Department of Housing and Works

Report for Stage 1 of Barbagallo Raceway Review
Needs Assessment and Site Condition Report
March 2009



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- A Completed Key User Position Papers
- B V8 Supercars Specifications and Additional Information
- C Aerial View of Barbagallo Raceway
- D Minutes of Stakeholder Workshop
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- F CAMS Track Inspection Report
- G WASCC Site Plans of Barbagallo Raceway (for V8 Supercars Event)
- H Aerial Photos from V8 Supercars Event
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Executive Summary

GHD Pty Ltd was engaged by the Department of Housing and Works on behalf of the Department of Sport and Recreation to conduct a review of Barbagallo Raceway in Wanneroo, Western Australia. The focus of the review was to identify and quantify the improvements needed to ensure the site is suitable to continue hosting future rounds of the V8 Supercars Championships.

A process of stakeholder consultation has been conducted in order to review the existing facility and ascertain the requirements of key users. Based on the results of this consultation a number of improvement options have been identified. It should be noted that while input was sought from V8 Supercars Australia Pty Ltd (V8 Supercars), no feedback or confirmation was received in relation to the options presented in this report.

Summary of Existing Site Conditions

Based on GHD's review of Barbagallo Raceway the following key features have been identified:

- The site is well located, less than one hour from the Perth CBD and surrounded by industrial zoned land as well as State Forest.
- The capacity for future infrastructure expansion is constrained by the current site boundaries.
- Access to the site is an issue as it is limited to one access road.
- ▶ The lack of parking is an issue. For the V8 Supercars event, it is estimated that approximately 10,000 cars park at an old tip site 2 km from the raceway.
- ▶ The track complies with standards for an existing circuit and holds both Confederation of Australian Motor Sport (CAMS) as well as Motorcycling Australia (MA) Track Licences.
- At 2.4 km in length, the track is one of the shortest circuits to host a V8 Supercars event in Australia.
- A key issue identified by V8 Supercars and other stakeholders is the remote location of garages with respect to the pits. This creates safety hazards as vehicles are driven through spectator areas. It is also inconvenient for drivers and their pit crews.
- The current medical facility appears dated and would benefit from an upgrade as well as expansion to provide additional treatment areas.
- ▶ Safety concerns have been raised by motorcyclists regarding the proximity of safety barriers to the track in some areas.
- ▶ The management capability of the Western Australia Sporting Car Club (WASCC) is suitable for day-to-day operations and local events.



There is potential to form a board of key stakeholders to undertake the promotion of the V8 Supercars event while WASCC focuses on organising the event.

Options for Improvement

Three options have been identified as feasible options for improvement of Barbagallo Raceway and the management of the V8 Supercars event.

<u>Option 1</u> does not involve any major upgrade to the track or facilities. Minor improvement works by WASCC are likely to continue as part of its normal operations. However these works are unlikely to adequately address the key issues raised for the raceway with the exception of potential improvements to the event management and promotion of the V8 Supercars event.

There is a high possibility that WA could lose the V8 Supercars event and without further upgrades to the facilities it is unlikely that WA could attract any other major events. The motor sport community would consider this to be unacceptable. Furthermore there would be no growth to WASCC membership and a potential decline in member support.

Option 2 involves the construction of a new track section approximately 1 - 1.2 km in length. New pits, garages, race controls and general amenities would be provided as well as some basic upgrades to existing medical facilities. Longer runoff areas would be developed where possible as well as storage space for air fences. An additional concrete hardstand for event parking, driver training and other activities would be also be constructed. The existing track, however, would not be upgraded.

Improvement works would address most of the key issues raised by V8 Supercars and the current users of the facility. The option has the potential to create a multi-use facility allowing small events to run simultaneously and increasing availability of the track for users.

This option would require a significant amount of funding from the government. There would also be a requirement for additional land both on the AJS Motocross site and north of Wattle Ave. As a result government constraints associated with environmental approvals and re-zoning of this land would need to be addressed.

As this option does not include improvements to the existing track there is a possibility that V8 Supercars would raise further issues with the raceway in the future. This option may also place additional pressure on WASCC to organise and run more events at the raceway.

<u>Option 3</u> involves an upgrade of the existing track as well as construction of approximately 2 km of additional track all to current Fédération Internationale de l'Automobile (FIA) standards. New pits, garages, race controls and general amenities would be provided as well as significant upgrades to existing medical facilities. An additional concrete hardstand for event parking, driver training and other activities would be developed along with the installation of track lighting. Furthermore improved road access would be considered within the limits of existing site constraints.



This option will provide a facility that is capable of hosting international racing events. It will exceed the needs of current users and meet all of V8 Supercars expectations. The option will create a multi-use facility allowing events to run simultaneously and increase the availability of the track for users. It will also provide a range of opportunities for additional activities at the raceway.

This option will include a requirement for a significant amount of additional land to the north of Wattle Ave. Alternatively there is an option to relocate the AJS Motocross complex so that this land can be used for the expansion of Barbagallo Raceway. Government constraints associated with environmental approvals and re-zoning of the land at either location would need to be addressed.

Due to the significant amount of capital investment required for this option there is the risk that the sufficient funds may not be available. This option will also place significant additional pressure on WASCC to organise and run several additional events per year including international racing categories. There is however the opportunity to engage an independent events management company to promote/organise major and international events.



1. Introduction

1.1 General

GHD has been commissioned by the Department of Housing and Works (DHW) on behalf of the Department of Sport and Recreation (DSR) to conduct a review of Barbagallo Raceway in Wanneroo, Western Australia.

The scope of work for the review includes:

- Stage 1: Needs Assessment and Site Condition Report; and
- Stage 2: Facility Improvements and Business Case.

The objective of Stage 1 of the review is to identify and quantify the necessary or desirable improvements required at Barbagallo Raceway in order to make the site suitable to continue hosting future rounds of the V8 Supercars Championship.

Stage 2 of the review involves the development of a Business Case based on the options for improvements identified in Stage 1.

This report details the outcomes of the Stage 1 Needs Assessment and Site Condition Report.

1.2 Background

Barbagallo Raceway has been managed by the WA Sporting Car Club (WASCC) since it was constructed in 1968. The raceway is located on Crown land, leased from the City of Wanneroo, and the infrastructure has been constructed over a number of years by the WASCC. The WASCC re-invests profits from operations into upgrading the track and facilities as needed. This has resulted in the development of a substantial facility that has had little financial support and input from the Government to date.

Recent investigations commenced after V8 Supercars requested a street race in WA. This proposal was assessed by Tourism WA and determined not feasible due to factors such as cost, disruption to CBD activities, minimal increase in spectators and no infrastructure 'legacy' for the WA motor racing community. V8 Supercars then stated that the current infrastructure at Barbagallo Raceway did not meet their requirements and that significant upgrades were required to improve safety aspects, the track layout and general amenities. V8 Supercars suggested they would not return to WA beyond their current 2009 commitment unless assured that improvements would be made so that a suitable raceway facility was available.

This review has been commissioned by the Government in order to define V8 Supercars' requirements and to investigate the cost to develop a suitable facility to service the needs of V8 Supercars and in addition the Western Australian motor racing community.



Methodology

2.1 Identification of Primary Stakeholders and Key Users

The initial phase of the review involved the collection of information from the primary stakeholders and key users of Barbagallo Raceway.

Based on investigations with regards to track users and discussions with DSR the following primary stakeholders and key users were identified:

- DSR;
- V8 Supercars;
- City of Wanneroo;
- WA Sporting Car Club (WASCC);
- Motorcycling WA (MWA);
- ▶ Motorcycle Racing Club (MCRC); and
- Confederation of Australian Motor Sport (CAMS).

2.2 Preliminary Collection of Information

GHD developed a "Position Paper" template to be completed by all key users to aid in the collection of information on the raceway. This enabled GHD to gather the information in a uniform format from all users.

The position paper covered such topics as:

- Current uses of the raceway;
- Issues relating to existing facilities; and
- Expectations for improvements at the raceway.

A copy of all position papers received by GHD has been included in Appendix A.

2.3 Further Consultation with Key Stakeholders

2.3.1 V8 Supercars

In addition to completing a position paper, V8 Supercars also provided GHD with a list of specifications for new racing circuits and additional comments via email. This additional information has been included in Appendix B.

2.3.2 City of Wanneroo

GHD met with the City of Wanneroo on 20th June 2008. The City of Wanneroo provided valuable information on the planning issues for the site and opportunities for future growth of the facility as well as associated businesses in the region. The City of



Wanneroo has also provided continuous support and additional information throughout the review process.

An aerial photograph of Barbagallo Raceway, obtained from the City of Wanneroo, has been included in Appendix C.

2.3.3 WASCC

The WASCC currently owns and manages the facilities at Barbagallo Raceway. GHD initially met with the WASCC President (Phil Johnson) and General Manager (Peter Thornell) at Barbagallo Raceway on 10th June 2008. Subsequent correspondence and meetings with WASCC were also arranged in order to further discuss details of the track, facilities and management of the raceway.

2.3.4 MWA and MCRC

Based on information provided by WASCC the two motorcycling clubs (MWA and MCRC) were identified as significant users of the facility and therefore were included in the consultation process. GHD met with MWA on 5th August 08 to discuss the requirements for motorcycles at the raceway.

2.4 Stakeholder Workshop

A primary stakeholder workshop was conducted on 26th August 2008. The workshop was attended by representatives of all organisations except V8 Supercars. The workshop had been re-scheduled from earlier dates to accommodate V8 Supercars representatives however on 25th August 2008 V8 Supercars advised that they were unable to attend due to an urgent meeting requirement in the eastern states.

In order to capture items for discussion related to V8 Supercars, GHD obtained a list of key points from V8 Supercars for each of the workshop topics prior to the event. This information has been included in Appendix B.

The minutes for the Stakeholder Workshop have been included in Appendix D. It should be noted that GHD did not receive any feedback requested from V8 Supercars on the minutes distributed to all parties on 2nd September 2008.

2.5 Public Consultation

2.5.1 Email Database

DSR set up an email address to provide the public with the opportunity to express their opinions regarding Barbagallo Raceway. Emails sent to the address were collected by DSR and forwarded to GHD for consideration in the review. Over 80 emails were received covering a range of opinions on topics such as track location, spectator amenities and the V8 Supercars event.



There was strong support for retaining the V8 Supercars Championship round in Perth and some of the key issues regarding Barbagallo Raceway were identified as follows:

- Site access;
- Parking; and
- Spectator amenities (toilets, food stalls, viewing etc).

2.5.2 Community Information Session

A Community Information Session was held at the City of Wanneroo offices on the evening of 22nd September 2008. The information session was well attended by approximately 100 people from a range of different clubs and organisations affiliated with motorsport. A number of independent spectators also attended.

The information session aimed to provide interested members of the public with information regarding the feasibility study being carried out on the Barbagallo Raceway. It was also an opportunity for the public to provide additional input on their views of improvements needed at the raceway in order to continue hosting the V8 Supercars Championship event.

During the Information Session attendees were asked to provide written responses to the discussion question, "How can the Barbagallo Raceway be improved to better cater for the V8 Supercars Championship?" Responses were to focus on the three main areas of the review: Track & Facilities; Event Management; and Opportunities.

Minutes from the information session have been included in Appendix E along with a compiled list of responses to the discussion question and a list of all the attendees.

2.6 Other Interested Parties

GHD and DSR were approached by representatives from several organisations interested in the management of a new facility. At this stage of the review these discussions were considered premature. Therefore GHD indicated that although input from external management organisations may be valuable, further discussions would be postponed until the future Master Planning phase.

Some of the organisations who have expressed interest in the management and development of a raceway are listed as follows:

- ▶ AHG Driver Centre (Dave Christison & Steve Perry);
- Events Industry Association (Cassandra Brennan);
- Jetgroup (Bill Meeke);
- John Howe Consulting (John Howe); and
- Perth Motorplex (Gary Miocevich).



3. Site Ownership and Surrounding Land Use

3.1 History of the Raceway

Construction of Barbagallo Raceway commenced in 1968 under the management of the WASCC. The works were completed by a team of contractors and volunteers ready for the first race meeting in 1969. Since this time, the raceway has undergone continual upgrades including a new pit and paddock area in 1979; construction of the short 1.7km circuit in 1992; and track resurfacing in 2004. In addition to these works the WASCC also funds and manages a range of ongoing improvements at the raceway such as construction of new facilities, upgrading services, general track maintenance and other works as required.

3.2 Area and Ownership

Barbagallo Raceway is located on approximately 60 ha of Crown land, which is part of Reserve 10866. The raceway site is leased to the WASCC by the City of Wanneroo on behalf of the Crown. This lease expires on 30th September 2022.

The City of Wanneroo has indicated that it would be keen to keep the raceway within Wanneroo and that the existing location would be preferable over a new site.

3.3 Surrounding Land Use

The City of Wanneroo has advised that Barbagallo Raceway is generally surrounded by industrial zoned land (Neerabup Industrial Area) and State Forest areas. Therefore there are no issues related to urban encroachment and it would appear that the site is well located with respect to both current and future surrounding land uses.

Current developments surrounding the site include Wanneroo Kart Hire to the east, AJS Motorcycle Club to the northeast and Cockburn Cement's limestone quarry to the west. The remaining land surrounding the raceway is currently undeveloped. State Forest is located to the north of Wattle Ave and future industrial land is located to the south. In addition Cockburn Cement intends to further develop the land to the west.

The City of Wanneroo has advised that a power station is to be developed to the southeast of the site. Recent information indicates the power station area includes the adjacent go-kart track and facilities on the opposite side of Orchid Road.

3.4 Regional Development Potential

The City of Wanneroo advised that there was potential regional benefit through development of motor sport related industry within Wanneroo. The City also identified the potential benefit of developing businesses associated with motor sport near the existing raceway. Currently the area accommodates a variety of motor sport from motocross, track racing and the adjacent go-kart facility. There also appears to be significant potential to develop the area into a larger scale motorsport related precinct. However, it should be noted that the future power station to the southeast may require



the removal of the existing kart track and facilities. This does not appear to conform with the concept of developing an area dedicated to motorsport adjacent to Barbagallo Raceway.

3.5 Site Constraints

The future expansion of Barbagallo Raceway is constrained by both current and future surrounding land uses. AJS Motorcycle Club is located on approximately 20 ha of land adjacent to the northeast boundary of site. This land is leased from the City of Wanneroo and is a major constraint on the future expansion of Barbagallo Raceway. Further restrictions include industrial zoned land to the south of the site, Cockburn Cement land to the west and State Forest areas to the north of Wattle Ave. It should be noted that there are issues regarding Bush Forever to the west and south of the raceway, which are impacting on the future development of these areas

Due to the current site constraints the potential for expansion of the raceway is limited unless the AJS Motocross facility can be relocated or additional land can be acquired from the Government to the north of the site or Cockburn Cement to the west. The City of Wanneroo has advised that there may be potential for expansion into the adjacent Government land north of Wattle Ave as long as Government development constraints are addressed. Issues include land re-zoning and potential environmental issues related to Bush Forever sites as well as significant flora and fauna.

3.6 Road Access

There is currently only one permanent bitumen access road into the site. Traffic enters the raceway from Wattle Ave (east), which branches off Old Yanchep Road. This causes a significant amount of traffic congestion during major events and the ideal option would be to construct at least one additional access road to the site. It was also noted that the existing road infrastructure is potentially restrictive for access and egress of emergency vehicles.

The obvious option is to connect Wattle Ave (east) to Wattle Ave (west), which is off Wanneroo Road. This would require construction of Wattle Ave through Cockburn Cement land. However, the City of Wanneroo has advised that this is unlikely to be developed in the near future due to the difficult terrain and the presence of Bush Forever sites.

The City of Wanneroo has advised that the Neerabup Industrial Area to the south of the site will provide additional road access once developed. The main feeder to the industrial area will be the existing Flynn Drive and minor access roads will also be developed. The City also advised that the WAPC are conducting a regional road study which looks at linkages to the industrial area from the east. However based on information available to date it does not appear that there will be any road development occurring in the vicinity of the Raceway in the near future. Therefore it appears that there are currently no options to increase the number of access roads to the site.

Another issue which has been raised, particularly through public consultation, is the condition of the existing roads to the site. The preference is for Wattle Ave and Old



Yanchep Rd to be upgraded to cater for larger traffic volumes associated with major events. In addition street lighting would also be beneficial should night racing become a more frequent event.



4. Summary of Activities and Events

4.1 Regular Users

In addition to the key users of the raceway, the following list represents other frequent users of the track and facilities identified through consultation with the WASCC:

- Warren's Ultra Fast Karts (based at Barbagallo Raceway);
- Fastlane Racing Driver School (operate from the raceway on drive days);
- Trackskill (operate and store cars on site);
- No Limits;
- Perth Soapbox Club Inc.;
- Police Department;
- Trakdayz;
- Roadsafe Australia;
- Wheel Chair Sports WA;
- SuperTrucks; and
- Drift Australia.

These organisations were not considered to be key stakeholders and therefore were not consulted in this stage of the review process.

4.2 Regular Activities

Based on information provided from key users, GHD has compiled information on current activities regularly conducted at the raceway. The following table summarises the activities, frequency and typical attendance numbers. The complete details are included in the position papers in Appendix A.

Table 1 Summary of Regular Activities at Barbagallo Raceway

Club and Activity	Frequency	Attendance		
	(per year)	Crew	Spectators	
WA Sporting Car Club Inc.				
Race Meeting	8	280	600	
Regularity Trials	3	110	150	
Super Sprints	3	120	50	
Driver Training	3	22		



Club and Activity	Frequency	Attendance			
	(per year)	Crew	Spectators		
Hill Climbs	5	80	30		
Private Practice (weekdays)	19	34	20		
(weekends)	10	80	100		
Motor Cycle Racing Club of	WA Inc.				
Race Meeting	7	170	400		
Private practice	Tuning days 9	80	100		
	Weekdays 10	35	20		
Motor cycle rider training	13	90	150		
Historic Competition Motorc	ycle Club of WA Ir	nc.			
Race Meetings	4	110	150		
Private Practice	4	70	50		
Fastlane Racing Driver Scho	ool				
Racing Car School	35	15	4		
Testing Days	60	6	0		
Warren's Ultra Fast Karts			_		
Go Kart Hire on Raceway	150	26	10		
Go Kart Hire on Jack's Hill	150	21	10		
Others	Others				
Police Department – Driver Training	40	25	0		
Trakdayz – Motor Cycle Rider Training	10	90	150		
Perth Soapbox Club Inc.	12	52	20		
Events at Jack's Hill					
Trackskill – Driver training	35	34	25		
Wheel Chair Sports WA	12	8	6		



Club and Activity	Frequency	Attendance	
	(per year)	Crew	Spectators
Roadsafe Australia – Driver training	7		

The information presented in Table 1 indicates that the Raceway is well utilised throughout the year by a range of clubs and organisations. Activities range from various training days to race meets which attract significant numbers of spectators. The most frequent users of the track and facilities are WASCC, MCRC, Fastlane Racing Driver School, Warren's Ultra Fast Karts, Trackskill and the Police Department.

Discussions with key users of the raceway indicate that there is high demand on the track particularly on weekends. All users agree that track availability is an issue. The ideal option for the track would be the addition of multiple circuits that can be used simultaneously. In addition night racing may also be an option to increase available track time.

