

Attachment 2: New Proposed Routes (Updated 3 December 2007)

Proposed Route	Bikeways Plan 1996 Status	Location	Current Condition	Proposed Action 2006	Priority	Unit Rate (each/per km)	Cost Estimate
L1 to M4 - Link	Existing on road local (Gov Dr), no mention of Darwin Dr.	L1 Extension from Explorers Rd along Governors Drive/ Darwin Drive to GWHY at Lapstone Hill	Hazardous drop off (up to 250mm) due to erosion along edge of bitumen between GWHY and bridge. Good sealed shoulder & K&G in Lapstone - tight on corners and across gullies.	Seal the shoulders, 300m between GWHY and the bridge at the entrance to Lapstone, install bicycle lanes. PS-2 x 2 logos. Install W6-214s x 2. Remove veg on edges. Provide alternate route (signposted only) Southwards via Darwin Drive to avoid steep hill on Governors Drive near bridge. Install bicycle network route directional signage.	Medium	Bicycle lane @\$5000km Signage \$180 Maintenance Logos \$250	\$3000 \$360 \$500
						Total Cost	\$3,860
L1 to Nat. Park Link	Recreational on road	Extend L1 from Glenbrook Railway Station along Burfitt Pde and Bruce Rd to the National Park entrance gates.	Narrow road through the bends. There is an off road path, not declared as a shared path, on the railway side of the road. Wide shoulders from Bush Place to railway overbridge then tight profile to NPWS gate.	Install bicycle network route directional signage.	Medium	Signage \$180	\$1,440
						Total Cost	\$1,440
L1 to L2 Link B	No mention.	Fletcher St Overbridge near Glenbrook Pool to Kidman St	Footpath has just been laid at 1500mm.	Widen the path to 2.0m and declare as shared path. Install bicycle network route directional signage.	Medium	Review	
						Total Cost	
L2 to L1 Link	No mention.	Hare Street from GWHY to Levy Street Glenbrook	Local road two way.	Will provide link from Glenbrook precinct to St Finbars School and residential areas. Widen existing path 400m to 2.0m. Install R8-2 x 2. PS3/4 x 2	Medium	Widen path .8@\$65sq/m Signage \$180 Logos \$250	\$26,000 \$360 \$500
						Total Cost	\$26,860
L2 Extension East	No mention.	Barnett Street Glenbrook from Levy Street to access road to lookouts.	Local road, two way until access road which is gravel	Install bicycle network route directional signage & W6-214 in both directions.	Medium	Signage \$360	\$360
						Total Cost	\$360
L2 Extension West	Existing on road local.	Levy Street from Hare Street to Fletcher Street	Currently 1.2 wide footpath connecting Brooklands shopping centre, St Finbars School and residential areas. Will link to L1.	Widen footpath 550m to 2 metres. Install R8-2 x 2. PS3/4 x 2.	Medium	Widen path .8@\$65sq/m Signage \$180 Logos \$250	\$35,750 \$360 \$500
						Total Cost	\$38,610

DRAFT

L3 Extension East	Existing on road local.	Mitchell's Pass from Glenbrook Rd to Emu Plains	Narrow, two way road to Lennox Bridge, then narrow one-way downhill to Emu Plains.	On-road cycling. W6-241s X 2. Install bicycle network route directional signage.	Medium	Signage \$180	\$360
						Total Cost	\$360
L4 Extension East	No mention.	Old Bathurst Rd from Tallowood to Emu Plains	Wide two way road until Binya Street then narrow steep grade to Emu Plains.	Install bicycle lane from Tallowood to Bunya 950m. PS-2 logos x 2. Install W6-2142 x 2. At Binya install steep grade and narrow signage for cyclist.	Low	Bicycle lane @\$5000km Signage \$180 Logos \$250	\$4750 \$900 \$500
						Total Cost	\$6,150
L4 Extension	Existing on road local.	L4 Extension to L2 Old Bathurst Rd	BMCC has constructed a 2.0m shared path on the Northern side from Wilson way to Rusden Rd, with a narrow section around significant trees near Reserve Ave	Complete the shared path at 2.0m min. Examine alternatives to get past the trees - perhaps using part of the parking lane. Install bicycle network route directional signage.		No Action	
L5 Extension	Existing on road local.	Warrimoo via Waratah Rd to Green Pde, Valley Heights	BMCC has constructed a narrow road link with roll -guttering as advised by BMBG. There is a chicane (necessitated by a Telstra pit) which is used as a traffic calming mechanism. This presents a hazard to cyclists, as do two westbound corners with power poles very close to the road edge. Some signage is present.	Examine possibilities for bicycle bypasses of the chicane, and examine the two corners to determine how to improve safety. Install bicycle network route directional signage.	1-5 years Remedial Works	See L5 for details	
L6a Extension North	No mention.	Green Pde from Tusculum across railway bridge to pedestrian bridge over GWHY, then West along a shared path past The Avenue	In the short term, the section from Tusculum to the GWHY overbridge would be on road and not optimal. Long term SRA plans may involve a continuation of the bridge to the station and across to the Southern side. There is a 1.2 m footpath along the Northern side of the GWHY.	Widen the path to 2.0m and declare as shared path. Install bicycle network route directional signage. Install signage to new standard, taking care to slow traffic on the rail overbridge.	Low	To Be Reviewed	
L6b to L6 Link	No mention.	From George St (nr Hawkesbury Rd roundabout) West along GWHY to Lewin St.	There is adequate space for a shared path to be constructed from George St to West of Boland Ave. There is a section opposite the Police Station, between Boland Ave and Boomerang Ave, where it would be preferable to construct a path on the Northern side of the fence. This may involve earthworks. From Moorecourt to Lewin, there is a footpath.		High	To Be Reviewed	

