Appendix A
Bathurst bike park layout

APPENDIX 2

THIS PAGE HAS BEEN LEFT INTENTIONALLY BLANK

Traffic Feasibility Report
Bathurst Bicycle Park

Cox Richardson

Report ref:
208010-001-01
21 June 2010
Revision 3

aurecon

Document prepared by:

Aurecon Australia Pty Ltd
ABN 54 005 139 873
116 Military Road
Neutral Bay
New South Wales 2089 Australia

T: +61 2 9465 5599
F: +61 2 9465 5598
E: sydney@ap.aurecongroup.com
W: aurecongroup.com

Document control

aurecon

Document ID: Document1

Rev No	Date	Revision details	Typist	Author	Verifier	Approver
0	11 May 2010	Draft report	RD	RD	KH	JW
1	27 May 2010	Final report	RD	RD	KH	JW
2	31 May 2010	Final report v2	RD	RD	KH	JW
3	21 June 2010	Final report v3	RD	RD	KH	JW

Contents

1. Introduction

Bathurst Regional Council is investigating the feasibility of constructing a bicycle park to be used by a number of local clubs to hold training, competitions and educational courses. Aurecon were commissioned by Cox Richardson to prepare a Traffic Report for the development of the Bathurst Bicycle Park (BBP) as part of the feasibility study. The analysis and assessment of the proposed development is detailed in the following sections of this report.

2. Existing conditions

2.1 Site location

The proposed BBP is located approximately 5km south of the centre of the Bathurst CBD on Vale Road. It is currently owned by Bathurst Regional Council and is being used for rural purposes.

2.2 Existing traffic provisions

The proposed location for the BBP has two access points. The one access will be from Vale Road, sharing the access road with Omya Southern Pty Ltd (Omya) (a mineral processing plant). This intersection gives priority to vehicles on Vale Road. There are no right turn bays at the intersection of Vale Road with the access road. This access crosses the main western rail line at a signed controlled crossing. The other access will be from a new access road off College Road. Currently there is a sealed internal road that passes through the site.

2.2.1 Vale Road

Vale Road is a two-way two-lane State Road as classified by the RTA with a speed limit of 100km/h in the proximity to the access road. MetroCount Traffic data was provided by Bathurst Regional Council for counts undertaken within the proximity of the site access on Vale Road and is attached in Appendix A. These counts were undertaken from Tuesday 23 March 2010 to Thursday 1 April 2010, providing a total of eight complete days and two half days of data. The AADT volume as indicated by Bathurst Regional Council in April 2010 for this location is 3,155 vehicles per day.

A review of the Metrocount Traffic Data indicted that the typical weekday AM peak hour traffic period is between 08:15 and 09:15 with an approximate average peak of 360 vehicles (two-way). The weekday PM peak hour traffic period is between 16:45 and 17:45 with approximate average peak of 360 vehicles. The weekend peak hour traffic period occurs typically between 11:15 and 12:15 with approximately 300 vehicles (two-way).

2.2.2 Lagoon Road

Lagoon Road intersects with Vale Road approximately 140m south of the proposed BBP access onto Vale Road. This intersection gives priority to vehicles on Vale Road. Lagoon Road is a two-way two-lane local road with a speed limit of 100km/h that provides access to rural properties and the settlement of Rockley.

MetroCount Traffic data was provided by Bathurst Regional Council for counts undertaken near the intersection of Lagoon Road and Perthville Road on Lagoon Road and is attached in Appendix A. These counts were undertaken from Thursday 12 October 2006 to Monday 20 November 2006, providing a total of thirty eight complete days and two half days of data. The AADT volume as indicated by Bathurst Regional Council in November 2006 for this location is 485 vehicles per day.

Council provided an AADT for 2003 of 370 vehicles for Lagoon Road. Depending on the period that the counts were undertaken to obtain this AADT value, there has been a 9.4% annual increase in traffic for this road.

The peak traffic volumes on Lagoon Road are low in comparison with Vale Road. The typical weekday AM peak hour traffic period is between 08:00 and 09:00 with approximate average peak of 47 vehicles. The weekday PM peak hour traffic period is between 16:45 and 17:45 with approximate average peak of 57 vehicles. Weekend peak hour traffic period occurs typically between 11:45 and 12:45 with approximately 54 vehicles.

2.2.3 College Road

College Road is a local two-way two-lane road with a speed limit of 80km/h. It is a narrow road with some sections with no road markings. College Road provides access to the spectator viewing area at the top of Mt Panorama and the Bathurst Waste Management Facility.

Council provided an AADT for 2003 of 310 for College Road beyond Currawong Street. This AADT is expected to be constant along College Road as there are no other contributing factors.

3. Proposed development

The present proposal of the BBP plans to cater for the various bicycle clubs and groups around Bathurst. It is proposed that as a minimum, the following facilities are provided:

- 333.33m outdoor velodrome
- Criterium long course
- Criterium short course
- BMX track
- Mountain bike down-hill course
- Mountain bike cross country course
- Junior education course
- Club house and amenities building
- 612 space sealed car park

The proposed plan is shown in Appendix B.

4. Proposed traffic and parking impacts

4.1 Basis for forecasting

Due to the type of facility proposed, it is difficult to assess the traffic impact that the development would have on the surrounding road network. Although both the RTA Guide to Traffic Generating Developments and Bathurst Regional Council Off-Street Car Parking Code specify minimum parking requirements, they do not cover a development such as the one proposed, except for the club house, which will have a negligible impact compared to the proposed events.

To accommodate the deficiency in this area of development, we have analysed the likely generation of traffic and parking based on information provided by the client, attached in Appendix C is the estimated attendance to each event at the BBP. The information provided is estimates of the total likely participants/spectator/organisers for local, regional and major events. Table 4.1.1 shows the breakdown of the numbers expected for each activity for each event.

Table 4.1.1: Breakdown of estimated attendance based on activity and event

Activity	Local events	Regional events	Major events
Track (velodrome)	160	470	600
Criterium (short/ long)	100	300	500
Down-hill/Cross country	75	400	1000
BMX	100	700	1200
Road staging	80	250	600
Bike education	70	-	-
Other activities	10	-	-

The attendance numbers in Table 4.1.1 represent the estimated number of people that would attend for each type of event. It is important to note that down-hill, cross country and criterium events can not be run at the same time due to the design of the park. Also, track events can not be run in conjunction with bike education. Bike education would typically be held on weekdays during school hours.

It is possible that two regional events can be held concurrently. However, major events would be held individually with some events (depending on the type of event) catered and managed from Mount Panorama. Major events are expected to occur a few times a year (approximately three a year).

4.2 Parking provision

Based on the estimated attendance in Table 4.1.1, the maximum number of people to be at a local event would be approximately 360 (typically on a weekend). A regional event would attract approximately 1170 people while a major event is expected to draw a maximum of 1200 people. Based on information from the client, the following assumptions have been made to determine the number of parking spaces required:

- The majority of the events will be held for junior competitors that will be driven by a parent or friend (assume 50% of competitors).
- Senior participants are likely to travel to the BBP together if driving (assume 50% of competitors).
- Regional and major events are likely to have a greater amount of people travelling together (assume 75% of competitors).
- 50% of local participants of criterium, road staging, down-hill and cross country are likely to cycle to the BBP.
- 20% of local participants for BMX are likely to cycle to the BBP.
- Bike education is likely to have one spectator for every participant.

Based on these assumptions, Table 4.2.1 shows the calculation of parking provision required to cater for the estimated demand.

Table 4.2.1: Estimated parking provision required based on activity and event

Activity	Local events	Regional events	Major events
Track (velodrome)	**120**	206	263
Criterium (short/ long)	38	109	197
Down-hill/Cross country	29	159	421
BMX	60	**298**	**516**
Road staging	30	92	245
Bike education	35	-	-
Other activities	10	-	-

Based on the above parking provision estimated, the following assumptions for the BBP can be made:

- Local events that are held concurrently would generate approximately 218 vehicles (track, criterium and BMX).
- Regional events that are held individually would generate approximately 298 vehicles (BMX). If two regional events are held at the same time, then the demand would be approximately 504 vehicles (track and BMX).
- A major event would generate approximately 516 vehicles (BMX).

Therefore the 612 space sealed car park is expected to cater for a major event.

In addition it is expected that some events will require facilities for buses and trailers. Based on the information provided by the client, consideration is to be made for two buses and five trailers for all regional and major events.

4.3 Traffic generation

Traffic generated by the site is likely to occur outside the existing weekday peak hour periods. As most of the events are expected to occur during the weekend, the peak traffic generated by the site is unlikely to coincide with the existing peak hour periods. This is due to the early starting time for most of the events.

It is expected that the traffic generated by the site would arrive at the site over a two-hour period and depart over a three-hour period. Assuming that this is evenly split, there would be a generation of approximately 260 vehicles per hour in the morning and approximately 172 vehicles per hour in the afternoon/evening for a major event.

Omya have stated that they have 25,000 articulated vehicle movements per annum, with a potential increase to 70,000 vehicles per annum. Although the processing plant is operating 24 hours, the majority of their truck movements occur between 05:00 and 23:00 on weekdays. This provides an average of approximately six movements an hour on a weekday.

The College Road access is planned to be the main access to the BBP. This is due to the low number of movements on College Road and the separation from the mineral processing plant and rail line. The Vale Road access is planned to be available; however, it will be up to event organisers to advertise the preferred access to competitors and spectators.

It is expected that the majority of traffic generated by the BBP would travel from/to Bathurst, where it would congregate/disperse. Although some competitors may travel south along Vale Road, it is expected that this amount would be negligible.

In order to assess the performance and capacity of Vale Road, the access road was analysed using SIDRA Intersection with the assumption of a 70/30 split in traffic movements on Vale Road during the AM and PM peak periods on a weekday. This is assumed to be a worst case scenario if all vehicles were to use Vale Road to access the BBP.

Due to the existing AADT on College Road, the impact of the BBP on College Road will have a minimal impact on the existing users.

SIDRA Intersection is a deterministic traffic modelling tool which determines how well an intersection is operating to a fixed set of inputs. SIDRA Intersection can be used to analyse priority intersections, roundabout and signalised intersections. Outputs from SIDRA Intersection include Level of Service (LOS) based on average vehicles delay and Degree of Saturation (DS).

A good indication of how a junction operates is to determine its LOS. The RTA Guide to Traffic Generating Developments (October 2002) provides the criteria used to determine the Level of Service. SIDRA Intersection outputs the LOS for each of the approach movements at a particular junction. Table 4.3.1 below shows the RTA LOS criteria.

Table 4.3.1: Level of Service Criteria for Intersections

Level of Service	Average Delay per Vehicle (sec/veh)	Traffic Signals, Roundabouts	Give Way and Stop Signs
A	Less than 14	Good operation	Good operation
B	15 to 28	Good with acceptable delays and spare capacity	Acceptable delays and spare capacity
C	29 to 42	Satisfactory	Satisfactory, but accident study is required
D	43 to 56	Operating near capacity	Near capacity and accident study required
E	57 to 70	At capacity; at signals, incidents with cause excessive delays	At capacity, required other control mode

The following key parameters were used for the intersection analysis:

- Degree of Saturation (DS) - The degree of saturation value indicates the ratio of arrival volumes to capacity. Values above 1.0 represent oversaturated conditions (arrival volumes exceed capacity) whereas degrees of saturation below 1.0 represent under saturated conditions (arrival volumes are below capacity).
- Average Delay - The average delay is the amount of seconds that each vehicle incurs in waiting to pass through the intersection that arrives during the peak period.
- Level of Service (LOS) - Level of service is an overall indication of the operational performance of traffic on any given intersection, traffic lane or roadway.

To compare the impact of the development, and the predicted existing traffic volumes during the peak periods were analysed and compared to the proposed traffic generation. For the basis of the report, it was assumed that there will be 12 heavy vehicle movements (6 in, 6 out) at the intersection of Vale Road and the access road. Two scenarios were tested. Scenario one assumed that these movements will be to/from the north while scenario two assumed that these movements will be to/from the south.

Table 4.3.2 presents the results of the SIDRA analysis based on the assumed split in the existing peak hour traffic and traffic generated by the mineral processing plant and the proposed BBP

Table 4.3.2: SIDRA Intersection analysis of the full access from Vale Road

	Degree of Saturation (DS)	Average Delay per Vehicle (sec/veh)	Level of Service	95% Back of Queue (veh)
Existing Conditions – heavy vehicles travel to/from the north				
Weekday AM	0.137	13.2	A	0.5
Weekday PM	0.147	12.7	A	1.0
Existing Conditions – heavy vehicles travel to/from the south				
Weekday AM	0.144	13.2	A	0.5
Weekday PM	0.137	12.7	A	1.0
Proposed Conditions – heavy vehicles travel to/from the north				
Weekday AM	0.312	13.6	A	1.9
Weekday PM	0.164	13.0	A	1.2
Proposed Conditions – heavy vehicles travel to/from the south				
Weekday AM	0.301	13.6	A	1.9
Weekday PM	0.155	13.0	A	1.2

The results show that the proposed BBP would have a minimal impact on the existing Vale Road intersection based on the assumed traffic conditions. The direction that the heavy vehicles travel to/from this intersection does not influence the LOS based on the assumed heavy vehicle movements. There would be no changes in the LOS. The length of the 95% queue will not extend over the rail track based on the above assumptions.

4.4 Impact on road safety

Vale Road appears to be a 7m wide rural road with 1m shoulders typically reducing to 500mm in places. A road safety audit should be undertaken at concept design stage and during the detail design to identify any possible road safety aspect and enable mitigation or assessment within the design.

4.5 Impact of traffic noise

With the AADT volumes increasing by around 520 vehicles on major event days there is likely to be an increase in noise for receivers along Vale Road. During the design development stage, a noise assessment should be undertaken to ascertain existing "base case" road traffic noise for the purpose of establishing noise exposure levels using ambient background measurements. This assessment should also determine remedial measures required to mitigate any increased exposure above acceptable levels to the identified receivers.

4.6 Internal design

It is proposed that the internal design of the BBP will cater for car parking and internal traffic movements. It is proposed that there will be two parking areas, a corporate area, and a shared internal sealed road with the criterium track. The proposed car parks will be split between two locations. The bottom car park access will be located before the criterium course, allowing for the separation between cyclists/competitors and motorist accessing the site from Vale Road. The top car park will have direct access from College Road. There will be an internal road connecting the two areas together.

Due to the sharing of the internal road with the criterium course, event planning will be required to provide a safe environment for competitors. This will mean that the corporate area will need to be closed to traffic when criterium is using the shared road.

There will be no pedestrian access to the site from Vale Road and College Road. This is due to the location and the distance from Bathurst. Internal movements will be catered for by footpaths and pedestrian crossings. As these pedestrian crossings are located on the criterium course, event planning is required to provide a safe environment for both competitor and pedestrian.

4.7 Cyclist access

Vale Road is relatively flat making is easy for cyclists to maintain a constant speed. It is expected that approximately 50% of locals using the BBP will cycle to the park due to the close proximity to Bathurst. It is expected that those who cycle to the BBP will cycle in groups of two or more. Where cyclists travel in groups, it is legal for them it ride two abreast, occupying a lane. There are sections of the road that provide overtaking opportunities, therefore with the low traffic volumes it should be considered safe for experienced riders. Currently the Bathurst Cycling Club holds events in Perthville, approximately 10km from the centre of Bathurst, with some races using Vale Road. This indicates that Vale Road may be a common cycling route.

Access into the site may need to be designed to cater for cyclist, especially as they are crossing the main western rail line.

Cyclists may also be able to use College Road to access the BBP. College Road would generally be quieter than Vale Road; however, it is narrower and with unmarked sections.

5. Conclusion and recommendations

5.1 Conclusion

Based on the information provided, the following conclusions can be made:

- Bathurst Regional Council wishes to investigate the feasibility of constructing the Bathurst Bicycle Park to be used by a number of local clubs to hold training, competitions and educational courses.
- Access to the site would be provided from Vale Road using the existing access road to the adjoining mineral processing plant and from College Road via a new access.
- Vale Road is a two-way two-lane State Road with an AADT of 3155, with peak hour volumes of approximately 360 vehicles (two-way) in both morning and afternoon/evening peaks.
- Lagoon Road is a two-way two-lane rural road with an AADT of 485, with a morning peak hour volume of approximately 50 vehicles and an afternoon/evening peak hour volume of approximately 60 vehicles.
- The BBP will hold local, regional and major events, with some events run simultaneously (depending on the event).
- It is estimated the local events would generate 196 vehicles, regional events 298 if individually run, 504 vehicle if two events are held, and 516 vehicles if a major event was held. The proposed parking provision will cater for a major event.
- It is estimated that traffic generated by the site would arrive over a two hour period in the morning (258 vehicles per hour) and depart over a three hour period in the afternoon/even (172 vehicles per hour).
- Based on assumptions with the existing traffic conditions, the Level of Service at the intersection of Vale Road and the access road will not change.
- The peak hour traffic generation for the site is unlikely to coincide with the existing peak periods on the surrounding road network.
- The majority of the traffic generated by the site would travel to and from Bathurst.
- The internal design means that event planning will be required to manage vehicle, cyclists and pedestrian movements when the criterium course is being used.
- Experienced cyclists are likely to ride in groups to the BBP.

5.2 Recommendations

The following recommendations for the site can be made based on the information provided:

- An event management plan should be developed to manage vehicle, cyclist and pedestrian movements.
- Event managers are to be made responsible for the advertising of College Road as the main access for the proposed BBP.
- Widen the pavement on Vale Road and mark a bicycle lane between the BBP and Bathurst to provide cyclists with a safer alternative.
- Investigate whether the speed limit on Vale Road should be reduced to 80km/h between the BBP and Bathurst.
- Install signs on Vale Road to inform motorists of cyclist activities, and to also give cyclists directions.
- Undertake a Road Safety Audit during the design stages to identify any possible road safety aspect and enable mitigation or assessment within the design.
- Undertake an assessment of the intersection of Vale Road and the access road and determine if new traffic controls are required for the increase in traffic.
- Undertake a noise assessment during the design development stage to ascertain existing "base case" road traffic noise for the purpose of establishing noise exposure levels using ambient background measurements.

