

Selwyn District Plan - Transport Components

Street design and footpaths

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1. Introduction

This Technical Note outlines the findings of a review of the initial draft Selwyn District Plan provisions for street design and footpath provision. This includes the rule, requirements and matters of discretion. The review has considered the preferred options developed in the District Plan Transport Baseline Review (Abley, 2018), and how this has been translated into the draft provisions. It also considers a subsequent technical note that discussed potential footpath rule content (Abley, 2019).

A Workshop was held with Council staff on 15 August 2019 to discuss transport issues including footpaths, however no conclusions were reached on the best way forward.

This Technical Note is structured as follows:

1. Introduction
2. Baseline Review and supplementary advice
3. Draft Provisions
 - 3.1. Draft Policies
 - 3.2. Draft Rule
 - 3.3. Draft Matters for Discretion
4. Recommendations

2. Baseline review and supplementary advice

Baseline review

The Abley District Plan Transport Baseline Review (DW009 - Transport, 2018) reviewed rules around the country and developed several options for road design and footpath provision. Extracts from the Baseline Report describing the options is included below in italic text.

Road design

The focus of the review are local roads as SDC staff have raised issues with the 'narrow street' concept that was introduced as part of PC12. These issues also include concerns from residents who live on narrow streets. Often they purchased the site without the street design being made clear to them. There do not appear to be any issues with the higher classification road design standards and they are generally consistent with other Plans.

There have been problems with the 'local-minor' street standards (minimum width of 10m). Skye Lane in Prebbleton is one example, as shown in Figure 9.3, that did not meet the intent of the narrow width allowable for a 'local-minor' street. The standards anticipated these streets would be provided as 'shared space' type roads or used as access to higher

density developments such as rear accessways. This ability to use a narrower street was introduced in PC12 in response to concerns by developers that further restrictions on the use of private rights of way prevented them from providing effective access to some areas that were difficult to provide access to. However, developers also want to be able to serve higher density developments with service lanes.

In particular the absence of good design (creating a low speed, safe, high amenity space that allows for anticipated servicing and parking requirements) has resulted in following adverse effects:

- blocking of the carriageway by parked vehicles,
- parking on the footpath and berms,
- poor amenity as road and path are hard surfaces with no landscaping to break up the long stretch of asphalt
- access constraints for refuse collection and emergency vehicles.

.....It was anticipated that the District Plan rules would be applied in conjunction with the Subdivision Design Guide typologies for narrow streets, however this has not occurred. There is also robust guidance for street design contained within the ECoP which is not being referred to at subdivision stage. Cross-sectional detail of roading design is also routinely lacking.

If this existing guidance was more clearly linked to or became part of the District Plan, applicants would have clear guidance at the start of the development process and the design would be better addressed and any issues captured early.

On balance, it is considered best practice to allow for flexibility and a range of road reserve and carriageway widths. However, the allowance of narrow streets without specific design guidance or controls to ensure specific outcomes is not recommended. The following section outlines some possible methods to address this.

- Option 1 - Status Quo - Local Minor road reserve width min 10m max 12m
- Option 2 - Increase the permitted minimum road reserve and carriageway widths for the local intermediate and minor road classifications - proposals for narrower roads would be subject to resource consent with clear matters of assessment
- Option 3 - Retain the current road reserve and carriageway widths for local intermediate and minor roads but introduce controls (notes to the road design table), that apply to those widths for them to be allowable

Option 2 is the recommended option. This will require the linkage to or transfer of some material from the Subdivision Design Guide and the ECoP to the Plan to ensure the desired outcomes are clear and can be assessed from a statutory perspective.

The assessment matters will be important and should include both amenity and operational aspects, such as outlining the proposed waste collection provisions, and meeting anticipated on-street parking demand (higher in medium density than low density). The matters need to be developed with consideration of the ECoP objectives and Subdivision Design Guide so there is consistency.

It is recommended that further discussion and analysis is required to agree the increased minimum permitted widths for local intermediate and minor roads, and to determine the assessment matters. This would involve representation from the various units of council who have a stake in the road design outcomes.

SDC subsequently removed the Local Immediate and Minor road types and replaced them with a Local Road type in the draft proposed plan.

Footpaths

The Transport Baseline Review reviewed other Plans and concluded current best practice is to require the provision of footpaths on both sides of all local streets (except in rural residential subdivisions). But with exemptions for certain circumstances where a footpath on only one side would not be detrimental to the walking network or the width of road compromises the ability to meet desired amenity outcomes.

Two options were developed (in addition to Option 1 - Status Quo):

- Option 2 - Require two sided footpaths on all local streets (assuming the existing street widths for local minor and intermediate are increased), but allow for one-sided subject to resource consent where walking outcomes are not compromised. (Note this is the Christchurch District Plan method.)