DRAFT

L6b to Bunnal Ave to shops - New Link	No mention.	Footpath linking Bunnal Ave to the shops on Hawkesbury Road near Lee Rd	The footpath is already built, is approx 100m long and is 2m wide near Hawkesbury Rd.	Widen the path to 2.0m (if under 2m) and declare as shared path. Install bicycle network route directional signage. Install signage to new standard.	Low	SEE L6b - 6.17a for details.	
L6b Extension East	No mention.	Hawkesbury Road from Whitecross Road to Booker Road	No pedestrian or off road cycling facilities exist	Provide 3500m of 2 metre shared path. Install R8-2 x 8. PS3/4 logos x 8.	Low	Shared path @\$160,000 km Signage \$180 Logo \$250	\$560,000 \$1440 \$2000
						Total Cost	\$563,440
L6b Northern Extension	No mention.	From Shelton Ave, White Cross to Sunset Blv.	The footpath is already built, is approx 250m long and is 2m wide near Hawkesbury Rd and varies in width around the back of a BMCC owned Youth Centre. A 1.8m wooden fence has been constructed around the Centre, beside/across what was a very narrow shared path. Visibility is almost nil and the path is now very dangerous for all users.	Remove the wooden fence beside the Youth Centre and replace with a transparent fence repositioned away from the path. Widen the path to 2.0m (if under 2m) and declare as shared path. Install bicycle network route directional signage.	High	Review	
L6c New Link	Existing on road local.	Macquarie Rd from L6 to Faulconbridge Railway Station	A new bridge crossing the GWHY and railway is cycle friendly. Much of the road is quite narrow (along Sir Henrys Pde). A new Scout hall is a trip generator. The "big dipper" has poor visibility.	This route would be on road only. W6-214 6. On the steepest section 'dipper' install G9-57 x 2. .	Low	Signage \$180	\$1,440
						Total Cost	\$1,440
L7b New Link	No mention.	St Georges Crescent	No footpath beyond Russell Ave. Cars often park across the unmade footpath, forcing elderly pedestrians, parents with strollers and young cyclists and pedestrians onto the roadway.	Construct 500m of 2.0m shared path along the Northern side of St Georges Cres from Russell Ave to Adeline St. R8-2 x 44. PS3/4 x 4	Low	Shared path @\$160,000 km Signage \$180 Logo \$250	\$80,000 \$720 \$1000
						Total Cost	\$81,720