Appendix A
Metrocount Data

MetroCount Traffic Executive
Vehicle Counts

VehicleCount-176 -- English (ENA)

Datasets:

Site:	**[Vale Road (Omya Min] 220 Meters Intersection of Omya Minerals**
Direction:	3 - South bound, A hit first. **Lane:** 0
Survey Duration:	11:18 Tuesday, 23 March 2010 => 13:22 Thursday, 1 April 2010
File:	Vale Road (Omya Min01Apr2010.EC0 (Plus)
Identifier:	U037PGG3 MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm:	Factory default
Data type:	Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time:	**11:18 Tuesday, 23 March 2010 => 13:22 Thursday, 1 April 2010**
Included classes:	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range:	10 - 160 km/h.
Direction:	North, East, South, West (bound)
Separation:	All - (Headway)
Name:	Default Profile
Scheme:	Vehicle classification (AustRoads94)
Units:	Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile:	Vehicles = 28964 / 29013 (99.83%)

* Tuesday, 23 March 2010 - Total=2233 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**220**	**205**	**255**	**326**	**306**	**365**	**245**	**121**	**69**	**57**	**46**	**18**	
-	-	-	-	-	-	-	-	-	-	-	-	64	50	59	60	74	**105**	73	27	19	11	11	8	6
-	-	-	-	-	-	-	-	-	-	-	0	55	50	62	82	66	**93**	70	31	16	15	14	6	0
-	-	-	-	-	-	-	-	-	-	-	27	45	49	61	88	74	**100**	56	30	20	12	14	3	1
-	-	-	-	-	-	-	-	-	-	-	47	56	56	73	96	**92**	67	46	33	14	19	7	1	0

PM Peak 1645 - 1745 (390), PM PHF=0.93

* Wednesday, 24 March 2010 - Total=3795, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
7	**2**	**1**	**4**	**10**	**61**	**163**	**241**	**356**	**271**	**205**	**223**	**213**	**204**	**222**	**308**	**335**	**353**	**247**	**127**	**68**	**96**	**49**	**29**	
6	1	0	0	1	9	24	57	78	**86**	56	48	64	57	58	64	79	**102**	65	34	13	25	14	12	2
0	0	1	2	2	8	42	67	**91**	70	49	45	53	39	43	83	84	**92**	63	31	23	26	14	10	0
1	1	0	1	1	16	48	56	**90**	70	51	67	54	54	61	73	74	**84**	59	31	19	23	5	3	1
0	0	0	1	6	28	49	61	**97**	45	49	63	42	54	60	88	**98**	75	60	31	13	22	16	4	2

AM Peak 0815 - 0915 (364), AM PHF=0.94 PM Peak 1645 - 1745 (376), PM PHF=0.92

* Thursday, 25 March 2010 - Total=3705, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
5	**2**	**3**	**2**	**13**	**49**	**138**	**219**	**364**	**265**	**207**	**208**	**211**	**220**	**229**	**327**	**290**	**327**	**232**	**143**	**123**	**72**	**35**	**21**	
2	1	0	0	3	5	21	49	78	**82**	51	51	43	52	58	61	69	**84**	63	53	33	24	8	7	1
0	0	0	1	3	8	25	64	**111**	60	46	56	53	54	49	89	80	**98**	72	34	45	13	11	5	2
1	1	2	0	1	12	46	51	**77**	63	60	63	58	59	59	90	57	**84**	47	29	23	19	7	4	3
2	0	1	1	6	24	46	55	**98**	60	50	38	57	55	63	87	**84**	61	50	27	22	16	9	5	1

AM Peak 0815 - 0915 (368), AM PHF=0.83 PM Peak 1645 - 1745 (350), PM PHF=0.89

* Friday, 26 March 2010 - Total=4010, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
7	**8**	**7**	**3**	**15**	**46**	**185**	**236**	**349**	**239**	**247**	**190**	**233**	**229**	**255**	**358**	**325**	**368**	**260**	**170**	**92**	**74**	**74**	**40**	
1	2	4	1	2	4	19	65	66	**69**	64	44	66	49	66	84	77	**80**	65	41	25	19	22	13	5
2	3	2	0	4	8	42	43	**98**	76	63	58	58	54	64	81	79	**119**	83	40	25	20	18	10	1
3	2	0	0	2	12	54	58	**98**	33	54	43	54	55	63	95	**98**	84	51	60	21	16	19	6	4
1	1	1	2	7	22	70	70	**87**	61	66	45	55	71	62	98	**71**	85	61	29	21	19	15	11	3

AM Peak 0815 - 0915 (352), AM PHF=0.90 PM Peak 1630 - 1730 (368), PM PHF=0.77

* Saturday, 27 March 2010 - Total=3097, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
13	**14**	**5**	**5**	**8**	**35**	**69**	**107**	**166**	**228**	**252**	**267**	**265**	**236**	**218**	**212**	**208**	**238**	**159**	**134**	**64**	**62**	**68**	**64**	
5	5	0	0	3	2	12	23	29	62	55	48	**85**	55	52	43	57	65	45	35	19	19	17	23	3
1	3	3	3	4	10	13	26	38	66	62	**60**	**55**	54	56	52	51	58	53	41	14	15	17	18	4
4	3	1	1	0	9	20	27	45	58	66	**71**	**66**	67	49	62	52	54	37	26	13	15	14	15	5
3	3	1	1	1	14	24	31	54	42	69	**88**	**59**	60	61	55	48	61	24	32	18	13	20	8	3

AM Peak 1115 - 1215 (304), AM PHF=0.86 PM Peak 1200 - 1300 (265), PM PHF=0.78

* Sunday, 28 March 2010 - Total=2887, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
15	**20**	**8**	**12**	**7**	**17**	**41**	**68**	**132**	**197**	**270**	**282**	**257**	**272**	**248**	**204**	**238**	**198**	**147**	**107**	**62**	**53**	**21**	**11**	
3	4	5	3	3	3	6	7	16	39	45	**68**	67	56	**57**	47	44	45	46	30	18	20	7	6	1
4	6	0	1	2	4	7	14	30	44	58	**66**	59	**77**	65	54	71	38	41	17	19	14	3	2	0
5	5	1	5	1	3	14	26	37	44	**87**	75	79	**68**	56	60	70	61	36	34	11	10	10	3	0
3	5	2	3	1	7	14	21	49	70	**80**	73	52	**71**	70	43	53	54	24	26	14	9	1	0	1

AM Peak 1030 - 1130 (301), AM PHF=0.86 PM Peak 1315 - 1415 (273), PM PHF=0.89

* Monday, 29 March 2010 - Total=2952, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
2	**9**	**3**	**3**	**7**	**55**	**148**	**192**	**324**	**213**	**181**	**149**	**141**	**195**	**185**	**267**	**284**	**299**	**149**	**61**	**41**	**25**	**14**	**5**	
1	4	2	0	1	5	25	42	64	**66**	41	42	22	42	41	47	75	**75**	56	17	13	4	6	2	0
0	0	1	0	3	11	25	39	**106**	53	47	38	34	52	45	73	69	**75**	42	20	8	7	3	1	0
0	3	0	1	0	18	45	50	**82**	52	55	45	46	48	54	74	78	**72**	35	14	14	7	4	2	2
1	2	0	2	3	21	53	61	**72**	42	38	24	39	53	45	73	62	**77**	16	10	6	7	1	0	0

AM Peak 0815 - 0915 (326), AM PHF=0.77 PM Peak 1700 - 1800 (299), PM PHF=0.97

* Tuesday, 30 March 2010 - Total=3097, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
2	**0**	**4**	**6**	**8**	**50**	**90**	**186**	**369**	**221**	**207**	**176**	**186**	**184**	**196**	**294**	**268**	**238**	**189**	**104**	**33**	**38**	**24**	**24**	
0	0	1	1	1	7	15	32	**77**	58	53	39	47	52	46	70	**86**	79	50	36	17	9	9	8	1
0	0	2	2	3	13	17	45	**107**	63	62	44	38	34	50	60	**65**	75	52	28	1	9	6	9	3
2	0	0	2	1	11	20	47	**86**	51	47	46	56	43	43	**83**	53	65	46	20	9	16	7	4	0
0	0	1	1	3	19	38	62	**99**	49	45	47	45	55	57	**81**	64	19	41	20	6	4	2	3	0

AM Peak 0800 - 0900 (369), AM PHF=0.86 PM Peak 1530 - 1630 (315), PM PHF=0.92

* Wednesday, 31 March 2010 - Total=1919, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
4	**2**	**4**	**5**	**6**	**46**	**127**	**152**	**269**	**188**	**195**	**186**	**168**	**141**	**151**	**120**	**20**	**21**	**26**	**20**	**29**	**37**	**0**	**2**	
1	0	0	0	0	2	20	34	**70**	47	42	48	52	29	**39**	24	9	2	0	1	10	11	0	0	0
3	1	1	1	3	10	30	56	**67**	36	45	41	32	44	**38**	58	2	6	13	15	2	10	0	0	0
0	1	3	1	0	5	39	20	**62**	53	55	42	39	16	**48**	37	5	0	13	1	14	10	0	0	0
0	0	0	3	3	29	38	42	**70**	52	53	55	45	**52**	26	1	4	13	0	3	3	6	0	2	0

AM Peak 0800 - 0900 (269), AM PHF=0.96 PM Peak 1345 - 1445 (177), PM PHF=0.85

* Thursday, 1 April 2010 - Total=1195 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
0	**1**	**1**	**4**	**2**	**6**	**96**	**197**	**346**	**204**	**254**	**13**	**62**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
0	0	0	0	1	1	0	34	60	**76**	55	8	22	6	-	-	-	-	-	-	-	-	-	-	-
0	0	1	0	1	3	17	54	**102**	64	46	2	19	3	-	-	-	-	-	-	-	-	-	-	-
0	0	0	1	0	1	34	50	**91**	35	45	2	11	-	-	-	-	-	-	-	-	-	-	-	-
0	1	0	3	0	1	45	59	**93**	29	108	1	10	-	-	-	-	-	-	-	-	-	-	-	-

AM Peak 0815 - 0915 (362), AM PHF=0.89

MetroCount Traffic Executive
Vehicle Counts

VehicleCount-177 -- English (ENA)

Datasets:

Site:	**[Lagoon Road] Perthville Rd Turnoff**
Direction:	5 - South bound A>B, North bound B>A. **Lane:** 0
Survey Duration:	16:09 Thursday, 12 October 2006 => 12:15 Monday, 20 November 2006
File:	Lagoon Road20Nov2006.EC0 (Plus)
Identifier:	U036Q69J MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm:	Factory default
Data type:	Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time:	**16:09 Thursday, 12 October 2006 => 12:15 Monday, 20 November 2006**
Included classes:	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12
Speed range:	10 - 160 km/h.
Direction:	North, East, South, West (bound)
Separation:	All - (Headway)
Name:	Default Profile
Scheme:	Vehicle classification (AustRoads94)
Units:	Metric (meter, kilometer, m/s, km/h, kg, tonne)
In profile:	Vehicles = 19129 / 19140 (99.94%)

* Thursday, 12 October 2006 - Total=0 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0

* Friday, 13 October 2006 - Total=375, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
0	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**23**	**32**	**33**	**42**	**40**	**37**	**44**	**39**	**47**	**10**	**7**	**5**	**9**	**7**	
0	0	0	0	0	0	0	0	0	0	1	**11**	7	10	10	9	**11**	13	12	4	3	0	4	1	0
0	0	0	0	0	0	0	0	0	0	9	**7**	8	11	5	5	**14**	11	15	3	2	3	1	3	1
0	0	0	0	0	0	0	0	0	0	5	**8**	10	9	14	**14**	10	5	8	0	2	1	2	2	1
0	0	0	0	0	0	0	0	0	0	**8**	6	8	12	11	**9**	9	10	12	3	0	1	2	1	1

AM Peak 1045 - 1145 (34), AM PHF=0.77 PM Peak 1530 - 1630 (48), PM PHF=0.86

* Saturday, 14 October 2006 - Total=481, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
3	**0**	**0**	**0**	**0**	**6**	**17**	**15**	**30**	**34**	**29**	**45**	**48**	**33**	**34**	**50**	**34**	**36**	**32**	**12**	**7**	**8**	**4**	**4**	
0	0	0	0	0	0	1	4	6	8	7	12	**18**	8	11	**11**	7	8	10	3	2	1	1	0	2
1	0	0	0	0	0	4	4	6	11	6	**9**	5	8	6	**12**	13	7	6	4	4	5	2	2	3
1	0	0	0	0	4	6	5	9	6	11	**12**	15	12	11	**16**	4	7	8	2	1	2	1	1	1
1	0	0	0	0	2	6	2	9	9	5	**12**	10	5	6	**11**	10	14	8	3	0	0	0	1	1

AM Peak 1115 - 1215 (51), AM PHF=0.71 PM Peak 1500 - 1600 (50), PM PHF=0.78

* Sunday, 15 October 2006 - Total=629, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
7	**5**	**2**	**2**	**2**	**4**	**9**	**22**	**31**	**33**	**35**	**49**	**64**	**102**	**77**	**60**	**39**	**34**	**24**	**11**	**7**	**7**	**1**	**2**	
2	0	1	0	0	1	3	4	3	10	11	20	**16**	24	**34**	17	9	6	5	2	4	1	1	0	1
3	1	1	0	1	0	2	7	3	6	3	10	**12**	17	**19**	18	10	9	12	6	0	1	0	2	0
1	2	0	0	1	2	3	5	13	4	12	8	**17**	**29**	12	16	7	7	4	1	0	4	0	0	0
1	2	0	2	0	1	1	6	12	13	9	**11**	19	**32**	12	9	13	12	3	2	3	1	0	0	0

AM Peak 1145 - 1245 (56), AM PHF=0.82 PM Peak 1330 - 1430 (114), PM PHF=0.84

* Monday, 16 October 2006 - Total=500, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
1	**0**	**0**	**0**	**0**	**4**	**12**	**38**	**47**	**24**	**32**	**24**	**36**	**42**	**36**	**38**	**58**	**47**	**32**	**10**	**8**	**5**	**3**	**3**	
1	0	0	0	0	0	3	9	**9**	8	10	7	12	7	8	10	**16**	9	14	2	2	3	2	1	0
0	0	0	0	0	2	1	11	**14**	7	5	4	9	10	13	7	**21**	9	8	1	5	1	0	1	0
0	0	0	0	0	2	4	7	**12**	5	9	8	9	15	8	8	**10**	16	5	2	1	0	1	1	0
0	0	0	0	0	0	4	11	**12**	4	8	5	6	10	7	**13**	11	13	5	5	0	1	0	0	0

AM Peak 0800 - 0900 (47), AM PHF=0.84 PM Peak 1545 - 1645 (60), PM PHF=0.71

* Tuesday, 17 October 2006 - Total=484, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
0	**0**	**0**	**0**	**1**	**11**	**14**	**34**	**47**	**26**	**28**	**34**	**32**	**24**	**40**	**41**	**41**	**50**	**34**	**6**	**9**	**5**	**6**	**1**	
0	0	0	0	0	1	1	12	**15**	12	8	6	8	5	9	10	13	**11**	9	1	3	1	2	0	0
0	0	0	0	0	1	3	7	**13**	2	7	9	5	5	14	8	13	**14**	10	2	2	1	1	1	0
0	0	0	0	0	3	1	7	**10**	6	8	13	10	8	9	10	10	**16**	11	1	1	1	2	0	0
0	0	0	0	1	6	9	8	**9**	6	5	6	9	6	8	13	5	**9**	4	2	3	2	1	0	0

AM Peak 0800 - 0900 (47), AM PHF=0.78 PM Peak 1700 - 1800 (50), PM PHF=0.78

* Wednesday, 18 October 2006 - Total=497, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
0	**0**	**0**	**0**	**0**	**12**	**21**	**39**	**40**	**34**	**30**	**33**	**24**	**31**	**29**	**33**	**52**	**43**	**29**	**12**	**14**	**15**	**5**	**1**	
0	0	0	0	0	0	4	11	7	**15**	5	6	8	7	5	7	12	**9**	6	6	3	3	1	0	1
0	0	0	0	0	1	4	11	**15**	6	9	13	6	5	5	5	14	**19**	10	3	5	9	0	0	0
0	0	0	0	0	5	3	11	**9**	7	5	7	4	13	6	11	**13**	12	6	2	2	3	2	0	0
0	0	0	0	0	6	10	6	**9**	6	11	7	6	6	13	10	**13**	3	7	1	4	0	2	1	0

AM Peak 0815 - 0915 (48), AM PHF=0.80 PM Peak 1630 - 1730 (54), PM PHF=0.71

* Thursday, 19 October 2006 - Total=477, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
1	**0**	**0**	**1**	**0**	**6**	**24**	**38**	**41**	**22**	**18**	**27**	**24**	**24**	**37**	**38**	**44**	**36**	**43**	**22**	**16**	**9**	**4**	**2**	
1	0	0	0	0	1	7	13	**8**	8	4	7	4	9	10	8	10	6	**11**	9	7	1	3	1	0
0	0	0	0	0	1	4	8	**16**	5	4	6	9	5	7	5	10	10	**12**	7	5	4	0	0	0
0	0	0	0	0	1	3	4	**10**	5	5	7	8	4	7	12	11	8	**13**	5	1	2	0	1	1
0	0	0	1	0	3	10	**13**	7	4	5	7	3	6	13	13	13	**12**	7	1	3	2	1	0	0

AM Peak 0745 - 0845 (47), AM PHF=0.73 PM Peak 1745 - 1845 (48), PM PHF=0.92

* Friday, 20 October 2006 - Total=471, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
1	**0**	**1**	**0**	**0**	**7**	**26**	**29**	**47**	**26**	**31**	**32**	**35**	**33**	**27**	**27**	**41**	**35**	**25**	**17**	**14**	**8**	**6**	**3**	
0	0	0	0	0	0	7	9	6	**11**	9	6	7	10	10	5	**12**	9	7	5	0	1	3	1	0
0	0	0	0	0	2	4	7	**19**	7	9	11	12	8	9	8	**9**	11	10	5	6	2	1	2	0
1	0	0	0	0	3	4	7	**6**	5	6	7	10	6	4	7	**10**	8	5	5	6	5	2	0	0
0	0	1	0	0	2	11	6	**16**	3	7	8	6	9	4	7	**10**	7	3	2	2	0	0	0	1

AM Peak 0815 - 0915 (52), AM PHF=0.68 PM Peak 1600 - 1700 (41), PM PHF=0.85

* Saturday, 21 October 2006 - Total=494, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
1	**2**	**2**	**0**	**0**	**5**	**7**	**20**	**36**	**40**	**30**	**47**	**46**	**25**	**27**	**44**	**32**	**51**	**33**	**15**	**9**	**14**	**3**	**5**	
0	0	1	0	0	0	1	5	9	10	4	1	**17**	6	10	7	4	**12**	8	5	2	2	1	1	3
0	0	0	0	0	1	1	5	6	11	10	**22**	11	5	6	15	7	**13**	11	5	3	3	1	4	0
0	1	1	0	0	2	3	4	8	7	6	**12**	6	7	5	12	11	**12**	7	4	2	5	0	0	2
1	1	0	0	0	2	2	6	13	12	10	**12**	12	7	6	10	10	**14**	7	1	2	4	1	0	0

AM Peak 1115 - 1215 (63), AM PHF=0.72 PM Peak 1700 - 1800 (51), PM PHF=0.91

*** Sunday, 22 October 2006 - Total=477, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
5	**3**	**3**	**0**	**0**	**2**	**20**	**21**	**33**	**35**	**19**	**38**	**51**	**29**	**33**	**52**	**37**	**34**	**31**	**9**	**5**	**13**	**3**	**1**	
3	0	0	0	0	0	1	8	11	10	4	9	**17**	8	4	**11**	7	10	9	5	1	2	0	0	0
0	3	1	0	0	0	7	4	6	10	3	13	**14**	5	11	**16**	10	9	7	1	2	4	3	1	0
2	0	1	0	0	1	3	3	8	9	5	10	**11**	7	6	**15**	8	10	9	2	1	5	0	0	0
0	0	1	0	0	1	9	6	8	6	7	**6**	9	9	**12**	10	12	5	6	1	1	2	0	0	0

AM Peak 1145 - 1245 (48), AM PHF=0.71 PM Peak 1445 - 1545 (54), PM PHF=0.84

*** Monday, 23 October 2006 - Total=411, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
0	**0**	**0**	**1**	**1**	**4**	**17**	**31**	**39**	**36**	**25**	**22**	**26**	**27**	**13**	**34**	**41**	**33**	**32**	**10**	**8**	**6**	**2**	**3**	
0	0	0	0	1	1	2	8	**10**	10	6	5	5	5	1	10	7	**9**	11	3	4	0	2	2	0
0	0	0	0	0	1	0	8	**10**	4	8	5	8	3	2	7	**12**	12	10	4	2	3	0	1	1
0	0	0	1	0	1	4	5	**16**	10	3	6	8	10	6	6	**10**	5	6	1	1	1	0	0	0
0	0	0	0	0	1	11	**10**	3	12	8	6	5	9	4	11	**12**	7	5	2	1	2	0	0	0

AM Peak 0745 - 0845 (46), AM PHF=0.72 PM Peak 1615 - 1715 (43), PM PHF=0.90

*** Tuesday, 24 October 2006 - Total=489, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
1	**0**	**0**	**0**	**0**	**9**	**16**	**29**	**31**	**32**	**29**	**33**	**34**	**32**	**31**	**48**	**41**	**41**	**35**	**15**	**12**	**11**	**6**	**3**	
0	0	0	0	0	2	1	7	11	9	**10**	5	9	7	10	**9**	7	11	6	3	3	3	1	0	0
1	0	0	0	0	1	2	8	6	6	**10**	15	8	10	4	**17**	10	12	6	6	4	5	3	3	0
0	0	0	0	0	3	2	5	8	**9**	3	8	8	4	7	**9**	12	6	14	2	2	1	2	0	0
0	0	0	0	0	3	11	9	6	**8**	6	5	9	11	10	**13**	12	12	9	4	3	2	0	0	0