- *Option 3 - Require two sided footpaths on all 'local major' streets, one side on local intermediate and minor streets except in some situations.*

At the time of writing the Baseline report Option 2 was the preferred option. However it was recognised that given the interdependency with the street design issue and the permitted road width, further discussions should be held as part of the next phase of the review to discuss both these matters, with representation from the various units of council who have a stake in the outcomes.

We understand that Option 3 is the option preferred by SDC Asset Management team.

Technical Note - Road standards footpath review (24 April 2019 for discussion)

SDC commissioned Abley to review the proposed District Plan road standards with respect to local road footpath requirements. A draft Technical Note was issued on 24 April 2019 for discussion only.

The Technical Note outlined that through the Baseline Review it had already been agreed that Local - Major Roads should have footpaths on both sides. Due to the issues with implementation of Local – Minor roads, the Local - Intermediate and Minor road types have been merged into one type (Local) and the minimum and maximums of the current Local Intermediate type will apply. The proposal is to require footpaths on one side only with some exceptions for locations where two sided is a more appropriate level of service, e.g. near schools.

The question that this review sought to answer was the appropriateness of footpaths on one side of Local roads.

The specific requirements for the Large Lot Residential Zone at Rolleston and Living 2 zone that are included in the District Plan were excluded from the review as these were developed under a separate process that Abley were not involved in.

Best practice design guidance and other District Plans indicate that footpaths should be provided on both sides of local roads in townships. This needs to be balanced with the road reserve space available to provide other features that contribute to the walking experience. The current proposal to increase the minimum footpath width to 1.8m (as recommended in a review by Abley of the ECOP) may impact what can be provided on a street.

The proposal to require a footpath on one side of Local roads only in the DP road standards requires exemptions/conditions that are clearly linked to wider walking network outcomes. The recommended conditions where two sided footpaths are required were outlined below for discussion.

- iv. *A footpath shall be provided on both sides of a local minor road in locations where:*
 - a. *Where an ODP has identified the local minor road is a key walking connection*
 - b. *There is a suburban commercial/activity centre, school, preschool or retirement village on the road or within one block of the road*
 - c. *The adjacent land is medium density*

3. Draft provisions

The relevant draft provisions include:

- Policy TRANS-P1 and SUB-P2
- Rule TRANS-R9 and SUB-R
- Matters for discretion SUB-MAT8 (None are proposed in Draft Transport Provisions for road design and footpaths)

3.1 Draft policies

Policy TRANS-P1 - Road classifications and network hierarchy

The safe and efficient establishment, operation, renewal and improvement of the district's land transport infrastructure and the strategic transport network is enabled through integrated land use, subdivision and transport planning that:

1. *Manages the levels of service, formation standards and the types of land transport infrastructure, including through road classifications;*
2. *Establishes land transport infrastructure that is consistent with the form, function, amenity and character of each Zone;*
3. *Ensures there is enough space within land transport infrastructure, land transport corridors and the strategic transport network to support the efficient and effective operation of utilities;*
4. *Provides for the safe and efficient movement and operation of emergency services;*
5. *Ensures the safe, efficient and effective operation of land transport infrastructure and the strategic transport network, including road, rail and freight networks; and*
6. *Recognises and responds to cross-boundary connections with adjoining districts.*

Discussion:

This policy is considered to be appropriate for higher classification roads and does not require amendment. The *form, function, amenity and character* consistency requirement for the relevant zone, although not explicitly stated, would cover the aspects raised in the Baseline Review for lower classification roads.

Policy SUB-P2 Ensure that every site created by subdivision has safe and efficient access for motorists, pedestrians and cyclists, consistent with that required for the intended use of the site.

Discussion:

This policy is related to sites created by subdivision not streets within the subdivision. There does not appear to be a policy directly related to street design. It is understood that TRANS-P1 is the relevant policy.

3.2 Draft rule

The Transport Chapter draft rule for new roads is outlined below. The Subdivision chapter refers to the Transport Rule for new roads. Any recommended changes to the draft rule are in red text.

TRAN-R9 -Roads

TRAN-R9.1. Any works to establish a new road.

In applying [TRAN-R9.4](#) and the requirements listed below, road controlling authorities do not need to comply with the design requirements listed in [APP X - Table 5](#).

Where:

- The road is to be vested in the road controlling authority.

Where this activity complies with the following rule requirements:

[TRAN-REQ1](#) location of works

[TRAN-REQ26](#) road formation

[TRAN-REQ27](#) intersection spacing

[SUB-REQ6](#) subdivision access

Table 1: Activity status where compliance is not achieved:

TRAN-R9.2. Where compliance with any of [TRAN-R9.4.a](#) is not achieved: DIS.

When compliance with any rule requirement is not achieved: Refer to Table 3.