DRAFT

L7 Extension West Off/On Road Faulconbridge to Linden	Regional on road only	Parkes Cres, Faulconbridge Westwards to Weemala Ave, crossing GWHY then off-road to Martin Place and Numantia Rd to GWHY footpath near the water tower.	This section forms a large part of the "missing link" - the only section of the GWHY where no off-highway cycleway exists between Katoomba and Emu Plains. Between Parkes and Bellevue, it is a 1.2m footpath. From Bellevue Westwards for 500m, there is a service road requiring some sealing. For 250 m past the old petrol station (Northern side of GWHY) and up to the fruit store, no path exists. From the Fruit Store to Weemala Ave, there is a narrow footpath of some description.	Widen existing path 900m to 2.0m. Construct 1500m of 2.0m shared path along the Northern side of the GWHY from the old service station past the Fruit Store to Weemala Ave. Construct a centre refuge and safe passage across GWHY at Weemala Ave. Construct 200m of 2.0m shared path on the Southern side from opposite Weemala Ave to Martin Place. Provide on road facility along Martin Place and Numantia Rd, connecting to the footpath past the water tower and on to Linden Railway traffic lights. Widen the path to 2.0m where possible and declare as shared path. R8-2 X 6. PS3/4 x 6.	High	Shared path @\$160,000 km Widen path @\$65sq/m Signage \$180 Logo \$250 Refuge	\$272,000 \$58,500 \$1080 \$1500 \$7000
Total Cost							\$340,080
L6 Extension East	Regional on road / existing off-road shared from St Georges Cres to Meeks Cres.	From Parkes Cres Faulconbridge along GWHY to Buttenshaw Park	RTA has provided a 2.0 off-road cycle path from Parkes Cres to Churchill St. The path from Churchill to Buttenshaw Park is below width for 100m.	Widen the last 100m of path to 2.0m .	High	Widen path @\$65sq/m	\$6,500
Total Cost							\$6,500
L8 Extension East	Not previously list but incorporated as part of GWHY upgrade.	New access road and shared path as part of GWHY upgrade from Clearview Av Hazelbrook to Station Street Woodford.	RTA to provide a 2 meter off-road shared path from Clearview Av to Station Street Woodford.	Installed as per programmed works by RTA.	High	Work s will be part of GWHY upgrade. Due for completion 2007/08	RTA
L8 Extension West	Not previously list but incorporated as part of GWHY upgrade.	Adjacent to GWHY from Clearview Av Hazelbrook to Queens Road Lawson.	RTA to provide a 2m off-road shared path from Clearview Av to Queens Road .	Installed as per programmed works by RTA.	High	Works will be part of GWHY upgrade. Due for completion 2007/08	RTA

DRAFT

L8a New Off Road Hazelbrook to Linden	Existing on road local from Hazelbrook to Woodford along Railway Avenue. No mention from Woodford to Linden Railway Station. Recreational on road along Glossop Rd, Linden.	Hazelbrook to Woodford via Railway Parade then off-road path along GWHY to Tollgate Drive Linden, on road along Glossop Rd and Linden Ave to the Observatory	On road from the proposed underpass at Oaklands Rd, Hazelbrook to Linden along Railway Pde is in good condition with some potholes/bumps and eroded edges in parts. The pedestrian refuge between Orama Rd and Valley Rd causes dangerous conditions for cyclists. There is an informal route along the Northern side of the GWHY from Station St/ The Appian Way Woodford to Tollgate Drive Linden, which needs to be formalised. Tollgate Drive is in good condition and joins up (on the Southern side of the GWHY) with a footpath which leads down to the Linden Railway Traffic Lights & crossing.	This route would link with new GWHY Upgrade off road shared path which is being constructed. It would link up at The Appian Way at Woodford. On road link 580m along Station Street into Bridge Lane. Construct 1500m of 2.0m shared path along the Northern side of the GWHY from Bridge lane to Tollgate Drive Linden. On road 1900m length of Tollgate Drive, Linden and along Glossop Rd & Linden Ave to the Observatory. Burke Rd to Station. R8-2 x 2. PS3/4 x 2. W6-214 x10.	High	Shared path @\$160,000 km Signage \$180 Logo \$250 Bicycle lane \$5000	\$240,000 \$2160 \$500 \$12,400
						Total Cost	\$255,060
L9 Extension East	Existing on road local.	Hazelbrook to Lawson via Baths Rd	Good but narrow on road -no shoulder in parts of Honour Ave, rolled K&G between lower Honour Ave and Hazelbrook RFS. Very narrow in Terrace Falls Rd Hazelbrook.	Install W6-214 x 8. Install bicycle network route directional signage.	High	Signage\$180	\$1,440
						Total Cost	\$1,440
L9a New off Road Link	No mention.	Queens Rd Lawson to Ridge St Bullaburra	GWHY Lawson upgrade project.	RTA commitment for GWHY.	RTA Lawson Upgrade	Works will be part of GWHY upgrade. Due for completion 2007/08	RTA
L10 link to L9, Bullaburra	Existing on road local.	Wentworth Falls to Bullaburra	Generally good local road with poor surface in older sections and eroded edges. The linking section, between towns, is recently sealed and has median barriers on hills which cause constriction of the road width and a hazard for cyclists.	To be reviewed as part of Bullaburra West GWHY Upgrade.	High	Works will be part of GWHY Bullaburra West upgrade. Due for completion 2008/09	RTA
L10a New Link	No mention.	Waratah Rd Wentworth Falls, joining two ends of Blaxland Rd (L10).	Generally good local road with poor surface in older sections and eroded edges.	Seal the shoulders and repair poor surface. Install shoulder lanes & PS-2 logos. Install bicycle network route directional signage. Install signage to new standard.	Low	No Action	
L 10b New Link	No mention.	Fletcher St and Valley Road Wentworth Falls	Generally good local road. Will link L10 from Falls Road to GWHY	Install route direction signage	Low	Signage \$180	\$1,440