AM Peak 0930 - 1030 (37), AM PHF=0.93 PM Peak 1500 - 1600 (48), PM PHF=0.71

*** Wednesday, 25 October 2006 - Total=555, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
0	**0**	**0**	**0**	**0**	**7**	**19**	**52**	**59**	**38**	**29**	**24**	**31**	**30**	**25**	**63**	**51**	**37**	**41**	**11**	**13**	**11**	**10**	**4**	
0	0	0	0	0	1	3	5	**10**	11	8	5	9	11	7	**10**	8	10	13	3	4	2	4	0	0
0	0	0	0	0	2	4	19	**17**	7	7	4	9	8	6	**21**	11	8	16	3	4	2	2	3	0
0	0	0	0	0	1	6	14	**20**	9	10	2	5	6	8	**16**	20	12	9	2	3	1	3	0	0
0	0	0	0	0	3	6	**14**	12	11	4	13	8	5	4	**16**	12	7	3	3	2	6	1	1	2

AM Peak 0745 - 0845 (61), AM PHF=0.76 PM Peak 1500 - 1600 (63), PM PHF=0.75

*** Thursday, 26 October 2006 - Total=577, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
2	**0**	**0**	**0**	**0**	**5**	**32**	**36**	**50**	**32**	**31**	**35**	**48**	**39**	**43**	**58**	**41**	**47**	**36**	**12**	**13**	**10**	**5**	**2**	
0	0	0	0	0	1	10	11	6	**13**	6	8	10	8	13	**13**	7	11	10	4	2	1	2	0	1
0	0	0	0	0	1	9	6	**15**	6	14	13	13	9	13	**10**	12	12	13	2	2	3	1	1	1
0	0	0	0	0	2	5	5	**17**	8	4	8	8	13	9	**18**	12	8	5	5	6	5	1	1	0
2	0	0	0	0	1	8	14	**12**	5	7	6	17	9	8	**17**	10	16	8	1	3	1	1	0	0

AM Peak 0815 - 0915 (57), AM PHF=0.84 PM Peak 1500 - 1600 (58), PM PHF=0.81

*** Friday, 27 October 2006 - Total=505, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
2	**0**	**0**	**0**	**0**	**7**	**17**	**35**	**46**	**27**	**32**	**32**	**37**	**27**	**28**	**45**	**36**	**32**	**40**	**26**	**9**	**13**	**8**	**6**	
1	0	0	0	0	1	3	7	**8**	7	5	6	5	8	4	7	**11**	5	12	10	4	2	2	1	0
1	0	0	0	0	2	4	12	**16**	3	8	4	16	7	8	**13**	4	9	9	5	4	5	1	4	0
0	0	0	0	0	2	5	7	**12**	6	12	7	6	7	9	**14**	5	10	9	5	1	3	3	0	0
0	0	0	0	0	2	5	9	**10**	11	7	15	10	5	7	**11**	16	8	10	6	0	3	2	1	0

AM Peak 0800 - 0900 (46), AM PHF=0.72 PM Peak 1515 - 1615 (49), PM PHF=0.88

*** Saturday, 28 October 2006 - Total=545, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
0	**1**	**1**	**0**	**1**	**4**	**12**	**29**	**29**	**32**	**44**	**49**	**33**	**58**	**70**	**45**	**29**	**35**	**28**	**12**	**8**	**9**	**10**	**6**	
0	1	0	0	0	1	2	1	3	5	11	**11**	5	9	**10**	15	9	6	10	6	4	2	4	2	1
0	0	1	0	1	0	5	12	11	10	10	**12**	7	8	**24**	12	7	10	7	3	0	1	4	2	0
0	0	0	0	0	1	2	9	9	9	11	**12**	6	22	**29**	10	4	14	6	0	3	5	1	1	2
0	0	0	0	0	2	3	7	6	8	12	**14**	15	**19**	7	8	9	5	5	3	1	1	1	1	1

AM Peak 1100 - 1200 (49), AM PHF=0.88 PM Peak 1345 - 1445 (82), PM PHF=0.71

*** Sunday, 29 October 2006 - Total=465, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
4	**1**	**0**	**2**	**2**	**7**	**11**	**21**	**28**	**39**	**32**	**31**	**47**	**40**	**35**	**41**	**44**	**35**	**18**	**10**	**13**	**2**	**2**	**0**	
1	0	0	1	0	2	4	1	3	9	9	5	**18**	5	11	8	**15**	9	6	2	1	1	2	0	0
0	0	0	1	0	1	1	3	7	12	4	8	**7**	18	11	12	**12**	7	4	5	6	0	0	0	0
2	0	0	0	0	3	3	5	10	8	8	5	**8**	6	8	7	**14**	16	4	3	2	1	0	0	1
1	1	0	0	2	1	3	12	8	10	11	**13**	14	11	5	**14**	3	3	4	0	4	0	0	0	0

AM Peak 1145 - 1245 (46), AM PHF=0.64 PM Peak 1545 - 1645 (55), PM PHF=0.92

*** Monday, 30 October 2006 - Total=446, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
1	**0**	**0**	**1**	**5**	**9**	**27**	**55**	**21**	**24**	**31**	**25**	**28**	**26**	**28**	**35**	**53**	**36**	**17**	**17**	**5**	**1**	**1**	**0**	
0	0	0	1	1	2	9	**13**	6	3	8	5	10	4	5	9	9	**14**	4	4	2	1	0	0	0
0	0	0	0	1	1	6	**20**	8	8	9	6	7	5	9	5	**19**	8	2	7	1	0	1	0	0
1	0	0	0	2	2	5	**11**	4	6	8	10	7	5	9	12	**12**	9	5	3	1	0	0	0	0
0	0	0	0	1	4	7	**11**	3	7	6	4	4	12	5	9	**13**	5	6	3	1	0	0	0	0

AM Peak 0700 - 0800 (55), AM PHF=0.69 PM Peak 1615 - 1715 (58), PM PHF=0.76

*** Tuesday, 31 October 2006 - Total=525, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
0	**0**	**0**	**1**	**4**	**15**	**31**	**48**	**26**	**28**	**32**	**30**	**34**	**27**	**45**	**62**	**52**	**33**	**32**	**10**	**9**	**4**	**2**	**0**	
0	0	0	0	1	2	6	**11**	6	2	8	6	7	8	13	10	**19**	13	3	3	1	1	1	0	0
0	0	0	0	1	1	13	**12**	2	10	8	8	9	4	6	**15**	7	11	13	1	3	1	1	0	0
0	0	0	1	0	4	3	**14**	9	5	9	7	8	9	15	**19**	20	2	12	2	4	2	0	0	0
0	0	0	0	2	8	9	**11**	9	11	7	9	10	6	11	**18**	6	7	4	4	1	0	0	0	0

AM Peak 0700 - 0800 (48), AM PHF=0.86 PM Peak 1515 - 1615 (71), PM PHF=0.93

*** Wednesday, 1 November 2006 - Total=561, 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
0	**0**	**0**	**0**	**4**	**16**	**43**	**43**	**32**	**30**	**41**	**43**	**39**	**34**	**51**	**47**	**49**	**38**	**19**	**14**	**14**	**3**	**1**	**0**	
0	0	0	0	1	2	5	**12**	10	6	6	11	9	11	11	**12**	16	12	7	1	2	1	0	0	0
0	0	0	0	0	0	**19**	12	9	6	13	13	6	7	15	**17**	16	8	6	7	2	1	1	0	1
0	0	0	0	1	7	**6**	10	5	10	8	9	13	6	**12**	8	9	14	2	4	5	1	0	0	0
0	0	0	0	2	7	**13**	9	8	8	14	10	11	10	**13**	10	8	4	4	2	5	0	0	0	0

AM Peak 0615 - 0715 (50), AM PHF=0.66 PM Peak 1430 - 1530 (54), PM PHF=0.79

* Thursday, 2 November 2006 - Total=478, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
1	**1**	**0**	**0**	**4**	**19**	**40**	**42**	**23**	**19**	**30**	**24**	**32**	**36**	**48**	**35**	**53**	**32**	**13**	**10**	**10**	**3**	**2**	**1**	
0	0	0	0	1	2	9	**7**	7	1	9	7	2	10	**10**	9	18	5	1	1	3	1	0	1	0
1	1	0	0	1	3	12	**10**	7	10	8	7	14	5	**17**	14	12	11	8	3	2	1	0	0	0
0	0	0	0	1	5	6	**12**	3	2	4	3	7	8	**14**	6	14	9	3	2	2	1	1	0	0
0	0	0	0	1	9	**13**	13	6	6	9	7	9	**13**	7	6	9	7	1	4	3	0	1	0	0

AM Peak 0645 - 0745 (42), AM PHF=0.81 PM Peak 1345 - 1445 (54), PM PHF=0.79

* Friday, 3 November 2006 - Total=507, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
0	**1**	**0**	**0**	**6**	**9**	**29**	**46**	**37**	**31**	**26**	**22**	**32**	**35**	**38**	**44**	**39**	**40**	**31**	**10**	**20**	**5**	**3**	**3**	
0	0	0	0	1	1	11	**10**	8	13	6	4	7	12	7	**15**	7	12	7	1	6	1	1	0	0
0	1	0	0	2	2	8	**13**	8	5	8	4	5	7	6	**11**	13	9	7	2	7	2	1	2	0
0	0	0	0	1	4	3	**16**	9	7	6	4	12	6	9	**14**	10	7	7	2	2	0	0	1	2
0	0	0	0	2	2	**7**	7	12	6	6	10	8	10	**16**	4	9	12	10	5	5	2	1	0	0

AM Peak 0645 - 0745 (46), AM PHF=0.72 PM Peak 1445 - 1545 (56), PM PHF=0.88

* Saturday, 4 November 2006 - Total=504, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
2	**2**	**0**	**0**	**5**	**13**	**22**	**24**	**38**	**47**	**39**	**39**	**32**	**37**	**45**	**40**	**38**	**20**	**18**	**15**	**8**	**10**	**6**	**4**	
0	0	0	0	0	1	1	3	8	**13**	6	14	8	13	**16**	10	10	11	7	3	0	5	2	0	0
0	0	0	0	2	5	7	6	8	**12**	13	10	6	7	**12**	10	7	3	2	5	5	3	1	1	2
2	1	0	0	3	3	9	7	**12**	9	12	8	12	**12**	6	5	10	1	5	5	1	2	2	2	0
0	1	0	0	0	4	5	8	**10**	13	8	7	6	**5**	11	15	11	5	4	2	2	0	1	1	1

AM Peak 0830 - 0930 (47), AM PHF=0.90 PM Peak 1330 - 1430 (45), PM PHF=0.70

* Sunday, 5 November 2006 - Total=424, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
3	**1**	**2**	**3**	**2**	**15**	**10**	**16**	**20**	**30**	**38**	**44**	**30**	**44**	**45**	**30**	**43**	**21**	**9**	**6**	**10**	**2**	**0**	**0**	
0	1	0	2	0	0	0	1	2	9	9	**13**	11	6	**11**	8	9	9	3	0	5	2	0	0	0
2	0	0	1	1	7	3	4	4	6	7	**11**	4	**14**	11	10	11	4	3	0	4	0	0	0	0
0	0	0	0	1	3	3	7	10	9	**9**	8	11	**13**	6	6	15	4	1	2	0	0	0	0	0
1	0	2	0	0	5	4	4	4	6	**13**	12	4	**11**	17	6	8	4	2	4	1	0	0	0	0

AM Peak 1030 - 1130 (46), AM PHF=0.88 PM Peak 1315 - 1415 (49), PM PHF=0.88

* Monday, 6 November 2006 - Total=487, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
0	**0**	**0**	**1**	**6**	**16**	**25**	**43**	**31**	**30**	**23**	**25**	**28**	**44**	**38**	**40**	**50**	**35**	**21**	**17**	**5**	**5**	**4**	**0**	
0	0	0	1	0	3	4	10	**14**	5	3	7	11	14	9	8	**16**	9	7	7	2	2	1	0	0
0	0	0	0	3	2	8	**15**	6	7	7	4	7	8	8	12	**17**	10	6	6	1	0	2	0	0
0	0	0	0	2	4	6	**6**	5	9	5	6	2	10	12	**11**	9	8	4	3	2	2	1	0	0
0	0	0	0	1	7	7	**12**	6	9	8	8	8	12	9	**9**	8	8	4	1	0	1	0	0	0

AM Peak 0715 - 0815 (47), AM PHF=0.78 PM Peak 1530 - 1630 (53), PM PHF=0.78

* Tuesday, 7 November 2006 - Total=459, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
0	**0**	**0**	**0**	**6**	**26**	**23**	**33**	**29**	**36**	**32**	**31**	**24**	**23**	**19**	**50**	**42**	**32**	**18**	**17**	**5**	**8**	**4**	**1**	
0	0	0	0	1	3	4	8	11	11	6	**9**	6	11	5	10	**7**	5	8	8	2	3	1	0	0
0	0	0	0	1	4	10	12	7	7	8	**10**	7	6	2	10	**14**	9	3	4	3	2	3	0	2
0	0	0	0	3	8	2	9	4	8	**10**	8	8	3	5	**16**	11	9	7	3	0	1	0	0	0
0	0	0	0	1	11	7	4	7	10	**8**	4	3	3	7	**14**	10	9	0	2	0	2	0	1	1

AM Peak 1030 - 1130 (37), AM PHF=0.93 PM Peak 1530 - 1630 (51), PM PHF=0.80

* Wednesday, 8 November 2006 - Total=556, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
3	**0**	**0**	**0**	**8**	**25**	**33**	**51**	**26**	**22**	**24**	**41**	**28**	**27**	**50**	**54**	**61**	**33**	**26**	**18**	**12**	**10**	**3**	**1**	
0	0	0	0	2	3	10	**7**	5	6	6	10	6	4	11	10	**15**	9	12	4	6	4	0	0	0
2	0	0	0	0	7	10	**15**	12	6	5	8	5	7	15	8	**15**	8	3	4	2	3	3	0	0
0	0	0	0	3	9	5	**15**	5	8	7	14	10	9	11	**18**	16	11	5	6	1	1	0	0	0
1	0	0	0	3	6	8	**14**	4	2	6	9	7	7	13	**18**	15	5	6	4	3	2	0	1	0

AM Peak 0700 - 0800 (51), AM PHF=0.85 PM Peak 1530 - 1630 (66), PM PHF=0.92

* Thursday, 9 November 2006 - Total=498, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
0	**2**	**1**	**1**	**4**	**23**	**30**	**37**	**21**	**22**	**27**	**26**	**28**	**42**	**45**	**41**	**46**	**43**	**27**	**9**	**7**	**10**	**3**	**3**	
0	0	0	0	2	3	**7**	7	6	3	13	9	6	15	9	9	14	**15**	8	4	2	6	2	0	1
0	0	1	0	0	2	**13**	15	5	6	6	9	7	5	12	11	9	**11**	7	3	3	0	1	0	1
0	2	0	1	2	**9**	4	9	8	7	4	5	6	9	13	10	9	**10**	6	1	1	2	0	3	0
0	0	0	0	0	**9**	6	6	2	6	4	3	9	13	11	11	**14**	7	6	1	1	2	0	0	0

AM Peak 0530 - 0630 (38), AM PHF=0.73 PM Peak 1645 - 1745 (50), PM PHF=0.83

* Friday, 10 November 2006 - Total=492, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
2	**0**	**0**	**1**	**5**	**20**	**37**	**44**	**31**	**20**	**23**	**20**	**32**	**30**	**41**	**40**	**47**	**30**	**20**	**19**	**13**	**8**	**5**	**4**	
1	0	0	0	1	3	13	9	**11**	6	1	6	4	7	10	12	**13**	7	7	6	4	3	1	3	0
1	0	0	0	1	4	6	**10**	6	2	4	6	8	7	10	10	**11**	9	7	3	4	1	2	1	0
0	0	0	0	1	7	7	**12**	6	5	10	3	10	5	11	8	**13**	6	3	4	2	3	0	0	0
0	0	0	1	2	6	11	**13**	8	7	8	5	10	11	10	**10**	10	8	3	6	3	1	2	0	0

AM Peak 0715 - 0815 (46), AM PHF=0.88 PM Peak 1545 - 1645 (47), PM PHF=0.90

* Saturday, 11 November 2006 - Total=588, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
0	**1**	**1**	**2**	**4**	**11**	**20**	**35**	**32**	**82**	**37**	**36**	**39**	**57**	**39**	**27**	**51**	**37**	**23**	**17**	**9**	**12**	**9**	**7**

0	0	0	0	0	1	6	7	9	**42**	8	10	10	**8**	5	12	8	8	8	3	3	3	0	2	0
0	1	0	0	1	1	3	10	7	**9**	10	14	8	**23**	12	4	14	10	5	4	3	5	5	0	2
0	0	0	1	2	6	7	8	10	**16**	10	3	9	**15**	9	8	14	13	7	4	1	4	2	3	1
0	0	1	1	1	3	4	10	6	**15**	9	9	**12**	11	13	3	15	6	3	6	2	0	2	2	0

AM Peak 0900 - 1000 (82), AM PHF=0.49 PM Peak 1245 - 1345 (58), PM PHF=0.63

* Sunday, 12 November 2006 - Total=525, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
3	**1**	**2**	**0**	**2**	**15**	**13**	**31**	**43**	**34**	**46**	**48**	**37**	**40**	**60**	**42**	**31**	**24**	**20**	**14**	**12**	**5**	**2**	**0**	
0	1	1	0	0	3	3	3	11	6	15	8	**8**	16	**11**	6	7	3	4	3	3	2	0	0	0
2	0	0	0	0	3	2	7	12	10	7	7	**9**	11	**17**	12	12	9	4	2	4	1	2	0	0
1	0	0	0	1	6	2	11	13	13	11	**13**	6	6	**15**	16	5	6	2	4	4	1	0	0	0
0	0	1	0	1	3	6	10	7	5	13	**20**	14	7	**17**	8	7	6	10	5	1	1	0	0	0

AM Peak 1130 - 1230 (50), AM PHF=0.63 PM Peak 1400 - 1500 (60), PM PHF=0.88

* Monday, 13 November 2006 - Total=470, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
0	**1**	**0**	**1**	**5**	**16**	**29**	**41**	**40**	**24**	**27**	**30**	**28**	**38**	**36**	**38**	**47**	**31**	**16**	**14**	**4**	**2**	**2**	**0**	
0	0	0	1	0	1	9	**13**	6	5	7	4	3	8	4	13	**17**	12	1	7	0	1	0	0	0
0	0	0	0	1	5	5	**10**	19	5	6	10	6	11	14	10	**12**	7	5	4	1	1	0	0	0
0	1	0	0	3	4	5	**14**	6	7	6	10	7	11	8	7	**10**	6	2	2	1	0	2	0	0
0	0	0	0	1	6	**10**	4	9	7	8	6	12	8	10	**8**	8	6	8	1	2	0	0	0	0

AM Peak 0645 - 0745 (47), AM PHF=0.84 PM Peak 1545 - 1645 (47), PM PHF=0.69

* Tuesday, 14 November 2006 - Total=498, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
0	**0**	**0**	**0**	**7**	**21**	**36**	**39**	**19**	**30**	**28**	**17**	**26**	**41**	**48**	**51**	**47**	**37**	**20**	**14**	**10**	**3**	**4**	**0**	
0	0	0	0	2	3	10	**9**	3	9	9	2	5	11	13	16	**14**	13	7	3	4	2	0	0	0
0	0	0	0	1	1	13	**9**	6	10	7	7	3	13	16	7	**15**	11	6	1	2	1	1	0	0
0	0	0	0	1	8	0	**14**	5	7	6	5	8	9	9	**18**	6	6	5	5	3	0	0	0	0
0	0	0	0	3	9	**13**	7	5	4	6	3	10	8	10	**10**	12	7	2	5	1	0	3	0	0

