

# **BERRIGAN SHIRE COUNCIL**

## **TOCUMWAL PEDESTRIAN ACCESS AND MOBILITY PLAN**



**Des Gunn Landscape Design/ Berrigan Shire Council**

Adopted 16th July, 2014

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## **1. Introduction**

Pedestrian Access and Mobility Plans were initially prepared for all towns within Berrigan Shire by Des Gunn Landscaping Pty Ltd and adopted by Council in 2006.

This review is based on the original plan and incorporates accomplishments since its adoption in 2006.

The review also incorporates requirements of legislation and other Council adopted documents that have changed during the intervening period.

It has also been expanded to consider issues and infrastructure related to recreational walking/cycling paths and trails that sit outside the scope of the accepted PAMPS format.

### **1.1 Study Objectives**

#### **1.1.2 State Objectives**

The Pedestrian Safety Action Plan 2002-2004 sets out the New South Wales (NSW) State Government Policy context for the current study. That policy has the following objectives:

- Encourage safe behaviour by pedestrians, and by motorists and other road users around pedestrians.
- Raise the priority given to pedestrians on the road network.
- Provide appropriate road facilities to improve pedestrian safety especially for the aged, children and people with disabilities.
- Increase the 'pedestrian friendliness' of vehicles on New South Wales roads.
- Improve the planning and implementation of local pedestrian safety initiatives across the community.

#### **1.1.2 Local Objectives**

In addition to ensuring that this plan achieves the outcomes required by Roads and Maritime Services *Local Government Pedestrian Facilities Program* namely:

1. Improved community satisfaction with pedestrian facilities.
2. Improved and expanded opportunities to cross roads conveniently and safely.
3. Improved personal mobility for all pedestrians.

This review of the Tocumwal Township *Pedestrian Access and Mobility Plan* (PAMP) contributes to the following Berrigan Shire Council strategic planning outcomes and Delivery Program objectives.

<b>Plan</b>	<b>Outcome</b>	<b>Objective / Action</b>
<i>Berrigan Shire 2023</i>	Sustainable natural and built landscapes	
<i>Delivery Program 2013 - 2017</i>	Connect and protect our communities	Coordinate flood levee, Council road network and stormwater asset management and planning
<i>Ageing and Liveability Strategy Action Plan 2013 – 2017</i>	Age friendly pedestrian access in and between open space, public buildings and retail centres	Extend and upgrade pedestrian access to open space, public buildings and retail centres

The review and development of this plan will also achieve a number of specific objectives:

- To undertake a strategic review of footpath/shared networks within the township area.
- To review the condition of key pedestrian infrastructure, particularly kerb ramps, crossings and key paths.
- To identify improvements required to bring pedestrian/shared facilities to current Roads and Maritime Services standards.
- To develop a Pedestrian Access and Mobility Plan which promotes a safe and ageing friendly network of pedestrian routes linking the major public facilities and attractions.
- To provide pedestrian facilities which cater for the needs of all pedestrians including people with disabilities, children, seniors, commuters, club patrons and recreational walkers.
- To provide shared facilities that cater for recreational walkers, joggers and cyclists to a standard that allows safe operation at the anticipated usage levels.
- To ensure that pedestrian facilities are provided in a consistent manner throughout the Shire based on New South Wales standards of best practice.
- To prioritise pedestrian improvement works by means of a costed and staged works schedule.

## **1.2 Methodology**

The original study was undertaken in the following sequence of steps:

- Define project objectives.
- Review existing conditions. Map key attractors and generators of pedestrian traffic. Undertake detailed audit of existing pedestrian facilities, with photographs and preliminary works recommendations.
- Consult with Shire officers on preliminary findings.
- Identify priority routes based on analysis of existing conditions and discussions with Shire officers.
- Map priority routes.
- Identify global list of works. Review with Shire officers.
- Develop criteria, prioritise and cost global list of works.
- Map proposed works.

The review followed a similar sequence with attractors and generators being updated and a new audit being carried out to record improvements carried out to the path network since the original audit.

As the review was carried out internally it involved staff working groups to help determine priorities for future works and develop the mapping.

The review also involved public consultation in the form of a street stall meeting where members of the public could discuss both the functionality of works completed since the original plan and the proposals and priorities for future works.

This plan does not go past the prioritisation of works to the development of a works program as the works program needs to be considered as part of the overall Council financial plan. The programming of works is done via the asset management process and the development of the Roads, Bridges, Footpaths, Kerb and Guttering Asset Management Plan and the preparation of the Council delivery program.

## **1.3 How to read this report**

Appendix 1, Site photographs and comments, underpins all the analysis and recommendations contained in this report. Reviewing this document first will give the reader a feel for the range of issues relevant to pedestrian infrastructure in Tocumwal. Together with Plan 1, Existing Conditions, and Section 2 of this report, Appendix 1 provides an overview of existing paths, crossing points, pedestrian desire lines, and settlement pattern as well as an indication of improvements accomplished since the original plan.

Section 3 defines key pedestrian/shared routes through and around the town, and provides a discussion of the basis for assigning priority to those routes.

Section 4 discusses proposed works, including discussion of criteria used for allocating works priority.

#### **1.4 Status of recommendations**

Recommendations for capital works to enhance pedestrian/shared facilities in Tocumwal are outlined in this report. The actual pace at which the various stages of work identified will be able to be implemented depends upon:

- Availability of funds from council.
- Availability of funds from Roads and Maritime Services.
- Periodic availability of funds from other sources, including developer and resident contributions, special government programs and the like.
- Complexity of project logistics including any need for special consultation (for example on rail crossing works).

This document provides a basis for sensible allocation of resources when and as available from whatever source. The existence of the document will allow ready submission of application for new funding programs as and when they become available.

In addition, council undertakes maintenance and capital works on footpaths as part of normal annual operation budgets. This document will influence some focussing of that annual expenditure towards the achievement of capital works priorities identified in the report.

## **2. Existing Conditions**

### **2.1 The town**

Tocumwal is located on the northern bank of the Murray River in the south western part of the Berrigan Shire. The population of around 2154 swells significantly in summer holiday periods, when the town becomes a centre for water sports, aviation, and river based camping and recreation activities. A substantial levee bank divides the town from the river, and highlights the location of much of the town in the river floodplain.

