31/03/2022

WST22/00031 | SF2022/045828

The Manager
Resource and Energy Assessments
Department of Planning, Industry and Environment
GPO Box 39
Sydney NSW 2001

Attention: Sheelagh Laguna

Dear Ms Laguna

SSD-10096818: Buronga Landfill Expansion

Thank you for referring SSD-10096818 for the Buronga Landfill Expansion via the Major Projects Portal pursuant to clause 2.121 of the *State Environmental Planning Policy (Transport and Infrastructure) 2021* and section 138(2) of the *Roads Act 1993,* to Transport for New South Wales (TfNSW).

TfNSW understand that the development involves:

- upgrade to the existing recycling infrastructure to provide a dedicated recycling facility, community resource recovery area and bulking up areas to improve recycling rates and economics of recycling
- constructing new landfill cells to the north of the existing landfill area, increasing the landfill footprint from 19 ha to approximately 40 ha. The expansion is proposed to be undertaken in eleven stages with each stage providing 3-5 landfill cells
- increasing maximum waste volumes from 30,000 tonnes per annum to 100,000 tonnes per annum over the longer term.

TfNSW have reviewed the submitted Traffic Impact Assessment (TIA) and the supporting EIS.

Pursuant to clause 2.121 of the *State Environmental Planning Policy (Transport and Infrastructure) 2021* TfNSW provides the following advice for your consideration:

- TfNSW supports the assessment for the proposed Rural Basic Right (BAR) turn and a Rural Basic Left (BAL) turn treatments in accordance with *Figure 3.25: Warrants for turn treatments on major roads at unsignalised intersections* at the site intersection with Arumpo Road as per the TIA.
- It is noted that Arumpo Road is a road train approved route and the design of the intersection to the site has stipulated B-double as the design vehicle within the swept path analysis. The intersection treatments need to be designed to allow for the through movements of the AB-triple road train, demonstrated in a swept path analysis.
- The intersection treatments of a BAR/BAL proposed at the Arumpo Road/site access are proposed to be delayed until the Buronga Landfill reaches its expanded capacity, which is assumed to be the peak traffic generation of 261 vehicles per day during construction plus operation. Given the deficiency in the existing width of the seal, the current road train access on Arumpo Road and the present turning volumes warranting a BAR/BAL at the intersection, it is recommended that the completion of the BAR/BAL intersection treatment

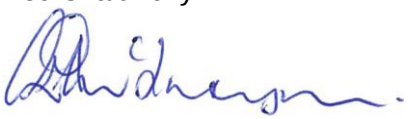
occurs prior to the commencement of the construction work associated with the Buronga Landfill Expansion.
- The facility is to be limited to waste volumes of 100,000 tonnes per annum.

TfNSW provides the following requirements that will be subject to a future concurrence as a part of a section 138 *Roads Act* application to the Roads Authority (Wentworth Shire Council):

- The proposed intersection treatments and access to the site are required to comply with the Safe Intersection Sight Distance in accordance with *Austroads Guide to Road Design.*
- A Rural Basic Left (BAL see figure 8.2 within Attachment 1) and a Rural Basic Right (BAR see figure A6 with Attachment 2) turn treatments are required to be constructed at the intersection of Arumpo Road and the site access prior to the commencement of construction works associated with this project. The intersection treatments are to be designed in accordance with *Austroads Guide to Road Design*.
- A swept path analysis is to accompany the section 138 *Roads Act* application to Wentworth Shire Council and demonstrate that the B-double design vehicle can ingress and egress within the correct lane to and from Arumpo Road and include swept path analysis identifying how the AB-triple road trains will be able to simultaneously pass within the passing lane.
- Any ancillary aspects such as road signage, utilities or vegetation are to be identified within the scope of works for the intersection treatments.

If you wish to discuss this matter further, please contact Alexandra Power on 02 6861 1428 or email development.western@transport.nsw.gov.au.