AM Peak 0645 - 0745 (45), AM PHF=0.80 PM Peak 1530 - 1630 (57), PM PHF=0.79

* Wednesday, 15 November 2006 - Total=518, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
0	**0**	**0**	**0**	**12**	**21**	**44**	**38**	**31**	**25**	**39**	**26**	**25**	**35**	**50**	**44**	**49**	**23**	**20**	**13**	**11**	**10**	**2**	**0**	
0	0	0	0	5	5	9	**11**	8	5	10	5	7	10	10	**12**	11	7	8	5	0	4	0	0	0
0	0	0	0	3	3	**12**	12	7	6	16	4	6	9	13	**12**	11	4	5	5	4	3	1	0	0
0	0	0	0	2	4	**11**	6	11	10	7	11	7	6	11	**14**	10	8	1	2	4	2	1	0	0
0	0	0	0	2	9	**12**	9	5	4	6	6	5	10	**16**	6	17	4	6	1	3	1	0	0	0

AM Peak 0615 - 0715 (46), AM PHF=0.96 PM Peak 1445 - 1545 (54), PM PHF=0.84

* Thursday, 16 November 2006 - Total=446, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
0	**0**	**0**	**0**	**8**	**17**	**32**	**47**	**17**	**25**	**26**	**20**	**24**	**22**	**48**	**36**	**44**	**36**	**22**	**10**	**5**	**2**	**5**	**0**	
0	0	0	0	3	3	9	**17**	3	6	8	2	4	7	8	**10**	12	13	7	1	1	2	1	0	1
0	0	0	0	1	4	8	**11**	5	5	9	3	10	4	**15**	5	9	13	5	4	2	0	2	0	1
0	0	0	0	1	4	7	**13**	3	7	4	10	6	5	**12**	9	13	6	4	2	1	0	1	0	1
0	0	0	0	3	6	**8**	6	6	7	5	5	4	6	**13**	12	10	4	6	3	1	0	1	0	0

AM Peak 0645 - 0745 (49), AM PHF=0.72 PM Peak 1415 - 1515 (50), PM PHF=0.83

* Friday, 17 November 2006 - Total=536, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
3	**0**	**0**	**0**	**7**	**13**	**31**	**53**	**42**	**32**	**31**	**19**	**27**	**33**	**59**	**43**	**45**	**33**	**26**	**14**	**6**	**13**	**5**	**1**	
1	0	0	0	1	4	15	**10**	7	10	5	5	5	6	11	**13**	16	9	5	4	2	4	1	0	1
1	0	0	0	1	3	3	**16**	13	8	8	5	7	9	11	**15**	7	13	7	2	4	4	2	1	0
1	0	0	0	3	4	8	**12**	8	8	8	7	9	9	**23**	10	11	5	4	4	0	2	2	0	1
0	0	0	0	2	2	5	**15**	14	6	10	2	6	9	**14**	5	11	6	10	4	0	3	0	0	0

AM Peak 0700 - 0800 (53), AM PHF=0.83 PM Peak 1430 - 1530 (65), PM PHF=0.71

* Saturday, 18 November 2006 - Total=537, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
2	**0**	**2**	**0**	**3**	**13**	**20**	**27**	**36**	**32**	**42**	**38**	**50**	**39**	**40**	**49**	**33**	**23**	**33**	**18**	**9**	**14**	**9**	**5**	
1	0	1	0	0	1	2	3	8	6	6	**9**	17	**13**	6	14	11	5	8	10	3	4	4	0	0
0	0	1	0	0	6	5	9	9	7	12	**14**	7	**14**	7	12	8	4	11	4	2	2	5	1	0
1	0	0	0	3	2	7	12	7	5	**9**	9	**15**	5	16	8	4	4	9	0	2	5	0	3	1
0	0	0	0	0	4	6	3	12	14	**15**	6	**11**	7	11	15	10	10	5	4	2	3	0	1	0

AM Peak 1030 - 1130 (47), AM PHF=0.78 PM Peak 1230 - 1330 (53), PM PHF=0.88

* Sunday, 19 November 2006 - Total=473, 15 minute drops

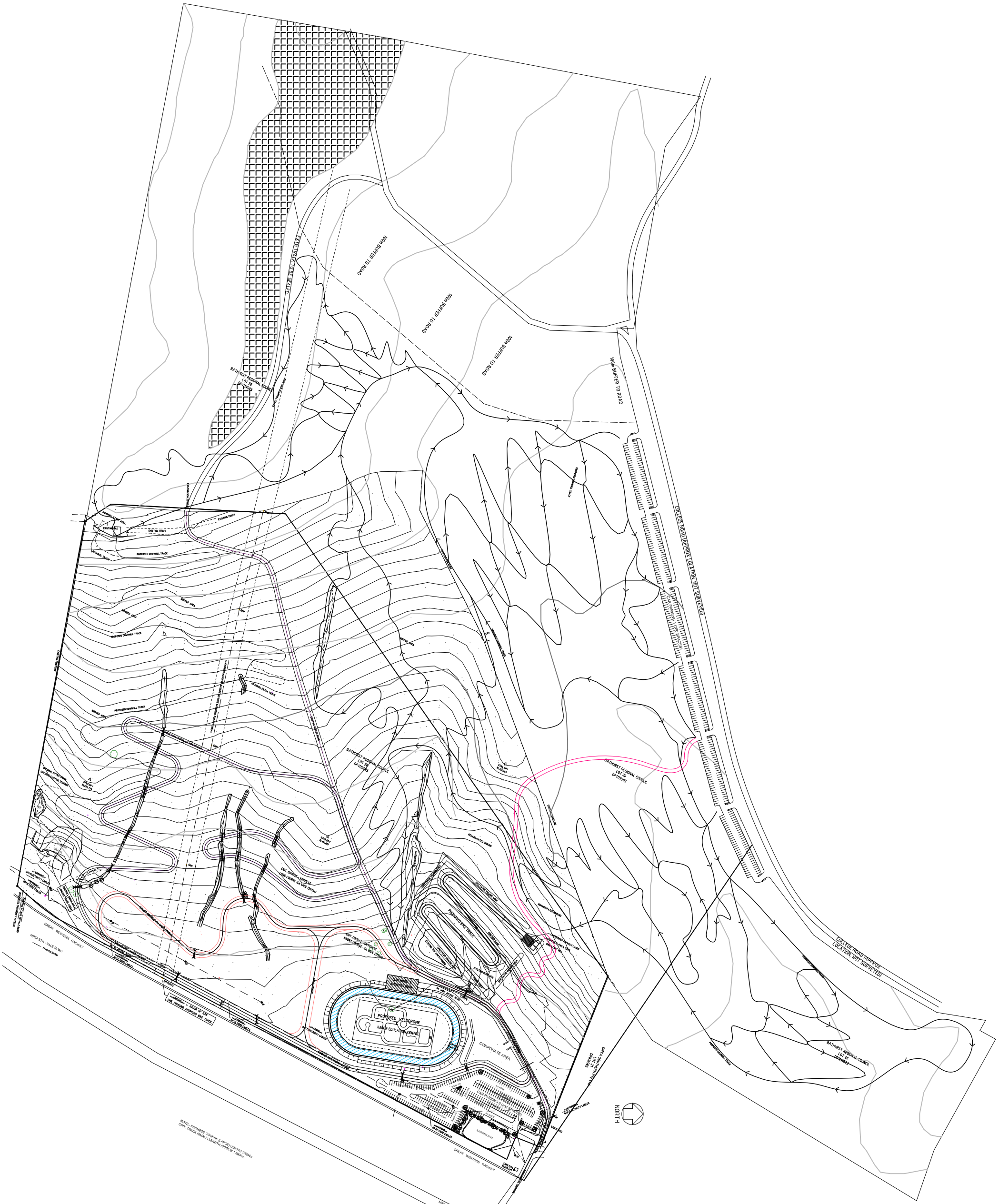
0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
1	**1**	**0**	**0**	**4**	**10**	**15**	**26**	**18**	**26**	**57**	**40**	**30**	**47**	**46**	**42**	**37**	**34**	**17**	**11**	**6**	**4**	**0**	**1**	
0	1	0	0	1	0	2	4	6	8	11	**12**	6	**17**	10	10	10	7	4	1	1	3	0	0	0
0	0	0	0	0	6	5	10	2	8	**12**	9	6	**10**	15	13	10	8	4	2	3	0	0	1	0
1	0	0	0	1	1	6	9	7	9	**16**	10	13	**12**	12	10	13	10	5	5	2	1	0	0	0
0	0	0	0	2	3	2	3	3	1	**18**	9	5	**8**	9	9	4	9	4	3	0	0	0	0	0

AM Peak 1015 - 1115 (58), AM PHF=0.81 PM Peak 1300 - 1400 (47), PM PHF=0.69

* Monday, 20 November 2006 - Total=169 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
0	**0**	**0**	**0**	**7**	**22**	**39**	**46**	**35**	**16**	**4**	**0**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
0	0	0	0	1	2	14	13	12	6	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-
0	0	0	0	1	2	9	10	10	3	3	0	-	-	-	-	-	-	-	-	-	-	-	-	-
0	0	0	0	4	5	9	14	4	2	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-
0	0	0	0	1	13	7	9	9	5	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-

Appendix B
Bathurst Bike Park layout


100m BUFFER TO ROAD
EXIST TRACK TO BE SEALED
100m BUFFER TO ROAD
100m BUFFER TO ROAD
100m BUFFER TO ROAD
BATHURST REGIONAL COUNCIL LOT 29 DP1179593
EXISTING TRACK
PROPOSED DOWNHILL TRACK
OPTIONAL TRACK
MOWED AREA
OPTIONAL EXTRA TRACK
CROSS COUNTRY - KERMESSE LARGE COURSE - 1.2m WIDE (TBC)
CROSS COUNTRY - KERMESSE SMALL COURSE - 1.2m WIDE (TBC)
PROPOSED VELODROME
JUNIOR EDUCATION CENTRE
CORPORATE AREA
CAR PARKING
BUS PARKING
COACH PARKING
EXISTING DAM
SPECTATOR MOUNDING
REHABILITATED GROUND
SPECTATOR SEATING AREA
Pumptrack/BMX TRACK
GREAT WESTERN RAILWAY
MR54 STH - VALE ROAD
From Perthville
To Bathurst
NOTE - KERMESSE COURSE (LARGE) LENGTH 1752m
CRT TRACK (SMALL) LENGTH APPROX 1.250m
MR54 STH - VALE ROAD
APPROX LOCATION, NOT SURVEYED
COLLEGE ROAD (APPROX LOCATION, NOT SURVEYED)
BATHURST REGIONAL COUNCIL LOT 29 DP1179593
NORTH

Appendix C
Predicted Bathurst Bike Park Event Operation

Relevant information for Consideration of participant numbers and overall traffic demand
Source-Bathurst Bicycle Park Draft Business Overview

The Bathurst PCYC **BMX Club** commenced racing in mid 2006 and has increased its membership base to 36 competitive members in 2008. In 2007 the Club held a regional meet that saw 350 riders from across Southern Region compete at the track

In 1998 a Bathurst **Mountain Bike Club** was formed and constructed a MBT circuit in the precincts of the Blayney Common entirely from voluntary labour and donations. The rapid growth of this club was stunning with a membership of over 100 competitors in just six months.
The potential for the growth of this sport in Bathurst is enormous. Even a small interclub meeting commonly attracts participant crowds of about 300. Larger events such as 12 and 24 hour enduro events attract participant crowds of up to 2000 cyclists or more.
The Bathurst MBT Club would envisage that a Down Hill trail here would be at a state level. State races commonly attract on average around 220 riders, with 1-3 spectators, support crew per rider. It is expected that 2 to three state level state races would be conducted annually. Cross Country loop would be national level with national races attracting 110 riders while 8hour, 12hour and 24 hour endurance participation events attract between 400-2000 riders depending on how well the event is promoted and marketed. It is expected that 1 or 2 national events could be conducted with perhaps two to three endurance events being conducted along with one major promotion. **However down-hill course will not be state level, therefore downhill estimates should only consider recreational activities and entry-level competitions. Cross-country course unlikely to attract elite level competitions, rather it has the potential to be regional level course capable of attracting recreational riders and regional level competitions.**

Bicycle Education and Training Centre
One class at a time- up to 30 students and teachers normally during school hours and therefore 99% of time not clashing with any events or training; other than minor weekly day time use such as high performance, veterans or major event training

Sport Tourism: This is calculated on the assumption of 1 to 2 major track events at 450 visitors, and 2 to 3 Road Major events with 325 and 500 visitors at these events, (there are more visitors at a junior event). On top of that the Track would also attract 3 regional type event 2 smaller 40 visitors events and one larger Championship type event drawing approximately 120 visitors. Similarly on the Road you would expect 3 to 4 major regional events.

Parking, Drainage, Access roads, Maintenance: - Parking would have to cater for 200 cars for larger events, but overflow areas to approximately 500 cars would have to be planned for. On top of that a corporate parking area for official cars would be required which has a direct connection to the events, and similarly a team parking area or set-up spot.

Source-Other Information from Bathurst Meeting with Bicycle groups, other information from venues around Australia and reports on club activities.

General Comment

All disciplines should see a growth in local participation with track cycling likely to see the largest growth due to the drop off experienced in recent years as track and infrastructure has deteriorated. Recreational and grass roots level participation in cross country mountain bike is likely to significantly increase. As there are no accurate local figures upon which to base an estimate on mountain bike participation figures from Tasmania which has excellent access to trails has been used to assist with providing estimates.
Therefore local participation figures for past three years have been inflated by 30% for track and 20% for all other disciplines.

Velodrome
Track reports list up to 70 senior male and female riders in local competitions and activities with approximately 40 regular riders and 20 to 30 juniors in events.
Club reported a drop off in interest in track activities due to ongoing issues with track infrastructure. It would be anticipated that the majority of track cyclists would travel to track events by car as track bikes are not designed for roads.
Local activities would attract approximately double competitors when taking account of officials and spectators. I.e. 120 patrons combined across junior and senior activities with 80 cars on-site of which 60 would require long term parking.
Regional events likely to triple patron numbers with high percentage travelling by car.ie 360 patrons
Allow 30% growth for improved facilities

Criterium/ Kermese
Club officials estimated local events would attract 30 to 70 participants (50 to 100 patrons). Estimate at least 50% competitors would ride their bikes.
Regional events are likely to triple patron numbers with high percentage of visitors from outside the area travelling by car.

Mountain Bike
More than 4% of Tasmanians participate in mountain bike/ off road cycling. However as is the case with many other recreational activities a high percentage of these participants will only participate between one and five times per year. Therefore applying similar statistics to Bathurst visitation to the site on weekends may translate to 10% of this figure. Therefore it could be anticipated 100 to 150 riders would visit the site each weekend with the majority involved in the cross country track. At least 50% of these visitors would be expected to ride to the park and the majority of visitations likely to be spread from 9am to 3pm on Saturday and Sunday.
Local events are expected to attract approximately half the recreational riders

BMX
State level titles attract 700 riders and 1500 plus visitors to the site.
Other centre participation figures confirm Club's estimate that 350 riders and an overall 700 visitors to the site would be attracted to regional events with the potential for at least 3 regional events per year.
A small percentage (estimate 5% would ride bikes to major events and approx 20% would ride to local activities)

Other Considerations

Assume 2 buses and 5 trailers for all major regional events.
Assume only 2 ongoing activities operate at any one time
Assume if there is a major or regional event occurring only one of the other ongoing activities will be run

Appendix D
SIDRA Intersection 4.0 Results

MOVEMENT SUMMARY

Site: Vale Road - AM entry without BBP

Vale Road and Access Road to proposed BBP Site
Stop (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East	RoadName										
5	T	114	0.0	0.071	0.9	LOS A	0.5	3.4	0.34	0.00	82.2
6	R	15	0.0	0.071	13.2	LOS A	0.5	3.4	0.34	1.21	72.2
Approach		128	0.0	0.071	2.3	LOS A	0.5	3.4	0.34	0.14	80.9
North	Access Road										
7	L	15	0.0	0.014	9.8	LOS A	0.1	0.5	0.35	0.84	41.5
9	R	1	0.0	0.014	9.3	LOS A	0.1	0.5	0.35	0.90	41.9
Approach		16	0.0	0.014	9.8	LOS A	0.1	0.5	0.35	0.84	41.5
West	Vale Road										
10	L	1	0.0	0.132	12.6	LOS A	0.0	0.0	0.00	1.59	69.1
11	T	265	0.0	0.137	0.0	LOS A	0.0	0.0	0.00	0.00	100.0
Approach		266	0.0	0.137	0.0	LOS A	0.0	0.0	0.00	0.01	99.8
All Vehicles		411	0.0	0.137	1.1	NA	0.5	3.4	0.12	0.08	88.7

LOS (Aver. Int. Delay): NA. The average intersection delay is not a good LOS measure for two-way sign control due to zero delays associated with major road movements.
Level of Service (Worst Movement): LOS A. LOS Method for individual vehicle movements: Delay (RTA NSW).
Approach LOS values are based on the worst delay for any vehicle movement.

MOVEMENT SUMMARY

Site: Vale Road - PM entry without BBP

Vale Road and Access Road to proposed BBP Site
Stop (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East	RoadName										
5	T	265	0.0	0.147	0.4	LOS A	1.0	7.1	0.24	0.00	87.5
6	R	15	0.0	0.147	12.7	LOS A	1.0	7.1	0.24	1.37	71.6
Approach		280	0.0	0.147	1.1	LOS A	1.0	7.1	0.24	0.07	86.5
North	Access Road										
7	L	15	0.0	0.012	9.2	LOS A	0.1	0.4	0.21	0.87	41.7
9	R	1	0.0	0.013	8.7	LOS A	0.1	0.4	0.21	0.96	42.1
Approach		16	0.0	0.012	9.2	LOS A	0.1	0.4	0.21	0.87	41.7
West	Vale Road										
10	L	1	0.0	0.058	12.6	LOS A	0.0	0.0	0.00	1.58	69.1
11	T	114	0.0	0.059	0.0	LOS A	0.0	0.0	0.00	0.00	100.0
Approach		115	0.0	0.059	0.1	LOS A	0.0	0.0	0.00	0.01	99.6
All Vehicles		411	0.0	0.147	1.1	NA	1.0	7.1	0.17	0.09	86.2

LOS (Aver. Int. Delay): NA. The average intersection delay is not a good LOS measure for two-way sign control due to zero delays associated with major road movements.
Level of Service (Worst Movement): LOS A. LOS Method for individual vehicle movements: Delay (RTA NSW).
Approach LOS values are based on the worst delay for any vehicle movement.

MOVEMENT SUMMARY

Site: Vale Road - AM entry with BBP

Vale Road and Access Road to proposed BBP Site
Stop (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East	RoadName										
5	T	114	0.0	0.312	1.3	LOS A	1.9	13.6	0.40	0.00	75.2
6	R	288	0.0	0.312	13.6	LOS A	1.9	13.6	0.40	0.84	68.7
Approach		402	0.0	0.312	10.1	LOS A	1.9	13.6	0.40	0.60	70.5
North	Access Road										
7	L	42	0.0	0.040	9.9	LOS A	0.2	1.3	0.36	0.86	41.5
9	R	1	0.0	0.039	9.3	LOS A	0.2	1.3	0.36	0.98	41.9
Approach		43	0.0	0.040	9.9	LOS A	0.2	1.3	0.36	0.86	41.5
West	Vale Road										
10	L	1	0.0	0.132	12.6	LOS A	0.0	0.0	0.00	1.59	69.1
11	T	265	0.0	0.137	0.0	LOS A	0.0	0.0	0.00	0.00	100.0
Approach		266	0.0	0.137	0.0	LOS A	0.0	0.0	0.00	0.01	99.8
All Vehicles		712	0.0	0.312	6.3	NA	1.9	13.6	0.25	0.40	75.7

LOS (Aver. Int. Delay): NA. The average intersection delay is not a good LOS measure for two-way sign control due to zero delays associated with major road movements.
Level of Service (Worst Movement): LOS A. LOS Method for individual vehicle movements: Delay (RTA NSW).
Approach LOS values are based on the worst delay for any vehicle movement.