Substantial river side open space, give the town that special quality of Murray River towns, with the historic associations, and riverine landscape setting. Tocumwal acts as a service centre for local agriculture to some extent, particularly with the presence of an active railway station. Nonetheless it is clear that increasingly the character of the town is being shaped by demand for tourism related services.

### **2.2 Settlement and subdivision pattern, road network**

Most development has been to the east of the Newell Highway, with mainly railway and industrial development to the west, and only a little residential development. (See Plan 1)

The Newell Highway (SH 17) is close to the western limits of the town. East of the Newell Highway, the subdivision pattern has two main elements: an area immediately east of the Newell Highway characterised by a grid pattern derived from the orientation of the Newell Highway and the Railway line; a second and much larger area of grid pattern sub-division, apparently based on the orientation of Deniliquin Street, bounded on three of its four sides by Bruton, Kelly and Hannah Streets.

Tocumwal has recently experienced substantial residential growth in the area bounded by Charlotte, Deniliquin, Hannah and Bruton Streets, as well as east of Hannah Street adjacent to the golf course.

Other important arteries include the Tocumwal-Mulwala Road, which runs east west through the town along the southern boundary and parallel to the Murray River, and called in various parts Jerilderie Street, Deniliquin Street, and Deniliquin Road. Deniliquin Street between Morris Street and Murray Street constitutes the main commercial core. A major area of recreational river frontage lies adjacent to this commercial core, just over the levee.

The structure of the street system is less orderly approaching the river, as alignments respond to the river's orientation. A similar disruption of the grid pattern occurs at the Creek Trail between the Tocumwal Barooga Road and Hennessy Street.

Low traffic volumes, wide road reserves, good town facilities, and a host of river based natural attractions; make Tocumwal an accessible and pleasant place for people to walk.

### **2.3 Attractors and generators**

The majority of features generating pedestrian traffic occur within an arc from the rail line to Kelly Street, and within two blocks of the river.

Schools are found in both Charlotte and Morris Streets. Recreation Reserve and Bowls Club occupy river side open space. Many accommodation facilities one or two blocks away from the river cater to the seasonal holiday influx.

Deniliquin Street and Morris Street contain the core public and private facilities, including police, fire station, library, Post Office, and a number of public houses.

Jerilderie Street between Adams and Tuppall Streets contains two elderly persons accommodation facilities and a pre-school centre.

### **2.4 Existing paths and associated facilities**

Appendix 1, Site Photographs and comments, provides a photographic inventory of pedestrian facilities and issues as at 2005 and comparison photographs of the sites where works have been completed since that date. New issues identified have also been included. This also provides recommendations for future actions. Recommendations requiring significant capital works are detailed here. Other recommendations which relate to maintenance items for Council's attention will be directly taken up by council as a part of normal operations.

Plan 1 shows existing paths and crossing facilities. Analysis of existing pedestrian facilities has two main elements, one being the condition of existing assets, the other being the adequacy of those assets as a path network.

#### **Condition of existing assets : Existing paths, kerb ramps and crossings**

Existing paths are of varying materials and widths, ranging from earth tracks along the Creek Trail to sealed, concrete, asphalt and even brick pavements in the commercial area. The river side shared trails generally serve their purpose well and I have not commented in detail on these assets.

The concrete path network is generally in very good condition with many of the shortcomings identified in the 2006 plan having been rectified.



Very few paths have recommended markings for the visually impaired and it would be beneficial to provide these markings in the high traffic areas such as the shopping strip.

### **Adequacy of the path network**

As part of the review of this plan a series of street meetings were conducted. At these meetings residents were given information on Council's planned 10-year program of works resident feedback was sought on service levels.

No comments were received requesting a change to overall service levels for footpaths.

Observations were made by some property owners that they would like the footpath network extended to their side of the street. In all cases other than those highlighted in the following report when it was explained that New South Wales legislation required that property owners pay a contribution toward the installation of a path these ratepayers subsequently expressed their satisfaction with current service levels.

Comment was also received in relation to weed management – in particular the control of Bindi and the difficulty this caused for property owners that had rear access lanes, open drains, and/or no formed footpaths / guttering. Comments suggested that intermittent attempts by property owners controlling or not controlling this issue would not 'fix' the problem whereas formed paths, kerbs and gutters would assure cyclists, pedestrians, mobile scooter riders and mother's with prams Bindi free access. A number of comments were made about punctures caused by Bindi weed and the cost incurred by cyclists and mobility scooter users.

Specific comment was made that pedestrian ramps Murray Street and other locations in Tocumwal – are too steep and offset from main path. This has caused falls from mobility scooters in a number of locations. These ramps were built according to a now outdated standard. Consideration may need to be given to upgrading the ramps built to this standard in areas with relatively high traffic.

The path network generally services existing attractions reasonably. Observation of the distribution of existing paths shown on Plan 1 reveals a few notable exceptions:

- There is a need to connect the residential areas to the east of the town with the footpath network and it is suggested that this is best done by creating a loop around Hennessy St, Hannah Street and Kelly Street
- There is still a short section on Tuppall Road that should be extended to Bridge Street
- Deniliquin Road and Deniliquin Street paths are not properly linked at Murray Street.

## TOCUMWAL

### PLAN 1 – EXISTING CONDITIONS

- 1) Library
- 2) Police Station
- 3) Tocumwal Public School
- 4) Tocumwal Recreation Reserve
- 5) R.S.L. Hall
- 6) Aged Hostel
- 7) Tocumwal Hospital
- 8) Bowls Club/Convention Centre
- 9) Uniting Church
- 10) Anglican Church
- 11) Catholic Church and School
- 12) Presbyterian Church
- 13) Tocumwal Golf Club
- 14) Farmers Arms Hotel
- 15) Tattersalls Hotel
- 16) Terminus Hotel
- 17) Palms Hotel
- 18) Rail Station
- 19) Foreshore Park
- 20) Post Office
- 21) Fire Station/Search and Rescue
- 22) Visitor Information Centre
- 23) Tocumwal Caravan Park
- 24) Boomerang Tourist Park
- 25) Sportavia and Aerodrome
- 26) Tocumwal Motel
- 27) Bakery Park Motor Inn
- 28) Thomas Lodge Motor Inn
- 29) Bridge Motor Inn
- 30) Langford House B&B
- 31) Kanimbla Motor Inn
- 32) Kingswood Motel
- 33) Swimming Pool
- 34) Creek Trail
- 35) Murray Haven



### 3. Priority Routes

#### 3.1 Discussion of key routes

Key route may be defined as those which:

- link the majority of attractors and generators of pedestrian traffic, or a significant individual feature, such as a school
- carry significant pedestrian and vehicle traffic
- play an important linking role in relation to subordinate streets in the subdivision or settlement pattern.