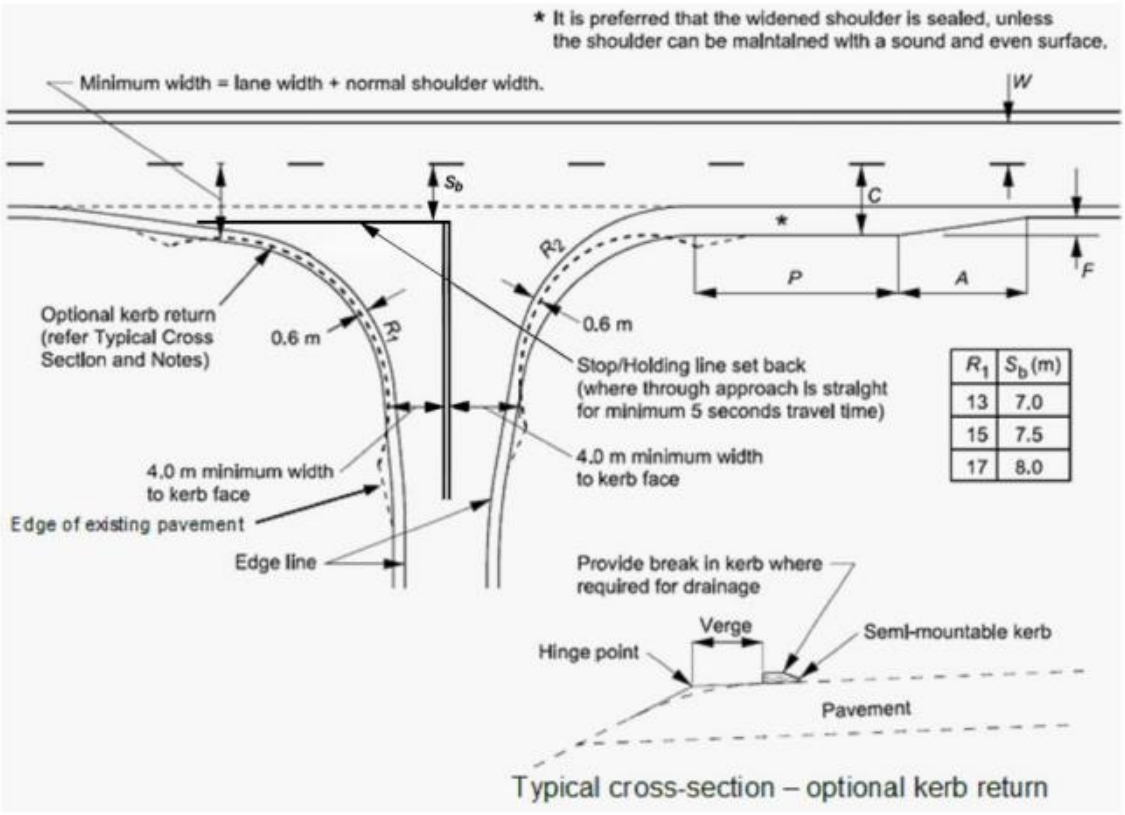
Yours faithfully



Andrew McIntyre
Manager Development Services West
Regional and Outer Metropolitan

Attachment 1

Figure 8.2: Rural basic left-turn treatment (BAL)



R_1	S_b (m)
13	7.0
15	7.5
17	8.0

Notes:

- *R_1 and R_2 are determined by the swept path of the design vehicle.*
- *The dimensions of the treatment are defined thus:*

  W = *Nominal through lane width (m) (including widening for curves).*

  C = *On straights – 6.0 m minimum.*
  On curves – 6.0 m plus curve widening (based on widening for the design turning vehicle plus widening for the design through vehicle).

  $A = \frac{0.5VF}{3.6}$

  V = *Design speed of major road approach (km/h).*

  F = *Formation/carriageway widening (m).*

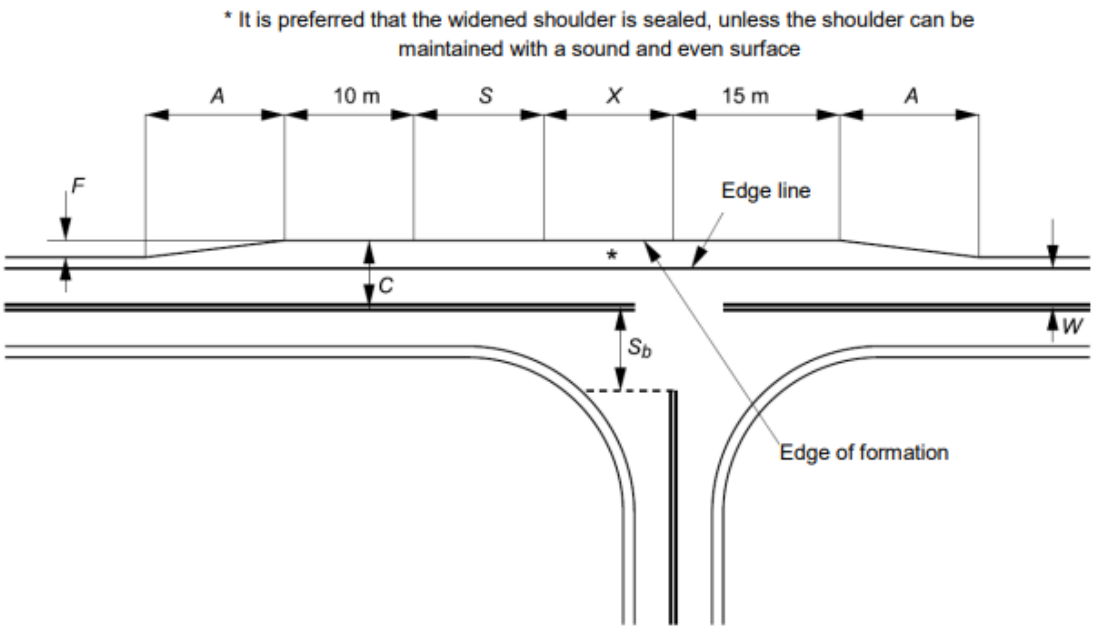
  P = *Minimum length of parallel widened shoulder (Table 8.1).*

  S_b = *Setback distance between the centre of the major road and the give way or stop line in the minor road.*

Source: Department of Main Roads (2006)[35].

Attachment 2

Figure A 6: Basic right (BAR) turn treatment on a two-lane rural road



Notes:

This treatment applies to the right turn from a major road to a minor road.

The dimensions of the treatment are:

- W = Nominal through lane width (m) (including widening for curves). Width to be continuous through the intersection.
- C = On straights –6.5 m minimum
  7.0 m minimum for Type 1 & Type 2 road trains
  On curves – widths as above + curve widening (based on widening for the design turning vehicle plus widening for the design through vehicle)
- A = $\frac{0.5VF}{3.6}$
  Increase length A on tighter curves (e.g. those with a side friction demand greater than the maximum desirable). Where the design through vehicle is larger than or equal to a 19 m semi-trailer the minimum speed used to calculate A is 80 km/h
- V = Design speed of major road approach (km/h)
- F = Formation/carriageway widening (m)
- S = Storage length to cater for one design turning vehicle (m) (minimum length 12.5 m)
- X = Distance based on design vehicle turning path, typically 10–15 m

Source: Department of Main Roads (2006)[12].