MOVEMENT SUMMARY

Site: Vale Road - PM entry with BBP

Vale Road and Access Road to proposed BBP Site
Stop (Two-Way)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
East	RoadName										
5	T	265	0.0	0.164	0.8	LOS A	1.2	8.3	0.32	0.00	83.0
6	R	34	0.0	0.164	13.0	LOS A	1.2	8.3	0.32	1.22	72.0
Approach		299	0.0	0.164	2.2	LOS A	1.2	8.3	0.32	0.14	81.6
North	Access Road										
7	L	196	0.0	0.152	9.3	LOS A	0.8	5.8	0.24	0.88	41.7
9	R	1	0.0	0.150	8.7	LOS A	0.8	5.8	0.24	0.99	42.1
Approach		197	0.0	0.152	9.3	LOS A	0.8	5.8	0.24	0.88	41.7
West	Vale Road										
10	L	1	0.0	0.058	12.6	LOS A	0.0	0.0	0.00	1.58	69.1
11	T	114	0.0	0.059	0.0	LOS A	0.0	0.0	0.00	0.00	100.0
Approach		115	0.0	0.059	0.1	LOS A	0.0	0.0	0.00	0.01	99.6
All Vehicles		611	0.0	0.164	4.1	NA	1.2	8.3	0.24	0.35	64.3

LOS (Aver. Int. Delay): NA. The average intersection delay is not a good LOS measure for two-way sign control due to zero delays associated with major road movements.
Level of Service (Worst Movement): LOS A. LOS Method for individual vehicle movements: Delay (RTA NSW).
Approach LOS values are based on the worst delay for any vehicle movement.

APPENDIX 3

Email from Brian Armstrong, Plant Manager, Omya Australia Pty Ltd, providing comments and highlighting key issues and concerns about the proposed Bike Park development.

From: Brian.Armstrong@omya.com
Sent: Tuesday, 25 May 2010 9:28 AM
To: kshilton@sglgroup.net
Subject: Bathurst Bike Park

Attachments: Calcium Carbonate - Prod MSDS.pdf

Dear Kym,

Thank you phone call with me to discuss the proposal for Bathurst Bike Park on 20/5/2010. We have considered the information provided and comment as follows:

1.Omya Australia considers the concept of a Bike Park a worthwhile community project which would be of benefit to the Bathurst Region.

2. Omya has serious concerns about the safety aspects of placing a community recreational facility immediately next door to an industrial complex and sharing the access to the site with semi trailers and other vehicles accessing the Vale Road factory. While the heaviest concentration of trucks occurs on weekdays between 5am and 11pm, the plant is accessed at all hours.

3. The Vale Rd factory currently has some 25,000 semi trailer movements per annum which could increase to around 70,000 movements per annum if the business grows to the full capacity permitted under the development consent for the associated Mine. Additionally there are light vehicles and contractors vehicles accessing the site. It is of very great concern that a proposal would be made to inject significant numbers of private vehicles and particularly bicycles into a confined access road and railway crossing servicing heavy vehicles with limited visibility when turning. We are well aware that bicycle activity will not be confined to the Bike Park as it does not cater for road races and training which currently occur on public roads to the south of Bathurst. Omya has gone to some lengths on our factory sites to minimise the mixing of light and heavy vehicles by utilising separation zones and one way traffic where possible. In truck loading areas we exclude all personnel including truck drivers from being anywhere near moving equipment. While there is a limit to what can be done at the rail crossing, which was originally only intended for industrial access, we are very concerned that the proposal would see significant numbers of private vehicles entering and leaving through this access.

4. Omya Australia also has concerns that development of access to a Bike Park would limit the future use of the rail access to the Omya factory. The rail access has not been used for some years and the turnout has been removed due to maintenance cost however it is our belief that rail transport will eventually return as the economics of road transport are impacted by rising carbon costs. we have retained the rail tracks internally for such future use. When rail traffic recommences there will be two lines to cross, one controlled and one a shunting line.

5. The Omya Factory is governed by environment conditions regarding dust and noise and we have been successful in controlling these issues. Nonetheless the factory and trucks do generate noise and it should be understood when considering the amenity at a recreational facility positioned very close to the factory and its access.

6. The area around the Omya Factory site is subject to inundation after heavy rain. The factory site was selected due to its slightly increased elevation. After heavy rainfall the Vale Rd opposite and north of the factory is covered and sometimes closed due to flooding. The low ground north of the factory and west of the railway line also floods. The land between the Vale Rd and the railway to the south also floods and has no drainage. The site

of the proposed bike park is also subject to run off flooding adjacent to the railway line and extends to cover about the same area indicated for stage 1 development. The drainage from this area is prevented by the railway embankment and water can lie here for long periods. The flooding and drainage issue and its potential to damage facilities should be recognised and considered in the capital and running cost of the proposed facility.

7. Security of the proposed site is an issue due to its isolation from town. Omya has had to install security fencing, cameras and other measures provide security.

6. Omya strongly suggests that alternate sites should be considered in the feasibility study. One such site could be the old saleyards which is closer to town and has the opportunity for access from a side road.

7. If the proposed site is considered the final site then Omya suggests that a 50m buffer zone consisting of a 5m earthen berm and vegetation be included along the northern boundary of the proposed site and that the Bike Park layout be reconfigured to move the car park and velodrome to the south end of the site, away from potential noise and dust and out of the flood zone.Access should be solely via College Rd to avoid a dangerous mix of traffic on the Omya rail crossing.

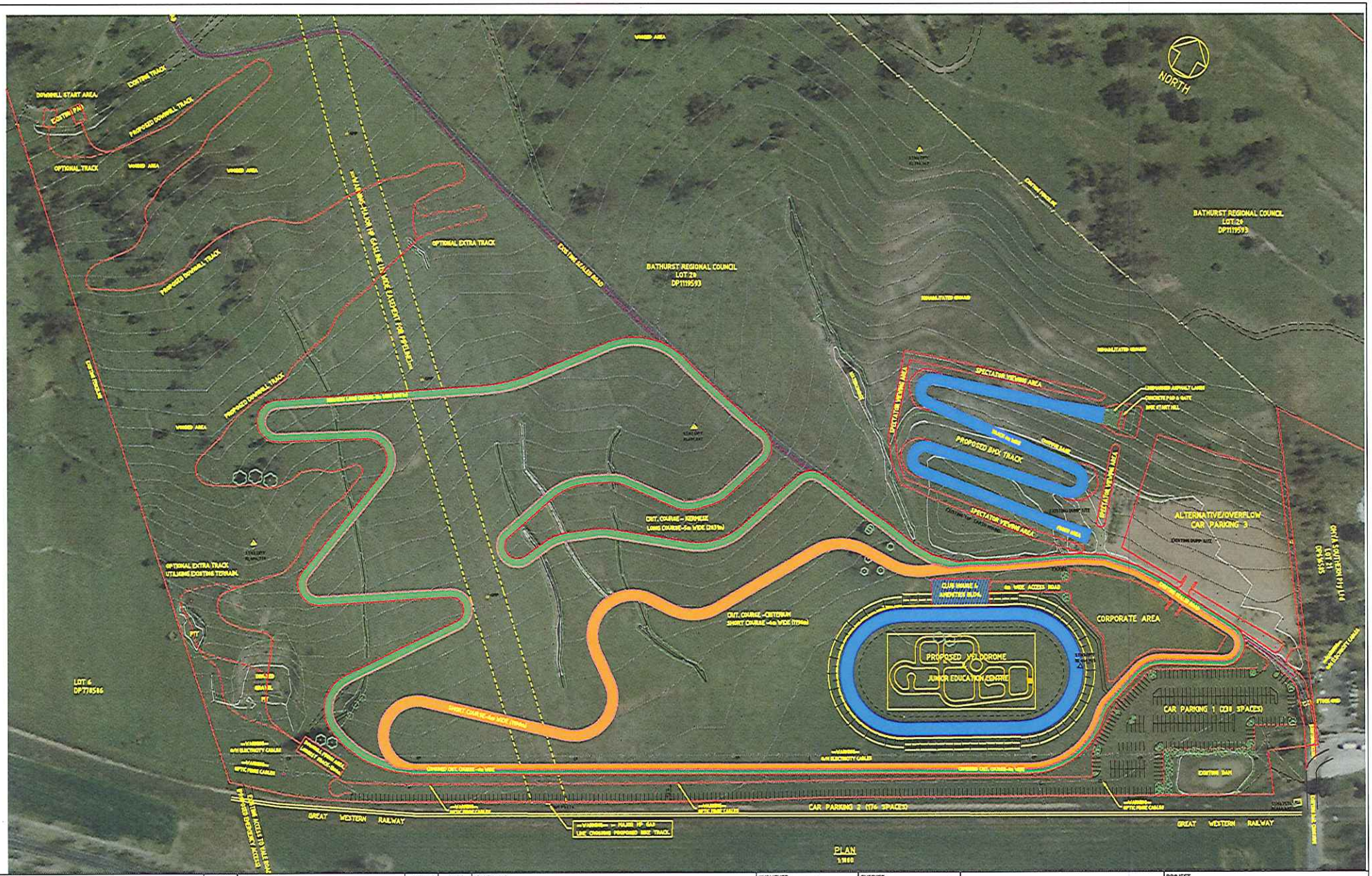
8. Included is a file containing the material safety data sheet which covers all the products manufactured on site,if you require further clarification on product safety i can provide the appropiate Omya contact.

A number of Omya employees and family members are cyclists and we support the development of such a facility. Omya is however concerned that insufficient consideration has been given to first and foremost community safety, and secondly the amenity of such a facility for its users. We trust our comments will assist in your evaluation.

Best Regards

Brian Armstrong
Plant Manager

Omya Australia Pty. Limited
Vale Road,Orton Park (P.O. Box 53)
Bathurst NSW 2795
Australia
Phone direct: +61 2 6333 6417
Mobile: +61 409391719
Fax: +61 2 6333 6481
eMail: brian.armstrong@omya.com
Internet: www.omya.com



CONSULTANT		REV	DESCRIPTION	INITIALS	DATE
		A	ISSUED FOR APPROVAL	GW	15-08-09
CHECKED	APPROVED				

SCALES (A1)

1:10 0 0.1 0.2 0.3 0.4 0.5 Metres
1:20 0 0.2 0.4 0.6 0.8 1.0
1:50 0 0.5 1.0 1.5 2.0 2.5
1:100 0 1 2 3 4 5
1:200 0 2 4 6 8 10 Metres
1:500 0 5 10 15 20 25
1:750 0 7.5 15 22.5 30 37.5
1:1000 0 10 20 30 40 50

SURVEYED	GW/MC
DRAWN	GW
DESIGN	GW
DATE	AUG 09
DATUM	AHD

CHECKED

TECHNICAL SERVICES MANAGER

DIRECTOR ENGINEERING SERVICES

BATHURST REGIONAL COUNCIL

PROJECT: BATHURST BICYCLE PARK
VALE ROAD, ORTON PARK

DESCRIPTION: DRAFT LAYOUT PLAN

JOB No.	DWG No.	SHEET No.	REV.
_/-000	EN9702	2	A

APPENDIX 5

(Please insert Draft Bathurst Bike Park Business Plan, CBBugs, May 2010 at time of printing or as required)

Bathurst Bicycle Park
Construction and Development Project
Draft Business Overview

Prepared By
Combined Bathurst Bicycle Users Group – CBBUGS

With Submissions from
Bathurst Cycling Club (BCC)- *Mark Windsor*
Bathurst PCYC BMX Club (BMX)– *Michael Breen*
Bathurst Mountain Biker Club (MBT)– *Greg Westman*
Bathurst Bicycle users Group – (BADBUGS) *– Robert McAlery*
Bathurst Community Climate Action Network (BCCAN)- *Keith Hungerford*
Conservation Volunteers Australia (CVA):- *John Fry*
Combined Bathurst Bicycle Users Group (CBBUGS) :- *Garry Taunton*

Contents

Documentation and Distribution

Document Location

I. The master soft copy of this document is held in the following location: g/gtaunton…/bikes/CBBUGS

Revision History

Revision Date	Version No		Changes Marked
18th May 2009	V 0.1		
2 June 2009	V1.0	Garry Taunton	
28 June2009	V2.0	Garry Taunton	

Distribution

II. This document has been distributed to:

Organisation & Title	Date of Issue	Copies
		1

Organisation & Title	Date of Issue	Copies

BATHURST BICYCLE PARK

CONSTRUCTION AND DEVELOPMENT PROJECT.

Executive Summary

In 2002 as a direct response Bathurst City Council's call for expressions of interest in the preparation of the Mount Panorama Strategic Plan, the Combined Bathurst Bicycle Users Group (CBBUGS) was formed.

Since that time CBBUGS and particularly BCC and Bathurst Mountain Bikes have been lobbying council to find a "Home for Cycling in the Bathurst Region" as well as increased funding to the Bathurst Cycleway System.

Over the past two years a subcommittee of the CBBUGS comprising BCC, MBT, BMX and council representatives was formed to investigate and evaluate a range of council owned sites which might be suitable for the purpose of development of a Bicycle Park.

After careful evaluation the Proposed Site on the Vale Road and Adjacent to Omya Minerals was unanimously voted to be by far the most suitable of available sites to construct an all inclusive "One Stop Shop" Bicycle Park.

The area of interest is council owned land and is fully enclosed within Lot 20 of Deposited Plan 1119593. At the April 2009 council monthly meeting it was endorsed in principle the proposed site and included a stage one construction budget of $500,000 for public viewing and community comment. (Refer to diagram "Proposed Site for Bathurst Bicycle Park" Page 9.

Note :- A complete site plan showing the full set of requirements for the for the proposed Bicycle Park is being prepared by the Engineering Department of Bathurst Regional Council and should be available by early July 2009. The implementation within each group should be stage d to meet cycling facility priorities which are consistent with available finance and cost effectiveness.

At a recent meeting between Bathurst Council's, Director of Corporate Services and Finance, Bob Roach, Deputy Mayor Ian North, Councilor Greg Westman, CBBUGS Garry Taunton, BCC Mark Windsor and PCYC'c Joe Chapman it was requested that CBBUGS prepare this business case for submission to council prior to final approvals of the 2009/10 budget.

The business case covers all issues related to the site suitability, the cycle sports facilities required, the desperate need for such a facility in Bathurst, the community benefits of the proposal and sport tourism benefits to the region and supplementing funding requirements.

The facilities are listed in two group: cycling facilities and general infrastructure. The over

GROUP A: CYCLING FACILITIES REQUIRED

1) **333m Bitumen Velodrome**: design which has a maximum banking that can be hot mixed and rolled. An example would be Coffs Harbour Velodrome which is a 333m track so timed events (e.g. 1 and 2 km Time Trials / Pursuit) can start and finish in the same spot yet keep the tarred surface area to a minimum. No Roof is required but it may be worth considering the costing foundations to allow future development. Seating should consider accommodating initially 200 with room for growth.

   Estimated Cost ……

2) **Down Hill Facilities:** The basic design of a MBT Downhill Mountain Bike course would commence at the highest practical point at the park with a single track on a meandering downhill route to the lowest point on the site where a finish and assembly area could be established. The track should designed to the international standards as laid out in the MBT design and construction manual and should include precision timing facilities. (IMBA Guidelines) The start area will require construction of a "Start Ramp" to accommodate a minimum of two riders and should as high as possible for this site. A ramp up to start platform should also be included with

room for timers, marshals with a table then ramp down to start of the trail. Slalom style ski poles might be the best way to mark out and bunt the course from start to finish which could incorporate part of the planned BMX track. Most spectator requirements would be accommodated through walking access to viewing points around the course. Spectator facilities developed for the BMX course can be used in the finish area of the MBT Downhill course.

Estimated Cost ……

3) **Cross Country Facilities :** A cross country course would be designed as per the MBT design and construction manual mentioned above and should follow a meandering course through out the park site which does not interfere with or cross other bicycling facilities. The total distance of the course should follow a circuit of between at least 6km and preferably 8km if possible. The course could incorporate all or part of the BMX track itself and share the start and finish areas. Most spectator requirements would be accommodated through walking access to viewing points around the course. Spectator facilities developed for the BMX course can be used in the finish area of the MBT Downhill course.

4) **Estimated Cost ……**

5) **Closed Circuit Criterium Courses:** – flat and fast, an approximate 1.2km Criterium loop would have to utilise the flat area of the proposed park. As an initial suggestion the course could extend about 500m up and back along the railway track boundary with a fairly tight hairpin bend at the southern end and a more rounded bend at the Bathurst end of the course. Ideally grades on this course should be no greater then 4%. Spectator stands are not required.

Estimated Cost ……

6) **Closed Circuit Kermese Loop: -** The bigger 2km Kermese Loop would use the tar on the Criterium loop and then add extra distance up the hill to increase the endurance requirements on the competitor and aid in the running of longer duration events for event organisers. (See attached diagram). As a basic design concept the use of “switch back” bends would reduce the grade of the slope whilst climbing the hill and at the same time add interest to the design. Ideally grades should be minimized to no greater then 10%. Spectator stands are not required.

Estimated Cost ……

7) **BMX Race Track**: - built to UCI standards in close consultation with the committee *(see Attachment Manual).* The track facilities should include the following:-
   i. Track excluding buildings should be approximately 100m in length by 60m in width.
   ii. Spectator area to accommodate approximately 200 persons for major events, natural amphitheatre.
   iii. Shelter over the start hill.
   iv. Main straight to face approximately north or south.
   v. Signage space or billboard to advertise events, sponsors, safety notices and rules of track use.
   vi. Adequate site drainage to minimise erosion and damage.
   vii. Weed control: (refer to general infrastructure)
   viii. Water supply to nominated points around the track.

Estimated Cost ……

8) **Bicycle Education and Training Centre :-** A Bicycle Education and Training Centre is rather like a miniature road system including stop signs , speed humps, crossings, Cul De Sacs etc, which are establish in a small enclosed area to educate young children safe cycling techniques and general road skills.

Estimated Cost ……

9) **Commuter and Leisure Riding Route:-** This route should connect access points at the South end and North end of the site via the Vale Road and on College Road to facilitate use of the park

by commuters and Leisure riders. Although not part of this project the upgrade of College Road to include a wide shoulder as an "On Road " cycleway should be considered in the preparation of the 2010 Bathurst Bike Plan.

GROUP B: BIKE PARK SUPPORTING INFRASTRUCTURE REQUIREMENTS

1) **Multi Purpose Club House and Amenities Block:** This multi-functional club house and amenities block could be constructed to the same standard as that of the Perthville Hall. It would be owned and operated by the three primary stakeholders being BCC, PCYC BMX and Bathurst Mountain Bike Club. It would need to include three separate storage rooms for specific use of the three primary interest groups. A concept design for the main club house is being prepared by the Engineering Department at Bathurst regional Council in consultation with stakeholders.

   Estimated Cost……...

2) **Parking, Drainage, Access roads**, Maintenance: - Parking would have to cater for 200 cars for larger events, but overflow areas to approximately 500 cars would have to be planned for. On top of that a corporate parking area for official cars would be required which has a direct connection to the events, and similarly a team parking area or set-up spot.

   Estimated Cost……...

3) **Lighting** – It is expected the velodrome would have lighting, however with good planning the towers could be place to be used by a number of the venues including the BMX track and Amenities. Security lighting also needs to be considered.

   Estimated Cost……...

4) **Fencing** – Secure fencing for safety (keep kid away from railway and water areas) and park protection (prevent Vandalism), while also allowing general assess to the community.

   Estimated Cost……...

5) **Wetlands Development: -** There are a number of possible sites within the proposed Bicycle Park which could be suitable for the creation of wetlands. Obviously the site of the small dam located on the flatlands and adjacent to Omya Minerals is an ideal site for such a project.

   Estimated Cost……...