Plan 2 shows streets deemed to be key routes based on the above criteria, and assigned a priority level as described below.

#### 3.2 Priority level of key routes

Plan 2 also shows a priority (numbered 1 to 3) for the key routes identified therein. Priority levels are assigned according to the degree to which the route in question satisfies the criteria, as follows:

Priority Level 1	Satisfies all criteria
Priority Level 2	Satisfies at least one criteria strongly.
Priority Level 3	Non – key routes, to be re-evaluated when other routes complete.

**Priority levels and routes may be summarised as follows:**

##### **Priority Level 1**

**Deniliquin Road** - from the rail line to Murray Street. The main entry to the town from south and north.

**Deniliquin Street/ Jerilderie Street** - from Murray Street to Kelly Street.

**Murray Street** - from Deniliquin Road to Deniliquin Street

**Morris Street** - from Deniliquin Street to Adams Street

**Adams Street** - from Morris Street to Jerilderie Street

**Dean Street** - from River to Deniliquin Road

## **Priority Level 2**

**Hennessy Street** - from Morris Street to Charlotte Street

**Morris Street** - from Barooga Street to Deniliquin Street

**Barooga Street** - from Morris Street to Murray Street

**Murray Street** - from Moore Street to Deniliquin Street

**Finley Street** - from Murray Street to Dean Street.

**Bridge Street** - Tuppal Street to Browne Street

**Town Beach** - Road

**Hennessy Street** - Town Beach Road to Charlotte Street

**Charlotte Street** - Bruton Street to Kelly Street

**Kelly Street** - Charlotte Street to Jerilderie Street

**Tuppal Street** - Charlotte Street to Hannah Street

## PLAN 2 – PRIORITY ROUTES



## **4. Proposed Capital Works**

Site investigations, and subsequent analysis and discussion with Shire Officers, has resulted in the nomination of 6 individual projects, some of which are integral with each other. (See Appendix 2). These projects were then ranked as outlined below.

### **4.1 Criteria for prioritising works**

The identification of key routes, and allocating a priority level to those routes, is one component of a broader process for identifying works priorities. A number of criteria for establishing works priorities have been developed. A numeric score or range of scores is associated with each criterion. The sum of those scores constitutes a priority score. It is assumed that any immediate safety hazards identified are communicated directly to the Shire and dealt with as part of normal operations. The works nominated are therefore generally capital improvements intended to be implemented over a period of years.

The criteria and associated scores are set out below:

**a. Works creating better connections between key generators and attractors** of pedestrian traffic along key routes and improvement of facilities located close to pedestrian generators and attractors, where higher pedestrian and vehicle traffic volumes warrant close attention to safety and access issues. Closing of gaps in existing path routes linking attractors and generators has particular emphasis.

**Score: 1. Bonus if closes gap to create circuit: .5**

**b. Route priority level.**

Works on Priority 1 Routes. **Score: 2**

Works on Priority 2 Routes. **Score: 1**

Works on Priority 3 Routes. **Score: 0**

**c. Improvements to safety of crossing points on key routes.**

**Score: 1.**

**d. Improvements able to deliver multiple benefits** (for example to cyclists and pedestrians). Some potential improvements, in particular new off road paths, offer opportunities to cater for shared use with cyclists under appropriate conditions.

**Score: 1.**

**e. Visual inspection of patterns** of use as evidence of demand

**Score: 1.**

**f. Improvements delivering benefits to seniors and juniors**, the major users of pedestrian facilities.

**Score: 1.**

The draft scores were discussed with Shire officers to ensure that application of the criteria took account of any particular local knowledge which might cast additional light on the priority which might sensibly be attached to a work's proposal.

#### **4.2 Ranking the priority of proposed works**

Application of the criteria and scoring system outlined above generated a range of priority scores from 3.5 to 5.5 and provided sufficient discrimination to allow projects to be ranked in the following sequence:

Score 5.5	Priority Rank 1
Score 5	Priority Rank 2
Score 3.5	Priority Rank 3

**Tocumwal projects achieving high rankings are listed below:**

##### **Score 5.5 Priority Rank 1**

- Substantial path upgrade around Tourist Information Centre and Murray Street/ Deniliquin Street corner.

**Score 5      Priority Rank 2**

- Extend path in Tuppal Road to Bridge Street

**Score 3.5      Priority Rank 3**

- Extend Hennessy Street path to Hutsons Rd
- Construct path in Kelly Street from Charlotte St to Hannah St
- Construct path in Hannah Street from Hennessy St to Kelly St

**Score 2.5      Priority Rank 4**

- Construct gravel track from Golf Club entrance to Quicks Road
- Construct gravel track from Railway line to Pumps Reserve

**4.3      Costing and Staging of Works**

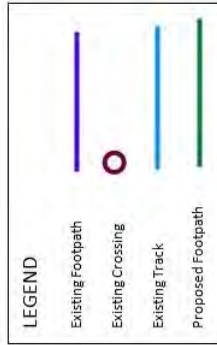
Appendix 3 lists the nominated projects in priority order, along with an indicative cost estimate and funding source. As noted earlier, these priorities and costings form the basis for further internal council deliberations across the Shire's four towns. One outcome of these deliberations is a separate submission to Roads and Maritime Services containing a Shire wide funding and Staging proposition.

This Shire wide staged works proposal accommodates political, logistical, technical, financial and other practical considerations in a program soundly based on Council's financial and operational capacity.