4.3 Special Events

Table 2 presents a summary of special events held at Barbagallo Raceway. These generally occur only once or twice per year. This information is based on information from the position papers presented in Appendix A.

Table 2 Summary of Special Events at Barbagallo Raceway

Club and Activity	Attendance (per day)			
	Participants	Staff	Spectators	
V8 Supercar Round (9 - 11 May 2008)	120	1000	23,000	
SuperTruck Nationals (19 & 20 July 2008)	180	250	3,000	
Drift Australia 24 & 25 February	64	70	3,500	
Australian TT and Australian Sidecar State Championships	130	70	unknown	
Australian Historic Road Racing Championships (21 – 24 November 2008) This event is held every 5 years	140	70	600	



Club and Activity	Attendance (per day)		
	Participants	Staff	Spectators
MWA event November	120 - 150	80 - 100	600

Subsequent advice from WASCC indicates that the SuperTruck event can attract up to 10,000 spectators. Attendance at the 2008 event was considered to be low due to poor weather conditions. In comparison WASCC advised that attendance levels to the V8 Supercars event were not significantly impacted by weather and that generally only family attendance was affected. WASCC further noted that they believed spectator numbers to the V8 Supercars event were limited by the lack of available parking at the venue as well as the likelihood of traffic jams.

4.4 Potential Future Users

A number of potential future users of the track and facilities have been identified. It is likely that additional users of the track could only be accommodated if improvements were made to increase track availability. Some of the potential users and events are listed below:

- Pinfold Racing & School;
- West Coast Tafe;
- Edith Cowen University;
- Carrera Cup and Mini Challenge (Motorsport Event Management);
- V8 Utes;
- Powercruise; and
- Superbikes.



Review of Track and Racing Facilities

5.1 The Track

5.1.1 Status of Track Licences

Barbagallo Raceway holds both CAMS and Motorcycling Australia (MA) Track Licences to national championship standards. CAMS has confirmed that the track meets the relevant regulatory standards for an existing facility. However the track would not meet the current standards for a new circuit.

Minor local inspections of the raceway are conducted annually by a Motorcycling WA and a CAMS State Regional Track Inspector. Major inspections are conducted every three years by a MA Track Inspector in conjunction with the CAMS National Track Safety Committee.

A record of notes from the most recent track inspection carried out at Barbagallo Raceway on 15th August 2007 has been obtained from CAMS and is included in Appendix F. This outlines a number of corrective actions to be undertaken at the raceway.

5.1.2 Existing Track Features

The existing race track is 2.4 km in length and is one of the three shortest tracks to hold a V8 Supercars round in Australia. The track is 9 m wide with sand traps and cambered corners. There is also a 1.7 km short circuit option. The track will be due for resurfacing in approximately 6 years.

MCRC and MWA have raised issues regarding potential hazards associated with the current safety barriers and runoffs for motorcycle users. GHD was advised that some existing barrier walls are too close to the track on certain corners and create a safety hazard for motorcyclists. Furthermore MWA & MCRC advised that sand traps are dangerous for riders due to the rapid deceleration experienced by riders. It should be noted however that sand traps are necessary at the existing raceway due to the lack of available space needed for gravel or bitumen runoffs which do not slow vehicles as quickly as sand.

V8 Supercars has issued a list of specifications that should be taken into account when designing a new track (included in Appendix B). The existing track layout does not meet these specifications however it should be noted that the track does comply with relevant standards for an existing track. Furthermore other race tracks in Australia with similar features to Barbagallo Raceway still host a V8 Supercars Championship round.

V8 Supercars has noted that there are no ideal tracks in Australia and that all compromise on the V8 Supercars specifications in some way. However V8 Supercars did note that the preferred circuit is Bathurst, which is considered to have the best garages, media centre, race controls and briefing room. The only negative aspect identified for the circuit was that the pit lane is not flat.



5.1.3 Opportunities for Track Improvements

General Layout

Based on the outcomes of the Stakeholder Workshop, it was agreed that the ideal track length would be 3.6 km (minimum) to meet International Racing Standards. In order to fully comply with international standards the track width would need to be increased to 15m at the starting line and a minimum of 12m for the remainder of the track. This width would meet V8 Supercars minimum desired specification. It should be noted however that V8 Supercars has advised that their preferred track width is 14m.

If the ideal option could not be achieved all stakeholders agreed that the second best option would be to extend the track length to approximately 3 km. This would satisfy all user expectations including the V8 Supercars who specified a preferred length of approximately 3 km and not longer than 3.5 km. (V8 Supercars did not provide any explanation for the preference that the track is shorter than 3.5 km.) This increase in track length would be likely to improve racing performance by creating longer lap times, ideally adding more corners and creating additional passing opportunities for the drivers.

Additional benefits that could be achieved by lengthening the track are the opportunity to create multiple track configurations and multiple circuits that could allow simultaneous events to occur. This will improve track availability and allow greater use of the raceway. There is also the potential to attract other racing categories to Barbagallo Raceway particularly if the track is upgraded to International Racing standards. This is not however considered to be essential for the racing categories currently using the facility.

It should be noted that any upgrade to the length or width of the track will require associated upgrades to the entire track layout due to the change in racing conditions. For example lengthening or widening the track can increase the speed of racing and therefore require longer runoff areas. Therefore it is essential that an integrated approach to design be undertaken to ensure adequate track safety is maintained. This may require widening the track, lengthening runoff areas and modifications to existing safety barriers.

During the Stakeholder Workshop CAMS also noted that any major upgrade will require the entire circuit to meet the current standards for a new track. However subsequent advice from CAMS indicates that this may not be a requirement if Barbagallo Raceway was only seeking to retain a CAMS Track Licence. In this case the new sections of the circuit would need to comply with the current criteria in all regards. However existing parts of the facility would not necessarily need to be of the same standard. CAMS would expect that any upgrades that are considered to be necessary from CAMS perspective would be carried out to the existing track as part of the overall scope of works.

Additional expectations which were identified as a result of the public consultation process include:

▶ The ability to race in the reverse direction on the track;



- A multi-use facility that could accommodate categories such as BMX, speedway, rally cars and drag strips; and
- A user-friendly facility which can accommodate all racing categories.

Safety Barriers and Runoffs

V8 Supercars, MWA and MCRC all noted that the track would be improved if runoff areas in some corners were increased. The outcomes of the stakeholder workshop indicated that the ideal safety feature of a race track is long bitumen runoffs. The next best option is generally considered to be gravel runoffs, which are standard across Australia. However due to the limited area surrounding the track at Barbagallo Raceway neither of these options are feasible without the acquisition of additional land and substantial improvement works.

As a result sand traps are currently utilised to produce a rapid deceleration of vehicles over a short distance. It was noted that if the existing sand traps were converted to gravel runoffs then there would be a requirement to extend runoff distances since gravel does not slow vehicles as quickly as sand. WASCC also noted that gravel could be dangerous when present on the track and would require more maintenance than the existing sand traps. In comparison it has been noted that some users do not prefer sand as it is difficult to clean out of cars and can create a slippery racing surface if it gets on the track.

As discussed previously MWA and MCRC have indicated that there are safety concerns regarding the proximity of safety barriers to the track in some corners. While the ideal solution is to remove the walls and have longer runoffs, the alternative options are to push back the wall locations where possible or use an air fence for motorcycle races. As air fences cannot be used during car races they would require management and storage. MWA and MCRC have advised that there is currently no storage space available on site to keep the air fence systems.

General outcomes

The agreed ideal option is to upgrade the track to meet FIA Grade 2 and FIM Grade 1 standards. For any upgrade the preference is for multiple tracks and multi-purpose facilities to increase the flexibility and availability of the track for users of the raceway. WASCC expects that any new facilities would be highly utilised consistently throughout the year.

WASCC has advised that the race season generally closes each year from November through to January and this would be the ideal time for upgrade works to occur.

5.1.4 Development Constraints

Availability of Land

Lengthening and/or widening the existing track would require additional land that is currently unavailable within the boundaries of Barbagallo Raceway. The City of Wanneroo has advised that there may be potential to utilise some land north of Wattle



Ave if government constraints such as land zoning and environmental issues are addressed.

Furthermore there may be an opportunity to acquire some of the land currently leased by AJS Motorcycle Club to the northeast of the site. Preliminary discussions with the President of AJS Motorcycle Club indicate that while the Club would prefer to remain at their current location, the Club was willing to consider the transfer of some land on the western portion of the site which was not currently being used. The Club was reluctant to relocate due to the unique track layout and infrastructure at the current site which may be impossible to replicate at an alternative location. The WASCC has indicated that discussions with the Club have commenced. Further consultation with the Club is recommended in order to formalise an agreement for the transfer of land.

A third option that has been identified by WASCC is the purchase of additional land from Cockburn Cement adjacent to the western boundary of the existing site. This however is not the preferred option as it will require negotiations with a private party and significant funding would be required. The two previous options involve government land that would only need to be transferred and possibly re-zoned for the purposes of extending the raceway.

All options for the acquisition of additional land will require further investigation and negotiation with the relevant parties involved during the Master Planning Phase.

Impact on Operations

Any major upgrades to the existing track are likely to have significant impacts on operations and require a shutdown of the facility during construction periods. As a result staged construction is the preferred method with short term shut down times to reduce the impact on operations. Additionally, options whereby there is minimal requirement for works to the existing track is preferred by WASCC. This could be achieved by constructing new sections of the track and new facilities on greenfield sites, allowing operations to continue on the existing infrastructure until the areas can be integrated into the existing track and facilities.

5.1.5 Recommendations for Further Action

Once the project reaches the Master Planning Phase, it is recommended that the following actions be undertaken:

- ▶ CAMS to provide information on FIA / FIM standards.
- ▶ CAMS & MWA / MCRC to provide guidelines for safety barriers and runoffs including relevant distance requirements.
- City of Wanneroo to identify options for relocation of AJS Motocross and advise on any other opportunities to obtain additional land for future upgrades.
- Discussion and negotiation with relevant parties to acquire additional land.



5.2 Pit Lane and Garages

5.2.1 Existing pits and garages

Barbagallo Raceway currently has 32 x 6m long pit bays. There are also 32 double length garages located in a paddock area approximately 150 m from pit lane. These garages are made available to V8 Supercars during the event and are otherwise leased to WASCC members throughout the year. There are several other garages on site that are used by members year round for the storage of racing vehicles. WASCC advised that there are also 8 garages available to track users for day hire.

Based on the information provided by V8 Supercars, it appears that the major issue with the existing raceway is the arrangement of pits and garages. The garages currently used by the V8 Supercars are located in a paddock remote to pit lane. This requires vehicles to travel through spectator areas between the garages and pits. As a result this creates a safety issue for spectators that must be addressed each year through careful traffic management.

The lack of availability of garages for day hire is also an issue. In particular MCRC has advised that the current garages are not accessible to motorcycles.

5.2.2 Opportunities for upgrade

V8 Supercars has advised that their preference is for 8m long pit bays rather than the existing 6m long bays. V8 Supercars has also advised that they require garages to be located directly behind the pits. This would alleviate safety and traffic management issues that arise due to the current configuration. The garages would need to be capable of adequately supplying power and services to meet the needs of V8 Supercars. Private toilet facilities including showers for crew members would also be ideal.

It should also be noted that adequate facilities are needed to cater for support categories. CAMS has advised that V8 Supercars is likely to continue bringing equal to or more support categories as this year's event, which included categories such as Porsches, Minis and Utes. WASCC indicated that the 2008 event had an additional 69 trucks on site compared to what had been expected.

WASCC has also advised that they intend to construct another 40 - 50 day hire garages for track users. All stakeholders have agreed that carport structures are insufficient due to poor security and inadequacy for night use or in poor weather conditions.

5.2.3 Constraints

The existing pits are approximately 3-4 m below the level of adjacent land to the west of pit lane. Furthermore, preliminary investigations indicate that land would need to be cleared over a distance of at least 80m behind the pits. This is in order to accommodate double length garages, B-Double trailers and provide sufficient access for the trailers based on their turning circles. Therefore it is anticipated that the addition of garages behind the existing pits would require extensive excavation works.



In addition upgrades to the existing pit arrangement would also require a shutdown of track operations for a significant period resulting in a loss of income for the WASCC which is essential to continue general operations and provide necessary maintenance of the facility. Furthermore there would be a requirement for the removal and replacement of significant permanent infrastructure currently located behind the pits as well as the relocation of major services in this area.

5.3 Emergency Facilities

The current arrangement of medical facilities for the V8 Supercars event meets CAMS requirements. This includes one crew and two spectator medical facilities all with medical equipment compliant with CAMS standards. The crew medical facility is located infield and users agree that this is the ideal location for the facility. However the standard of the current crew facility has been classified as just meeting requirements. MWA & MCRC have advised that the current crew facility does not have enough treatment room area. V8 Supercars has also indicated that medical facilities are not up to standard however this may be in relation to international racing standards.

During a site visit to Barbagallo Raceway, the infield medical facility was inspected. The facility is located on the ground floor of the old race control tower. The treatment room contains three beds and storage areas for medical equipment. It appears dated and is likely to be congested if more than two patients require treatment.

The agreed ideal option is for medical facilities to meet international standards. This may require a combination of permanent and temporary facilities / equipment for major events. For example fully equipped ambulances are currently available for major events. It was noted that there are two additional rooms on the ground floor of the infield medical facility that are currently not in use. There is potential for these rooms to be updated and opened for additional treatment areas for major events.

5.3.1 Recommendations for Further Action

It is recommended that the following actions be undertaken:

- CAMS to provide typical FIA standard layout drawing for a medical facility. This includes a large area that can be sectioned off for small events.
- Improvements to the current arrangement to be investigated with CAMS input and a focus on temporary versus permanent infrastructure options.
- Identify specific V8 Supercars requirements.

5.4 Other Racing Related Infrastructure

5.4.1 Race Controls

During the stakeholder workshop CAMS noted that the current race control layout needs improvement. CAMS advised that doubling the width of the existing room would be ideal.



V8 Supercars also raised concerns that the old control tower in the centre of track is a safety hazard. However CAMS has advised that this is not a safety issue. The building is being used as the infield crew medical facility and, although the treatment room requires upgrading, the general location of the facility meets the needs of users.

5.4.2 Briefing room

The V8 Supercars currently uses the "machinery shed" for driver briefing. V8 Supercars has indicated that this arrangement is inadequate and CAMS has agreed that the current set up is inappropriate and another facility should be sought. WASCC has advised that the existing media conference room could be a better option. Alternatively the Club House first floor could accommodate briefing room requirements in the morning prior to VIP / corporate use.

It is believed that this issue can be easily resolved through management of the appropriate rooms.

5.4.3 Media

WASCC has indicated that the media facilities at the V8 Supercars event meet current requirements. While it was acknowledged that the existing permanent facility would not be sufficient for media use, WASCC advised that the current event arrangement of media tents has received positive feedback from the media.



6. Spectators and General Facilities

6.1 Parking and Public Transport

Traffic management and parking are major issues for large events at Barbagallo Raceway. During the V8 Supercars event more than 10,000 cars park on adjacent land and at the old tip site, approximately 2km from the raceway. WASCC believes that the limited amount of parking at the site restricts the number of spectators who might otherwise attend the event.

The City of Wanneroo indicated that there could be additional parking available once nearby industrial areas are developed. However this development is unlikely to occur in the near future.

There is also an opportunity to construct a large concrete hardstand for event parking that could be used throughout the year for Motorkhana, driver training and other uses. All key users of the facility agreed that such a development would be well utilised and would allow greater flexibility of activities at the raceway.

Additional land would be required to develop a large hardstand area. There is potential to construct a concrete pad to the north of Wattle Ave if government constraints can be addressed. Additionally there is some possibility of creating formal parking areas within the site and on a portion of AJS Motorcycle Club land if acquired.

Although free buses are organised by WASCC to pick up people from the train station, they are not widely used. It is believed that better promotion of public transport would improve the number of people using this option and could attract more spectators to the event. Furthermore the inclusion of free public transport within the entry ticket fare could encourage better use of the train and bus systems.

V8 Supercars has also indicated that traffic signage and demarcation needs improvement on site.

6.2 Event access

As previously discussed, access to the site is restricted via only one road. A temporary limestone road to the south of the site is regraded each year for crew use during the V8 Supercars event. Outcomes from consultation with the City of Wanneroo indicate that it is unlikely that additional access roads will be developed in the near future. Therefore a focus on public transport is needed and some upgrades to existing access roads would also be beneficial.

WASCC advised that there are several gate entries to the V8 Supercars event and these are adequate if people use the maps provided to identify which gates offer the best access to their preferred viewing areas.



6.3 Spectator accessibility

There is generally good spectator accessibility to various areas at Barbagallo Raceway. The WASCC believes that this is well managed and have recorded no major safety incidents over the history of the V8 Supercars event. Spectators currently have good access to the cars and garage areas in the V8 Supercars paddock. However if garages are to be located directly behind the pits, to meet the needs of the V8 Supercars, then this will decrease spectator access to the cars and garages. Although this may not be favourable to spectators, the arrangement is typical of other tracks in Australia and regulations still require the back of garages to be open for spectator viewing. This arrangement also alleviates safety hazards associated with vehicles being driven through spectator areas.

6.4 Track coverage

There is currently sufficient space for spectator viewing areas from which approximately 85% of the track is visible. The WASCC also hires big screens for the V8 Supercars event. These are costly and therefore are not practical for smaller events. WASCC indicated that if spectator attendance numbers increased then there could be an opportunity to construct spectator viewing banks near Kolb Corner where there is currently no track coverage. Refer to WASCC site plans for the V8 Supercars event included in Appendix G for location of Kolb Corner and other site features. WASCC also provided aerial photos taken during the V8 Supercars event and these have been included in Appendix H.

One option to improve spectator viewing comfort would be to provide shaded grandstands. However WASCC has noted that a three year trial of additional grandstands was previously conducted and was deemed unsuccessful. Results indicated that spectators were unwilling to pay an additional fee to have formal seating and preferred to sit on the existing grass banks.

Additional input from the public indicates that they would prefer multiple access points to viewing areas in order to avoid congestion.

6.5 Corporate facilities

WASCC arranges for corporate tent facilities to be hired for major events. It is believed that these are adequate for their purposes. Furthermore any issues with marquees can be resolved through appropriate event management.

V8 Supercars did not provide clarification on their comments regarding the lack of suitable corporate facilities.

6.6 Catering

The catering at Barbagallo Raceway is contracted out to Spices Catering to provide refreshments for all events from club race meets to stalls at major events. Stakeholders agree that there is an issue with the high price of food and drinks



supplied at all event levels. It is believed that the main concern for the public would be the high cost rather than any issues with quality.

The number of food stalls at an event is managed by Spices who provide what they believe are the necessary numbers to cater for each event. However it is anticipated that delays will occur in obtaining refreshments during racing breaks.

Outcomes from public consultation indicate that there is strong support for the provision of barbeques at major events.

6.7 Toilets and General Amenities

Crowding of toilet facilities and the cleanliness of toilets has been raised as an issue by the public. However WASCC advised that toilet numbers were determined by Health Department regulations and that all events complied with these standards. It is expected that crowding of toilet facilities will occur during racing breaks but the overall numbers should be sufficient for the event. Maintenance of toilets is an event management issue that can be readily resolved.