6) **Reforestation and Revegetation: -** This program will need to work in closely with the requirements of the infrastructure development within the site plan but at the same time be an integral component of the entire plan.

   Estimated Cost……...

7) **Cycleway Access via College Road: -** As part of the development of this site it is desirable to include a passive and safe access to the site from this from Bathurst. It has been suggested that the construction of an access cycleway to RTA standards to allow cyclists and pedestrian access to the main area via College Road would be appropriate.

8) **Inclusion of Cycleway Access Routes into the 2010 Bike Plan: -** Although not part of this plan the upgrade of College Road to include a wide shoulder as an on road cycleway should be considered in the preparation of the 2010 Bathurst Bike Plan.

Fund Raising and "In Kind " Contributions to Project

With the combined efforts and diverse membership of the Bathurst Cycling Club, PCYC BMX Club and the Bathurst Mountain Bike Club it is likely that not only will the clubs membership be able to contribute considerable hours in voluntary professional services labour as required. We will also be able to access a range of professional skills consistent and reliable "In Kind" services such as electrical, mechanical, pneumatic, earth moving, administration and accounting, cycle shop suppliers, civil drafting).

Australian Conservation Volunteers have a keen interest in this project and if appropriate funding is made available are prepared to allocate labour resources to undertake a range of activities covering

- Wetlands and construction on water retainment areas,
- Reforestation programs
- Assist BMX Club with track construction and
- Assist the mountain Bike Club with engineering design works and construction of Downhill and Cross country courses.
- Assist with construction for Velodrome, Criterium circuits and Bicycle Education facility (where appropriate)

With appropriate approvals Australian Conservation Volunteers will utlilised the resources the inmates at Bathurst jail to undertake this community project work along with our regular conservation programs volunteers.

CBBUGS will be pursuing all appropriate grants to assist in the financing of this project. The federal government has already announced grant funding for appropriate bicycle infrastructure program of $40M Australia wide.

In addition to this we are aware that grants are available from time to time for any projects which are directed to youth education and bicycle safety programs. These grants lend themselves perfectly to the construction of the Bicycle Education centre.

It my also be possible to acquire additional funding for this project by raising commercial sponsorship through the allocation of "Naming Right's" for the major venues. This is powerful tool when pursuing sponsorship programs and may be appropriate if handle with stringent guidelines in place.

The total value of "In Kind "over the life of this project has been estimated in well in excess of $500,000

Background

Bathurst Cycling Club

The local Bathurst Cycling Club has an amazing cycling history, with the local district the home of cycling in the state, after pioneer W.R. George built and designed the first bicycle in NSW in the mid 1800s in Bathurst.

In fact club competition cycling is going into its 125th year in 2009, with the Bathurst Cycling Club history as long as the sport itself in this country. In fact it is fair to say that BCC is arguably the oldest continuously operating Cycling club in Australia today. (For more detail on the History of Cycling in Bathurst see Attachment A)

Through out the history of the BCC it has gained a reputation for continuously producing national and world class racing cyclists.

Yet with all that history it is incredible to think that the club still continues to achieve new standards in the sport of cycling. At the club's last presentation night a number of outstanding international achievements where recognized. They are:-

- Athens Olympian and Commonwealth Games Gold medallist Mark Renshaw went into the history books as the first Bathurst Cycling Club Member to race in the world's Premier Cycling Event "The Tour De France".

- Local Bathurst cyclist's presence on the world stage also at record levels with an amazing 4 Bathurst riders now holding international "UCI" Pro Tour / Continental contracts, and representing the Bathurst region in all the worlds major cycling locations.

- Away from the Sponsored Teams, the Club continued a fine tradition in National representation, with local club members selected in the Beijing Paralympics and featuring in the Medals.

- While the Club continued its recent outstanding results in the Masters and Junior Ranks, winning a National Championship in the Juniors and a World Championship in the Masters Division.

Whilst the BCC has had such a long history it has not at any time had a truly dedicated facility for cycling activities. In the 1960s the dirt oval surrounding the Bathurst Sports ground was sealed with a bitumen surface and later with joint funding from BCC and Bathurst City Council resurfaced in the late 1970s.

However, as repeatedly stated by Bathurst Regional Council the primary purpose of the Bathurst Sports ground is not for track cycle racing but cricket. Long term the relocation of the track cycling facility has been recommended.

As a result for past two decades no improvements for upgrade or maintenance of the track have been undertaken.

Also with the improved technology on the bicycle design aerodynamics and coaching, track cyclists are now traveling at speeds far greater then the current capability of the existing Bathurst track.

In 2007 Bathurst Regional Council also constructed a new picket fence around the perimeter of the track despite strong objections from the BCC and CBBUGS

These issues has resulted in the BCC deeming the existing track as unsuitable for the conduct of major track cycling carnivals and as such has not conducted any events of this nature for at least 10 years. The sports ground track is currently used for club race / training activities and junior sport development and bicycle education programs only.

PCYC BMX Club

The Bathurst PCYC BMX Club is a racing club solely concerned with BMX racing. The Club does not cater for trick riding or anything to this effect. Club members race each other in respective classes around a 350 metre track. The track is made up of various humps, hollows and corners (referred to as 'berms'). The club is family-oriented and caters for children from four years of age to veterans of 64+ years.

The Bathurst BMX Club has existed three times: the first time in the eighties with regular competition on track constructed on the now Bathurst Basketball Stadium, with the club folding in the early nineties. The second in 2001 and 2002 when a committee was formed and the track was negotiated, designed, sited and partially built with assistance from Bathurst Regional Council before the committee folded due to the difficulties with completing the track to racing standard; and in its current form since late 2005.

The Bathurst PCYC BMX Club commenced racing in mid 2006 and has increased its membership base to 36 competitive members in 2008. In 2007 the Club held a regional meet that saw 350 riders from across Southern Region compete at the track.

As stated earlier since 2002 Bathurst PCYC BMX Club has been trying to establish itself at the site on the flood plain opposite the Peace Park in River Road. However, the sites long term viability is limited indeed due to its construction in the floodplain itself. It is understandable to expect that when the next Bathurst flood does occur then the BMX track will be largely destroyed. Due to it's current location council has shown a strong reluctance to support any construction of amenities etc at this site.

Long term it is therefore necessary to find a more suitable site for the BMX club to conduct it's sporting activities.

Bathurst Mountain Bike Club

In the late 1980's a new lightweight design of "off road" bicycle was developed called "the MBT" and rapidly grew into a sport of major significance world wide. Mountain bike racing was introduced at the Sydney Olympics has been featured ever since (accept Beijing).

Interestingly, the first ever Australian Mountain Bike Championships were conducted at Sofala in 1988.

In 1998 a Bathurst Mountain Bike Club was formed and constructed a MBT circuit in the precincts of the Blayney Common entirely from voluntary labour and donations. The rapid growth of this club was stunning with a membership of over 100 competitors in just six months.

Unfortunately for reasons unknown the Bathurst City Council ordered the circuit to be demolished and it was bull dosed into the ground effectively putting an end to organised Mountain Biking in the Bathurst area.

Nether the less the growth of Mountain Biking as a recreational activity has continued to surge in Bathurst. Mountain Bikers with no affiliation to any organisation's have continued to operate in the Blayney common precinct, Boundary Road Common and many other areas within the Mount Panorama Precinct in a clandestine manner without any supervision or established standards of conduct.

With the construction of a dedicated Mountain Bike facility at the proposed Bicycle Park site a formal club can be established with the latent club membership being significant.

In Search of a Home for Cycling

In 2002 as a direct response Bathurst City Council's call for expressions of interest in the preparation of the Mount Panorama Strategic Plan, the Combined Bathurst Bicycle Users Group (CBBUGS) was formed. This group then prepared a detailed submission as requested to the plan prepared by ???? . This plan was accepted by Bathurst City Council a used as part its successful submission to the Federal Government for additional funding grant of $10m to upgrade the "The Pits" complex at Mount Panorama.

Combined Bathurst Bicycle Users Group

Bathurst Bicycle Park _ Draft Business Overview

In 2007 a new Mount Panorama development plan was prepared which rescinded all activities proposed by the CBBUGS group. However Council suggested a willingness to identify and assess other suitable sites for development of a “Bicycle Park” not in the immediate Mount Panorama Precinct

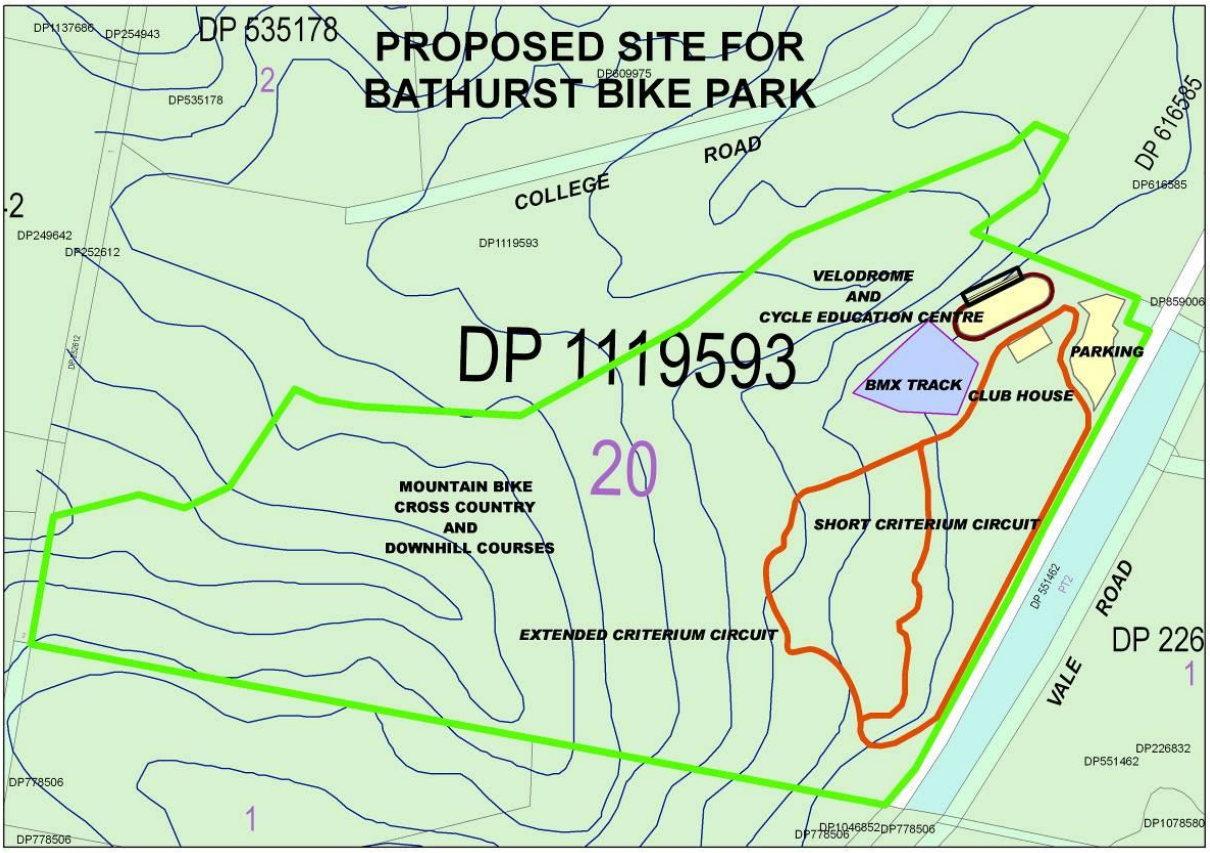
Since that time CBBUGS and particularly BCC and Bathurst Mountain Bikes have been lobbying council to find a “Home for Cycling in the Bathurst Region”

Present Status

Over the past two years a subcommittee of the CBBUGS comprising BCC, MBT, BMX and council representatives was formed to investigate and evaluate a range of council owned sites which might be suitable for the purpose of development of a Bicycle Park.

After careful evaluation the Proposed Site on the Vale Road and Adjacent to Omya Minerals was unanimously voted to be by far the most suitable of available sites to construct an all inclusive “One Stop Shop” Bicycle Park. The area of interest is council owned land and is fully enclosed within Lot 20 of Deposited Plan 1119593. At the last council monthly meeting has also endorsed in principle the proposed site and included a stage one construction budget of $500,000 for public viewing and community comment.

At a recent meeting between Bathurst Council’s, Director of Corporate Services and Finance, Bob Roach, Deputy Mayor Ian North, Councilor Greg Westman, CBBUGS Garry Taunton, BCC Mark Windsor and PCYC’c Joe Chapman it was requested that CBBUGS prepare this business plan for submission to council prior to final approvals of the 2009/10 budget.



Project Scope

1. The scope of this proposal includes:
    - **Velodrome for track racing**
    - **Closed Short Circuit Criterium Racing Course**
    - **Closed Long Circuit Kirmese Road Racing Course**
    - **Opportunities for further Road Race options**
    - **BMX Track**
    - **Mountain Bikes Downhill Course**
    - **Mountain Bikes Cross Country Circuit**
    - **Bicycle Education Centre**
    - **Multi Purpose Club House and Amenities Block**
    - **General Infrastructure eg :- Fencing Lighting Parking**
    - **Site Reforestation and Vegetation Program**
    - **Wetlands Program**
    - **Cycleway access from College Road**

Cycling Facilities Required

Bathurst Cycling Club

The major requirements of the Bicycle Park for the Bathurst Cycling Club are divided into 4 Themes:-

1. Velodrome for track racing

2. Closed Circuit Road Racing Course

3. Opportunities for further Road Race options

4. General infrastructure (all interest groups)

Velodrome For Track Racing – replacing the sportsground velodrome

Track – the track would be a 333m medium to conservatively banked track. (As opposed to a fully banked 250m track which is aimed at international competition and speeds). The Bathurst track would be mainly aimed at Club level to elite junior competition, while at the same time being suitable for the local elite level performer to suitably prepare for their major competitions.

The Bathurst club is looking to avoid going into competition with the Olympic Velodrome in Sydney which is not much more that 2hours away at Bankstown but focusing on the more lucrative and less catered for junior demography, with the further focus on the traditional Wheel Race handicap format which has been fraught recently with the growth of the smaller 250m track.

Surface would be preferably hot mix to avoid the joints that come with a cement surface; however that will certainly affect the degree of banking. So while dropping the banking looks likely to get a more suitable

surface, the cement options would be considered if it can economically achieve the more elite level banking in the corners.

Specs – Really dimensions and building specs are dependent on costs and time frames, with the velodrome currently becoming an urgent club requirement. The club is considering three options - the most extravagate would be the more elite style Tempi Velodrome Concrete style down to the more economically Coffs Harbour bitumen velodrome.

1. Elite Banked Velodrome – This caters for the elite riders and the juniors by having the steep banks for the elite and a wide flat duck board (bottom section of the track) where juniors can race at slower speeds. The velodrome would be built to the same specifications as Tempi Velodrome (Canterbury Council) with some further work on the duck board thus making this some what extravagant option suited to all types of users.

2 Mid Banked Velodrome - The specs similar to that of the Unanderra Velodrome at Wollongong, the differences would be a preference for slightly more banking (maybe 26 to 28%) in the corners and about 20m extra in each of the straights. The slightly extra banking in the corners will mean about 5 to 6 metres of extra distance in the four corners to add to the transitions so the straights have the same banking as Unanderra.

3 Bitumen Velodrome – The BCC's most practical option for velodrome design is one which has a maximum banking that can be hot mixed and rolled. An example would be Coffs Harbour Velodrome which is a 333 track so timed events (e.g. 1 and 2 km Time Trials / Pursuit) can start and finish in the same spot yet keep the tarred surface area to a minimum.

Design Considerations:

- Degree of slope that can be hot mixed
- Cost per metre – given many of the new tracks are now smaller. The BCC's logic is not to put too much banking on the track so it is junior friendly and fitting the targeted demographic. The smaller 250m tracks requiring more banking due to the forces in the corners.
- The engineering and crucial foundation work required for the steeper banking.
- Infrastructure requirements for the different options, including Earth works, and Track Entry which greatly increase the costs on the steeper banked options.

Closed Circuit Criterium and Kermese Courses:

Criterium Course and Kermese course (which is bigger), is effectively just an "Off Public Road" "Road Cycling" Circuit. To cater for all requirements the course would need to be about 2km (slightly longer if possible) with a smaller 1.2 km Criterium track option. Of Course the surface would preferably be Hot Mix but this is dependent on cost. Existing courses opt for a narrower shorter course to cut the tarred surface area to lower the cost but effectively end up with an unsuitable course. Road racing is about versatility so the 2 option course is the preferred approach.

Criterium loop –flat and fast, the Crit loop would have to utilise the flat area of the proposed park. As an initial suggestion the course could extend as much 500m up and back along the Railway track boundary with a fairly tight hairpin bend at the southern end and a more rounded bend at the Bathurst end of the course.

Kermese Loop – The bigger Kermese Loop would use the tar on the Criterium loop and then add extra distance up the hill to increase the endurance requirements on the competitor and aid in the running of longer duration events for event organisers. (See attached diagram). As a basic design concept the use of "switch back" bends would reduce the grade of the slope when climbing the hill and at the same time add interest to the design.

There are a number of these off road cycling courses being developed, including Queensland's Sunshine Coast cycling venue at Noosa, Canberrra's Mt Stromlo Bicycle Park, Port Macquarie and Coffs Harbour. While older tracks in Sydney such as Lansdowne, Heffron Park and Sutherlands Waratah Park are in very high demand.

Specs – At this design stage the preference is for a long Kermese circuit, given that the availability of true road courses in NSW are very limited, in fact almost non existent. However mindful of realistic budget

restraints and available land the attached diagram shows an approximate 1.2km Crit loop and a 2 km kermese loop option, but it would be nice for a bit of extra length. Road width is a variable as it is possible to save some money by cutting the tar surface area, but in the past some venues have been guilty of being a bit greedy here and undermining the track with track bottlenecks. Initial talks with road builders Goddard Construction seem to point to an average width of 5metres, while Stromlo Course Designer Steve Hodge would probably suggest wider on the Crit circuit.

Design Considerations:

- Suitable Road Surface for the circuit, considering cost, maintenance and Quality & Rolling Resistance. There is a preference for Hot Mix on both courses however initial discussions with experts have suggested a 2 coat bitumen mix with a suitable aggregate, as a cost effective option, particularly for the Kermese track, which does allow a hot mix upgrade in the future.
- Actual land available, due to relief, other venues, drainage, utilities & access and other building restrictions e.g. gas line.
- General lack of design specs, the British standards one of the only available source, (copy attached) but not entirely appropriate. Talks with recognised authorities showing how the targeted demographic needs to be considered closely before settling on design specifics.

Other Road Race Options (to cater for all aspects of Road Racing)

- Connecting the Criterium and Kermese Courses to the existing cycling friendly roads in the Perthville and Bathurst South Region.
- Developing the existing tarred road that climbs up the hill in the Bicycle Park to connect to the local cycling network and Bathurst Bike Plan.

Simply connecting the criterium & kermese loop to the Vale Road and the existing tar road that goes over the hill to College Road opens up a whole range of cycling options. These include finishing some of the existing major events that use the roads in the Perthville area in the Bicycle Park, and secondly adding a hill top finish (and other road race option) to an event on the criterium or kermise circuit. This would certainly allow for the upgrade of these existing events into bigger races, and also adding a true uniqueness to the Bathurst Bicycle Park, by having such versatility in the road events it could hold.

Specs –

This is all fairly simple, as it's just a matter of connecting the Criterium loop to the Vale Road, with an awareness that events could be brought onto the course via that road; therefore the design of the venue's entry should be mindful of congestion with issues such as rail crossings speed humps and traffic islands all required consideration. This congestion and emergency assess issue elevates the importance of supplementary roads within the park links to the public road network, i.e. the existing road up the hill and an alternate Vale Road access, which of course all offer further Road Competition options.

Clearly again the user requirements need to be closely considered when designing not only the competition courses but also the supplementary roads in the park which need to be competition friendly.

