the required vehicles without difficulty, with the turning head at the end of The Drive providing sufficient space to accommodate all vehicle tracking. The proposal is therefore considered to meet this criterion.

- b) *Whether other techniques proposed, such as passing bays, speed humps or corners, would allow for reduced access widths and/or increased access length while maintaining safety and convenience.*

With a carriageway width of 5.4m, passing bays will not be required. Speed humps could be introduced if speed (particularly exiting vehicles down the driveway) proves to be an issue, but this will be a matter of on-site management if required. The driveway can operate safely to accommodate both vehicles and pedestrians as a “shared space”, with good visibility along the driveway. Again, the proposal is considered to meet this criterion.

*c) Whether the distance to the lots is such that the standard access width is not necessary.*

The proposed width of the carriageway meets the standard, and the distance is not directly relevant.

*d) Whether the physical nature of the site would make providing the internal access or private way to the required dimensions and formation inappropriate or impractical.*

The legal width of the access is restricted to 6m, but the proposed carriageway is sufficient to enable the access to operate safely and efficiently. It is not physically possible to provide any further widening.

*e) Outside of the Rural Area, whether lighting and pedestrian access should be provided.*

As seen in **Figure 3**, street lighting has been provided on The Drive and Estuary View, appropriate for their use and residential environment. Pedestrian footpaths are provided along both sides of The Drive and Estuary View, although these do not continue around the entire turning head (reason unknown), and pedestrians have to walk onto the carriageway. It is recommended that consideration be given to providing a footpath extension across the subject driveway so that any potential conflict is minimised between passing pedestrians and entering/exiting vehicles, as it is for other existing driveways. Once on the internal driveway, it is considered that the mix of vehicles and pedestrians will be acceptable, and will occur without undue conflict.

#### **4. Conclusion**

Whilst the proposed subdivision access does not comply with the requirements of the Operative District Plan in terms of the legal width of the first 60m of the private way, it does comply with the requirements of the Proposed District Plan. In both cases, the proposed carriageway width of 5.5m does comply, and will enable safe and efficient access to the proposed 8-lot subdivision.

It is recommended that consideration be given to providing a footpath extension across the subject driveway at its intersection with The Drive, otherwise it is considered that no changes to the existing turning head (including road markings) are necessary.

Overall, the proposal is considered to be acceptable from a transportation point of view.



John Burgess  
Director