# TOCUMWAL

## PLAN 3 - PROPOSED WORKS



## **APPENDICES**

**Appendix 1 Site photographs and comments**

**Appendix 2 Global list of recommended works**

**Appendix 3 Priority works and costs**





**Appendix 4 Standard kerb ramp detail**

**Appendix 5 Kerb extension detail**

**Appendix 6 Pedestrian refuge island detail**

APPENDIX 1 SITE AUDIT PHOTOGRAPHS

Work ID	Photo ID
T1	2
T2	3
T3	16
T4	19
T5	21
T6	22
T7	24
T8	28
T9	29
T10	32
T11	34
T12	43
T13	48
T14	51
T15	52
T16	55
T17	56
T18	58,59
T19	61
T20	62
T21	65,66
T22	74
T23	77
T24	80,81,82
T25	No photo
T26	No photo
T27	No photo
T28	No photo
T29	No photo

Work ID	Routes	Photo ID	Key Inspection Issues	
	Jerilderie St and Creekside path walk			
		1	Trip hazard at Pit.	No change
T1		2	Preschool driveway access crosses path. Some signs or reflector posts would be useful here as both surfaces are a similar colour.	
T2		3	Consider defining a crossing point of Jerilderie St in the vicinity of the pre-school (Adams St)	Crossing constructed
				

Work  
ID

Routes

Photo  
ID

Key Inspection Issues



4

Path crossing at Kelly St. Note grab rails.



Grab rails on North side only



5

Simple recycled plastic signs such as this are very useful to visitors and locals alike.




6

Crossing at Short St: Reflector posts used here - why not elsewhere in a consistent protocol?







Work ID	Routes	Photo ID	Key Inspection Issues
		7	Crossing at Cobram St
		8	PVC coated mesh fence makes a reasonable safety barrier at creek crossing near Tocumwal Golf Motor Inn.

Work ID	Routes	Photo ID	Key Inspection Issues
	Creek Walk		
		9	Bridges are good. Approach tracks adjacent to bridges require more maintenance than the track generally.
		10	Roberts Bridge. Some orientation sigs would be useful.
		11	Creek walk crosses Kelly St here - but it is hard to tell! More prominent signs, reflector posts etc needed.
			 <p>Signed and upgraded track</p>

Work ID	Routes	Photo ID	Key Inspection Issues
		12	Bessie's Bridge. Four ways to go - no signs.
		13	Path link from Creek Walk to Short St needs minor reforming, especially in the vicinity of a drainage swale.
			Signage added
			



Work ID	Routes	Photo ID	Key Inspection Issues	
		14	Generally there is not enough orientation signage along the creekside walk. This is also the case at each end, where signs announcing the walk, and the connection of the walk back into the street system need to be addressed.	
		15	<p>Creek track connect to path at Hennessy St, but no signs.</p> <p>Not a designated track</p>	Signage added, path upgraded

Work ID	Routes	Photo ID	Key Inspection Issues	
T3	Charlotte St/ Hennessy St to Jerilderie St			
		16	<p>A path on the school boundary in Charlotte St and connecting to Kelly St and the creek side track would complete a useful loop in an overall network.</p>	 <p>Path installed</p>
		17	<p>A kerb ramp and path link to school would be useful. (See photo below also)</p> <p>A path along Charlotte and Kelly Sts to the creek side trail would create a useful loop in the bigger network of access paths.</p>	 <p>Path and ramp installed</p>
		18	<p>Corner of Tuppal St East and Charlotte St viewed from School side. Note path commencing other side.</p>	 <p>Path installed</p>



Work ID	Routes	Photo ID	Key Inspection Issues	
T4		19	Vehicles cross path to access Hennessy St service road. Mark with reflector posts for added safety.	 Completed
		20	Start of concrete path in Hennessy St - need to seal to edge of carriageway.	 Upgraded
T5		21	Hennessy St path crosses Barker St - seal paths to edge of carriageway. Consider reflector posts.	 Hand rails installed and edges sealed

Work ID	Routes	Photo ID	Key Inspection Issues	
T6		22	Kerb ramp at Farmer's Arms Hotel, north west corner, Hennessy and Barker Sts. Ramp broken at edges, out of specification.	Repaired
		23	Service road access across the Hennessy St path, near and opposite to the end of Berrigan St. Compare use of reflector posts here with photo below.	Hand rails and extra G/post installed
T7		24	Service Road entry, Hennessy St near end of Berrigan St. No signs or reflector posts .	



Work ID	Routes	Photo ID	Key Inspection Issues	
		25		
			Safety fence at creek - extend fence or remove projecting steelwork.	
		26		
			This important access point to the creek trail from Hennessy St should be suitably sign posted.	Not recognised track





Work ID	Routes	Photo ID	Key Inspection Issues	
	Hennessy St, Morris St, Adams St, Jerilderie St Block			
T8		27	<p>Crossing at Jerilderie St just south of Hennessy St</p> <p>Grab rails would be useful here, partly because of the angle of approach the path takes to the crossing.</p>	 <p>Grab rails installed</p>
		28	<p>There should be a greater length of path perpendicular to the crossing, east side.</p>	<p>see above</p> <p>Road kerbed</p>
		29	<p>Consider sealed path to carriageway, Jerilderie St at Hennessy St.</p>	 <p>path and ramp installed</p>

Work  
ID

Routes

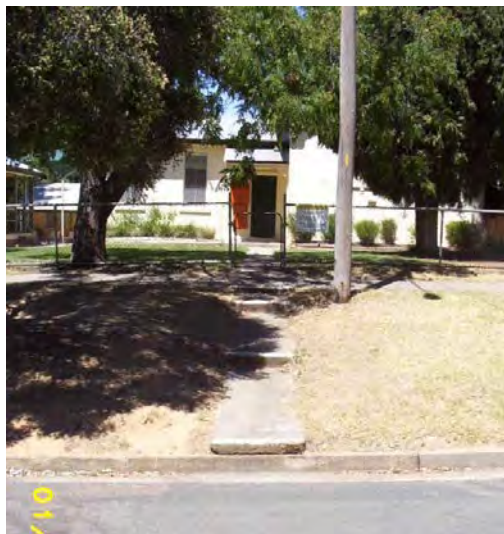
Photo  
ID

Key Inspection Issues



30

Typical absence of kerb ramp at school  
and other third party access paths  
(this one adjacent to school in  
Hennessy St



31

School access path In Morris St - note  
high step, no kerb ramp.