Design Considerations

- The current road surface on these supplementary race roads (e.g. the existing Hill Road)
- Restrictions on access preventing connections with roads in the area – railway crossings, Dump restricted areas.
- Future constraints on access- future planned development in the area, housing and changes to roads.
- Access options - the uniqueness of this project makes it difficult to consider all issues with confidence, In regard to bottle necks and not having venue access options. Certainly the Mount Stromlo venue is

a big budget project where supplementary access road seem to battle with congestion at major events and require further consideration.

Bathurst Mountain Bike Club

The major requirements of the Bicycle Park for the Bathurst Cycling Club are divided into 2 Themes:-

1. Down Hill Race Facilities

2. Cross Country Race Facilities

Down Hill Facilities:

The basic design of a downhill MBT course would commence at the highest practical point at the park with a construction of single track on a meandering downhill route to the lowest point on the site where a finish and assembly area could be established. The track should designed to the international standards as laid out in the MBT design and construction manual. (IMBA Guidelines)

The start area will require construction of a “Start Ramp” the bigger the better for this site. A ramp up to start platform should also be included with room for timers, marshals with a table then ramp down to start of the trail.

Slalom style ski poles might be the best way to mark out and bunt the course from start to finish.

It may also be desirable to complete the finish of the downhill course in the BMX Track itself which has been requested to be located at the base of the hill. This will allow a multi functional use for the assembly point facilities constructed for the BMC track.

Precision event timing capability would need to be designed into the course as results can be determined in 1 hundredth’s of second. Options for undertaking this process include:-

- Timing cable. With the small hill size and open layout it might be possible to run timing cable buried into he ground with outlets at either end for the start gates to plug straight into. A Cat 5 cable is used at Lithgow. However, something else may be more appropriate for this site.
- Alternatively depending on budget a wireless system might be able to be utilised.

Cross Country Facilities

A cross country course would be designed as per the MBT design and construction manual mentioned above and should follow a meandering course through out the park site which does not interfere with or cross other bicycling facilities.

The total distance of the course should follow a circuit of between 6km and up 8km if possible.

The course could incorporate all or part of the BMX track itself into the start and finish area providing once again a multi functional discipline for use of assembly are infrastructure. As with the downhill course the Start /Finish area could easily incorporate the BMX. Start/finish gates.

As with the downhill course again ski pole bunting might be the best way to mark the course for events.

Examples quality X country from other areas include:-

- Mt Stromlo, ACT
- Eagle Park. SA
- Glenorchy, Tas

Bathurst PCYC BMX Club

The major requirements of the Bicycle Park for the Bathurst PCYC BMX Club are:-

1) A track built to UCI standards in close consultation with the committee *(see Attachment Manual).* with secure access to prevent unauthorised use and vandalism (eg the Dubbo BMX track)
The track facilities should include the following:-

- Spectator area to accommodate major events, natural amphitheatre.
- Shelter over the start hill.
- Main straight to face the north or south.
- Signage space or billboard to advertise events, sponsors, safety notices and rules of track use.
- Adequate site drainage to minimise erosion and damage.
- Weed control: A cathead free facility.
- Water supply to nominated points around the track.

CBBUGS and BADBUGS

The major requirements of the Bicycle Park for the Combined Bathurst Bicycle User Group and BADBUGS is:-

1. Construction of Bicycling Education and Training centre

2. Cycleway access to the site via College Road

3. Inclusion of planning for further “On Road” and “Off Road” cycleway development to the site from Bathurst and Perthville as inclusions in the new “Bathurst Bike Plan” to be prepared in 2010

Bicycle Education and Training Centre

A Bicycle Education and Training Centre is rather like a miniature road system including stop signs , speed humps, crossings, Cul De Sacs etc, which are establish in a small enclosed area to educate young children safe cycling techniques and general road skills.

Clearly the idea is to use these facilities to train and equip young children with the required skills to become competent and responsible members of the bicycling community.

There are a number of these types of facilities in Sydney but a model which could be adapted for the Bicycle Park facility can be seen at St Mary’s. (see below)

The construction of this facility would allow the already trained and qualified members of the BCC and BADBUGS the ability to conduct skills courses for their members and the community at large.

Multi Purpose Club House and Amenities Block.

Cycleway Access via College Road

As part of the development of this site it is desirable to include a passive and safe access to the site from this from Bathurst. It has been suggested that the construction of an access cycleway to RTA standards to allow cyclists and pedestrian access to the main area via College Road would be appropriate.

Inclusion of Cycleway Access Routes to the in the 2010 Bike Plan.

Although not part of this plan the upgrade of College Road to include a wide shoulder as an on road cycleway should be considered in the preparation of the 2010 Bathurst Bike Plan.

Also the sharing of space by all road users on the Vale Road in particular is a major concern for the entire road user's community. With the construction of this Bicycle Park midway along the Vale Road between Bathurst and Perthville the bicycle usage is certain to increase. Therefore it is essential that an upgrade of the Vale Road to include bicycle friendly travel should be included in Councils 2010 Bike Plan.

Note: - Bathurst Regional Councils Urban Strategic Plan includes the Vale Road as a cycling route of significant strategic importance.

General Infrastructure

Of course their will be a considerable need for servicing the parks activities with a range of Infrastructure Buildings and facilities.

More discussion is required before we can get to specifics with these infrastructure issues as the majority of the facilities will be shared facilities. There are also facilities such as storage sheds, shelters for officials and competitors which might be an individual user responsibility.

Lighting – It is expected the velodrome would have lighting, however with good planning the towers could be place to be used by a number of the venues including the BMX track and Amenities. Security lighting also needs to be considered.

Fencing – Secure fencing for safety (keep kid away from railway and water areas) and park protection (prevent Vandalism), while also allowing general assess to the community.

Parking, Drainage, Access roads, Maintenance: - Parking would have to cater for 200 cars for larger events, but overflow areas to approximately 500 cars would have to be planned for. On top of that a corporate parking area for official cars would be required which has a direct connection to the events, and similarly a team parking area or set-up spot.

With any road in the complex a potential competition corridor a number of parking options are required with links to alternative Park access. Of course this alternative access would also be considered when planning for emergency vehicle access. Segregation of activities, and organisation of park users needs to be considered for busy days where maybe 8 different senior events (and event more juniors groups) need to be organised

Design Considerations

Traffic Control – Car Parking options and overflows to allow the variety of park user's continual problem free access. Stromlo still require considerable traffic marshalling in the venue itself at big events which seems to defeat the whole idea of having an off road venue.

Related Initiatives

Australian Conservation Volunteers and BCCAN

In the design of the Bicycle Park consideration should not only be to the creation of infrastructure but the further enhancement of the site as a green space that restores the area to natural woodlands with a scattering of ponds to attract native fauna and flora back into the area.

The major requirements of the Bicycle Park are:-

- Wetlands Development
- Reforestation and Re-vegetation Program

Wetlands Development.

There are a number of possible sites within the proposed Bicycle Park which could be suitable for the creation of wetlands. Obviously the site of the small dam located on the flatlands and adjacent to Omya Minerals is an ideal site for such a project

Reforestation and Revegetation.

This program will need to work in closely with the requirements of the infrastructure development within the site plan but at the same time be an integral component of the entire plan.

BUSINESS CASE TO SUPPORT DEVELOPMENT PROGRAM,

Why Bathurst Needs a Bicycle Park

Bathurst Cycling Club

It is incredibly frustrating for a sport to have not only survived for over 120 years in a city and produced athletes that have competed at the highest level yet still not have a venue or home to develop the sport further and use the local expertise that is available. In a time when other sports are fighting to retain participants, cycling is experiencing record growth, if the city had competition cycling facilities they would need some urgent upgrading to meet the increased demands. Without any real venues the need for these facilities is desperate.

Velodrome for track racing – Track cycling urgently needs a replacement for the sportsground velodrome which bluntly is not a Cycling Track but a Cricket Ground. Currently the venue can not be used for any major promotions due to the original design (no banking, no straights, no smooth curves) and recent alteration for the venues main user cricket (i.e. Picket Fence) making it unsuitable for any significant promotion. On top of that the cycling specific components of this venue (i.e. the Track Surface, Lighting, Edges) require urgent maintenance, and the allocation of time at the sportsground is limited with world ranked masters riders unable to get training time for their world championships as in falls in the football season.

(Attached are recent comments from the Bathurst Cycling Club President on the matter.)

I have great difficultly getting authorities, sport administrators and the community to understand the desperation of our club to find a home where we can safely develop our juniors and conduct our activities.

Currently the Council web site lists the Sportsground track as the cities only competition cycling facility, but it's a shared venue which essential is a cricket ground. Please understand this is like the local football or soccer association getting allocated a paddock at the cattle yards to use during winter to run their competitions. Then imagine having to use irrigation pipes for the field's boundaries rather than proper marked side lines because the cows are the main users. On top of that imagine having to use warning signs to tell the cow to keep off the field while the soccer game is being played rather than segregating the cows from the soccer field.

Honestly we have had kids in hospital because of cricketers jumping the fence chasing balls, and for a club that currently has an Olympian, World and Oceania champions and a number of international contract riders, surely no one could argue that it doesn't require some attention.

Closed Circuit Road Racing Course – The Criterium and Kermese Course will allow the club to again run a proper junior program again away from the traffic in the cycling discipline (road cycling) that continues to grow and is a world wide professional Industry.

In a State where obtaining permissions to run Road Cycling Events is maybe as hard as anywhere in the world, these off road circuits are becoming essential to run State and National Category Road Cycling Events.

Worst still with the current system for gaining approvals for the road events little more than a stop gap measure to allow the sport to continue in NSW after the police shut down road cycling in 2003, the only future for Road Events (the most professional of all cycling disciplines) is on closed circuit such as the Bathurst Proposal.

Bottom line is all lower level road event and maybe most large events in NSW will have to be on these closed circuits in the coming years, the local cyclists (and the states) cyclists need to have this facility to continue in this incredibly popular pastime

Bathurst Mountain Bike Club

The Bathurst Mountain Bike club has never in it's history as sport been able to establish any venues in the Bathurst district. The clubs only attempt back in 1998 was highly successful and gained immediate support from the local cycling community. Membership growth was spectacular. However, its life was short indeed as Council ordered the site at Blayney Common to be demolished in the same year it was constructed.

Since that time Bathurst Mountain Bikers have had no official venue in the area on which to conduct their sport. Like BCC the need for a dedicated venue is desperate!

The potential for the growth of this sport in Bathurst is enormous. Even a small interclub meeting commonly attracts participant crowds of about 300. Larger events such as 12 and 24 hour enduro events attract participant crowds of up to 2000 cyclists or more.

Bathurst PCYC BMX Club

As stated earlier, due to the location of the current BMX track being on the Bathurst floodplain the long term viability of the existing track is highly untenable. The PCYC BMX Club is therefore desperate for the provision of an alternative site in which it can foster and grow the sport to its rightful status in the Bathurst region.

The facilities as describe would enable the track to be a top class venue. It would be showcased as one of the State's, if not the Nation's, finest BMX tracks and would therefore attract State and National riders. At present the current Bathurst PCYC BMX track is maintained by our small club on a shoe string budget. The dedication and ongoing support from members of the Club has ensured that the track is always being maintained and improved despite the fiscal constraints and resulted in track meetings attracting and continuing to attract regional and open events. The possibility of a professionally maintained track would open up even more opportunities for the Club to host some of the top BMX calendar events

Location of Facilities within the Proposed Bicycle Park.

Bathurst Cycling Club

Much of the BCC activity requires a flat area; hence it is very important for the planners to consider elevation when looking at the position of the track and road circuits.

Velodrome – it is important for this venue to be level, but as considerable earth works are required (especially for the steeper banked opinions) the facility can be cut into a hill. However because it's such a large level area (333m oval) the velodrome is built on a flat block. Given there is signification infrastructure and buildings required around the velodrome it is important to position this venue so these structures can be shared with other park user groups. Given the requirement to be level, the Foundations and footing for the Velodrome are very important (as shown with the Port Macquarie project), so soil and base need to be suitable.

Road Circuits – The majority of the Road Circuits will be flat, with the Criterium Course confined to the flat area of the Park. The Kermese Circuit does require a variety of Terrain but only maybe 10% of Climbing on the circuit (with maybe another 5 or 10 % of gradual rise), because the continual lapping magnifies the stress of the hill.

Designing the course with switch backs on the slope of the hill will reduce the grade of the hill and add interest in the course design.

Bathurst Mountain Bike Club

The design and location of the MBT courses will need to be located and carefully integrated with the facilities of all other venues. A mountain bike course by its nature can be highly malleable and therefore its design can easily work in the other venues.

The size of the development site in itself allows plenty of space for all venues to work together with good design and planning.

Bathurst PCYC BX Club

The location map indicates the general location within the Bicycle Park where Bathurst PCYC would require the track to be located. Generally speaking a BMX track does require a small are of flat land so s to produce the series of banks and jumps s indicted in the standards for BMX track construction. However, a large embankment on which to commence the starter's ramp would be most suitable. Also at the suggested location it may be possible a natural amphitheatre arrangement in slopes of the hill for spectator viewing.

CBBUGS

The Bicycle Education and Training Centre could be constructed on the flat area inside the Veledrome. In doing so it would provide a more secure area and could also double as warm up track for racing track cyclists*.*

Community Benefits of the Bathurst Bicycle Park

Bathurst Cycling Club

Competition Racing

The Community will certainly benefit from the increased visitors to the city with this venue set to draw people from Sydney and through NSW. With permissions tightening up to run Road Events at all levels of participation, the venue is not only set to bring the elite or serious competitors to the city for occasional Championship or Major event, but Clubs Novices and especially juniors look set to be regular visitors as they battle to organise events in there local area.

Tourism

The Community will also benefit from the status and notoriety generated from having a sport or activity becoming prominent and belonging to that region. In a time where internet hits, surveys and a cities reputation change business and government decisions, and activity settling in a city can generate all kinds of opportunities. Of course when you consider that the forecast for cycle tourism across Europe is 14 billion pounds per year by 2010, the benefit the local community are huge.

Enhanced Reputation

Certainly few would argue that that Bathurst is on the map through the Mt Panorama motor race circuit and the Great Race, however in a time when environmental issues are becoming increasingly important there is some logic to broadening the Great Race concept to include a range of green racing activities such as cycling. This is not a suggestion to swap V8 supercars with bicycles, Bathurst is the Great Race, but this city does have so many other things to offer.

Its more about sharing the charisma of the race and to provide a range of alternate activities to make the perception of Bathurst to be an energetic, active city that still has a relaxing country charm. Clearly the objective is to have Bathurst as a place to relax and stay the night as opposed to doing a lap of the mount and heading off to Orange, Dubbo or Mudgee for accommodation.

Healthy Active Communities

Of course the promotion of an Active Lifestyle through the park, and giving Bathurst youngsters a wider range of healthy activities to participate in is a considerable benefit to the community. Child obesity is increasing and nothing is more important than the health of our kids. Of course increase in physical activity in the community can save millions of dollars in health costs reducing the burden on Governments

Cycling is Big Business

With 1.2million bicycles imported into Australia just in 2008, and membership in competition cycling at record levels (2009 recording a big jump in CNSW membership), Cycling is big business. The local Bicycle Park catering for cycling's rapidly growing niche market, which is flourishing due to increasing interest in fitness and personal health. Cycling Events are becoming financial success stories, South Australia's Tour Down Under Cycling race recognised as the State's Number 1 tourism event. While the Rotary club of Bathurst Daybreak has proven the potential of cycling in this city with their rapidly growing B2B promotion.

In the Sport itself local cycling is constrained by this lack of safe venues, this obviously makes it difficult to conduct any major promotions or run any significant junior development programs

Creating a Nursery Ground for Champions

One of the biggest benefits to cycling that the closed circuit offer's, is that it provides a car free environment and maximum safety for the conduct of a broad range of events. In doing so it also simplifies the administration of event management.

Bathurst also has an abundance of Junior Development, State and National level coaches with decades of experience in cycle racing. BCC can also boast the availability of a coach with the highest level of NCAS accreditation of which there is only a handful in the country.

Unfortunately, these coaches in the past have had difficultly in dedicating all their resources to the role of coaching as they have been tied down with administration issues related to the conduct of events on open roads.

The development of this "One Stop Shop" bicycling facility will allow the clubs abundance of coaching personnel to dedicate their time more efficiently and effectively to the expertise of cycle coaching.

Ultimately the combination of first class facilities coupled with top quality coaching will go a long way to further enhancing Bathurst's already reputation as nursery ground for the production of champion cyclists.

Bathurst Mountain Bike Club

There are many benefits of attracting younger riders and promoting active life styles.

Economic drivers for event, 2006 National Down Hill hosted at Lithgow were estimated to inject $600,000 into the local economy on the race weekend. Many riders came to practice in the weekends before and had return visitation.

Positive media coverage across a range of media which directly targets a growing tourism market.

Bathurst PCYC BMX Club

The benefits for the community of Bathurst and its surrounding satellite villages are many. BMX racing and riding is a fun form of exercise that appeals to a young target audience. It is the only cycle sport that caters for competitors as young as four years of age. BMX provides an opportunity for children to exercise and compete in an environment that is conducive to family participation and support. BMX riders of all ages must wear compulsory full helmet, gloves, the appropriate clothing (which consists of a long sleeved racing top and leather pants). This encourages and educates our children on safety awareness and builds a culture that adopts a safe approach to cycling. The BMX track is currently well-attended by non-club members during the week and on weekends, proving that the facility has provided an alternative for riding in public places and on public roads. The club predicts that amenities located close to the track would increase its use both during and outside race meets.

The evident safety aspect of the sport also encourages parents to support their children in taking up the sport of BMX riding. Often this will result in a family approach to racing with a number of the Club's riders being the mums and / or dads of children who race (some of whom are aged in their 40's). The children really enjoy racing against their parents and often beating them to the finish line, all in good fun!

The Bathurst PCYC BMX Club promotes healthy lifestyles and encourages people of all ages to get off the lounge and on a bike! Statistics show that people who regularly ride bikes as children are safer drivers as adults (Source: The Cycling Promotion Fund).

BMX racing has gained a surge in popularity as a result of BMX racing now being a sport included in the Olympics. The Beijing Olympics showcased BMX racing as a professional sport for the first time. BMX racing is considered to be a professional sport on the world stage and with the support of the Bathurst Regional Council and its stakeholders this could become a reality for regional communities, providing an opportunity for 'grow our own' talent in the youth of our communities.

Many of the world's best cyclists come from a BMX background, including Cadel Evans, Robbie McEwen and even our own Mark Renshaw. Mark has been profiled in the March-April 2009 Bicycling Australia Magazine, showcasing Bathurst's attractions and his favorite local rides.

CBBUGS and BABBUGS

The inclusion of the Bicycle Education Facility in the Park development is about protecting the very lives of our communities' most valuable assets, Our Children! To be able to provide a safe quality venue to undertake supervised and qualified bicycle education programs in conjunction with perhaps with the local police and the Department of Education would be a major cue for the Bathurst community.

Initially this venue would service all school age children in the local area.

There are only a few of these venues in existence in Australia at the moment but there value can not be understated. With Bathurst having the only education centre west of the mountains it is very possible to make this venue the Bicycle Education Centre for the entire Central West.

Planned Major Events and Sports Tourism Benefits

Bathurst Cycling Club

Events

The sport in NSW is crying out for the Bathurst Bicycle Park Facility. In the past the Bathurst Cycling Club has held major events on the Track and Road but these days the club simply can not commit to any major cycling events as it doesn't have the facilities.

Letters from Cycling NSW executive, and a more recent letter of support from the CEO of the sport's National Body, "Cycling Australia", guarantee the backing of the complex by the sport, and suggest that Open Level events will be allocated to the Bathurst Bicycle Park as soon as the site is available. (see attached)

In recent times the Bathurst Cycling Club has hosted rounds of the Nationals Series, plus its prime location in the state seen a junior weekend of racing rapidly grow to one of the big junior tours in Australia, however a lack of facilities (and the downgrading of existing facilities e.g. picket fence on the Sportsground track – see attachment, Appendix C) has made it to difficult if not impossible to continue with these venues. Clearly then the new proposed facility will allow state and national cycling events to return to the Bathurst Area.