DRAFT

						Total Cost	\$1,440
L12 Extension East	No mention.	Scott Avenue at Leura to connect with off road shared path on GWHY at Caltex service station Wentworth Falls.	Off road shared path exist on southern side of Scott Av down to the Korowal school. There is no off road link to the GWHY & Wentworth Falls. The section of road between Korowal and the GWHY is narrow with bends.	Installed shared path from Korowal to GWHY on Southern side and then along South side of GWHY to link up with shared path near Caltex service station at Wentworth Falls.	Medium	SEE L12 12.6 for details.	
L12a New Link	No mention	West Street Wentworth Falls to Willow Park Av Leura	Shared path current exist at both ends of proposed link leaving critical gap in network.	This link will complete shared path for this section of the route. It will connect at West Street along Southern side across Scott Av and through Digger Cooper Reserve and connect with new shared path near Leura Public School. Construct 2km of 2.0m shared path. Refuge at Scott Avenue. Instal R8-2 X 6. PS3/4 x 6.	High	Shared path @\$160,000 km Signage \$180 Logo \$250	\$320,000 \$1080 \$2000
						Total Cost	\$323,080
L13 Extension East	Previously listed but not completed. Incorporated as part of GWHY upgrade.	GWHY from Mount Hay Leura to Woodlands Road Katoomba	Currently under construction.	Installed as per programmed works by RTA.	High	Works will be part of GWHY upgrade. Due for completion 2007/08	RTA
Rec 6a New Route	No mention.	Tablelands Road from GWHY to Queen Victoria Hospital (QVH)	Good local road. Sealed to QVH then gravel links to trail heads. Very important links with Ingar Fire Trail, McMahons Lookout and Anderson Fire Trail. Very popular Mountain Bike Routes. Sealed to Queen Victoria Hospital.	Install W6-214 x 6. Install W6-210 & W6-211 where appropriate.	Low	Signage \$180	\$1,440
						Total Cost	\$1,440
Rec 6b New Route	No mention.	Mount Hay Road from GWHY to end.	Local road, partly sealed then gravel to end. Popular mountain bike route.	Install W6-214 x 6. Install W6-210 & W6-211 where appropriate.	Low	Signage \$180	\$1,440
						Total Cost	\$1,440
Rec 5a New Link	No mention.	Glenraphel Drive from Cliff Drive into Narrow Neck Trail to end.	Mainly gravel road with some narrow, steep and windy sections. Very popular tourist and cycle route.	Install W6-214 x 6. Install W6-210 & W6-211 where appropriate.	Low	Signage \$180	\$1,440
						Total Cost	\$1,440