Additional input from the public indicates that they would like access to potable water and shelters in spectator areas. The public have also noted the expectation of a "family-friendly" environment where barbeques and playgrounds could be made available for major events.

6.8 Security and Fencing

There have been no major issues with event security to date. However MWA and MCRC noted that there was inadequate perimeter fencing near Kolb Corner. This allows public access to the track and creates a safety issue for the public and track users. It is recommended that improvements be made to the existing perimeter fencing to secure the site and protect the public.

WASCC has also acknowledged that better management of security staff was required in order to ensure appropriate personnel were employed for the event.



Review of Raceway Management

7.1 Local Event Management and Regular Operations

The WASCC currently manages all operations and events at Barbagallo Raceway. Outcomes from stakeholder consultation indicate that this is generally sufficient for local events and there are no major issues with the day-to-day operations of the facility.

As described in section 4 of this report, the WASCC currently hires the track and facilities to a range of organisations and clubs throughout the year. The main issue for the current users of the facility is the lack of track availability particularly on weekends. However this is difficult to overcome due to limitations with the existing facility. Additional circuits and full lighting of the track would assist in increasing availability of the track for users. This could also enable other potential users to access the facilities.

GHD representatives attended the 2008 SuperTrucks meet on 20th July 2008 at Barbagallo Raceway. GHD observed that the event was well managed and there were no obvious issues on the day. There appeared to be sufficient amenities for spectators without any major crowding or significant inconveniences. Access was adequate and the event proceeded without incident.

It has been noted that V8 Supercars highlighted issues with event facilities, food stalls, toilets and general amenities. However GHD representatives that attended the SuperTrucks event advised that these issues were not evident. Furthermore GHD noted that there were ample marshals on site to manage people, traffic and participants.

7.2 V8 Supercars Event Management

WASCC is currently both the promoter and organiser of the V8 Supercars Championship round in WA. WASCC has advised that there are significant costs associated with hosting the event. These costs include the hire of temporary facilities such as grandstands, marquis, big screens and medical units. In addition there are management costs associated with security, traffic management and shuttle services. Furthermore WASCC also pays V8 Supercars in the order of \$500,000 to attend the event.

As a result of the high costs associated with the running event the WASCC relies heavily on the assistance of volunteers. WASCC noted that around 1,000 volunteers typically assist in operations over the 3 day event. WASCC also indicated that there would be significant additional costs associated with the event if volunteer assistance was not available. As a result, WASCC believes event management companies would not find the event to be financially feasible or attractive.

It was also noted that the current ticket prices to attend the event are among the highest in Australia. Therefore it is likely that there is little if any ability to further increase ticket prices in order to fund any major future upgrades.



As the WASCC is the V8 Supercars "event promoter" in WA, it faces significant costs to meet V8 Supercars infrastructure expectations. To date the WASCC has put in reasonable efforts and funds into managing the V8 Supercars event with little financial or infrastructure support from the Government. The WASCC has, where possible, provided upgrades to V8 Supercars amenities to meet its changing needs. WASCC believes that it is capable of continuing to manage this growing event.

Outcomes from the public information session indicated the following expectations:

- Pre-event activities with V8 Supercars possibly spending more time in WA.
- Event and facility to continue being managed by the WASCC.
- Government commitment to promote V8 Supercars as well as other events.
- Succession planning for future management and operations at the raceway.

7.2.1 Opportunities

There is potential for WASCC to retain the organiser role while a separate promoter is engaged. This type of model of external promotion / management is likely to reduce the risk to WASCC. It may also be possible for WASCC to receive a fee or profit share in return for hiring out the venue and operations services if the event were externally managed. This could be a potential business benefit for the club.

During the Stakeholder Workshop it was agreed that it would benefit the event if the WASCC and City of Wanneroo could promote the event together. Alternatively promotion management could be undertaken by a board consisting of key stakeholders.

7.2.2 Recommendation for Further Action

- Management and partnership strategies to be discussed.
- Consider separate roles for promotion and management and identify opportunities for developing revenue roles.

7.3 Review of the WASCC

7.3.1 History of WASCC

The WASCC was established in 1927 and has been operating events at Barbagallo Raceway since the first race in 1969. Prior to this, the WASCC typically ran street racing events throughout regional WA as well as circuit events at the former racetrack at Caversham. In 1968 WASCC was advised by the government that Caversham would no longer be available and an alternative raceway site in Wanneroo was identified.

The WASCC commenced work on constructing the Wanneroo Raceway in 1968 and through the efforts of many volunteers and contractors the Raceway was completed and ready for the first meeting in March of 1969. Since this time WASCC has undertaken continual upgrades and improvements to the track and facilities. These



upgrade works are ongoing as and when require to meet the evolving needs of various motorsports.

7.3.2 WASCC Objectives

WASCC has advised that its prime objective is to make motor sport affordable to the public. The club aims to foster tarmac based motor sports of all disciplines, continue to develop talented young drivers and attract more participating members to the raceway. WASCC believes that it is unlikely that any commercial venture could provide a similar environment for participants of motorsport.

The WASCC re-invests income from the raceway into improving the track and facilities for all users. Returns from major events have been previously used for continuous improvements to the track facility, the spectator viewing areas, the garage facilities and safety services.

The WASCC wishes to retain the V8 Supercars Championship round at Barbagallo Raceway as well as attract other race categories and motor sport markets.

7.3.3 Challenges Facing WASCC

The WASCC acknowledges its major challenges are a result of the expanding needs and expectations of the motor sport community. The immediate and ongoing issues relate to the need for the continued improvement of the Raceway facility to meet user expectations.

The WASCC is also hoping to promote the raceway to other classes throughout the Asian region. Marketing efforts have commenced and the first international meeting with another (non-Australian) racing sanctioning body is scheduled for October and in November 2008.

The WASCC relies heavily upon volunteers to assist with event operations. It is important for succession planning to be in place to ensure the skills of current long term volunteers are transferred to new volunteers. There is also a great deal of support from members which enables a high level of infrastructure and operational services possible at lower than expected costs. The WASCC believes that a commercial operation could not provide and sustain the same level of service and management at similar costs to the WASCC.

7.3.4 WASCC Associations

WASCC caters for many disciplines and ages from young "soap box" racers, through to regular racers. The WASCC has also developed and provides a venue for the latest motor sport craze, namely "drifting". The WASCC has advised that its intention is to make motor sport safe and responsible.

Today the WASCC is proud to have amongst its members several Australian Champions who got their start at the Barbagallo Raceway. The WASCC provides assistance, support and backing to talented young drivers. This includes training, mentoring and in some cases the provision of both financial and commercial backing.



The WASCC works with many different organisations and provides for events such as the hand cycling challenge for the handicapped. The WASCC also works with the universities in WA, so student technicians and engineers can gain first-hand experience of racing. In 2007 the WASCC assisted in the development of the University of Western Australia's (UWA) successful Formula SAE challenger, which went on to win the World Championship. This car was developed and built by engineering students at UWA and was tested, tuned and competed at several events at the Raceway.

7.3.5 WASCC Membership Status

The WASCC currently has approximately 1600 members and based on advice from WASCC there is expected to be an increase in membership each year. The WASCC believes that additional members could be attracted to the club if the raceway provided more options for motor sport activities such as a skid pad or purpose build burnout pad. Without this additional infrastructure it is anticipated that overall membership numbers would be limited to an increase of approximately 100 members per year.

There is a range of memberships available from spectator or volunteer-only members to racing drivers. All receive free admission to club race meets as well as the V8 Supercars and the SuperTrucks events.

7.3.6 Promotion of WASCC and Events

WASCC has trialled promotion of the club at various motor shows such as Big Boys Toys and the Perth Motor Show. WASCC advised that there was no evidence of benefit to the club and therefore the WASCC did not continue with these promotions. In comparison cross promotion through radio and print media has proven beneficial.

At the Stakeholder Workshop it was agreed that better promotion and management of public transport to the V8 Supercars event could result in an increase in spectator numbers. It was also agreed that combined promotion by the City of Wanneroo as well as the WASCC could be beneficial for the event.



8. Review of Opportunities

8.1 Additional Racing

If the track was upgraded to meet International Racing Standards then there would be the opportunity to attract several other race categories to Barbagallo Raceway. This would create the potential to host separate national events and overseas categories. Furthermore if the track was lengthened and configured such that multiple circuits could be run simultaneously, then additional racing and activities could occur throughout the year. It should be noted that these options will require the acquisition of additional land. It is also likely that promotion and management strategies would be required in order to attract a variety of events to WA.

8.2 Night Racing

Currently there are limited opportunities to conduct night racing at the raceway. Lighting is available to the short 1.7 km circuit however the remainder of the track is not lit. WASCC conducts evening races in summer to take advantage of daylight saving.

There is the opportunity to provide lighting to the entire track and therefore enable night races to occur throughout the year. This will increase track availability to users and provide potential for additional events to be held at the raceway. It should be noted that motorcycles require well lit conditions and night racing may not be feasible for motorcycle categories.

8.3 Regional Development

The City of Wanneroo has identified the opportunity to create regional benefit through co-locating industrial and commercial development associated with motor sport near the raceway. There is also the potential to integrate various potential users and involve research into motorsport in the local area.

8.4 V8 Supercars Event Potential

The lack of parking and access roads have been identified as major issues for the V8 Supercars event. As a result better promotion and management of public transport to the event is needed. There is also the potential to include free public transportation in the event ticket price so that people are encouraged to take this option.

It is anticipated that if more people were encouraged to take public transport then this could result in an increase in spectator numbers. The WASCC noted that if number increased then there could be potential to add more spectator viewing banks particularly in the vicinity of Kolb Corner, which is currently not accessible to spectators.

Another opportunity that has been identified through stakeholder consultation is the potential for a 1 - 2 week long "motorsport festival" held in the City of Wanneroo around



the time of the V8 Supercars event. This could incorporate a variety of events in the town centre as well as Barbagallo Raceway and public transport could be made available between the venues. The public also noted the potential for more local support categories at the event.

Results from public consultation indicate that there is an expectation for "family-friendly" facilities including barbeques and playgrounds at the raceway. In addition the opportunity to provide camping areas near the raceway or in various locations within Wanneroo was identified. This was considered desirable due to the lack of accommodation present in the Wanneroo area. However camping grounds would need to be well managed to ensure the conduct of appropriate activities and behaviour.

8.5 Other Potential Uses

There are a range of other potential uses for the track and facility that have been identified in the review process. Examples of other opportunities include:

- Cycling at the raceway;
- Motorsport museum with potential support from the York Motor Museum and members of the WASCC;
- Driver training;
- A large concrete pad for event parking as well as regular driver skid training and Motorkhana racing;
- Youth driver training centre and youth motorcycling program;
- Appropriate function centre and promotion of venue to encourage spectators/diners to regular events and other functions; and
- Training classrooms.



Improvement Options and SWOT Analysis

9.1 Identification of Improvement Options

Based on results from Stakeholder Consultation a number of improvement options were identified for Barbagallo Raceway.

The first option is to "do nothing" and leave the facilities as they currently are, allowing WASCC to proceed with minor upgrades as and when it has the capacity to undertake the works.

The second option identified was to address what is considered to be V8 Supercars' highest priority concern. This is the addition of garages behind the existing pit infrastructure. However after further assessment of the site conditions and discussions with WASCC, this option was not considered to be feasible and has not been pursued further. This decision was made based on the following information:

- The existing pits are approximately 3 − 4 m lower than the adjacent land to the west.
- Significant excavation works are required to clear an area at least 80m behind the existing pits.
- Based on past experience in the area, excavation is likely to encounter limestone cap rock.
- A significant portion of WASCC existing permanent infrastructure would need to be demolished and replaced. However it should be noted that there does not appear to be significant space available for the relocation of this infrastructure around the existing track.
- Major services present in this area would need to be redirected.
- There would be major impacts to track operations and extended shutdown periods.

Therefore the only option which was considered to be a feasible method of meeting V8 Supercars' minimum requirements was the construction of a new pit lane and adjacent garages. However this can only be achieved if a new section of track is constructed as there is insufficient land surrounding the existing track to enable the construction of a new pit lane and garage area. In order to create a new track section, additional land is required. This option has been developed to address the minimum requirements to satisfy key issues at the existing raceway.

The last improvement option involves a major upgrade of the entire track to International Racing Standards. This requires the track to meet minimum length, width and safety specifications and additional land is essential. In order to achieve optimum use of the track, this option has been developed to consider a multiple-use facility that will enable two or more circuits to be utilised simultaneously. This option meets or exceeds all current expectations for the raceway.



9.2 Option 1: No Improvements

This option does not involve any major upgrade to the track or facilities. Minor improvement works are likely to continue as part of the WASCC normal management and operations. However these works are unlikely to adequately address the key issues raised for the raceway with the exception of an investigation into the event management for the V8 Supercars event.

9.2.1 Key Strengths

This option will not require government funding. The existing track meets CAMS standards and therefore national races can continue to operate at the venue if the racing categories can be attracted to WA. The track and facilities are suitable for local club use and events with crowds not exceeding 10,000 spectators.

9.2.2 Key weaknesses

There will be ongoing issues with the site that will not be adequately addressed. It is unlikely that the WASCC would have the capacity to undertake extensive upgrades without government assistance. There would be no opportunity for growth of motor sport at the raceway.

9.2.3 Key opportunities

This option does not create any opportunities for the raceway or WA motorsport.

9.2.4 Key threats

V8 Supercars has indicated that it will not return to WA beyond the 2009 series unless there is evidence that improvement works will be undertaken at the raceway. There is a high possibility that WA will lose the V8 Supercars event. Without further upgrades to the facilities it is unlikely that WA could attract any other major events. The motor sport community will consider this to be unacceptable. Furthermore there would be no growth to WASCC membership and a potential decline in member support if V8 Supercars do not continue racing in WA.

9.3 Option 2: Minimum Upgrade to Meet Current Needs

A key requirement identified at Barbagallo Raceway is the provision of 32 garages directly behind the pits. This is only possible if new pits and garages are constructed adjacent to a new section of track with sufficient area behind the garages to park and manoeuvre B-Double trailers. It is assumed that the additional track section could be developed on a portion of the AJS Motocross site that is currently undeveloped bushland.

It should be noted that the construction of a new track section in this area will impact on the current parking arrangements on site. Currently around 3,000 vehicles can park on site in the area between the track and the AJS Motocross land. Further to this an additional 10,000 cars are believed to park at the old tip site approximately 2 km from the raceway. The lack of parking on site has been identified as a major issue and



therefore this option should address where possible access roads and parking. An additional parking area may be possible on the land north of Wattle Ave if government constraints can be addressed.

The general scope for this option can be defined as follows:

- Acquire a portion of AJS Motocross land northeast of the site and some land north of Wattle Ave;
- ▶ Construct a new track section approximately 1 1.2 km in length to current standards. (Existing track will not require upgrading);
- New pits and 32 garages to new track section;
- New race controls at new pit area;
- New toilets and amenities to pit area;
- ▶ Additional concrete hardstand for event parking, driver training and other activities. There is a requirement parking to cater for 10,000 − 15,000 cars;
- Provide longer runoff areas where possible;
- Storage space for air fences to be used in motorcycle races; and
- Basic upgrade of medical facilities.

9.3.1 Key Strengths

This option will address most of the key issues raised by V8 Supercars and the current users of the facility. In addition to providing a pit and garage arrangement to satisfy V8 Supercars specifications, it also provides a longer track and additional parking. The provision of storage space for air fences on site will also assist in improving safety conditions for motorcyclists. Furthermore the additional garages could be made available for day hire for all track users, assuming the design is accessible to motorcycles as well as cars.

The option has the potential to create a multi-use facility allowing small events to run simultaneously and improving availability of the track for users. It will also provide a variety of circuit layouts and additional opportunities including driver training.

By constructing a new track section and adjacent facilities, the impact on existing operations is minimised. It is likely that only short shutdown periods will be necessary to tie in the new works to the existing track. There is also the potential for staged construction whereby the existing track could be upgraded at a future stage to convert the facility to an International Racing venue assuming a minimum length of 1.2 km for the new track section.

9.3.2 Key Weaknesses

This option will require a significant amount of funding from the government. There will also be a requirement for additional land both on the AJS Motocross site and north of Wattle Ave. This land is owned by the government and would only require a transfer



rather than purchase. However government constraints associated with environmental approvals and re-zoning would need to be addressed.

9.3.3 Key Opportunities

There is the opportunity to attract additional spectators by providing additional parking on site and encouraging the use of public transport. Driver training and other activities could ensure that the new concrete parking area is well utilised throughout the year.

There may be potential to hold simultaneous small events at the raceway, each with their own complete infrastructure, depending on the new track configuration. There is also opportunity to provide multiple track configurations for a variety of uses. This may enable more categories to race at Barbagallo Raceway and will improve track availability for users.

9.3.4 Key Threats

As this is only undertaking some of the identified requirements there is a possibility that V8 Supercars would raise further issues with the raceway in the future. In particular the upgrades would not include works to the existing track and therefore V8 Supercars may still be unsatisfied with the outcome given that the majority of the track is not widened and runoff areas are unlikely to change significantly.

Funding may also be an issue as the option is likely to require significant capital investment by the government.

The option requires additional land and issues regarding environmental constraints, rezoning and transfers would need to be addressed. Bush Forever may be a threat to the development of some areas.

It should also be noted that a preliminary inspection of Barbagallo Raceway indicated limestone outcrops within the area of AJS Motocross land. Therefore significant earthworks costs may be associated with this option.

This option may also place additional pressure on WASCC to organise and run more events at the raceway.

9.4 Option 3: Upgrade to International Racing Standards

This option creates a raceway suitable for hosting major international events. It also includes various ideal upgrades to enable a multi-use track and facilities. The general scope for this option can be defined as follows:

- Acquire a significant amount of additional land north of Wattle Ave or relocate AJS Motocross;
- Construct new track section approximately 2 km in length to current standards;
- Upgrade existing track to current FIA standards;
- Create multiple use circuits capable of holding simultaneous events;
- Include multiple track configurations;



- New pits and 32 garages to new track section;
- New race controls at new pit area;
- New toilets and amenities to pit area;
- ▶ Additional concrete hardstand for event parking, driver training and other activities. There is a requirement for parking for 10,000 − 15,000 cars;
- Significant upgrade of medical facilities;
- Improved road access within limits of existing constraints; and
- Lighting for the entire track.

9.4.1 Key Strengths

This option will provide a facility that is capable of hosting International Racing Events. It will exceed the needs of current users and meet all of V8 Supercars expectations. The option will create a multi-use facility allowing events to run simultaneously and improve the availability of the track for users. It will also provide a range of opportunities not directly related to racing, such as driver training.

The option includes all of the strengths identified in Option 2 as well as providing significant opportunities for a variety of additional activities at the raceway. Furthermore the track would comply with all current safety standards.

9.4.2 Key Weaknesses

This option will require the greatest amount of government funding. There will also be a requirement for a significant amount of additional land for development of the extended track and extra parking areas to the north of Wattle Ave. This land is owned by the government and would only require a transfer rather than purchase. However government constraints associated with environmental approvals and re-zoning would need to be addressed.

Alternatively there is an option to relocate the AJS Motocross complex so that this land can be used for the expansion of Barbagallo Raceway. This land is also owned by the government however this option would require significant additional funds to provide an equivalent facility for motocross use. Furthermore the AJS Motorcycle Club has advised that their preference is to remain at their current location, which provides a unique track that may be impossible to replicate elsewhere.