Work  
ID

Routes

Photo  
ID

Key Inspection Issues

T10



32



Path discontinuous at Morris and  
Tuppel Sts - asphalt also broken on  
road near path.



33

No crossing links to Recreational  
facilities, Morris and Adams Sts



Work ID	Routes	Photo ID	Key Inspection Issues
T11		34	
		34	This could be an appropriate place for a more organised crossing point, in Adams St.
		35	Parking arrangements and path alignment at Hospital look decidedly odd. It is recommended that parking arrangements be reviewed to ensure pedestrian safety.
		36	Kerb ramp at Adams and Jerilderie Sts, north west corner. Lip a little deep.
			Replaced

Work  
ID

Routes

Photo  
ID

Key Inspection Issues



37

Path damaged at laneway between  
Adams and Tuppal Sts, west side of  
Jerilderie St



38

Kerb ramp at Tuppal St West and  
Jewrilderie St, north west corner.  
Note grab rail, and commencement of  
shared standard path.

Work  
ID

Routes

Photo  
ID

Key Inspection Issues

Jerilderie St, Deniliquin St, Morris St block.  
Morris St to Barooga St.

39



Kerb ramp at Jerilderie and Hennessy  
Sts, north west corner.

Road surface patchy adjacent to ramp.

Patched

40





Path narrows, somewhat unexpectedly.

41







These paths at the corner of Deniliquin  
and Morris Sts require work to align  
path and ramp, connect paths  
properly.

Work ID	Routes	Photo ID	Key Inspection Issues
T12			<p>42</p> <p>Ramps east side of Morris St at Hennessy St</p>
			<p>43</p> <p>West side of Morris - a path link from Hennessy to the existing path near Morris and Deniliquin would be useful.</p>
			<p>44</p> <p>Crossing Deniliquin St and Morris St.</p>



Work ID	Routes	Photo ID	Key Inspection Issues	
		45	South side of Morris St at Deniliquin St.	Modified
		46	North side of Morris St at Deniliquin St	Modified
		47	Kerb ramps broken at laneway on Morris St between Deniliquin St and Barooga St - note also drainage problem.	Repaired



Work ID	Routes	Photo ID	Key Inspection Issues	
T13				
		48	Path on Morris St ends at Barooga St with a steep grade and no kerb ramp.	
	<b>Deniliquin St from Morris St, Murray St and Bruton St</b>			
		49	This crossing is problematic for pedestrians - a major urban design initiative is required to improve amenity and townscape, this area.	
		50	Kerb ramps at service road adjacent to Tocumwal Hotel.	

Rectified

Work ID	Routes	Photo ID	Key Inspection Issues		
T14					
		51	Ramp at Murray St and Barooga St needs attention.		Repaired
T15					
		52	No ramp or path link, other side.		Repaired
		53	Kerb Ramps at Murray and Bent Sts, east side.  Note path in poor condition in sections between Barooga and Bent Sts.		



Work  
ID

Routes

Photo  
ID

Key Inspection Issues



Murray St from Finley St, to Deniliquin St  
and Duff St

54

Kerb ramps at Murray and Bruton Sts,  
south east corner.

T16



55

West side of Murray St approaching  
Finley St - a path is warranted!

T17



56

South west corner of Murray and Finley  
Sts, looking south.

There is no proper kerb ramp or path,  
although an informal gravel path  
remains.



Path installed



Work  
ID

Routes

Photo  
ID

Key Inspection Issues



57

Is the absence of signs at the crossing in Deniliquin St due to pending upgrade to Pedestrian Crossing?

T18



58

The path on the north side of Deniliquin Rd, west of Murray St, is well used and should be extended to Dean St. (See also photo below).

Path extended to Crowley Street

Work  
ID

Routes

Photo  
ID

Key Inspection Issues



59

A path is needed on the north side of Deniliquin Road linking Murray St and the Pool.







Path installed



60

The landscape treatment of the arrival experience at the pool for pedestrians could be more pleasant.

Work ID	Routes	Photo ID	Key Inspection Issues
<b>West of the Newell Highway</b>			
T19		61	<p>A new pedestrian crossing area at the Newell Highway, on the south side of the roundabout, would give a tangible sense of connection between the main town centre and the historic railway precinct, with appropriate paths.</p>  <p>Constructed with roundabout</p>
T20		62	<p>Paving but no kerb ramps at Terminus Hotel. Recommend link path from Dean St to Bridge St south side.</p>
		63	<p>Levee bank at Jersey and Chanter Sts. The levee serves as a de facto shared trail along the river and is well used.</p>



Work ID	Routes	Photo ID	Key Inspection Issues
		64	Some sections of levee batter are quite steep and show early signs of erosion.
T21		65	Informal crossing where rail meets levee bank trail at Chanter and Bridge Sts.
T21		66	Levee bank trail crosses rail line. Crossing looking makeshift - an upgrade is recommended.



Work  
ID

Routes

Photo  
ID

Key Inspection Issues



67

Links between the levee trail and existing paths are very useful and could be improved. Shown here is the link between the levee trail and Browne St.



68

Link path from Anzac Ave to Browne St is overgrown and silted up.



Railing removed



69

This batter needs to be stabilised with jute mat or similar and planted to prevent silting of path below.

Work  
ID

Routes

Photo  
ID

Key Inspection Issues



70

Kerb ramp where link path under Dean St meets Browne St.  
This link path and ramp require upgraded maintenance and minor repairs



71

Ramp link at Anzac Ave broken, appears too steep, lip too deep.

Work  
ID

Routes

Photo  
ID

Key Inspection Issues



72

Path link from Anzac Ave to Hillwson  
St along the east side of Dean St

Maintenance of vegetation required.



73

Link path back up to river bridge on  
Dean St.