It is realistic to believe that the local area could have a junior and senior state level open event on the Track, and maybe even a national level as well as the state events on the Road as soon as the Bicycle Park track and circuits become available. On top of that are a number of major Regional events.

Using figures for estimated daily spending by the Cycling Promotion Fund, a cycling event participant and supporter would spend approximately $100 daily when coming to an area to compete.

Sports Tourism

Given the Park is expected to draw a number of major events as soon as it becomes available including a junior and senior state level open event on the Track, and maybe even a national level as well as the state events on the Road plus major Regional events on both the road and track a conservative figure of $150,000 a year could be spent in the local area form the time the facilities would become available.

This is calculated on the assumption of 1 to 2 major track events at 450 visitors, and 2 to 3 Road Major events with 325 and 500 visitors at these events, (there are more visitors at a junior event). On top of that the Track would also attract 3 regional type event 2 smaller 40 visitors' events and one larger Championship type event drawing approximately 120 visitors. Similarly on the Road you would expect 3 to 4 major regional events.

This adds up to 2300 visitors a year (or $230,000.00 per year) in the initial years with further growth expected.

Bathurst Mountain Bike Club

Events

The Bathurst MBT Club would envisage that a Down Hill trail here would be at a state level. State races commonly attract on average around 220 riders, with 1-3 spectators, support crew per rider. It is expected that 2 to three state level state races would be conducted annually.

Cross Country loop would be national level with national races attracting 110 riders while 8hour, 12hour and 24 hour endurance participation events attract between 400-2000 riders depending on how well the event is promoted and marketed. It is expected that 1 or 2 national events could be conducted with perhaps two to three endurance events being conducted along with one major promotion.

Using the same figures as suggested earlier a conservative estimate for participant and supporter no's this would equates to 4,000 visitors numbers annually @ $100 per bed night (single night only) $400,000 annually into the local economy

Bathurst PCYC BMX Club

As outlined above the 'Regional Rampage" will attract some 250-350 riders alone. The majority of these riders will be accompanied by family members who will support the tourism industry of Bathurst by utilising local motels, restaurants, bicycle shops etc. Many of these families who will accompany their children will stay in Bathurst for the weekend and may also enjoy some of the tourist attractions Bathurst has to offer, for example the Motor Racing Museum, the Somerville Collection, Bathurst Goldfields.

The estimated income for the local tourism industry would be a conservative $100,000.

The above estimate is provided using a current qualitative event but the potential for attracting and securing many other events on the State and National calendar would be vast if a top class facility is built.

In addition, as evidenced by the growing support and patronage of the Bathurst B2B Cyclo Sportif Challenge, the potential for Bathurst to become a hub for cycling is there it just needs to be harnessed. The construction of a bicycle park in Bathurst incorporating a BMX track would be a huge enabler for sports tourism in the town of Bathurst and the Central West region. Mt Stromlo Cycle Park in the ACT is a good example of a national cycling Mecca.

Project Contributions

Bathurst Cycling Club

Bathurst cycling Club has 125years of history in the Bathurst Community with the first Club President "Dr T A Machattie" also the Mayor of the city at the time. The club's diverse membership having a great impact on the city, with many of the pioneers (Past and Present) of the area active club members.

Today's club boosts some of the community's major business identities, including some of the cities major building companies, already this document is using their expertise, for example Experienced Road Builders Goddard Constructions have provided advise on the make up and design of the road circuits, while engineering advice has also came from Bathurst Cycling club members.

The Bathurst Cycling Club's vision and willing to back their judgement with hard work is clearly shown in the construction of It Mt Panorama Canteen. The Cycling Club one of the only local clubs on Mt Panorama bring the money back into the local community, because they where prepared to construct a new store built to modern health standards when it became obvious that the old iron shed era was finished.

The club not shying away from the task given the skills available among the members. These skill even more prevalent in today's club with arguably the owners of cities biggest residential dwelling builder, biggest

industrial site builder, and regions biggest road and major project constructor all active members of the club, all of whom keen cyclists and eager to see the sport available for future generation of the Bathurst community.

Bathurst Mountain Bike Club

We have members who are experienced in trail design and construction, out trails at XC Lidsdale and DH trails at Lithgow have been very popular and much loved with both elite and less experienced riders. We have a pool of volunteers to help construct the courses. As mountain biking takes place on rough trails most trails are constructed by hand however on this site a bobcat or mini excavator would be very handy, we have licensed operator who could help out in this regard.

Bathurst PCYC BMX Club

The Bathurst PCYC BMX Club is supported by members who donate regular, consistent and reliable "In Kind" services such as electrical, mechanical, pneumatic, earth moving, administration and accounting, cycle shop suppliers, civil drafting).

Australian Conservation Volunteers /BCCAN

Australian Conservation Volunteers have a keen interest in this project and if appropriate funding is made available are prepared to allocate labour resources to undertake a range of activities covering

- Wetlands and construction on water retainment areas,
- Reforestation programs
- Assist BMX Club with track construction and
- Assist the mountain Bike Club with engineering design works and construction of Downhill and Cross country courses.
- Assist with construction for Velodrome, Criterium circuits and Bicycle Education facility (where appropriate)

With appropriate approvals Australian Conservation Volunteers will utlilised the resources the inmates at Bathurst jail to undertake this community project work along with our regular conservation programs volunteers.

CBBUGS

Grants

CBBUGS will be pursuing all appropriate grants to assist in the financing of this project. The federal government has already announced grant funding for appropriate bicycle infrastructure program of $40M Australia wide.

In addition to this we are aware that grants are available from time to time for any projects which are directed to youth education and bicycle safety programs. These grants lend themselves perfectly to the construction of the Bicycle Education centre.

Sponsorship

It my also be possible to acquire additional funding for this project by raising commercial sponsorship through the allocation of "Naming Right's" for the major venues. This is powerful tool when pursuing sponsorship programs and may well be appropriate if handle with stringent guidelines in place.

Project Constraints

1. Uncertainty of support for program by all councillors
2. The dependence on external authorities for approvals and infrastructure
3. Need for additional funding through successful grant applications
4. The need for environmental impact statement and engineering reports.
5. The dependence on a unified support of a single project by all stakeholders.

Benefits and Outcomes

Number	Benefit	Outcome
1	Income Stream to the all Stakeholder Clubs Increased profile of clubs within the local community	Increased funding to Board designated charitable activities
2	Promotion of cycling in Bathurst	Increased participation and sponsorship for clubs designated events
3	Increased profile for all Clubs	Increased club membership
4	Increased participation rate in cycling	Improved health of population / decreased cost of health cover

Income and Costs

An estimated summary of income and costs is to be prepared by Bathurst Regional Council.

Project Planning

Bathurst Regional Council has allocated funding to undertake project planning. This will need to be undertaken in close consultation with all interested stakeholders in this development project.

SWOT Analysis

Strengths

- Location of the venue.
- Ideal site to adopt to all cycling disiplines
- To become recognised and endorsed racing venue for all cycling displines
- A single “One Stop Shop” for bicycling events
- Increased participation from year to year
- Ability to provide a multi functional approach to use of general infrastructure and amenities.
- Facilities of McPhillamy Park (parking, toilets, change rooms)
- Taps into growth pursuit
- Increased recognition of health benefits from cycling
- Integrates with planned bicycling infrastructure programs
- Climate
- Support from Local Government Authorities
- Skills of the Parties

Weakness

- Project requires additional fund through grant applications
- Soil structure and engineering suitability unknown
- Unrecognised as touring event
- Small Budget with no major sponsorship
- Minimal online presence
- No Sponsorship strategy, business plan, marketing plan, or promotional plan. Yet in place

Opportunity

- Associated skills set available from various sources to assist in construction
- Mt Panorama is a well recognised Australian landmark
- Strong interest in cycling in Australia
- Potential for acquisition of major sponsorship given the association of other products with the Mount Panorama and the concept of a active healthy Australia (e.g. Country Energy, GM Holden and the Ford Motor Company)
- To create a green fields site and wetlands areas

Threats

- Competition from other sports venues in Sydney and Canberra
- Growth potential is not restricted.
- Access to venue across railway line.

Investment Appraisal

1. No other venues in the Bathurst Region seem to match the core competencies and potential as the proposed site at Vale road and along side Omya Minerals to undertake such a wide range of cycling activities with good access route to Bathurst.

Risk Analysis

Risk	Risk Likelihood	Risk Level	Risk Mitigation Strategy
Insufficient Resources	TBC	TBC	TBC
Key resource pulls out	TBC	TBC	TBC
Expenditure exceeds budget	TBC	TBC	TBC
Accident resulting in litigation	TBC	TBC	TBC

Attachment A

"History of the Bathurst Cycling Club"

(As Researched by Heather McFarlane)

Current Activities of the Bathurst Cycling Club.

Bathurst Cycling Club is recognised as a high performance Sporting club, but achieves this, by not necessarily acting as one. In fact the main focus of the Bcc is Social cycling activities and competition; with club events aimed at participation using the catch cry "Everyone is a champion at the Bathurst cycling club.

Of Course with a number of members past and present having International Reputations and Sponsorship contracts, the Bcc has significant more experience than most cycling clubs (both rural and metro) at dealing and catering for the elite performer. This expertise acknowledged by the Institute of sport whom recognised the region as the only cycling high performance area in NSW in 2001.

See attached brief on NSW High Performance Sport Regions

In November 2000 the State Minister for Sport and Recreation John Watkins launched the NSWIS Mobile Services program with the plan to develop and enhance the capacity of the Institutes of Sports high performance service unit to provide high quality services to the states Athletes & Coaches in their home town environment through NSW. This seen the appointment of Dual Olympian Jenny Luff as Program Coordinator in January 2001 and then the announcement of 9 High Performance Centres supporting 8 different sport across the state.

9 High Performance Areas - Cycling – Bathurst, Canoeing – Byron Bay, Equestrian – Lochinvar, Sailing – Lake Macquarie, Snow Sports – Jindabine, Swimming – Far North Coast, Track and field – Newcastle & Illawarra, Triathlon – Lennox Head.

However while the top level expertise and experience is on offer in the region, the real secret to the local elite performers success is that they have been produced with a love for the sport and a respect for all those involved. The social side, and encouragement through out Cycling Community Environment providing a foundation for there success while at the same time aiming to provide the wider bicycle user with an opportunity to participate and set there own individual goals. The Bottom Line is Club aims to conducting its weekly activities (in both cycling disciplines Track and Road) where riders of all level can be involved. This is achieved by the use of the clubs Handicapping and Grading System and an active review process that formally meets monthly.

The Bcc is affiliated with Cycling Australia (CA) through Cycling NSW (CNSW), which means the whole sport is together under the World and Olympic Body the UCI. This is important as it gives the sport clarity when is comes to Administration and Representation; allowing Media and other outside Authorities a more recognizable structure to work with.

The Bcc uses the Sports (CA / UCI) Infrastructure such as Laws & Regs and Insurance, while the Club is incorporated and uses Model Rules as set by the Dept. of Fair Trading for its constitution. The Bcc has a long standing Executive, with the President, Treasurer and Secretary all holding their positions for the best part of a decade; all three being awarded the Jean Alexander award for Administrational Excellence.

The Bcc finances its activities thought its Canteen at Mt Panorama, which operates at the October Car Races and other meetings that draw a crowd to the Harris Park Location. The Bcc having the vision too completely rebuild the Canteen when racing at the mount went into its new professional era around 25years ago and almost all sports lost there shops at Mt Panorama due to the more stringent Health Regulations. The club is proud of its new Canteen which is a large 3 serving bay shop, the building and its contents costing the Bcc a substantial amount of money. The club holding onto its major asset not just through prior effective savings but also work of a number of local building contacts that remain in the club today.

The Club is proud of it retention rate of juniors to senior athletes, something many other cycling clubs and sports battle with. It is another of the Bcc objectives to hold onto its juniors, and is one that is repaid many times over when Commentators at the world's biggest sporting events talk of the Bathurst Riders. Using the Mt Panorama Colours, Design and Logo on their jersey the Bathurst Cycling Club is one of the cities most prominent advertisements showing off its energy, athleticism and motivation to a huge captured audience of drivers and spectators all around the world.

The Bathurst Cycling Club activities involve the 2 traditional competition cycling disciplines – the endurance based Road Cycling and the power based Track Cycling. Over the years the club has hosted many major events in both disciplines but in recent times a deterioration of local venues (such as the cricket fence on the Sportsground track) has seen it very difficult to conduct bigger events, although record numbers are involved in the sport.

NOTE: *It should be noted that Track and Road Racing are not just different distances but completely different types of cycling using a different bike and courses; hence the need for the separate venues. Track bikes have no gears, no brakes and is a fix wheel drive, as opposed to a road bike is closer to the more conventional bicycle. Road Racing is more popular and professional, however in Australia Track Racing has a high profile due to our Olympic Success and is considered an important part in junior development of all cyclists.*

History of the Bathurst Cycling Club.

The local Bathurst cycling club has an amazing cycling history, with the local district the home of cycling in the state, after pioneer W.R. George built and designed the first bicycle in NSW in the mid 1800s in Bathurst. In fact club competition cycling is going into its 125th year in 2009, with the Bathurst Cycling Club history as long as the sport itself in this country.

BATHURST HOME OF CYCLING IN NSW - The Bathurst Cycling Club is one of the oldest sporting clubs in Australia. In fact it is argued that one of the first ever Bicycle races in Australia was held at the Bathurst at the Racecourse on New Years day 1870, only a matter of weeks after the first competition in Australia which occurred in Melbourne in 1869, and not long after the first organised pedal cycle race in the world, which occurred in England in 1869.

Bathurst then also claims to have the first cyclist in NSW, when W.R. George contracted a Blacksmith to build him a machine that was reported as the first built and ridden in NSW by the Sydney Morning Herald. Typical of the rivalry that build up over the years with neighboring Dubbo, they too claimed the first bicycle in NSW when George Roth argued that he was the state first cyclist on a bicycle made of wood.

The Bathurst Bicycling Club first appeared in 1884 when cycling appeared on the program at the Highland Gathering in December of that year. That decade the Amateur and Professional Administration Bodies would both formed, which would course must unrest in the Australian Cycling scene and indeed in Bathurst cycling clubs for the next century as different group argued the merits of being affiliated with the Pro's or the Amateurs. The Bathurst Cycling Club would play a promenade role in the amalgamation of the Amateur and Professional bodies in Australia when the Pro Club joined the Amateur Club in 1985 under the control of the Amateur Body which sunk the league of wheelman in Australia.

See attached brief history of the Bathurst Cycling Club in Appendix B

Local residents and Bathurst Club Members are among the sports most respected performers, with Bathurst and Central West Area famous for producing top class cyclists. Highlighted in modern times by the New South Wales Institute of Sport, ear-marking the district as a High Performance Area for the sport of Cycling in 2001, acknowledging the World championship, Commonwealth Games and Oceania Championship Gold medal winning performances by an array of local cycling talent. Even back in the early years while the club was forming in the 19th century, one of the earliest "Amateur Champions of the World" – Herbert Cortis settled in the area after amassing an amazing record in England in the 1880's.

Stretching from Herbert Cortis to recent Olympian Mark Renshaw the Bathurst Cycling Club has many champions to boost about, as well as many famous events and memorable feats. One such feat was Sir Hubert Opperman phenomenal Unpaced Road Ride between Dubbo and Sydney in 1938, where he rode the 265miles in 12hours 54mins, and recorded a time of 6hr 48min for the last 132mile between Bathurst and Sydney, (note - pre Highway when the road between Bathurst and Lithgow was a weaving and winding cement track). Its should also be noted that Opperman broke the Australian 12 hour straight course Record in that ride amassing 248.6miles in the 12hours

TODAY BATHURST CYCLING CONTINUES TO SET NEW STANDARDS -Yet with all that history it is incredible to think that the club still continues to achieve new standards in the sport of cycling. At the club's last presentation night a number of outstanding international achievements where recognised, with 2008 going into the history books as the first time a Bathurst Cycling Club Member raced the world's Premier Cycling Event "The Tour De France".

Athens Olympian and Commonwealth Games Gold medallist Mark Renshaw making the tour's starting line-up for French Professional team Credit Agricole.

Local Bathurst cyclist's presence on the world stage also at record levels with an amazing 4 Bathurst riders now holding international "UCI" Pro Tour / Continental contracts, and representing the Bathurst region in all the worlds major cycling locations.

Away from the Sponsored Teams, the Club continued a fine tradition in National representation, with local club members selected in the Beijing Paralympics and featuring in the Medals.

While the Club continued its recent outstanding results in the Masters and Junior Ranks, winning a National Championship in the Juniors and a World Championship in the Masters Division.

Brief History of the Bathurst Cycling Club.

(Researched and prepared Heather McFarlane)

1884 16th Sept Bike Club formed
1885 10th Nov The Occidental Bicycle Club Formed
1887 15th Mar An off shoot of Occidental Club forms the Bathurst Bicycle Club, when Cyclists Union is formed
1889 5th Mar The two clubs Amalgamate to form the Bathurst Occidental Bicycle Club
1890 Name changed to the Bathurst Bicycle Club
1892 19th Nov Western Cycle Club formed
1893 League of NSW Wheelman ("pros") formed
1894 2nd June Affiliated with the Pro's, name change to Western District Cycle Club
1896 8th Jan Name to Bathurst Branch of the League of Wheelman
1897 27th April a new Amateur club formed
1899 Both Clubs lapse for the Boer War
1903 28-Apr Bathurst Bicycle club reformed and relapses
1904 25 Dec O'Connell Bicycle Club formed (Pro) (1904-1909)
1905 9th Jan Western League of Wheelmen - Mudgee, Penrith, Lithgow, O'Connell
16th Oct Bathurst Cycling and Motor Club formed
14th Dec Palace Cycling Club formed (at the Palace Billiard Saloon - H McGowan Proprietor)
1906 Palace Club joins the Cycle & Motor Club - form a Pro Club
1907 16th Mar Sofala Club forms
1908 17th Aug Sunny Corner Club formed
1910 Bathurst Bicycling (Amateur) Club forms - to make 2 clubs in Bathurst - an amateur & pro club (Cycle & Motor).
1912 9th July Rockley Club formed (1912-1914)
1913 Both Bathurst Clubs change their name, Bathurst Bicycle Club to Bathurst Union Bicycle Club, Cycle & Motor to Federal League Cycle Club
1915 World War 1 - Amateur Club lapses
1920 Federal League cc changes to Bathurst League cc
Mudgee reforms
1933 Bathurst League cc changes to Bathurst Cycling Club
1934 Bathurst cc changes to Bathurst League Carillon cc
1935 21st Jun Amateur club reforms
1936 Pro Club name goes back to Bathurst League Cycling Club
1937 Ladies Club forms (1937-1940)
1939 Amateur club lapses for 3 months then restarts due to the death of Danny Cuneen
1940 World War 2 - Amateur Club lapses
1947 Ladies Club reforms (1947-1948)

Combined Bathurst Bicycle Users Group

Bathurst Bicycle Park _ Draft Business Overview

1959 Pro Club name changed to Continental Club
1960 Pro Club name goes back to Bathurst League Cycle Club
1961 Lithgow Club revived
1962 Ladies Club reforms again (1962-1963)
1971 1st July Bathurst Amateur Cycle Club formed for Junior riders (Under16)
1982 Jan Harlequin Wheelmen formed by David Roggiero. (1982 -199?)
1985 Bathurst (league) Cycle club (Pro's) joins Bathurst Amateur Club, (after the liberating of the Amateur rules decreased the popularity of the league of wheelman (Pros)
  Name Changed from Bathurst Amateur Cycle Club to Bathurst Cycling Club"
1992 WRAS Cycling Development Program (1992 -2002), to assist the bcc with junior development
2001 Jan NSWIS setup Cycling High Performance program in Bathurst