9.4.3 Key Opportunities

There are several opportunities that would arise out of the upgrade of Barbagallo Raceway to International Racing Standards. These include but are not limited to:

- Capability to host international racing events and other race categories;
- Multiple track configurations;
- Simultaneous use of circuits:



- Night racing;
- Improved track availability;
- Potential to increase spectator numbers; and
- Driver training.

9.4.4 Key Threats

Due to the significant amount of capital investment required for this option there is the risk that the sufficient funds may not be available.

This option will also place significant additional pressure on WASCC to organise and run several additional events per year including international racing categories. The Club would be required to grow significantly to be able to manage more, multiple and different events. Alternatively an independent events management company could be engaged to promote/organise major and international events.

As the option requires additional land, issues regarding environmental constraints, rezoning and transfers will need to be addressed. Bush Forever may be a threat to the development of some areas.



10. Conclusions

10.1 Review of the Existing Facility

Based on GHD's review of Barbagallo Raceway the following key features have been identified:

- The site is well located, less than one hour from the Perth CBD and surrounded by industrial zoned land as well as State Forest.
- The capacity for future infrastructure expansion is constrained by the current site boundaries.
- Access to the site is an issue as it is limited to one access road.
- The lack of parking is an issue. For the V8 Supercars event, it is estimated that approximately 10,000 cars park at an old tip site 2 km from the raceway.
- The track complies with standards for an existing circuit and holds both CAMS as well as MA Track Licences.
- At 2.4 km in length, the track is one of the shortest circuits to host a V8 Supercars event in Australia.
- A key issue identified by V8 Supercars and other stakeholders is the remote location of garages with respect to the pits. This creates safety hazards as vehicles are driven through spectator areas. It is also inconvenient for drivers and their pit crews.
- ▶ The current medical facility appears dated and would benefit from an upgrade as well as expansion to provide additional treatment areas.
- Safety concerns have been raised by motorcyclists regarding the proximity of safety barriers to the track in some areas.
- The management capability of the WASCC is suitable for day-to-day operations and local events.
- There is potential to form a board of key stakeholders to undertake the promotion of the V8 Supercars event while WASCC focuses on organising the event.

10.2 Options for Improvement

10.2.1 Option 1: No Improvement

This option does not involve any major upgrade to the track or facilities. Minor improvement works by WASCC are likely to continue as part of its normal operations. However these works are unlikely to adequately address the key issues raised for the raceway with the exception of potential improvements to the event management and promotion of the V8 Supercars event.



There is a high possibility that WA could lose the V8 Supercars event and without further upgrades to the facilities it is unlikely that WA could attract any other major events. The motor sport community would consider this to be unacceptable. Furthermore there would be no growth to WASCC membership and a potential decline in member support.

10.2.2 Option 2: Minimum Upgrade to Meet Current Needs

This option involves the construction of a new track section approximately 1-1.2 km in length. New pits, garages, race controls and general amenities would be provided as well as some basic upgrades to existing medical facilities. Longer runoff areas would be developed where possible as well as storage space for air fences. An additional concrete hardstand for event parking, driver training and other activities would also be constructed. The existing track, however, would not be upgraded.

Improvement works would address most of the key issues raised by V8 Supercars and the current users of the facility. The option has the potential to create a multi-use facility allowing small events to run simultaneously and increasing availability of the track for users.

This option would require a significant amount of funding from the government. There would also be a requirement for additional land both on the AJS Motocross site and north of Wattle Ave. As a result government constraints associated with environmental approvals and re-zoning of this land would need to be addressed.

As this is option does not include improvements to the existing track there is a possibility that V8 Supercars would raise further issues with the raceway in the future. This option may also place additional pressure on WASCC to organise and run more events at the raceway.

10.2.3 Option 3: Upgrade to International Racing Standards

This option involves an upgrade of the existing track as well as construction of approximately 2 km of additional track to all current FIA standards. New pits, garages, race controls and general amenities would be provided as well as significant upgrades to existing medical facilities. An additional concrete hardstand for event parking, driver training and other activities would be developed along with the installation of track lighting. Furthermore improved road access would be considered within the limits of existing site constraints.

This option will provide a facility that is capable of hosting international racing events. It will exceed the needs of current users and meet all of V8 Supercars expectations. The option will create a multi-use facility allowing events to run simultaneously and increase the availability of the track for users. It will also provide a range of opportunities for additional activities at the raceway.

This option will include a requirement for a significant amount of additional land to the north of Wattle Ave. Alternatively there is an option to relocate the AJS Motocross complex so that this land can be used for the expansion of Barbagallo Raceway.



Government constraints associated with environmental approvals and re-zoning of the land at either location would need to be addressed.

Due to the significant amount of capital investment required for this option there is the risk that the sufficient funds may not be available. This option will also place significant additional pressure on WASCC to organise and run several additional events per year including international racing categories. There is however the opportunity to engage an independent events management company to promote/organise major and international events.

10.3 Qualifications

It should be noted that while input was sought from V8 Supercars, no feedback or confirmation was received in relation to the options presented in this report.



Appendix A Completed Key User Position Papers



BARBAGALLO RACEWAY REVIEW

By GHD Pty Ltd on behalf of Department of Housing and Works and Department of Sport and Recreation

WASCC Position Paper

Objectives

A review of Barbagallo Raceway is being undertaken to analyse possible facility improvements with the immediate aim of making the site suitable for hosting future rounds of the V8 Supercar Championships.

GHD has been engaged to carry out the first two stages of the review process including:

- Stage 1 Needs assessment and site condition report; and
- Stage 2 Facility improvements and business case.

This "Position Paper" template has been developed to assist in the collection of information related to the existing facilities. The paper aims to capture the current issues and expectations regarding the raceway and to provide an opportunity for stakeholders to provide input to enable the Barbagallo Raceway to meet user requirements.

A workshop will be arranged with key stakeholders in July 2008. Information collected from the Position Papers will be used to prioritise issues related to Barbagallo Raceway and form the basis of the agenda for the workshop. It should be noted that Position Papers will be made available to other stakeholders prior to the workshop.

Instructions

Please complete the following sections and return to Tracy Perchard on tperchard@ghd.com.au .

If you have any gueries please feel free to contact Tracy on 6222 8619 or Russell Barnard on 6222 8915.

1.1 Events and Activities at Barbagallo Raceway

1.1.1 Regular Activities (Activities scheduled on a regular basis, several times per year)

User Group	Activity and Frequency	No. participants (per activity)	No. support staff (per activity)	No. spectators (per activity)	Track and Support Facility Requirements
WA Sporting Car Club Inc.	Race Meetings – 8	130	150	600	Ticket Boxes, Race Office, Media Centre, Race Control Office, Timing Office, Commentary Booth, Start Lights, First Aid and Ambulance, Medical Centre, Recovery Vehicle and trailer, telephone/intercom system, CCTV, car park for trailers and competitor tow vehicles, car park for officials, machine examination area/office, impound area, Official's Lunch Area, after meeting awards/function area, catering facilities, ablution facilities including change rooms for male and females, briefing room, lighting of venue and track
WA Sporting Car Club Inc.	Regularity Trials – 3	70	40	150	Race Office, Media Centre, Race Control Office, Timing Office, Commentary Booth, Start Lights, First Aid and Ambulance, Medical Centre, Recovery Vehicle and trailer, telephone/intercom system, CCTV, car park for trailers and competitor tow vehicles, car park for officials, machine examination area/office, impound area, Official's Lunch Area, after meeting awards/function area, catering facilities, ablution facilities including change rooms for male and females, briefing room, lighting of venue and track

WA Sporting Car Club Inc.	Super Sprints – 3	100	20	50	Race Office, Race Control Office, Timing Office, Start Lights, First Aid and Ambulance, Medical Centre, Recovery Vehicle and trailer, telephone/intercom system, CCTV, car park for trailers and competitor tow vehicles, car park for officials, machine examination area/office, impound area, Official's Lunch Area, after meeting awards/function area, catering facilities, ablution facilities including change rooms for male and females, briefing room, lighting of venue and track
Historic Competition Motorcycle Club of WA Inc.	Race Meetings – 4	80	30	150	Carports, Canteen Facilities, Office, Start Lights, First Aid and Ambulance, Medical Centre, Recovery Vehicle and trailer, telephone. CCTV, Race Control Office, Timing Office, Commentary Booth, Motorcycle warm up area, car park for trailers and competitor tow vehicles, car park for officials, car park for spectators, machine examination area/office, Official's Lunch Area, impound area, ablution facilities including change rooms for male and females, lighting of venue and track
WA Sporting Car Club Inc.	Driver Training – 3	16	6	0	Carports, Dining Room, Office, First Aid and Ambulance, Medical Centre, Recovery Vehicle and trailer, telephone, car park, ablution facilities including change rooms for male and females, lecture room
WA Sporting Car Club Inc.	Hill Climbs - 5	60	20	30	Race Office, Timing Office, Start Lights, First Aid and Ambulance, Recovery Vehicle and trailer, telephone, car park for trailers and competitor tow vehicles, car park for officials, machine examination area/office, impound area, Official's Lunch Area, after meeting awards/function area, catering facilities, ablution facilities including change rooms for male and females, briefing room

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WA Sporting Car Club Inc.	Private Practice (weekday) - 19	30	4	20	Carports, Canteen Facilities, Office, Start Lights, First Aid and Ambulance, Medical Centre, Recovery Vehicle and trailer, telephone, car park, ablution facilities including change rooms for male and females, new participant briefing room
WA Sporting Car Club Inc.	Private Practice (weekend) - 10	70	10	100	Carports, Canteen Facilities, Office, Start Lights, First Aid and Ambulance, Medical Centre, Recovery Vehicle and trailer, telephone, car park, ablution facilities including change rooms for male and females
Historic Competition Motorcycle Club of WA Inc.	Private Practice (Tuning Days) – 4	60	10	50	Carports, Canteen Facilities, Office, Start Lights, First Aid and Ambulance, Medical Centre, Recovery Vehicle and trailer, telephone, car park, ablution facilities including change rooms for male and females
Motor Cycle Racing Club of WA Inc.	Race Meetings - 7	120	50	400	Ticket Boxes, Race Office, Media Centre, Race Control Office, Timing Office, Commentary Booth, Start Lights, First Aid and Ambulance, Medical Centre, Recovery Vehicle and trailer, telephone/intercom system, CCTV, car park for trailers and competitor tow vehicles, car park for officials, machine examination area/office, impound area, Official's Lunch Area, after meeting awards/function area, catering facilities, ablution facilities including change rooms for male and females, briefing room, lighting of venue and track
Motor Cycle Racing Club of WA Inc.	Private Practice (Tuning Days) - 9	70	10	100	Carports, Canteen Facilities, Office, Start Lights, First Aid and Ambulance, Medical Centre, Recovery Vehicle and trailer, telephone, car park, ablution facilities including change rooms for male and females

Motor Cycle Racing Club of WA Inc.	Private Practice (weekday) - 10	30	5	20	Carports, Canteen Facilities, Office, Start Lights, First Aid and Ambulance, Medical Centre, Recovery Vehicle and trailer, telephone, car park, ablution facilities including change rooms for male and females
Motor Cycle Racing Club of WA Inc.	Motor cycle rider training - 13	70	20	150	Carports, Canteen Facilities, Office, Start Lights, First Aid and Ambulance, Medical Centre, Recovery Vehicle and trailer, telephone, car park, ablution facilities including change rooms for male and females, lecture room
Fastlane Racing Driver School	Racing Car School - 35	10	5	4	Lecture Room, Office, Dining Area, Garages, ablution facilities, Kitchen Facilities, First Aid, Recovery Vehicle and After Hours access.
Fastlane Racing Driver School	Testing Days – 60	3	3	0	Garages, ablution facilities, First Aid, Recovery Vehicle and After Hours access
No Limits	Driver Training – 11	30	12	60	Carports, BBQ facilities, Office, Start Lights, Flood Lighting, Timing, First Aid, Recovery Vehicle, car park, ablution facilities including change rooms for male and females, lecture room
Perth Soapbox Club Inc.	Events at Jack's Hill - 12	40	12	20	Carports, Canteen Facilities, Office, Start Gate, First Aid, Club Room, Recovery Vehicle and trailer, car park, ablution facilities including change rooms for male and females, officials observation tower, timing equipment
Trackskill	Driver Training – 35	24	10	25	Lecture Room, Office, Dining Area, Garages, Wash Bay, ablution facilities, Kitchen Facilities, First Aid, Recovery Vehicle and After Hours access. (Would like regular power and drinking water from mains)

Warren's Ultra Fast Karts	Go Kart Hire on Raceway - 150	20	6	10	Lecture Room, Office, Dining Area, Garages, Wash Bay, ablution facilities, Kitchen Facilities, First Aid, Recovery Vehicle and After Hours access, mechanical workshop.
Warren's Ultra Fast Karts	Go Kart Hire on Jack's Hill - 150	15	6	10	Lecture Room, Office, Dining Area, Garages, Wash Bay, ablution facilities, Kitchen Facilities, First Aid, Recovery Vehicle and After Hours access, mechanical workshop.
Police Department	Driver Training – 40	20	5	0	Lecture Room, Lunch Room, Garages, Wash Bay, ablution facilities, and After Hours access.
Trakdayz	Motor Cycle Rider Training - 10	70	20	150	Carports, Canteen Facilities, Office, Start Lights, First Aid and Ambulance, Medical Centre, Recovery Vehicle and trailer, telephone, car park, ablution facilities including change rooms for male and females, lecture room
Roadsafe Australia	Driver Training – 7				Carports, Office, First Aid and Ambulance, Recovery Vehicle and trailer, telephone, car park, ablution facilities including change rooms for male and females, lecture room
Wheel Chair Sports WA	Events – 12	6	2	6	Carports, car park, ablution facilities including change rooms for male and females, lighting of venue and track

Notes:

There are various other users of the Raceway for one to three days per annum that conduct club motor sport and or driver / motor cycle rider training. The number of participants, and support staff vary depending upon the number.

Attendance figures are average and include family and crew members.

1.1.2 Special Events (Events which occur less frequently than regular activities eg. only once or twice per year)

User Group	Event and Date	No. participants	No. support staff	No. spectators	Track and Support Facility Requirements
WA Sporting Car Club Inc.	V8 Supercar Round, 9-11 May 2008	120	1,000	23,000	Ticket Boxes, Race Office, Media Centre, Race Control Office, Timing Office, Commentary Booth, Start Lights, First Aid and Ambulance, Medical Centre, Recovery Vehicle and trailer, telephone/intercom system, CCTV, car park for trailers and competitor tow vehicles, car park for officials, machine examination area/office, impound area, Official's Lunch Area, after meeting awards/function area, catering facilities, ablution facilities including change rooms for male and females, briefing room, Big Screens, plumbers, electricians, fire emergency services on standby, temporary power generators on standby, temporary fencing, temporary ablution blocks, lighting of venue and track
WA Sporting Car Club Inc.	SuperTruck Nationals, 19 & 20 July 2008	180	250	3,000	Ticket Boxes, Race Office, Media Centre, Race Control Office, Timing Office, Commentary Booth, Start Lights, First Aid and Ambulance, Medical Centre, Recovery Vehicle and trailer, telephone/intercom system, CCTV, car park for trailers and competitor tow vehicles, car park for officials, machine examination area/office, impound area, Official's Lunch Area, after meeting awards/function area, catering facilities, ablution facilities including change rooms for male and females, briefing room, plumbers, electricians, lighting of venue and track

WA Sporting Car Club Inc.	Drift Australia 24 & 25 February	64	70	3,500	Ticket Boxes, Race Office, Media Centre, Race Control Office, Timing Office, Commentary Booth, Start Lights, First Aid and Ambulance, Medical Centre, Recovery Vehicle and trailer, telephone/intercom system, CCTV, car park for trailers and competitor tow vehicles, car park for officials, machine examination area/office, impound area, Official's Lunch Area, after meeting awards/function area, catering facilities, ablution facilities including change rooms for male and females, briefing room, plumbers, electricians, lighting of venue and track
Motor Cycle Racing of Club of WA	Australian TT and Australian Sidecar State Championships	130	70	unknown	Ticket Boxes, Race Office, Media Centre, Race Control Office, Timing Office, Commentary Booth, Start Lights, First Aid and Ambulance, Medical Centre, Recovery Vehicle and trailer, telephone/intercom system, CCTV, car park for trailers and competitor tow vehicles, car park for officials, machine examination area/office, impound area, Official's Lunch Area, after meeting awards/function area, catering facilities, ablution facilities including change rooms for male and females, briefing room, plumbers, electricians, lighting of venue and track
Historic Competition Motorcycle Club of WA	Australian Historic Road Racing Championships 21 – 24 November 2008 Note: This is an event held every 5 years/	140	70	600	Ticket Boxes, Race Office, Media Centre, Race Control Office, Timing Office, Commentary Booth, Start Lights, First Aid and Ambulance, Medical Centre, Recovery Vehicle and trailer, telephone/intercom system, CCTV, car park for trailers and competitor tow vehicles, car park for officials, machine examination area/office, impound area, Official's Lunch Area, after meeting awards/function area, catering facilities, ablution facilities including change rooms for male and females, briefing room, plumbers, electricians, lighting of venue and track

1.2 Security Requirements

Event or Activity	Security Requirement
General security requirements	
Full Security	CCTV. Live in caretaker. Lock up garages for race cars and parts, perimeter fencing external and internal. Monitored alarms
Event Security	Security personnel, dependant upon event can range between 2 to 70.

1.3 Legal Obligations and Operating Regulations

Legal Obligation or Operating	Does the current Raceway	Impact of non-compliance on	What changes are required to meet Obligation/Regulations
Regulation	meet requirements	operations	

Confederation of Australian Motor Sport Track Licence – up to National Championship status events	Yes		Circuit safety standards are always evolving, especially with new technologies. Minor local inspections are conducted annually by CAMS State Regional Track Inspector. Major inspections are conducted every three years by CAMS National Track Safety Committee. Any venue changes are advised in the inspection report.
Motorcycling Australia Track Licence – up to National Championship status events	Yes		Minor local inspections are conducted annually by Motorcycling WA Track Inspector. Major inspections are conducted every three years by MA Track Inspector. Usually in conjunction with CAMS National Track Safety Committee.
FIA and FIM Inspection		Required to take facility from national to international status	Extending track length to 3.5km minimum. Widening track to 10m minimum. New pit entry road, relocation of some first line of protection barriers.
			Note: WASCC arranged FIA inspection with CAMS and MA Track Inspectors in August 2007 to obtain information on requirements to take venue to international status.

1.4 Assessment of Barbagallo Raceway

1.4.1 WASCC Short Term Expectations and Issues

Expectations and Issues regarding existing Raceway	Changes required to meet immediate needs and continue operations at Barbagallo Raceway
Require additional land	With more land to the west (Cockburn Cement) new pit/paddock facilities could be constructed whilst the current pit/paddock facilities are operating. Thus only a short shut down time would be necessary for joining the track with the new pit/paddock area.