Work  
ID

Routes

Photo  
ID

Key Inspection Issues

T22



74

Match concrete levels where path joins  
bridge at Dean St (newell Highway)



Repaired



75

Kerb ramp at Dean and Hillson Sts,  
south east corner.



Work  
ID

Routes

Photo  
ID

Key Inspection Issues



76

Typical informal link at Dean and Hillson Streets.

Deniliquin St south side from Anzac Ave, heading east.

T23



77

Looking back west along Deniliquin St from the Anzac Ave corner. Evidence of serious pedestrian traffic is visible.



Path installed



78

Kerb ramp at south east corner of Anzac Ave and Deniliquin Rd, where path starts.

The lip at channel invert is excessive.

Work  
ID

Routes

Photo  
ID

Key Inspection Issues



79

Things start to get a little busy and unco-ordinated - materials, path widths.

T24



80

Paving at Lime Spider is inadequate, with patrons occupying path space.



Now Tourism Info centre

Work  
ID

Routes

Photo  
ID

Key Inspection Issues



81

Path link should continue other side of river access road.

This concrete apron needs a complete reworking.



Area revamped with side boat ramp entry



82

Path link required through this central part of town at Murray and Deniliquin Sts, south west corner.



83

Toilets in Deniliquin St are too well hidden!

Signed



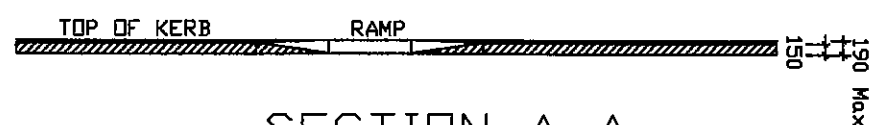
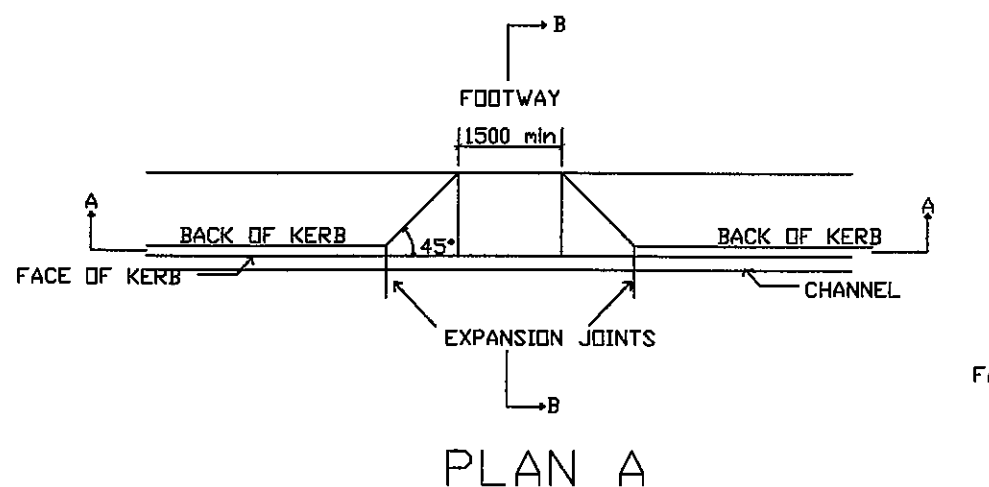
Work ID	Routes	Photo ID	Key Inspection Issues	
		84	Well used levee trails have poor transitions back to streets - some additional infrastructure would enhance usability (handrails, steps with wheel ramps, sealed on high slope areas?)	
		85	Levee trail just disappears unannounced, at reflector posts.	Now designated boat ramp exit



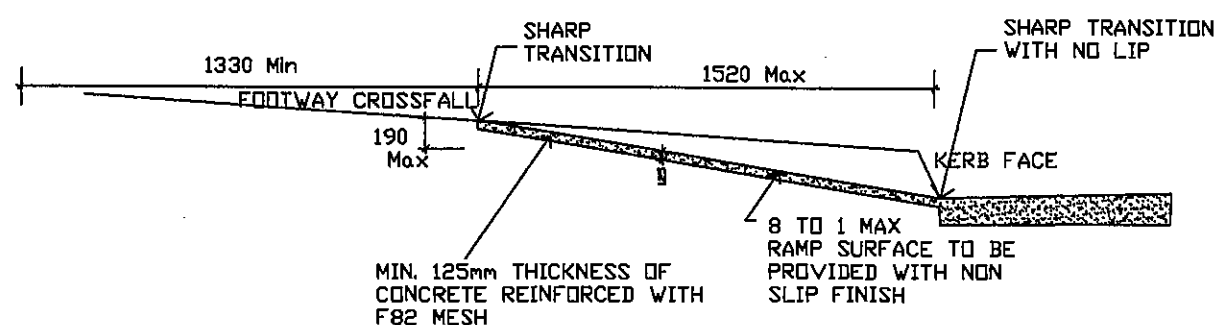
Project ID	Priority Score	Town	Street	Reference	Side	No. of Ramps	Description	Action
T1	3.5	Tocumwal	Hannah St	Hennessy to Kelly	W	6	Path to complete loop	Construct path and ramps.
T2	3.5	Tocumwal	Hennessy St	Charlotte to Hutsons	S	4	Path to connect residential area to network	Construct path and ramps.
T3	3.5	Tocumwal	Kelly St	Creek Walk to Hannah	N	5	Path to connect residential area to network	Construct path and ramps.
T4	5.5	Tocumwal	Deniliquin Rd	Tourist Information Centre	S	2	No proper path link to town centre	Construct new ramps & path.
T5	5	Tocumwal	Tuppall Rd	Bridge St	S	2	Extend path to Bridge Street	Construct new ramps & path.
T6	4	Tocumwal	Sealed and Gravel Tracks	Safety Improvements			Grab Rails and Reflector Posts at entrys and intersections	Install grab rails and reflector posts where required for consistency
T7	2.5	Tocumwal	Tuppall Rd	Pumps Reserve	N	0	Gravel track from Railway line to Pumps Reserve	Construct gravel path
T8	2.5	Tocumwal	Barooga Rd	Quicks Rd	Both	0	Gravel track from Golf Club entrance to Quicks Road	Construct gravel path