DRAFT

L16a Extension	Existing on road local	Station St from Civic Place to Camp Street	Good local road. Needs installation of bicycle network route directional signage.	Western side footpath is currently 2.0m, ensure a smooth surface and declare as a shared path. *Install line marking through the gardens at Civic Place or construct a refuge/crossing near Civic Place and use the Eastern side of Station St to join up to L13.*Install R8-1 x 2 signage and PS2 x 2 logos.	High	Refuge \$7000 Signage \$180 Logo \$250	\$7000 \$360 \$500
						Total Cost	\$7,860
L16b New Link	No mention.	Twynan street from Victoria St to Barton Street. Barton Street from Twynam Street to South Street.	No footpath in Twynan Street. Barton street has a 1.2 wide path. This link would connect Victoria Street route along a more desired route - flatter and more easier accessible with North Katoomba Public School, Bureau Park and Oval and North Katoomba residential area.	Install 200m of 2m shared path in Twynam Street. Widen 1000m footpath in Barton Street to 2m. Install R2-8 x 6. PS3/4 x 6.	High	Shared path @\$160,000 km Widen path @\$65sq/m Signage \$180 Logo \$250	\$32,000 \$65,000 \$1080 \$1500
						Total Cost	\$99,580
Rec 7a New Route	No mention.	Grand Canyon Rd from Railway Parade to Point Pilcher, Medlow Bath	Local road, sealed to Connell Rd then gravel to end.	Install bicycle network route directional signage & W6-214 x 6 in both directions.	Low	Signage \$180	\$1,080
						Total Cost	\$1,080
Rec 7b New Route	No mention.	Evans Lookout Road from GWHY to end	Local sealed road, popular with tourist. Minium width in most locations	Install bicycle network route directional signage & W6-214 x 6 in both directions.	Low	Signage \$180	\$1,080
						Total Cost	\$1,080
Rec 7c New Route	No mention.	Station Street from Bundarra to Shipley Road. Shipley Road from Station Street to Megalong Road. Megalong Road from Shipley to end.	Generally good local road to Megalong Road. Megalong Road is then quiet narrow and windy. Very popular with cyclist and has a number of tourist attractors in valley.	Install bicycle network route directional signage & W6-214 x 10 in both directions. Install W6-210 & W6-211 where appropriate.	Low	Signage \$180	1080
						Total Cost	\$1,080
Rec 7d New Route	No mention.	Station Street from Bundarra to Shipley Road. Shipley Road from Station Street to Hargraves Lookout.	Generally good local road although it is narrow and windy in some locations. Very popular with cyclist and has a popular lookout at end.	Install bicycle network route directional signage & W6-214 x 6 in both directions.	Low	Signage \$180	\$1,080
						Total Cost	\$1,080
Rec 7e New Route	No mention.	Station Street from Bundarra to Shipley Road. Shipley Road from Station Street to Kanimbla Drive. Kanimbla Drive to ramp - end of seal	Good local road although it is narrow, steep and windy in some locations. Very popular with cyclist.	Extension from Hargraves lookout. Install bicycle network route directional signage & W6-214 x 2. Install W6-210 & W6-211 where appropriate.	Low	Signage \$180	\$1,080
						Total Cost	\$1,080

DRAFT

L19 Extension North	No mention.	Hat Hill Road from Connaught to end - Perry's Lookdown and Anvil Rock	Hat Hill Road from GWHY to Connaught rd currently exist. Sealed local road to Robb Avenue then gravel to end.	*Install bicycle shoulder lanes 500m x 2 and PS-2 x 2 logos & R7-1-4 X 2 on both sides Connaught Rd to end of bitumen. *Repair edge on both sides were required to provide a smooth sealed shoulder and edge line	Low	Shoulder Lane \$5000 Signage \$180 Logos \$250 Shoulder Repair \$65000	\$5000 \$360 \$500 SLA
\$						Total Cost	\$5,860
Rec 7f New Route	No mention.	Ridgewell Road to end - Baltzers Lookout	Gravel road to tourist attractor.	Install bicycle network route directional signage & W6-214 in both directions.	Low	Signage \$180	\$360
\$						Total Cost	\$360
Rec 8a New Route	No mention.	Mt York Road from GWHY to end.	Good local road. Very popular with tourist & cyclist.	Part of Greensspace Project	Low	Refer Greenspace Project for full details.	
\$						Total Cost	NIL
Rec 8b New Route	No mention.	Mt Victoria Falls Road to end	Gravel road to tourist attractor. Need to link with Mt Victoria to Katoomba Rail Trail when completed.	Install bicycle network route directional signage & W6-214 in both directions.	Low	Signage \$180	\$720
\$						Total Cost	\$720
Rec 8c New Route	No mention	Mt Piddington Road from GWHY into Sylvania & Apex to Mt Piddington	Local sealed road, popular with tourist. Minium width in most locations.	Install bicycle network route directional signage & W6-214 in both directions.	Low	Signage \$180	\$1,440
\$						Total Cost	\$1,440
Katoomba to Mt Victoria Multi Purpose Trail - Part of Greenspace Regional Project	Previously listed but not completed.	Katoomba to Mount Victoria connecting with Rec 5, Rec 8, Rec 8a & Rec 8b to Katoomba connecting with L14	See Council report April 2003	This route has been identified as one of high importance both as a regional link with the GWHY and linking local walking tracks and major tourist attractions. The plan for this link is the development of a 20km multi purpose trail adjacent to the railway corridor between Katoomba and Mt Victoria. This trail has the capacity to link with a number of recreation trails including Point Pilcher, Mt Victoria Falls, Mt Piddington, Mt York, Berghoffers Pass and onto Hartley Vale in the Lithgow LGA. This trail will link with the Cliff Drive route Rec 5.	High	Refer Greenspace Project for full details.	\$5,145,228
\$						Total Cost	\$5,145,228
						TOTAL PROPOSED ROUTE COSTINGS	\$6,988,228