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Pedestrian Pathway	Pathway from Raceway to overflow car park at the former Wanneroo Refuse "Old Dump" site.			
Lighting of Track	Extension of lighting of the long circuit and spectator areas			
Bus Terminus	Extension of public transport route to the Raceway on weekends to encourage use of public transports and allow those without transport to access motor sport be it a volunteer official or spectator.			
Race Control, Timing Room, Commentary Rooms, Media Centre, Corporate Suites	These would be constructed in conjunction with construction of the pit lane and pit garages.			
Pit Lane Garages	Construction of pit lane and pit garage area to accommodate competitors.			
	Coaching of Drift motor sport participants.			
	Continued development and coaching of Junior Motor Cycle Racing presently ages 13-16 years with possible expansion to younger years in 2009.			
	Driver Training for upper school students as well as adults.			
	Motorkhana's – a motor sport that encourages Junior participation between the ages of 12-17 years as well as adults. Also enable coaching of Juniors as well as adults in car control.			
Sealed area	A sealed area to be utilised for the development of introductory motor sport, junior coaching and driver training:			

1.4.2 WASCC Long Term Expectations and Goals

Goal / Expectation	Changes Required to Achieve Goal	Timeframe to Achieve Goal
Require additional land	Extension of car park north east into AJS Motorcycle Club lease hold (resuming the land excised from the WASCC lease in 1975).	
, ioquiro assinoriar la la	This would allow the extension of spectator banking for patrons.	
	Lengthen track to at least 3.5km and widen track and longer pit lane.	
Promote and conduct larger events and attract international participation	Purpose built motor sport park on land adjacent to the north. Longer race track to international standards capable of being divided into short tracks to gain maximum usage of the facility. Go Kart track with shared facilities.	
Museum	Encourage the preservation of motor sport in WA and Australia. Preservation of Australia's oldest promoter of motor racing – the WA Sporting Car Club. Work with other museums in Australia and overseas and share historical items so all Australian's can learn and enjoy a major part of Australian heritage	
Canteen with sit down facility	Incorporated with museum as well as providing facilities at events	
	Joining Wattle Ave West and East to enable a second road into the Raceway and thus reduce a high risk management issue with presently one evacuation route.	
Wattle Avenue extension		

Sustainable Facility	Work towards a greener facility in terms of alternate energy use, and energy efficient buildings.	
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1.5 Position Statement

Please provide a concise position statement for your organisation including the primary outcome you would like to achieve from the review of Barbagallo Raceway.

The WA Sporting Car Club was established in 1927 and is the longest surviving club organising and promoting motor racing in Australia. There is a long and proud heritage of organising and managing some of the best events ever held in Western Australia. From the first time an Australian Grand Prix was held in Western Australia at Narrogin in 1951, to 1962 at Caversham through to the heady Formula 5000 days at the Wanneroo Raceway facility in 1979.

Since 1969 the WA Sporting Car Club has operated the facility at what is today known as Barbagallo Raceway. During this time, we have seen many successful young drivers develop into our country's best and we are sure one day we will have spurred on a world champion, perhaps even a Formula 1 Champion.

In the early days the WA Sporting Car Club would administer and run races throughout regional Western Australia, usually on street circuits in various country towns including Albany, Goomalling, Collie, Dunsborough, Bunbury, Northam and Narrogin as well as on various circuit combinations at Caversham. After the Second World War, the WA Sporting Car Club conducted the "Victory Grand Prix" held at the then RAAF Caversham Air Base in 1945. In 1956 the Club obtained a lease for Caversham, which was rapidly converted into a permanent track, using the sealed track connecting the aircraft parking bays as part of the circuit. In early 1968 the Federal Government advised the WA Sporting Car Club that the Caversham site would be no longer available from the end of that year. The Club continued to use Caversham while searching for a new site. In October 1968 the last race meeting was run at Caversham.

The current site in Wanneroo was identified in mid-1968 and work commenced quickly. Through the efforts of many volunteers and contractors the Raceway was completed and ready for the first meeting in March of 1969.

Since this time, the Raceway has undergone continual upgrades and improvements for spectators and in areas of safety. These upgrades and improvements are ongoing.

The WA Sporting Car Club has a culture of nurturing tarmac based motor sports of all disciplines. At the Wanneroo Raceway facility, the WA Sporting Car Club caters for many disciplines and ages. From the youngest up and coming racing girls and boys (as young as 5) who can drive in un-powered down hill "soap box" racers, through to teenagers (and others) who want to learn to drive quickly in a safe and responsible environment, to our regular racers who may be anywhere from 16 to 75 years of age, male and female, they compete wheel to wheel, door handle to door handle in competition racing cars that are stretched close to breaking, to our regularity events which provide disciplined motor sport to many via regularity trials.

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The prime aim of the WA Sporting Car Club is to make motor sport affordable to many. In other countries or even other states within Australia motor sport is often regarded as elitist or for the "well heeled". We have also developed and now provide a venue for the latest motor sport craze, namely "drifting". It is the intention of the WA Sporting Car Club to make motor sport safe and responsible. We "throw" a welcomed lifeline to younger folk who may well otherwise be on the streets or in the back blocks driving in a poor or dangerous fashion. We do not in any way condone "hoon" or anti-social behaviour in our motor sport activities. All events are run as professional events, poor behaviour or excessive drinking is not tolerated. We encourage sensible, responsible and safe road usage to all our members.

Today the WA Sporting Car Club is proud to have amongst its members several Australian Champions including;

Garth Tander (the Current V8 Supercars Championship winner, also won Formula Ford Australian Championship and Rookie of the year in Formula Ford),

Aaron Carratti (Australian Formula 3 Champion in '05 and currently in Porsche Carrera Cup),

Grant Johnson (current Australian Champion V8 Utes),

Clint Harvey (Australian Champion Saloon Cars '04),

Daniel Elliot (Australian Champion and rookie of the year Formula Ford),

Tony Ricciardello (multiple Australian Sports Sedan Champion),

Christian Murchison (Rookie of the year in Formula Ford),

Stuart Kostera Jnr (Rookie of the year in Formula Ford),

Dean Fiore (Rookie of the year Formula Fords),

Nathan Carratti (currently leading Formula 3),

Karl Reindler (Australian Formula 3),

Gary West (Australian Hillclimb Championship) and

Daniel Ricciardo (currently on contract with the Red Bull Racing Team and based in Europe).

These are just the more resent champions that all got their start not just at the Barbagallo Raceway Wanneroo facility but more importantly with the WA Sporting Car Club. Without the assistance, support and backing of the WA Sporting Car Club many of these Champions would never have reached the heights that they have achieved. Assistance comes in the form of being initially taught how to drive a race car on a racing track, then the fine tuning of driving skills and being taught and learning "Race craft", practice and further learning is generally ongoing. The support has come from making the facilities available and the mentoring that an instructor is able to provide to a junior learning to race. And in several cases the WA Sporting Car Club as a club built on the foundation of nurturing and promoting motor sport has assisted with the provision of both financial and commercial backing. It is unlikely that any commercial venture could provide such an environment not just at zero cost but also make substantial financial contributions to the development of new driving talent.

Today, our major challenges arise from our need to expand so as to meet the expectations of the motor sport community. We have mentioned previously in this document the plan for a track expansion and new pit lane garages. We also require a road connection for Wattle Avenue, this does not necessarily have to be completed in asphalt, crushed limestone would suffice. We require this road connection so as to be in a better position to better manage traffic on days of major events.

We also envisage a 100 metre x 100 metre hard stand surface. This surface would enable Motorkhana events as well as further driver education. This surface would double as additional car parking on days of major events.

There is a greater vision of the Wanneroo Raceway facility becoming the tarmac motor sport headquarters in Western Australia. Plans have been discussed that would have the facility build a museum on the same but improved site; this museum would attract tourists from

around the world. Many of the WA Sporting Car Club's membership own rare, exotic and unique cars that they are willing to place on loan to such a museum operation. This should be considered of immense value given the recent closure of the vehicle museum in Fremantle.

The future for the WA Sporting Car Club, with a membership of around 2000 paid up members should be clear and filled with optimism. The immediate and ongoing issues are for the continued improvement of the Raceway facility, the continued development of talented young drivers and, attracting more participating members to the raceway. And of great importance, pursuing and attracting other categories to race in Western Australia. We recognise that we must look beyond the V8 Supercars and as such we have commenced the compilation of a marketing strategy that will have us promote our facility to other classes throughout the Asian region. This plan is well advanced; our first international meeting with another (non-Australian) racing sanctioning body is scheduled for October and in November this year Barbagallo Raceway Wanneroo will be hosting an historic motorbike event with entries from around the globe.

It should be understood, that we are 100% committed to keeping the V8 Supercars coming to Western Australia and using our Wanneroo facility for as long as they want to come. We have been organising and promoting a round of the Australian Touring Car Championship for the last 38 years. We want to attract more and other interesting categories in addition to the V8 Supercars. We want to expand our facility and reach out to our international neighbours and fellow motor sport participants.

In order for the Club to operate in the professional manner in which it does and to make motor sport a reality for many, we as a Club rely upon our volunteers. Without the volunteers we could not operate as we do. Our volunteers are what make motor sport available to many. A commercial operation could not viably provide the same level of overall service and management of the facility at same or similar cost of the WA Sporting Car Club.

The WA Sporting Car Club works with many different organisations and contributes to the well being of others, we provide for such events as the hand cycling challenge for handicapped. We also work with the universities in Western Australian, so young up and coming technicians and engineers can gain first hand experience. In fact we were instrumental in assisting with development of the University of Western Australia's successful Formula SAE challenger. This car was developed and built by engineering students at the University of Western Australia and was tested and tuned at our Wanneroo Raceway facility. This car has competed in hill climbs and other speed events at the WA Sporting Car Club. This vehicle along with the University of Western Australia's engineering students and faculty has won the Formula SAE World Championship.

The benefit of the facility being operated by the WA Sporting Car Club cannot be understated. All income is spent on betterment of the club for members, the raceway facility and the general public. Returns from major events are put back into the facility, year on year there have been tremendous and continuous improvements to the track facility, the spectator viewing areas, the garage facilities and safety services.

The membership of the club includes various professions (doctors, engineers, legal practitioners etc), tradespeople (electricians, plumbers, builders etc) and skilled service providers (asphalt, earth moving etc), it is partially from this membership that makes such a high level of infrastructure and operational service possible at lower than expected cost.

In future, in line with our desire to retain the V8 Supercars as well as expanding and attracting other categories in Australia and other motor sport markets we need to further improve our facility. Primarily we envisage extending our raceway and providing what has become the "international standard" for pit lane garages. Using the successful Bathurst model, the pit lane garages would provide an immediate

garage facility on the pit lane, above the garage would be "hospitality suites". The rear of each garage would be constructed so as to allow a racecar transporter to back up to the garage and allow race team's access to their transporters from the garage. By extending the racing surface we would have a racetrack of around 3.5 kilometres in length, this would lift us from the realms of being one of the shorter tracks in Australia.				



BARBAGALLO RACEWAY REVIEW

By GHD Pty Ltd on behalf of Department of Housing and Works and Department of Sport and Recreation

V8 Supercars Position Paper

Objectives

A review of Barbagallo Raceway is being undertaken to analyse possible facility improvements with the immediate aim of making the site suitable for hosting future rounds of the V8 Supercar Championships.

GHD has been engaged to carry out the first two stages of the review process including:

- Stage 1 Needs assessment and site condition report; and
- Stage 2 Facility improvements and business case.

This "Position Paper" template has been developed to assist in the collection of information related to the existing facilities. The paper aims to capture the current issues and expectations regarding the raceway and to provide an opportunity for stakeholders to provide input to enable the Barbagallo Raceway to meet user requirements.

A workshop will be arranged with key stakeholders in July 2008. Information collected from the Position Papers will be used to prioritise issues related to Barbagallo Raceway and form the basis of the agenda for the workshop. It should be noted that Position Papers will be made available to other stakeholders prior to the workshop.

Instructions

Please complete the following sections and return to Tracy Perchard on tperchard@ghd.com.au .

If you have any gueries please feel free to contact Tracy on 6222 8619 or Russell Barnard on 6222 8915.

1.1 V8 Supercars Events and Activities at Barbagallo Raceway

1.1.1 Regular Activities (Activities scheduled on a regular basis, several times per year eg training)

User Group	Activity and Frequency	No. participants	No. support staff	No. spectators	Track and Support Facility Requirements
Not applicable					

1.1.2 Special Events (Events which occur less frequently than regular activities eg only once or twice per year)

User Group	Event and Date	No. participants	No. support staff	No. spectators	Track and Support Facility Requirements
V8 Supercars Australia	Championship Round	32 + support categories	365		Complete Venue

1.2 Security Requirements

Event or Activity	Security Requirement		
V8 Supercars Championship Series	mpionship Complete security presence including traffic management.		

1.3 Legal Obligations and Operating Regulations

Legal Obligation or Operating Regulation	Does the current Raceway meet requirements	Impact of non-compliance on operations	What changes are required to meet Obligation/Regulations
CAMS track permit	Yes		

1.4 **Assessment of Barbagallo Raceway**

V8 Supercars Short Term Expectations and Issues 1.4.1

Expectations and Issues regarding existing Raceway	Changes required to meet immediate needs and continue operations at Barbagallo Raceway		
Delivery of TV and Timing signals to Pit Lane and garages needs to be improved.	Current cabling to Pit Lane and V8 Super Garages needs		
Toilet Facilities not up to standard	Toilets in the V8 Paddock area are substandard and have little or no lights. In sufficient in number.		
Positioning of garbage bins between corporate facilities and paddock toilets in not suitable.	The garbage bins need to be located in a back of house area not in the middle of the paddock or adjacent to the corporate facilities.		
Current caterer not up to standard	A new caterer is needed		
Temporary corporate facilities were of a low standard	Better presented and newer equipment is needed to be used for building corporate facilities.		
Medical Facilities not up to standard	Better medical facilities need to be provided for the V8 Supercar event. This may involve the use of a temporary medical centre as used for other major events. Equipment levels should meet the standards set by CAMS.		
Team Garages are not located in Pit Lane	Team Garages need to be located on the Pit Lane with room for Team transporters to back up directly behind these garages.		
Sand traps are not suitable off run off areas.	Sand traps to be replaced with CAMS approved gravel traps or run off areas increased so that bitumen run-offs can be used.		
The intermixing of public and race vehicles in the paddock creates a high risk environment.	Better laid out paddock areas that provide control pathways for both pedestrian traffic and vehicle traffic is needed.		
Current briefing room (Machinery Shed) is not suitable.	A solid, relatively sound proof room is required to conduct various briefing across the weekend. This must be able to house 80+ in a class room style seating. A PA system is also required in this room.		

Current Media Room is inadequate for a V8 Supercar event	A larger purpose build media room is required. This must be able to house work areas for the media, lockers for photographers' equipment as well as a press conference area. Full broadband access for all media is also required.
Old Control Tower is a hazard in the centre of the circuit.	The old control tower should be removed from the centre of the track and a protected bunker placed further away from the main straight for housing recovery vehicles. This would most likely remove the need for the sand trap adjacent to the old tower.
Current car parking is not suitable	A properly planned car park is needed to be put in. Car parks should be suitable for all weather conditions.
Medical Centre not suitable	A proper medical centre needs to be built for use at all events. This centre needs to be suitable located for access to the circuit as well as the exit roads. Equipment levels should meet the standards set by CAMS.
Control Tower not suitable	Entire Control Tower complex needs to be rebuilt to modern standards. Current facility is to small and badly designed.

1.4.2 V8 Supercars Long Term Expectations and Goals

Goal / Expectation	Changes Required to Achieve Goal	Timeframe to Achieve Goal

1.5 Position Statement

Please provide a concise position statement for your organisation including the primary outcome you would like to achieve from the review of Barbagallo Raceway.

Barbagallo Raceway is an unsatisfactory venue at which to conduct a national Championship of this dimension which is televised across the world. It is our view that the venue, if it is to remain, needs a major upgrade and little of what currently exists would be suitable for retention with a possible exception of the race circuit itself which would need further widening and some upgrades.



BARBAGALLO RACEWAY REVIEW

By GHD Pty Ltd on behalf of Department of Housing and Works and Department of Sport and Recreation

Motorcycling WA Position Paper

Objectives

A review of Barbagallo Raceway is being undertaken to analyse possible facility improvements with the immediate aim of making the site suitable for hosting future rounds of the V8 Supercar Championships.

GHD has been engaged to carry out the first two stages of the review process including:

- Stage 1 Needs assessment and site condition report; and
- Stage 2 Facility improvements and business case.

This "Position Paper" template has been developed to assist in the collection of information related to the existing facilities. The paper aims to capture the current issues and expectations regarding the raceway and to provide an opportunity for stakeholders to provide input to enable the Barbagallo Raceway to meet user requirements.

A workshop will be arranged with key stakeholders in July 2008. Information collected from the Position Papers will be used to prioritise issues related to Barbagallo Raceway and form the basis of the agenda for the workshop. It should be noted that Position Papers will be made available to other stakeholders prior to the workshop.

Instructions

Please complete the following sections and return to Tracy Perchard on tperchard@ghd.com.au .

If you have any gueries please feel free to contact Tracy on 6222 8619 or Russell Barnard on 6222 8915.

1.1 Motorcycling WA Events and Activities at Barbagallo Raceway

1.1.1 Regular Activities (Activities scheduled on a regular basis, several times per year eg training)

User Group	Activity and Frequency	No. participants	No. support staff	No. spectators	Track and Support Facility Requirements
MCRC	GHD should already have accurate data from these user groups				
Historic Competition MC	GHD should already have accurate data from these user groups				
Trackdayz	GHD should already have accurate data from these user groups				
Speed motorsport	GHD should already have accurate data from these user groups				
Pinfold Racing	GHD should already have accurate data from these user groups				

1.1.2 Special Events (Events which occur less frequently than regular activities eg only once or twice per year)

User Group	Event and Date	No. participants	No. support staff	No. spectators	Track and Support Facility Requirements
See user groups					

1.2 Security Requirements

Event or Activity	Security Requirement

1.3 Legal Obligations and Operating Regulations

Legal Obligation or Operating Regulation	Does the current Raceway meet requirements	Impact of non-compliance on operations	What changes are required to meet Obligation/Regulations
Track Hire	Sometimes	Track is often not presented in a usable condition. Poor use of resources by hirer to bring up to standard ie cleaning up rubbish, oil on circuit etc	 Facility to be in an operating condition prior to hire Written agreement developed outlining what the ACC will do and what the hirer will do
Track Standard	No	Risk is being accepted, the venue is the only venue	Consultation with motorcycle user groups PRIOR to construction
		Venue improvements and works are usually made under CAMS regulation, which is not necessarily suitable for Motorcycles.	
		Other improvements seem to be made with impact of bigger events in mind ie spectators for V8's. Result walls too close to circuit for Motorcycles	
Insurance	No	Waiving of rights that should be responsibility of the circuit owner. Acceptance of risk outside control of hirer.	Insurance and track condition hire needs to be reasonable and achievable to protect the circuit owner and the hirer

Venue access Sometin	Limited opportunities to develop sport. Limited track access limits number and type of events – coaching, ride days, National events.	There are only 365 days in a year, this is perhaps a symptom of how popular a venue the circuit is.
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1.4 Assessment of Barbagallo Raceway

1.4.1 Motorcycling WA Short Term Expectations and Issues

Expectations and Issues regarding existing Raceway	Changes required to meet immediate needs and continue operations at Barbagallo Raceway
National events, not occuring at present	Working agreement and cooperation of SCC management and National promoters
	o Garaging issues resolved
	o Signage issues resolved
Garaging	Better arrangements required,
	Short term only (per event) garages established,
	o Pit area extended
Priority Hiring	Encourage a system of prioritising hire of the circuit. To ensure sustainability of clubs require a higher priority to establish a calendar of dates before ad hoc hirers.
SCC representation/availability	During hire, establish a presence or call out roster for key venue staff in case of urgent attention for venue issues ie power outages, equipment malfunction

Track Security	Venue requires fencing around perimeter.
Circuit Safety	Walls at turn1 and 4 too close to track. Airfered quitable in game legitions, however stereds and maintenance may be an issue.
	 Airfence suitable in some locations, however storage and maintenance may be an issue. Wall on front straight to pit lane is an issue, requires relocation
Catering	 Need club hirers to be included in catering rights negotiations Needs relocating, dining and sitting areas and within viewing area provided

1.4.2 Motorcycling WA Long Term Expectations and Goals

Goal / Expectation	Changes Required to Achieve Goal	Timeframe to Achieve Goal
Medical Centre	Requires upgrade and single level	
Corporate/function area	Construction of area to hold functions – existing facilities may be suitable if reallocated	
Training facility	Construction of training rooms, including communication and educational multimedia equipment. Opportunity to provide class room facility to complement existing activities and possible future training activities	

Existing short circuit needs to be better sutied to motorcycling, runoffs require improvement	

1.5 Position Statement

Please provide a concise position statement for your organisation including the primary outcome you would like to achieve from the review of Barbagallo Raceway.