Appendix X - Road formation and operational standards - Table 5

Road Type	Legal width (m)		Carriageway width (m)		Traffic lanes	Parking lanes	Specific provision for cycles (on road or off road)	Pedestrian Provision
	Min.	Max.	Min.	Max.	Min. No.	Min. No.		Minimum
Local Roads – Residential								
Local – Large lot residential zone	18	20	6	6.5	2	NA	NA	One side
Local - Major	16	20	8.5	9	2	1	Optional	Both sides
Local	13	15	7	8	2	1	NA	One side except where required by REQ26.4

Advisory notes:

- The ECoP19 includes more detail and the design requirements of roads and cycle/pedestrian accessways.

TRAN-REQ26.1. Footpaths are to be formed on both sides of Local Roads in locations where:

- a. ~~The road has been shown on an ODP, has identified the Local Road as a primary walking connection and/or;~~
- b. ~~there is a Neighbourhood centre zone, Local centre zone or KAC Overlay, school, pre-school or retirement village on the road or within one block of the road; and/or~~
- c. ~~the adjacent land contains medium density housing~~ **Small Site Development and Comprehensive Development.**

Discussion

The requirement REQ26.1 above for footpaths has been amended from that recommend in the earlier (shown in red and strike through text) and explained below.

Draft requirement (a) for footpaths on both side of roads shown as key walking routes on an Outline Development Plan has been amended to reflect the fact that ODPs only show the key roads, not all roads. It is reasonable to assume that key roads are part of the walking movement network. If the local roads shown on the ODP are not classified as a Local Major Road (where footpaths are required on both sides) then this requirement will ensure these roads are captured (i.e. footpaths shall be formed on both sides).

Draft requirement (b) was intended to capture roads that were in close proximity to an activity that generates high pedestrian volumes, such as a school site. This requirement could be difficult to assess and given the ODP process will account for land uses within the subdivision this requirement has been removed. If a high pedestrian generating activity is established on a Local Road after the Subdivision consent has been granted the issue of appropriate level of footpath provision will require consideration outside of the requirement above.

Draft requirement (c) has been amended to reflect that there will be no medium density housing, however this requirement can be applied to Small Site Development and Comprehensive Development.

3.3 Matters for discretion

The matters of discretion related to roads in subdivisions are shown below with recommended changes to reflect the findings of the Baseline Report. There are no Transport Matters for Discretion for new roads. Any recommended changes to the draft Matters are in red text.

The additional considerations are intended for situations when the design submitted does not meet the requirements in Table 5. An example is if a local road width is below the maximum required but this offers a good transport and urban design outcome, these matters allow SDC to ensure that the issues raised in the Baseline Review are considered.

SUB-MAT8 – Movement Networks

All zones

1. The layout and formation of all existing and proposed land transport infrastructure, including:
 - a) Ensuring the desired design speed is achieved with respect to the classification of roads (including the subsets of Local Roads) and the surrounding environment
 - b) Whether the roading pattern utilises opportunities to connect streets. Cul-de-sacs, except those that are short and straight and connected with pedestrian and cycle through routes, should be avoided.
 - c) Whether the existing and proposed land transport infrastructure is sufficient to accommodate the anticipated vehicle movements associated with the likely use of the land
 - d) The extent to which road designs make a positive contribution to the amenity of the neighbourhood **and meet the operational requirements of the street, such as waste collection, on-street parking and emergency services access.**
 - e) Whether the subdivision layout and road network supports walking, cycling and public transport, including access to reserves, facilities, commercial areas, and public transport facilities.
 - f) Whether service lanes, cycle ways, shared accessways and pedestrian access ways are required or appropriate and are located and designed in a safe and efficient manner.
 - g) The provision of footpaths, lighting and street furniture.

Residential Zones, Commercial and Mixed Use Zones, General Industrial Zone, Knowledge Zone, Port Zone

2. Any landscaping and tree planting required in the road reserve and its contribution to amenity values and the recreational and environmental attributes of the street
3. The degree to which pedestrian and cycle access may be enhanced through the provision of cycleways and footpaths **that are located and designed to meet best practice.**
4. The degree to which Crime Prevention Through Environmental Design principles have been incorporated into the subdivision design.
5. Where any shared accessway will access any existing or proposed road, whether the existing and proposed land transport infrastructure is sufficient to accommodate on-street parking.
6. The design of accessways serving four or more sites with respect to the creation of an open street environment and whether sites have sufficient frontage to such accessways.

4. Recommendations

It is recommended that the draft Transport and Subdivision provisions are amended to reflect the findings of this Technical Note, specifically:

1. **Policies** – No change required.
2. **Rules** – Amend TRANS-R9 as outlined in Section 3.2.
3. **Matters for discretion** – Amend the matters as outlined in Section 3.3.

It is recommended that the SDC Subdivision Guide is updated to reflect the revised rules and illustrate the design aspects outlined in the matters of discretion.

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