Project ID	Score	Town	Street	Reference	Side	Class'n	Ramp	Description	Action	On/off Road	RTA \$	Council \$
T1	3.5	Tocumwal	Hannah St	Hennessy to Kelly	W	Local	6	Path to complete loop	Construct path and ramps.	On	4800	48000
T2	3.5	Tocumwal	Hennessy St	Charlotte to Hutsons	S	Local	4	Path to connect residential area to network	Construct path and ramps.	On	3200	24000
T3	3.5	Tocumwal	Kelly St	Creek Walk to Hannah	N	Local	5	Path to connect residential area to network	Construct path and ramps.	On	4000	27000
T4	5.5	Tocumwal	Deniliquin Rd	Tourist Information Centre	S	Local	2	No proper path link to town centre	Construct new ramps & path.	On	1600	4000
T5	5	Tocumwal	Tuppall Rd	Bridge St	S	Local	2	Extend path to Bridge Street	Construct new ramps & path.	On	1600	4000
T6	4	Tocumwal	Sealed and Gravel Tracks	Safety Improvements		Local		Grab Rails and Reflector Posts at entrys and intersections	Install grab rails and reflector posts where required for consistency	Off		10000
T7	2.5	Tocumwal	Tuppall Rd	Pumps Reserve	N	Local	0	Gravel path from Railway line to Pumps Reserve	Construct gravel path	Off		25000
T8	2.5	Tocumwal	Barooga Rd	Quicks Rd	Both	Local	0	Gravel path from the Golf Club entrance to Quicks Rd	Construct gravel path	Off		35000



SECTION A-A



PLAN B  
MARKED FOOT CROSSING  
(Shared Pedestrian/Bicycle Crossing)

## NOTES

1. All dimensions are in millimetres.
2. All kerb ramps are to be aligned with the desired direction of pedestrian travel, and be a minimum of 1200 wide.
3. At pedestrian crossings and marked foot crossings ramps must line up with crossing and corresponding crossing on other side of road.
4. (i) For marked foot crossing (shared pedestrian/bicycle crossing) sloping face of ramp should be as wide as the inside of the paint lines with a push button on it at a practical width no less than 1200.  
(ii) At marked foot crossings (pedestrian only crossing) the sloping face of the ramp should be as wide as the inside of the paint lines. Where this is not possible, locate ramp as close to post with a push button on it, at a practical width no less than 1200.
5. Expansion joints to be provided where ends of kerb ramp abuts kerb and gutter.