The outcomes for the Barbagallo review should lead to circuit and venue improvements that make motorcycle racing and participation safer. Motorcycle user groups need to be included on the SCC committees that manage the venue to ensure decisions are pro-active rather than re-active. Management processes are fair and equitable for SCC and user groups. New events are attracted to the venue due to the circuit being 100% suitable for club, state and national/international events. Finally the GHD study includes the effect any recommendation for moving the facility (or major extension) has on neighbouring users such as the AJS Motocross club, the AJS MotoTrials Club, Soapbox club, Jacks Hill climb and Go-Karts. Should Barbagallo move it is likely these venues will be under threat and any new venue should include plans to incorporate these other venues.



BARBAGALLO RACEWAY REVIEW

By GHD Pty Ltd on behalf of Department of Housing and Works and Department of Sport and Recreation

Motorcycle Racing Club WA Position Paper

Objectives

A review of Barbagallo Raceway is being undertaken to analyse possible facility improvements with the immediate aim of making the site suitable for hosting future rounds of the V8 Supercar Championships.

GHD has been engaged to carry out the first two stages of the review process including:

- Stage 1 Needs assessment and site condition report; and
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A workshop will be arranged with key stakeholders in July 2008. Information collected from the Position Papers will be used to prioritise issues related to Barbagallo Raceway and form the basis of the agenda for the workshop. It should be noted that Position Papers will be made available to other stakeholders prior to the workshop.

Instructions

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If you have any gueries please feel free to contact Tracy on 6222 8619 or Russell Barnard on 6222 8915.

1.1 Motorcycle Racing Club WA Events and Activities at Barbagallo Raceway

1.1.1 Regular Activities (Activities scheduled on a regular basis, several times per year eg training)

User Group	Activity and Frequency	No. participants	No. support staff	No. spectators	Track and Support Facility Requirements
Motorcycle Racing Club WA Inc.	Race Meetings - 7	120	50 - 70	4 - 600	Race Office, Media Centre, Race Control Office, Timing Office, Commentary Booth, Start Lights, First Aid and Ambulance, Medical Centre, Recovery Vehicle and trailer, telephone/intercom system, CCTV, car park for trailers and competitor tow vehicles, car park for officials, machine examination area/office, impound area, Official's Lunch Area, Ticket Boxes after meeting awards/function undercover area, catering facilities, ablution facilities including change rooms for male and females. MCRC supplies own Track equipment ie fire extinguishers, flags, brooms, shovels, witches hats, service vehicles x 4, pickup /recovery vehicle and trailers and fuel. Radio communication system. St John Ambulance and paramedics.
Motorcycle Racing Club WA Inc	Private Practice (Tuning Days) - 9	70	10	100	Carports, Canteen Facilities, Office, Start Lights, First Aid and Ambulance, Medical Centre, Recovery Vehicle and trailer, telephone, car park, ablution facilities including change rooms for male and females. Track Equipment as above.

Motorcycle Racing Club WA Inc	Private Practice (Weekday) - 10	30	5	20	Carports, Canteen Facilities, Office, Start Lights, First Aid and Ambulance, Medical Centre, Recovery Vehicle and trailer, telephone, car park, ablution facilities including change rooms for male and females. Track Equipment as above.
Motorcycle Racing Club WA Inc	Motorcycle Rider Training courses (Racecraft) - 13	70 - 90	20	150	Carports, Canteen Facilities, Office, Start Lights, First Aid and Ambulance, Medical Centre, Recovery Vehicle and trailer, telephone, car park, ablution facilities including change rooms for male and females. Track Equipment as above.

1.1.2 Special Events (Events which occur less frequently than regular activities eg only once or twice per year)

User Group	Event and Date	No. participants	No. support staff	No. spectators	Track and Support Facility Requirements
Motorcycle Racing Club WA Inc	November	120 - 150	80 – 100 Officials/gatekeepers/ security	600	Race Office, Media Centre, Race Control Office, Timing Office, Commentary Booth, Start Lights, First Aid and Ambulance, Medical Centre, Recovery Vehicle and trailer, telephone/intercom system, CCTV, car park for trailers and competitor tow vehicles, car park for officials, machine examination area/office, impound area, Official's Lunch Area, Ticket Boxes after meeting awards/function undercover area, catering facilities, ablution facilities including change rooms for male and females. MCRC supplies own Track equipment ie fire extinguishers, flags, brooms, shovels, witches hats, service vehicles x 4, pickup /recovery vehicle and trailers and fuel. Radio communication system. St John Ambulance and paramedics.

1.2 Security Requirements

Event or Activity	Security Requirement
All race meetings	Full perimeter fencing of venue. Currently 4 wheel drive and off road motorcycle vehicles can access circuit thru bush area off Flynn Drive.

1.3 Legal Obligations and Operating Regulations

Legal Obligation or Operating Regulation	Does the current Raceway meet requirements	Impact of non-compliance on operations	What changes are required to meet Obligation/Regulations
Track Hire	Not always	Track is often not presented in a usable condition. Track needs to be cleaned prior use due to other hirers leaving behind oil/ debri on track. Issues with water/ pumps not working fully / sprinklers coming on during activities Creates safety hazards	Improved presentation of track for hirer. Written agreement developed outling what the WASCC will provide for hirer and what the hirer will be required to do.

Track Standard	No	Meets Motorcycling Australia's guidelines but needs to be improved to suit motorcycles more.	Consultation with motorcycle user groups PRIOR to finalising changes and construction of same.
		Venue improvements and works are usually made under the CAMS regulation which is not necessarily suitable for motorcycles.	
		All improvements seem to be made with impact of bigger events in mind ie V8's. Result walls too close, limited run off areas for motorcycles.	
Insurance / Sporting Facilities Licence Agreement	No	Waiving of rights that should be responsibility of the circuit owner. Acceptance of risk outside control of hirer.	Insurance and track condition hire needs to be reasonable and achievable to protect the circuit owner and the hirer.
Venue access	Most times, but could be utilised more if booking time available	Limited weekend opportunities to develop sport.	Due to only so many weekends in the year and the increasing number of hirers the circuit has limited availability.

1.4 Assessment of Barbagallo Raceway

1.4.1 Motorcycle Racing Club WA Short Term Expectations and Issues

Expectations and Issues regarding existing Raceway	Changes required to meet immediate needs and continue operations at Barbagallo Raceway
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National Championship events not occurring at	Working agreement and co-operation between Circuit Management and National Promoters
present	Resolve garaging issues – currently little or no access is available to garages. WA circuit is only venue in Australia that does not have available garages for hire during race meetings.
Potential for International event	Resolve signage issues – National Championship event was lost to WA due to Circuit Management requiring non coverup of existing signage on track walls.
Garaging	Garages for national or major events need to be made available.
	Suggest short term only (per event) garages be established.
	Suitable area for building of larger garage/storage area facility for equipment require for motorcycle Events. Current two garages do not afford enough room – our equipment requirements are increasing.
Priority Hiring	Encourage a system of prioritising hire of the circuit. Circuit venue is becoming increasingly multi purpose
Circuit Management	During hire, establish a presence other than current "house" caretaker or call out roster for key venue staff in case of urgent attention for venue issues ie power outages, water pump malfunctions etc.
Track Security	Venue requires fencing around whole of perimeter.
	City of Wanneroo need to resolve problems related to off road motorcycle user parking and congregating at entrance to circuit venue. Becoming a major road safety issue.

Circuit Safety	Walls at Turn 1, 4 (esses) and top of hill (skyline) too close to track. Airfence (Bike fence) suitable in some of these locations, however storage and maintenance issue needs to be considered. Would need to be maintained by circuit operator/ owner. Wall on front straight to pit lane is an issue, requires relocation.
Catering	Would like to be included in catering rights negotations Current catering outlet needs rebuilding and relocating, could do with dining/ sitting areas and within circuit viewing area.

1.4.2 Motorcycle Racing Club WA Long Term Expectations and Goals

Goal / Expectation	Changes Required to Achieve Goal	Timeframe to Achieve Goal
Medical Centre	Current location works well for motorcycling activities, giving good access to most areas of the circuit, but needs upgrading and more treatment areas/ rooms.	Now or in near future
Function/ Corporate area	Current "clubrooms" facility is more aimed at the wascc club member and does not allow enough available space for hirers to utilise.	
Training facility	Construction of training rooms, including communication and educational multimedia equipment. Opportunity to provide class room facility to complement existing activities and possible future training activities.	
Short Circuit	Existing short circuit needs to be better suited to motorcycle competition use, entry onto existing short track and runoff areas require improvement.	

Extend length of existing circuit	To attract international /asian market events need to increase length of circuit.	
	Upgrade pit lane, support redesign of pit lane to include garage access direct onto pit lane.	

1.5 Position Statement

Please provide a concise position statement for your organisation including the primary outcome you would like to achieve from the review of Barbagallo Raceway.

Motorcycle Racing Club of WA (major motorcycle user) needs to have representation on the WASCC/ circuit management committee, to ensure decisions are pro-active rather than re-active. Management processes need to be fair and equitable for both cars, bikes and other users.
Be included in track development and modifications before they are finalised to ensure that motorcycles are not disadvantaged.
Greater consideration needs to be given to motorcycle user groups to ensure attraction of national/international events.
Would like to see the circuit 100% suitable for motorcycle activities both competitive and non competitive, especially as this is the only proper racetrack available in W.A.



Appendix B

V8 Supercars Specifications and Additional Information

From: "Kurt Sakzewski" < KS@v8supercars.com.au> on 15/07/2008 03:21:32 PM

Repository: 6122644 Barbagallo Raceway Options Study and Business Case

To: <Russell.Barnard@ghd.com.au>

cc: <Carolina.Arias@ghd.com.au>, <TPerchard@ghd.com.au>

Subject: RE: Barbagallo Raceway Review

Russell,

Please see below and attached.

Kurt Sakzewski Operations Manager V8 Supercars Australia Pty Ltd

From: Russell.Barnard@ghd.com.au [mailto:Russell.Barnard@ghd.com.au]

Sent: Monday, 14 July 2008 2:22 PM

To: Kurt Sakzewski

Cc: Carolina. Arias@ghd.com.au; TPerchard@ghd.com.au

Subject: Fw: Barbagallo Raceway Review

Hi Kurt.

Thanks for the information provided in the attachment below which has proven very helpful in our review thus far.

As is to be expected, as the review has progressed we need to gather additional information to assist in gaining further understanding of all the Stakeholder requirements and how they relate to each other and the end result. With this in mind please could you review the below and provide feedback as required:

- Based on your extensive knowledge of the various circuits throughout Australia, advise which venues you have found most suitable and advise which aspects of these, if implemented at Barbagallo, would help align the current venue with your requirements and expectations
- To be honest we wouldn't recommend you replicate much out of the existing circuits as most of them involve some sort of compromise. This is because most of them evolved as the years went on, rather than being built with the future in mind.
- The real bench mark for Australian circuits is Bathurst. It has the best garages, Media centre, Race Control, Briefing Room. The only down side at Bathurst is that the Pit Lane is not flat.
- Please can you provide more specific information relating to the widening of the Barbagallo track and upgrades to the run-offs
- The ideal minimum width of a circuit is 12m. That being said 14 metres would be seen as better.
- The run-off areas at Barbagallo require total rebuilding. Many of the barriers are out of date constructions that would not pass a track inspection if it was a new circuit. Specific details on

what should be provided for in a new circuit can be obtained from CAMS. In short the tyre walls should all be replaced with concrete barriers and in some places these would have tyre buffer in front of them. The run off area in some corners could also be increased.

- As the Pit area appears to be one of your primary concerns, please can you provide some more detailed information with regards to sizes, quantity, access, power, e.t.c 32 Garages 8m x 12m. Room to park B double behind each garage (35m+) Each truck will require power, most are 3 phase.
- I will have to get back to you on the power requirements. Our electrician is currently working on World Youth Day.
- Also, please provide any additional information which may have been omitted in the above RFI and the Position Paper which you feel is relevant to your requirements in WA.
- I have attached the document that we sent through to the WA Govn some time ago out; lining many of the details we look for in a circuit.

Thanks in advance for you time and response to the above and I look forward to hearing from you in the near future.

If you need any further information please feel free to contact me on the details below.

Thanks

Regards

Russell

Regards

Russell Barnard

Senior Project Manager - Project & Program Management Group WA

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P Please consider the environment before printing this email

"Patricia Cerni" <PC@v8supercars.com.au>

To <TPerchard@ghd.com.au>

17/06/2008 02:30 PM

cc "Kurt Sakzewski" <KS@v8supercars.com.au>, "Shane Howard" <SH@v8supercars.com.au>

Subject FW: Barbagallo Raceway Review

Repository: 6122644 "Barbagallo Raceway Options Study and Business Case"

Attached as requested. Trisha.

Patricia Cerni | Executive Assistant to Wayne Cattach - CEO | D +61 7 5630 0331

M | F +61 7 5630 0365 | P +61 7 5630 0364 | www.v8supercars.com.au PO Box 607, Southport BC, QLD, 4215

[IMAGE][IMAGE]

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- WA Track Specifications.doc



MEMO

TO: GHD Consultants DATE: 25 August 2008

FROM: Kurt Sakzewski

SUBJECT: Barbagallo Raceway Review

Please see below V8 Supercars Australia's position regarding some of the points outlined in your presentation.

Track

- The current circuit is OK, but at 2.4km is one of the shortest circuits we run on. Extending the circuit to approximately 3km with some additional corners would provide a more suitable lap time and hopefully another passing oportunity.
- The minimum width of a new circuit should be 12m. The current track width of 9m is too narrow for V8 Supercars in many places. This limits the options available for drivers when positioning the car at the entry and exit of corners.
- The run-off areas in some corners are not deep enough, most notably in the final corner coming onto the straight.
- Sand traps should be replaced with gravel traps, or even better would be bitumen run-off areas, if enough room could be provided. (i.e. Turn 1)
- First line of defence should be either vertical faced concrete wall or conveyor belt faced tyre bundles. Tyre bundles should be made out of stand road car tyres bolted together.
- Old Race Control building in the middle of the circuit is not necessary and should be removed to create a clear run-off area along the main straight.
- Medical Centre is completely unsuitable. Medical centre needs to be set up to deal with the level of trauma that can be expected at a major race meeting and must have clear access to the circuit and the venue exit. A clear access to the helipad for medivac is also required. (recommend Phillip Island as a bench mark)
- General Public medical needs should be dealt with by a separate medical station positioned in a suitable are so that it is accessible to the GA area.

Pit Lane & Garages

- Pit Lane should be able to house a minimum of 32 cars in Garages 8m wide x 12 deep. Minimum width that would be acceptable is 6m.
- Garages must be accessible from the rear with the transporters parked behind them. Current practice of moving the cars in and out of pit lane through the paddock is time consuming and dangerous.
- Pit Lane must be a minimum of 12m from the front of the garages to the edge of the Pit signalling wall. The fast lane should be no more than 4m.
- Garages must be cabled for circuit TV signal as well as computer network.
- Each garage must have a minimum of 4 x 15amp power outlets and suitable overhead lighting.
- Separate power is required for the transporters.
- A suitable sized toilet block should be included in the pit lane building for use by Teams and Drivers (i.e. Darwin)
- More distance is needed between the first and last garages and the start and finish of the 40km/h zone.
- General Paddock area for support categories has too many permanent structures. This does not lend itself to adapt to different types of events. A large empty bitumen area would allow more variations in use and could also double as a driver training area outside of events

Spectator Areas

- More toilets needed. They should be of suitable standard with lights for after dark use.
- Merchandise area seems to work well.
- More spectator mounds should be positioned over near the back of the circuit to allow viewing of this part of the track. Currently this space is underutilised.
- Properly positioned grand stands with shade will provide abetter quality viewing area for those fans that wish to pay for it.

General Facilities

- Media Room, Race Control, Timing Room etc. are all too small and too narrow. The whole race control building need to be torn down and started again.
- Corporate facilities are very substandard. This is concerning as they are temporary and should be supplied in much better condition that what was seen this year. Flatter ground with suitable drainage is needed for positioning corporate tents.
- Toilet facilities in the paddock are substandard. There are also not enough of them for the amount of people in this area.
- A proper sound proof briefing room is required. Having briefings in the machinery shed is not suitable. A suitable room would also double as a press conference area if done properly.

Access

- Access roads are very confusing. Better publicised access routes and signage is needed.
- Location of car parks relative to where people have to get too is a problem.
- Formal demarcation of car parks and policing of these areas is also less than adequate.

Management

- Venue seems to be lacking an experienced event manager who can control the venue. IN the
 past this role has been undertaken by the General Manager, who ends up with too much on
 his plate.
- Club members are good for volunteer positions only. Professionals are needed for the management of the event.
- Changes to this year's traffic management plan were not communicated to V8 Supercars which caused confusion at the Wattle Ave gate on the Friday. Lack of communication about OH&S requirements also created issues earlier in the week.

Regards,

Kurt Sakzewski

Operations Manager

WA Track Specifications

• **TRACK** – Should be approx 3kms long, preferably not more than 3.5kms and not less than 12 metres wide, but 14 metres would be a preferred width. The topography of the track should be interesting with some undulation – not flat. Tracks around should include viewing mounds with shade (trees or shade structures). The overall design should resemble and amphitheatre so that all of the track can be seen from any viewing position in an ideal situation.

First line of defence surround the circuit should be Concrete walls, with suitable run-off and gravel traps where appropriate. Consultation with CAMS and V8 Supercars will be needed regarding this.

- GRAND STANDS These should be covered where possible and located opposite pit lane and adjacent to interesting corners. Each should have a clear view of a big screen. Reserved seating is a must in the grandstand to avoid nasty confrontations between the patrons.
- **PITLANE** Should contain at least 30 garages, approx 8 metres wide x 12 metres deep. Each with a roller door both front and rear with a door clearance of 2.4 meters high. Transporters should be able to back up to the garage at the same level, leaving a viewing corridor and Fire Lane between the transporter and the garage.
 - **PADDOCK POWER** Garages must be equipment with enough power and outlets for the Team needs as well as the ability to provide power to the transporters. In-ground cable drains are best suited to keep the cables out of harms way.
- <u>ADDITIONAL GARAGE FACILITIES</u> Should be allowed for tyre distributor,
 weighing equipment and television broadcaster. The tyre garage is not required to be on the
 Pit Lane, but must be close to the V8 Supercar garages. Support categories to be provided
 with open carports or clear hardstand suitable to position a stand alone hoecker on.
- **CORPORATE FACILITES** These should be located above pit lane and at other locations around the track. They should be air-conditioned with full height glass fronts and viewing balconies. Internal dividers should be removal to accommodate different sized groups. A catch guard or see-through material must be placed under the railing overlooking pit lane to ensure nothing is dropped from the corporate suites onto the Teams. The upper level of the corporate facility must have an opening for fork lift access on each level.
- <u>TIMING EQUIPMENT</u> A Dorian timing system should be set up capable of providing the following:
 - Start/Finish control line
 - Pit Entry
 - Pit Exit
 - 2 x sector split loops (each approximately 1/3 distance around the circuit)

The timing room must have access to broadband speed internet. The room should be positioned so that it has an uninterrupted view of the control line as well as Pit Entry and if possible Pit Exit.

TRACK CAMERAS - A CCTV camera system capable of showing every section of the circuit to Race Control. Cameras must be able to tilt, pan and zoom. The camera system should be connected to a hard drive recorder capable of storing several days' worth of footage.

- MEDIA CENTRE Large enough to accommodate 40 journalists and 20 photographers. (Similar to Winton raceway). Does not require a view of the track but should be air-conditioned and properly fitted out with individual work stations for journalists with lockable draws; air-conditioning, secured access, interview stage, proper audio facilities, access to television and timing screens around the room. The photographers will require lockers for securing camera equipment. Broadband speed internet is required at each workstation as well as multiple power points.
- MEDICAL CENTRE The medical centre requires unrestricted access to and from the circuit as well as the exit points from the venue. The facility should be set-up to similar standards as the Phillip Island medical centre, with access to a helicopter pad in case an airlift is required. Separate first-aid or medical points should be available for the general public at several points around the circuit.
- ADMIN CENTRE This area should accommodate circuit management and provide
 additional offices for visiting driving instructors lecturers. Should also include locker
 room and shower facilities. Also a full size classroom for lectures (may double as the
 media centre).
 - **BRIEFING ROOM** A Driver Briefing Room is required as well. This may be share with the media conference area, as long as it is separate the Media Centre working area. This room must be capable of seating 80 people facing a raised stage with desk and PA facilities. This must be reasonably sound proof so that it can be used during on-track activity.
- CONTROL TOWER Should be located on the outside of the track with a good view
 of the entire circuit and generally contain race control centre, timing room, stewards
 viewing area adjacent to race control, stewards room to conduct hearings, IPO office,
 DSO office, Clerk of Course office, Race Director's office. Lift access to the Timing Room is
 also required.
- **TICKETING OFFICE** Should be located adjacent to each gate. The main entry to the circuit should also accommodate a Credentials office where tickets can be left/picked-up.
- <u>FUEL TERMINAL</u> Should include at least 30,000 litres of underground storage fully bunded and safety compliant.
- MERCHANDISING PRECINCT Should be hardstand capable of accommodating B-Double transporters.

- **CAR PARKING** Should be designed to support a park and pay concept. Should facilitate separate car parks for corporates, media, teams and drivers. VIP parking area must accommodate at least 250 vehicles for Teams and V8 Supercar personnel.
- <u>CATERING</u> Kitchen area to support corporate catering adjacent to café open to the public, which could also accommodate driver education training days etc.
 <u>TEAMS CATERING</u> An area will be required close to the paddock with flat ground suitable for a erecting the V8 Supercar catering hoecker and the associated kitchens. This area will require connection power, water and sullage.
- **DRIVER EDUCATION CENTRE** Should include a small course to enable schoolchildren to practise traffic skills.
- **DRIVER TRAINING FACILITIES** Large skid pan of sufficient dimension to enable training of bus drivers. 4WD course for teaching off road driving.
- **IRRIGATION SYSTEM** Preferably fed from a lake at the location if ground water available.
- **ENVIRONMENTAL COMPATABILITY** Clearly this is an important political element for government and needs some special thought.



Appendix C Aerial View of Barbagallo Raceway

(Provided by City of Wanneroo)





Appendix D Minutes of Stakeholder Workshop



MINUTES OF MEETING

Project	Barbagallo Raceway Review	From	Tracy Perchard
Subject	Stakeholder Workshop	Tel	6222 8619
Venue/Date/Time	Department of Sport and Recreation WA Tuesday 26 th August 2008 12:30 – 5:00 PM	Job No	61/22644
Copies to	All attendees		
Attendees	Bruce Campbell (DSR) Helen Cloghan (DSR) Steve Humfrey – partial attendance (DSR) Phil Johnson (WASCC) Peter Thornell (WASCC) Russell Sewell (WASCC) John Paton (City of Wanneroo - CoW) John Royle (CoW) Paul Winton (CoW) Michael Masi (CAMS)	Apologies	Kurt Sakzewski (V8 Supercars – V8) Shane Howard (V8) Shane Spinks (CoW)
	Teresa Hook (CAMS) Rick Gill (MWA) Peter Smith (MWA) Denise Stronach (MCRC) Russell Barnard – Presenter (GHD) Jamie Thorburn – partial attendance (GHD) Tracy Perchard (GHD) Leah O'Brien (GHD) Martin de los Rios (GHD) Carolina Arias (GHD)		



Mi	nutes	Action
1	Introduction	
•	Apologies from V8 Supercars – representatives unable to attend.	Note
•	RB to refer to V8 Supercars' Position Paper and additional supplied comments during workshop discussions.	Note
2	The Track	
2.1	Track Length	
•	Currently one of the three shortest tracks in Australia at 2.4 km long.	Note
•	Lengthening the track creates opportunity for multiple tracks and uses, which could attract other events.	Note
•	3 km was agreed as a suitable length for all users.	Note
•	3.6 km required to meet international racing standards.	Note
•	3.6 km would be preferable over 3 km.	Note
•	Lengthening the track will impact width and run-off requirements.	Note
•	Lengthening track will require additional land.	Note
2.2	Track Width	
•	Existing track width at 9 m complies with CAMS standards.	Note
•	V8 Supercars specified minimum width of 12 m.	Note
•	It was noted that there are other tracks in Australia less than 12m wide that still host a V8 Supercars round.	Note
•	New track standards include 15 m width at starting line and 12 m minimum width for the rest of the track. This also meets international racing standards.	Note
•	Widening the track will require modification to the entire track layout including runoffs and additional land is likely to be required.	Note
2.3	Track Runoffs	
•	The preference is for long bitumen runoffs however due to space limitations the second best option is gravel runoffs.	Note
•	Sand traps may be dangerous for bike riders due to the abrupt stop.	Note
•	Currently sand traps are used. If converted to gravel then longer runoff distances will be required.	Note
•	WASCC noted that gravel would require maintenance as it will mix with existing sandy soils.	Note



Mir	nutes	Action
)	WASCC noted that gravel can be dangerous when present on the track.	Note
•	WASCC believe that gravel is the standard for runoffs because sand is not readily available in the eastern states.	Note
2.4	Track Safety Barriers	
•	CAMS advise the tyre safety barriers should be replaced with concrete walls.	Note
,	MWA & MCRC advised some existing barrier walls are too close to the track and create a safety issue for motorcycles.	Note
,	Ideal solution is to remove the walls and have longer runoffs. Alternatively push back wall locations or use an air fence.	Note
•	Air fences are an option for bikes but require management and storage space as they can't be left on the track for car races.	Note
2.5	General discussion	
,	Any major upgrade will require the entire track to meet the current standards for a new track.	Note
	An integrated approach to design is required when upgrading length, width, runoff and safety barriers.	Note
	Major upgrade to the existing track will impact on operations. Staged construction is preferred with short shut down times.	Note
r	Additional land would be needed for a major upgrade.	Note
2.6	Availability of additional land	
	MWA anticipate that the current leaseholder of the AJS club would consider relocation provided there is benefits for the club to do so. This would require consultation directly with to the club.	Note
	CoW advised there may be opportunity to acquire extra land for the raceway or AJS facility but a government approach is needed to overcome constraints such as land zoning, bush forever etc.	Note
	Extension of the raceway and creation of multiuse track / facilities will benefit the community.	Note
	Also potential regional benefit through development of motor sport related industry within Wanneroo.	Note
	WASCC noted that there was an option to acquire Cockburn Cement land to the west of the site but this is not the preferred option.	Note
2.7	Actions	



Mi	Action	
•	CoW to identify options for relocation of AJS Motocross and advise on any other opportunities to obtain more land for future upgrades.	CoW
•	CAMS & MWA / MCRC to provide guidelines for safety barriers and runoffs including relevant distance requirements.	CAMS & MCRC / MWA

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Minutes Action 3 **Emergency Facilities** 3.1 Medical centre and equipment Existing set-up includes 1 crew and 2 spectator medical facilities which meet Note CAMS requirements. MWA / MCRC advised that the existing crew medical facility is in a good location Note infield. MWA / MCRC advised the current crew facility only just meets requirements and Note there is not enough treatment room area. V8 has indicated medical facilities are not up to standard. This may relate to Note international racing standards rather than CAMS standards. CAMS noted that international standards would be the ideal option. Note Equipment requirements and space requirements depends on the level of trauma Note that the facility can deal with. Note Current equipment meets CAMS standards. 3.2 Access for emergency vehicles An additional access road to the raceway would improve access for emergency Note response vehicles. 3.3 Actions CAMS to provide typical FIA standard layout drawing for a medical facility. This **CAMS** includes a large area that can be sectioned off for small events. Improvements to the current arrangement to be investigated with CAMS input and **GHD & CAMS** a focus on temporary versus permanent infrastructure options. Identify specific V8 requirements. GHD & V8 4 Pit and garages 4.1 **Pits** Existing pits are 3 - 4 m below the level of adjacent land to the west. Note Addition of garages behind existing pits would require excavation and some Note shutdown of track operations. There are issues with traffic management related to current car access between Note garages and pits. This impacts on spectator safety.

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Mir	nutes	Action
4.2	Improvement options	
4.2	.1 New raceway	
•	WASCC advised that the ideal option would be to construct a new raceway possibly on government land north of Wattle Ave.	Note
•	This would require investigation of other relocation / management options.	Note
•	Focus of this study to identify improvements needed at Barbagallo Raceway.	Note
4.2	.2 Upgrade existing raceway – WASCC Concept Plan	
•	WASCC has prepared a Concept Plan for the site with an extension to the track on a portion of the AJS Motocross site.	Note
•	Total track length 3.4 km with multiple track configurations.	Note
•	WASCC noted this could easily be extended to 3.6 km	Note
•	New section of track to be constructed to international standards.	Note
•	New pits and garages conforming with V8 requirements.	Note
•	This option will have minimal impact on operations during construction.	Note
•	Staged construction is an option with the new section in Stage 1 and upgrades to the existing track in Stage 2.	Note
4.2	.3 General outcomes	
•	Ideal option is to upgrade track to meet FIA grade 2 / FIM grade 1 standards.	Note
•	Need to identify the benefits of upgrading to international or other standards.	GHD
•	Preference for multiple tracks and multi-purpose facilities.	Note
•	It is expected that new facilities would be used year round.	Note
•	WASCC advised that existing track will be due for resurfacing in 5-6 years.	Note
4.3	Garages	
•	MCRC advised current garages are not accessible to bikes.	Note
•	There are currently no day-rental garages available.	Note
•	WASCC aim to build approx 40-50 new garages for day hire use.	Note
•	Carport structures are insufficient at night and in bad weather. There are also security issues.	Note
•	Facilities also need to cater for support categories.	Note
•	CAMS noted that V8 are likely to continue bringing the same or more support categories as this year's event where there were an additional 69 trucks on site.	Note
•	WASCC advised there are currently 8 double length garages available for day hire.	Note



Minutes Action 5 **Spectators and General Facilities** 5.1 Spectator numbers WASCC advised the Supertruck event can have attendance levels up to 10,000. Note This years attendance was low due to poor weather. WASCC advised that attendance to the V8 event was not significantly impacted by Note weather and only family attendance was generally affected. WASCC believe spectator numbers are limited by availability of parking. Note 5.2 Parking and transport Traffic management and parking are major issues for large events. Currently a Note large number of cars park on adjacent land and at the old tip site 2km away. Note Buses are organised to pick up people from the train station but are not widely used. CoW & WASCC agreed that better promotion of public transport is needed. Note Opportunity to include free public transport as part of the ticket price. Note CoW advised there may be some additional parking available in nearby industrial Note areas once developed. V8 indicated that traffic signage and demarcation needs improvement. Clear Note signage is needed. Opportunity to construct a large hardstand area for event parking as well as Note motorkhana, driver training, bike use etc. 5.3 Road and event access Access is restricted to only one road. Focus on public transport is needed. Note CoW to provide advice on future plans for access and surrounding road network. CoW V8 event includes several gate entries. They work well if people use maps to identify which gates correspond to their preferred viewing areas. Note 5.4 Spectator accessibility Generally well managed and no major safety incidents have been reported. Note Currently good access to cars and garage areas. Note Spectator access to decrease if garages are relocated behind pits. Note Regulations require the back of garages to be open to spectator viewing but not Note access.

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Minutes	
5.5 Track coverage	
There is currently sufficient space for spectator viewing areas.	Note
Shaded grandstands could be considered.	Note
Previous 3 year trial of additional grand stands indicated that spectators we unwilling to pay additional fee to have formal seating.	ere Note
If attendance numbers increased there would be opportunity to construct means banks near Kolb Corner for spectator viewing.	nore Note
Big screens are hired for V8 event. These are costly and not practical for s events.	maller Note
5.6 Opportunities	
 Camping potential near the raceway or in various Wanneroo sites. Needs t well managed to ensure appropriate behaviour. 	to be Note
Organise and promote a week-long "motor sport festival".	Note
CoW to identify opportunities for complimentary events that could be held i Wanneroo town centre.	in CoW
Temporary infrastructure to meet demands of major event where appropria	ate. Note
5.7 Catering	
All catering including event food stalls is managed by Spices catering.	
Event attendees likely to find key issue with price rather than quality.	Note
Crowding and delays during racing breaks are expected.	Note
Possible opportunity for screens near food stalls.	Note
5.0. One was to addition	Note
Corporate facilitiesCorporate tent facilities hired for event appear to be adequate.	
·	Note
V8 comments on lack of suitability to be clarified.	Note
Any issues with marquis can be resolved through the event management.	Note
5.9 Toilets facilities	
Toilet numbers are in accordance with Health Department regulations.	
Expect crowding during breaks but overall numbers are sufficient.	Note
Private toilet facilities including showers for crew members would be ideal.	
case would be one in each team garage.	Note



Mir	utes	Action
5.1	D Race controls	
•	Old Control Tower in centre of track is not an issue from CAMS' perspective.	Note
•	Current race control layout needs improvement. Doubling the width of the room would be ideal	Note
5.1	Briefing Room	
•	The existing briefing room in the machinery shed is inadequate.	Note
•	The existing media conference room would be a better option.	Note
•	Alternatively Club House first floor could accommodate briefing room requirements in the morning prior to VIP / corporate use.	Note
5.1	2 Media	
)	WASCC to send GHD letter from media indicating positive feedback on tent arrangement at the last V8 event.	WASCC
•	Existing permanent facility would not be sufficient for media use.	Note
5.1	3 Security	
•	No issues with event security to date. Only minor recorded incidents.	Note
•	Better management of security staff needed to ensure appropriate personnel employed for the event.	Note
5.1·	4 Fencing	
•	Inadequate perimeter fencing near Kolb Corner allows public access to track and creates a safety issue.	Note
)	CoW noted that there would be no development of industry adjacent to southern border due to environmental constraints.	Note
•	Need to identify improvements needed to existing perimeter fencing. Consider both inner and outer perimeter fences.	Note
6	Management	
6.1	Local event and track management	
	Current management system suitable for local events.	Note



Minutes		Action
6.2	V8 Supercars event management	
•	WACSS currently promotes and organises the event.	Note
•	WASCC rely on volunteers for assistance in running the event.	Note
•	WASCC noted that there would be significant additional costs associated with running the event if volunteer assistance was not provided. Currently around 1,000 volunteers assist over the 3 day event. It is estimated that profits would decrease significantly if volunteer services were paid.	Note
•	It was noted that WASCC pay a significant fee to V8 Supercars to attend the event at Barbagallo.	Note
	Club facing challenges if event grows.	Note
	WASCC believe they are capable of continuing to manage growing event.	Note
•	WACSS believe event management companies would not find the event to be financially feasible/attractive.	Note
	Future model will require better event management.	Note
6.3	Opportunities for V8 Supercars event management	
•	WASCC could retain organiser role and a separate promoter could be engaged.	Note
•	External promotion / management would reduce risk to WASCC.	Note
	Possible for WASCC to receive fee/profit share for venue and services if externally managed. Opportunities for business benefit for the club.	Note
•	WASCC and City of Wanneroo could promote event together.	Note
•	Promotion management could be undertaken by a board/committee consisting of key stakeholders.	Note
6.4	Actions	
•	Management/partnership strategies to be discussed and agreed before presentation to the broader community.	All
•	Consider separate roles for promotion and management and identify opportunities for developing revenues roles.	WASCC / GHD



Action Minutes 7 **Opportunities** 7.1 Night use Track currently operates evening races in summer. Note Note Currently only the short circuit has lighting. Opportunity to provide lighting to entire track. Note Motorcycles require well lit conditions and night racing may not be feasible. Note 7.2 Regional development and community benefit CoW hoping to create regional benefit through industrial / commercial development Note associated with motoring. Note Opportunity to integrate various potential users and involve research, commercial and industrial collaboration. 1 - 2 week long motorsport "festival" held in the City of Wanneroo incorporating Note events in the town centre as well as Barbagallo with public transport available between the venues. 7.3 General comments Government are more likely to fund a multi purpose track and facilities. Note A facility that meets motorcycle requirements would also be favoured. Note 7.4 **Others** Cycling. Note Note Motorsport museum. Youth engagement such as the youth motorcycling program. Note Better promotion and management of public transport to the event could result in Note an increase in spectator numbers.

Tracy Perchard

Project Engineer



Appendix E

Records from Public Information Session

- 1. Minutes
- 2. List of Attendees (and people who registered interest but were unable to attend on the day)
- 3. Responses to Discussion Question





22 September 2008

Project	Barbagallo Raceway Review	From	Tracy Perchard (GHD)
Subject	Minutes for Community Information Session	Tel	6222 8619
Venue/Date/Time	City of Wanneroo - Banksia Room 7:30 PM, Monday 22 nd September 2008	Job No	61/22644
Attendees	A list of attendees is attached to the end of the minutes		





Minutes

1 Introduction and Welcome

- Introduction by Leah O'Brien (GHD).
- Purpose of the information session:
 - To provide information to the public about the feasibility study currently being carried out on the Barbagallo Raceway.
 - To get additional input from the broader public about improvements needed to the current facilities to host future V8 Supercar Championships at the Barbagallo Raceway.
- Representatives from a range of organisations attended the info session. A full list of attendees and contact details has been compiled from the registration sheets filled out at the venue.