Refer RTA TDT 2002/08

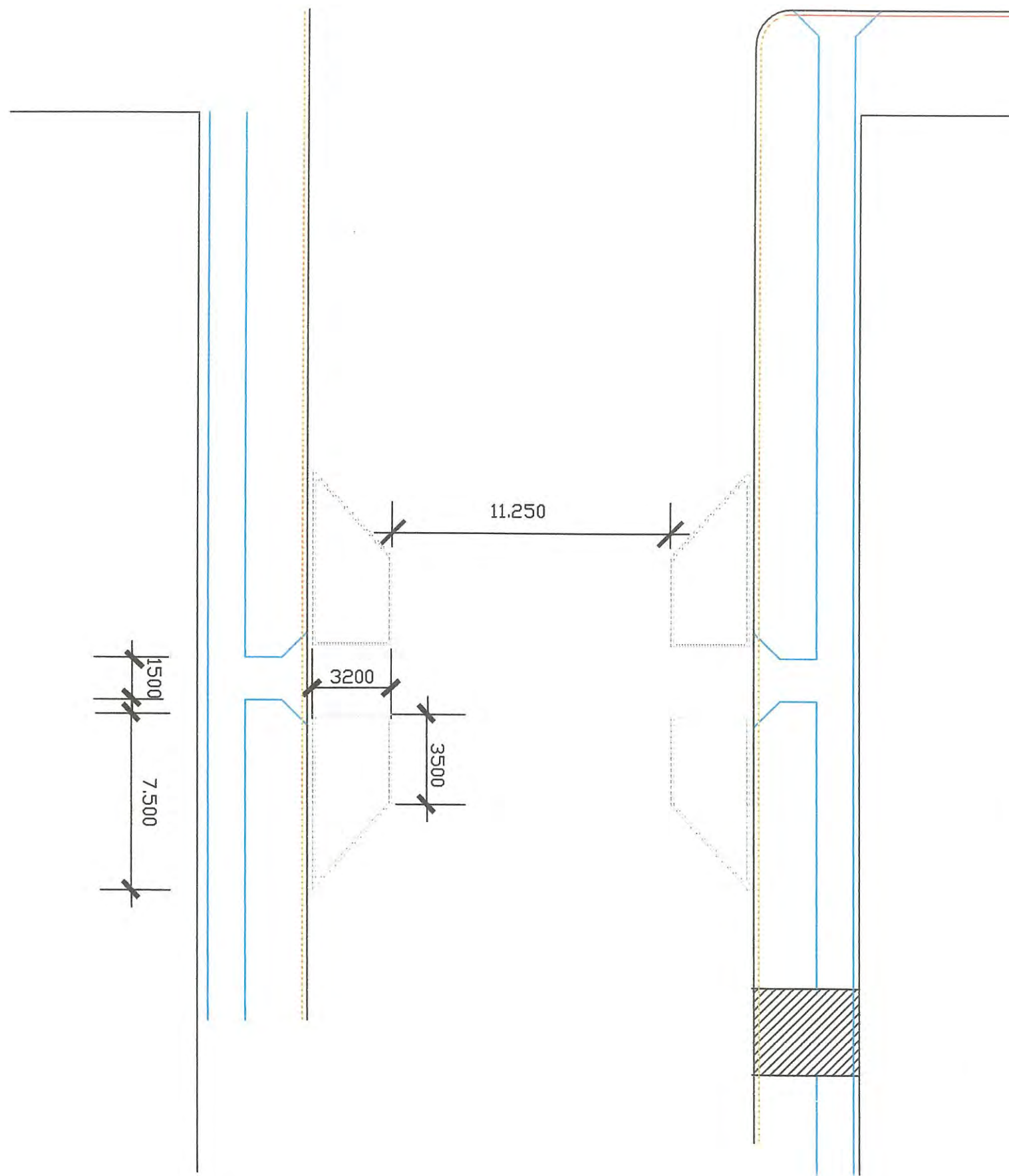
## BAROOGA

Berrigan Shire P.A.M.P  
Study

APPENDIX 4  
STANDARD KERB  
RAMP DETAIL

For Berrigan Shire Council  
February, 2006

Des Gunn Landscape Design



## **BAROOGA**

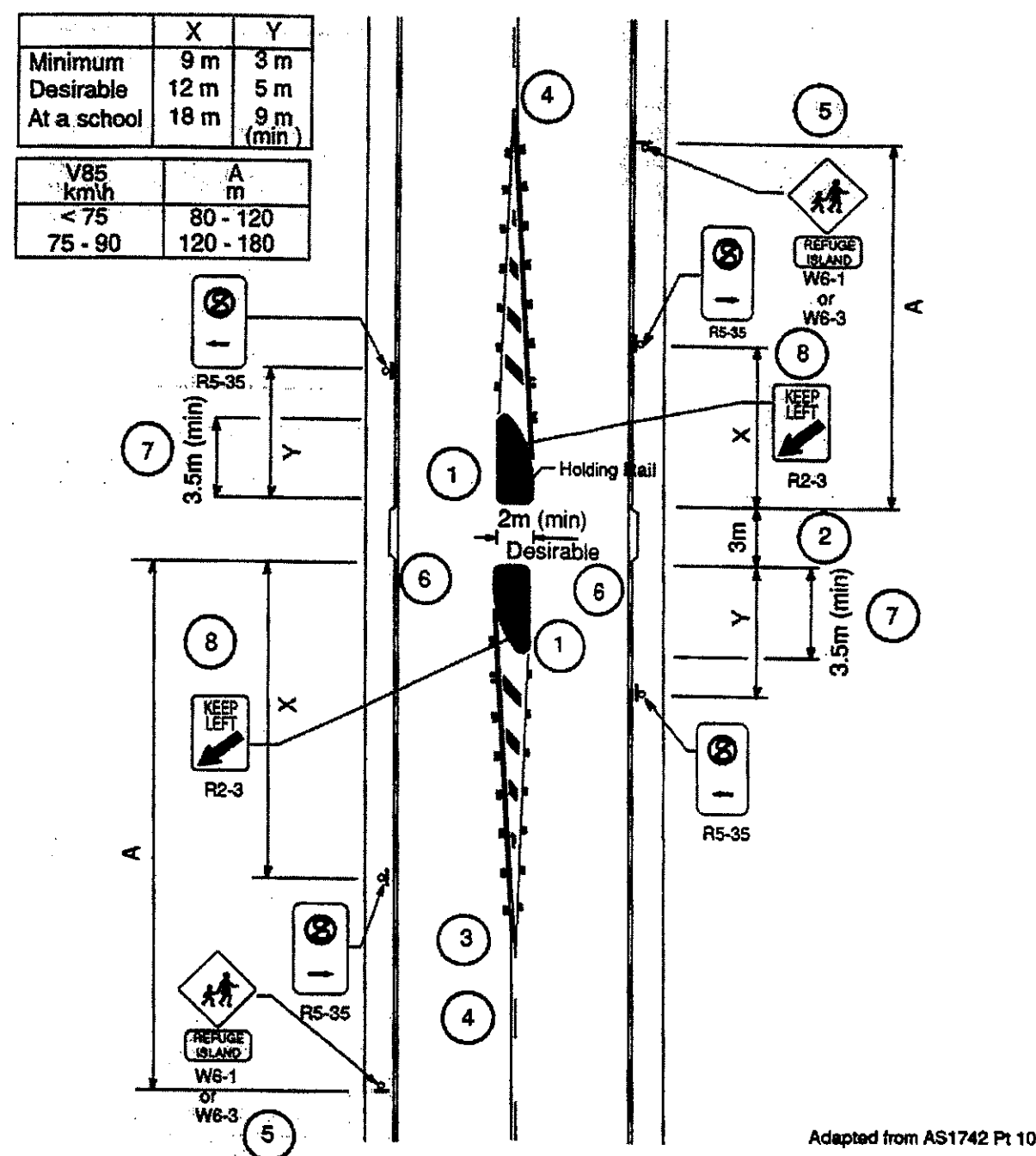
Berrigan Shire P.A.M.P  
Study

### **APPENDIX 5 KERB EXTENSION DETAIL**

For Berrigan Shire Council

February, 2006

*Des Gunn Landscape Design*



## NOTES:

1. Island kerbs may be painted white.
2. If the refuge is used in conjunction with a marked crossing, the spacing between the islands should be increased accordingly.
3. Length of painted median should be increased or other delineation devices considered if visibility to the island is reduced by vertical or horizontal alignment. Unidirectional raised retroreflective pavement markers are provided at 5.0m spacings.
4. Painted median is preceded by barrier line extending for 30m minimum.
5. Where refuges are used on arterial or high speed roads, pedestrians or children warning signs W6-1 or W6-3 (minimum size B), as appropriate, are erected together with supplementary plate REFUGE ISLAND (W8-25) in advance of the refuge.
6. Perambulator ramps should be constructed if practicable.
7. When used at intersections, the length of the innermost island may be reduced to accommodate turning traffic. A suggested minimum length is 1.25m.
8. A suitable hazard marker from the D4 Series (See AS1742.2) may be used under the Keep Left (R2-3) Sign. Mounting heights need to be selected so as to avoid obscuring visibility of child pedestrians.
9. Street lighting in accordance with AS 1158.1 should be provided.
10. Pedestrian assist handrails may be provided the island is at least 2m wide. If provided they shall be frangible.

Figure 3.6 Pedestrian Refuge

## BAROOGA

Berrigan Shire P.A.M.P  
Study

## APPENDIX 6 PEDESTRIAN REFUGE ISLAND DETAIL

For Berrigan Shire Council  
February, 2006

Des Gunn Landscape Design