2 Background Information by DSR

- Bruce Campbell (DSR) provided an overview of the project background as follows:
 - Investigations commenced following suggestions by V8 Supercars to hold a street race in WA.
 - This proposal was assessed by Tourism WA (Eventscorp) and was determined not feasible due to factors such as cost, disruption to CBD activities, minimal increase in spectators and no infrastructure 'legacy' for the WA motor racing community.
 - V8 Supercars responded by stating that the current infrastructure at Barbagallo does not meet expectations and that significant upgrades are required. V8 Supercars want reassurance that facilities will be improved otherwise they may not return to WA beyond their 2009 commitment.
 - This project aims to identify and quantify the necessary/desirable improvements to make the site suitable for future rounds of the V8 Supercars Championship.
- WASCC were acknowledged as having developed a significant and substantial facility over a number of years. WASCC were also noted as having to outlay a significant amount to have V8 Supercars come to Perth.
- ▶ WASCC are the V8 Supercars "event promoter" in WA and face significant costs to meet V8 Supercars infrastructure expectations.
- DSR advised that the project lies within the State Sporting Facilities Plan Framework and would undergo a standard DSR assessment process for government funding. This process is currently at approximately stages 2-3 of a 6 stage process.
- The project objectives are to identify:
 - o key issues at Barbagallo Raceway,
 - o requirements to meet V8 Supercars event needs and
 - o opportunities to improve the raceway for other key users and better event management standards.





3 The GHD Study

- ▶ Jamie Thorburn (GHD) outlined GHD's scope to assist in the review of Barbagallo Raceway including site assessment, needs analysis and business case.
- ▶ GHD has consulted with a range of key stakeholders / users of the Raceway and has sought input from V8 Supercars.
- Areas of focus for the study as follows:
 - Track & Facilities
 - Event Management
 - Opportunities
- Based on information received to date a key area for improvement relates to the pits and garages.
- A key constraint on any future expansion of the site is land availability.
- GHD acknowledged that spectator requirements are important as well.
- One of the aims for the project is to investigate options that result in benefits to many parties and not just the V8 Supercars.
- ▶ It was acknowledged that WASCC have managed the V8 Supercars event for a number of years with little support from government. WASCC now face the challenge of meeting V8 Supercars changing needs and requirements for the track and facilities.

4 Table Discussions

- Attendees discussed and noted responses to the question "How can the Barbagallo Raceway be improved to better cater for the V8 Supercars Championship?" The question was focused on the three study areas: Track & Facilities; Event Management; and Opportunities.
- Responses were prioritised through a voting system and table representatives gave feedback on the overall top 3 priority items listed. A summary of this feedback is given in the following sections. The complete lists from each table were collected and will be compiled into a single document for inclusion in the Stage 1 Report.
- It was noted that a number of attendees/tables chose to discuss issues that were unrelated to use of the Raceway by the V8 Supercars as well as other issues which were outside the scope of this stage of the review.

4.1 Track Layout

- Facility which is user friendly for all. (Ensure upgrades for V8 Supercars are not detrimental to other users)
- Larger track, with multiple circuits so that several events can be held at the same time.
- Option to race in the reverse direction on the track.

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- Multi-use facility which can cater for different categories such as bmx, speedway, rally cars, drag strip etc.
- More overtaking points on the track

4.2 Pits & Garages

- Garages available to all users year round
- Garages and pits co-located
- Larger pit area

4.3 Safety

- Meet current safety standards
- Wider and longer runoffs
- Improved safety for bikes including possibly air fences or longer runoffs
- Convert sand traps to tarmac so that cars can recover and get back on track if possible. Sand is hard to clean out and can create a slippery racing surface if it gets on the track.

4.4 Medical Facilities

Medical facility to remain infield.

4.5 Spectator Facilities

- Improved viewing so spectators can see the whole track. Possible use of big screens.
- Multiple access points for viewing areas to avoid congestion
- Improved spectator facilities eg toilets, grandstands, cover
- Open area near Kolb Corner for spectator viewing
- Potable water for in spectator shelters.

4.6 Site Access

- Improve access to site including more access roads and upgrades to existing roads (Wattle Ave & Flynn Dr)
- Improved traffic management
- Improve emergency and spectator access / egress

4.7 Event Management

- Pre-event activities with V8 Supercars spending more time in WA
- Closer access to transporters
- Continue management by WASCC

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- Government commitment to promote V8 Supercars as well as other events
- Succession planning for future management and operations. Includes transfer of skills and knowledge from current officials etc. Support from WASCC or government bodies could assist

4.8 Opportunities

- Youth driver training centre
- Motor sport precinct
- Camping facilities adjacent to the raceway
- Family facilities eg barbeques and playgrounds
- More local support categories
- Change name back to Wanneroo Raceway
- Motorsport business park including related industrial business near track
- International events
- Acquisition of additional land
- Hold other separate national events and overseas categories
- Include public transportation fare in the event ticket price so that people are encouraged to take shuttles from the train station

61/22644/81243 5





5 Questions

- ▶ The issue of land availability is likely to be further investigated in the future master plan phase.
- GHD reiterated that the current stage aimed to determine if Barbagallo Raceway can be improved to satisfy V8 Supercars and to determine what the associated cost would be.
- The City of Wanneroo has advised that they are keen for the Raceway to remain at the site.
- Q: What is the timeframe for this process?
 - A: The current V8 Supercars contract expires in 2009. V8 Supercars have indicated that they are prepared to continue the WA round beyond 2009 as long as there is a commitment to track/facility improvements.
- Q: What are the V8 Supercars infrastructure expectations?
 - A: In summary the V8 Supercars would like a longer, wider track with longer runoff areas. They also would like improved medical facilities and the garages located directly behind longer, more modern pit areas.
- Q: Have the V8 Supercars mentioned sanctioning fees?
 - A: No
- Q: Is the longevity and future of V8 Supercars being considered in the review?
 - A: Government are seeking commitment from V8 Supercars as part of the review process. However it is likely that there will always be a major event in WA, if not V8 Supercars in the future then another category. Any improvements to the Raceway will benefit current and future users.
- Q: What funding model (eg grant / loan / joint venture) is expected to be used for the improvements?
 - A: This is unknown at this stage. It may be in the form of a grant whereby DHW would contract out the works. It is unlikely that money would be given directly to the club. There are no private sector relationships at this stage. First the extent and cost of improvements needs to be determined then the government can assess the capacity for funding and look at options available.
- Q: What is the current Minister's position?
 - A: The new Minister has only just been appointed. At this stage the position is unknown but it is likely that this process of assessment will continue.
- Q: Has a combined sporting area been considered?
 - A: This would require availability of land. At this stage the review is focussed on improvements required to the existing Barbagallo Raceway including the existing land holding. Future stages of the study include master planning and this may include further investigation to co-located land uses. The aim now is to determine the baseline of what will meet V8 Supercars needs.
- Comment: Land availability is an issue and the current use of the old tip site for offsite parking has potential safety implications. This is not a long term solution.
- Comment: Potential parking location on land on the opposite side of Wattle Ave, which is currently an off-road vehicle area.

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BARBAGALLO RACEWAY COMMUNITY INFORMATION SESSION - LIST OF ATTENDEES

First Name	Last Name	Title	Company	Email/ phone
Cassandra	Brennan	Executive Officer	Events Industry Association	admin@eia.com.au
Carl	Williams		Landcorp	carl.williams@landcorp.com.au
Peter Newbound	Newbond		· · · · · · · · · · · · · · · · · · ·	petern@mcham.com.au
Steve	Cherry		DTEC	scherry@dtec.com.au
Gordon	Mitchell		WASCC Member	gordesma@bigpond.net.au
Denise	Stronach	Administrator	Motorcycle Racing Club of WA	mcrcwa@iinet.net.au
Adrian	Mettam	President	Motorcycle Racing Club of WA	mcrcwa@iinet.net.au
Anthony	Fogliani	Partner	Trackskill	trackskill@bigpond.com
Tracey	Fogliani	Partner	Trackskill	trackskill@bigpond.com
Neil	Streatfield		Public	
John	Hurney		Public	
Warren	Thompson		Warrens Ultra Fast Karts	adam@wascc.asn.au
Graeme	Hooley + Friend		Private	graeme@hooley.com.au
Laurie	D'Alessio + Frier	nds	Public	
Graeme	Harris		GHD	graeme.harris@ghd.com.au
John	Harris		?	
Teresa	Hook		CAMS - WA	teresa.hook@cams.com.au
Rob	Mitchell		Public	9341 3114
Noel	Mitchell		Public	9341 3114
John	?		Public	0400 443 237
Jim	Gellan		Public	
Grant	Gellan		Public	
Keith	Ward		Public	
Charlie	Mitchell	Chairman	CAMS - WA	charlie.mitchell@cams.com.au
Marilyn	Cassidy		Public	9405 4079
Michael	Cassidy		Public	9405 4079
Robert	Mitchell		Public	racmit@bigpond.net.au
Peter	Bowra		Public	racmit@bigpond.net.au
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Marion	Shaw		Public	rmshaw@iinet.neet.au
Rob	Hagarty		Speedwest	admin@speedwest.net
Brendon	Hagarty		Public	brendon9889@arach.net.au
Terry	Walker		Public	twalker1944@iprimus.com.au
Vick	Soulios		Public	vick@vicksoulios.com.au
Christopher	Mitchell		CAMS - WA	
Jennifer	Harrison		Public	phone
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Rick	Gill		WASCC	peter@wascc.asn.au
Sean	Supanz		WASCC	peter@wascc.asn.au
Alan	Hill		WASCC	peter@wascc.asn.au
David	Walker		WASCC	peter@wascc.asn.au
Robert	Janney		WASCC	peter@wascc.asn.au
Michael	Grogan		WASCC	peter@wascc.asn.au
Russell	Sewell		WASCC	peter@wascc.asn.au
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Travis	Barnes		Public	ray@biante.com.au
Ken	Tonge		Public	Phone
Bob	Humphreys		Historic Motorcycle Club	Phone
Ken	Redwood		Historic Motorcycle Club	phone
Maureen	Davey		Historic Motorcycle Club	phone
Stuart	Kostera		Public	0419 982 784
John	Napier-Winch		Public	9404 8863
Marion	Napier-Winch		Public	9404 8863
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David	Turner	İ	Public	davet@dtsroofing.com.au
Lindy & Mark	Kerr		Public	Phone
Brad	Campbell		Public	brad.campbell@promet.com.au
Kathryn	Davis		Public	Phone
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Paul	Winton		City of Wanneroo	Phone
Kevin	Schneider			netfixcs@arach.net.au
Steve	Oswald			
Ed	Voscamp		Public	
Simmons	Simmons		Public	434677863
Des	Johnstone		Public	93677499
John	Smith	President	Motoring South West, Collie	Phone
Teresa	Lupton		Fastlane Motoring	0418 942 141
Brett	Lupton		Fastlane Motoring	0418 942 141
Frank	Viskovich		WASCC	0438 781 292
Lance	Stanard		WASCC	
Stuart	Young		WASCC	
John	Royale		City of Wanneroo	9405 5000

List of interested member of the public who were unable to attend on the day

Alwin D	Hanson	Dr	Private	fireberg@bigpond.net.au
Peter	Sokil		Private	phenom1982@hotmail.com
Mr	Sokil Snr		Private	phenom1982@hotmail.com
John	Wholagan		Private	john@wholagan.com.au
David	Canole		Private	eastern-creek-commentary@hotmail.com
Jeff	Booker		Sinclair Knight Merz	JBooker@skm.com.au
Mr & Mrs	McDonald		Public	Pat & Glennis <patglenn@iinet.net.au></patglenn@iinet.net.au>
John	Boonzai	Enviro. Consultant	City of Wanneroo	cboonzai@bigpond.net.au

Barbagallo Raceway - Community Information Session 22/09/08 Outcomes of Table Discussions

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H (high priority) = 5 M (medium priority) = 3 L (low priority) = 1



Appendix F CAMS Track Inspection Report



Michael Masi <michael.masi@cams.com. au>

09/10/2008 08:09 PM

To "TPerchard@ghd.com.au" <TPerchard@ghd.com.au>

"Russell.Barnard@ghd.com.au"

<Russell.Barnard@ghd.com.au>

bcc

Subject Request for CAMS input for inclusion in Barbagallo

Hi Tracy

Further to our conversation earlier today I have attached a copy of the CAMS Track Inspection Notes from our Inspection that was conducted on the 15 August 2007.

The areas that are highlighted in yellow outline the absolute critical items that require attention however our expectation would be that all the matters in the report would be addressed in the case of an upgrade.

In addition one area that is difficult to quantify is the transition between any additions to the existing circuit and any proposed extensions. Depending on where these extensions take place a resultant impact on the existing infrastructure may be a result and thus improvements to that part of the track.

As I have stated in my earlier correspondence any extensions that are constructed must be constructed to the current standards along with the listed upgrades to the existing infrastructure if the circuit was on to hold a CAMS licence.

Should the desire exist to obtain an FIA Track Licence the entire circuit will be required to be upgraded to FIA specifications.

Once any changes that are proposed become more solid CAMS and/or the FIA would require formal submissions in any case.

Hope that this satisfies your requirements however should you have any further queries please do not hesitate to contact me.

Regards

Michael Masi

Project Manager

d: 61 3 9593 7784 m: 61 408 815 615 e: michael.masi@cams.com.au

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Malvern East VIC 3145

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From: TPerchard@ghd.com.au [mailto:TPerchard@ghd.com.au]

Sent: Tuesday, 7 October 2008 1:16 PM

To: Michael Masi

Cc: Russell.Barnard@ghd.com.au

Subject: RE: Request for CAMS input for inclusion in Barbagallo Report

Many thanks Michael

With regard to your comments "At the same time existing parts of the facility that are required to be upgraded in CAMS view will also need to be a part of this overall scope" - Can you please confirm what aspects of the track are required to be upgraded?

Thanks

Kind Regards,

Tracy Perchard

Project Engineer

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Michael Masi <michael.masi@cams.com.au>

To"TPerchard@ghd.com.au" <TPerchard@ghd.com.au>

07/10/2008 10:05 AM

SubjectRE: Request for CAMS input for inclusion in Barbagallo Report

Hi Tracey

Thanks for that. It was a long 10 days in Singapore but I think that it worked out well in the end!

With regard to your specific request below, I have split this into two parts to best address the matter:

Should Barbagallo wish to apply for an FIA track Licence it will need to fully comply with the FIA criteria for a new circuit at the time of design and inspection as determined by the FIA.

Should Barbagallo wish to retain a CAMS Track Licence only any new sections of the circuit would need to comply with the current criteria in all regards e.g. track width, runoff areas, walls, etc. At the same time existing parts of the facility that are required to be upgraded in CAMS view will also need to be a part of this overall scope of works however will not necessarily need to be of the standard of the newer parts of the facility.

With regard to your earlier request for information I will get this together and have it to you by the end of next week at the latest if thats ok?

Hope that this assists and let me know if you require anything further.

Regards

Michael Masi

Project Manager

d: 61 3 9593 7784 m: 61 408 815 615 e: michael.masi@cams.com.au

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From: TPerchard@ghd.com.au [mailto:TPerchard@ghd.com.au]

Sent: Monday, 6 October 2008 4:17 PM

To: Michael Masi

Subject: Fw: Request for CAMS input for inclusion in Barbagallo Report

Hi Michael

Welcome back!

I sent through an email while you were away - see below - requesting some additional input for the Barbagallo Review.

In addition to this we are also preparing the business case. One of the options we are looking at costing is similar to that prepared by WASCC and distributed at the stakeholder workshop. Can you please advise if the track is to be lengthened - what is the maximum addition that would NOT require the rest of the track to meet to current standards?

ie - if the track is lengthened to 3.4km from 2.4 km would this require the whole track be upgraded? If so what is the max length that will not trigger this requirement?

Thanks again

Kind Regards,

Tracy Perchard

Project Engineer

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---- Forwarded by Tracy Perchard/Perth/GHD/AU on 06/10/2008 01:10 PM -----

From: Tracy Perchard/Perth/GHD/AU on 17/09/2008 05:15:01 PM

6122644 Barbagallo Raceway Options Study and Business Case Repository:

michael.masi@cams.com.au To:

cc:

Request for CAMS input for inclusion in Barbagallo Report Subject:

Hi Michael

We are in the process of finalising the Site Condition Report and Needs Assessment part of the review on Barbagallo Raceway.

To complete the report it would be great if you could please provide some additional input as detailed below.

- If possible can you please forward me a copy of the CAMS report from the last inspection of Barbagallo
- Also please confirm that the tyre barriers are required to be replaced by concrete walls ie tyre barriers do not meet standards. Or alternatively advise if it is only prefered that saftey barriers are concrete

For the Business Case and Facilities Improvements report could you also please provide standards for national and FIA / FIM international racing - eg track length, width, runoff & safety barrier requirements, medical facility layout etc.

Anything else you can provide that you think would be useful would be much appreciated.

Thanks again

Kind Regards,

Tracy Perchard

Project Engineer

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NTSC Conveyor Belt Information Paper.pdf



TRACK INSPECTION NOTES – BARBAGALLO RACEWAY

Following Track Inspection – 15 August 2007

General Notes

Areas highlighted in yellow are those items which would not be required to be undertaken in the next triennium (to August 2010) if there was no improvement works undertaken to the circuit.

All flag marshals posts to be identified clearly through use of the required numbering system.

All tyre buffers to be faced with conveyor belt (minimum 18mm steel cored type). See NTSC information paper. All tyre buffers to be a minimum of two row type.

A survey of all existing tyre buffers to be undertaken and any units showing signs of collapse or exposed rod must be replaced.

A marshal zone of at least 4m wide should exist at any area where new 1LoP is introduced and at least 2m in any existing areas

Reinstate all painted white lines throughout the Circuit.

The issue of installation of additional debris fencing will be subject of further discussion with CAMS.

Specific Items

0.0 RH	All protection surrour	idina buildina to b	oe minimum h	neight of 1000mm.

0.2LH Reinstate the soil surface at reticulation valve cover

0.5 – 4.0 LH. No usable marshal zone exists between the locations noted. Spectator fence to be moved back to provide at least 2m between 1LoP barrier and Spectator fence

0.7LH Repair the surface of the "remote end" concrete panel of ripple-strip divider where delamination is evident.

1<mark>.0 LH</mark> Extend currently existing bitumen run off to barrier and increase width by 3m.

LH (Run Off) Conveyor belt to be affixed to tyre buffers in recommended manner





1.0 LH An additional row of tyre buffers may be required, and tyre inserts could be considered as well. 1.7RH Install conveyor belting to the perimeter of the tyre bundles at the infield compound. 2.7RH Provide a 1.5m wide strip of "hardstand" as used typically at this circuit, between adjacent concrete kerbs. (approx. 100m) 4.1RH Reinstate the soil surface or preferably "hardstand" to the edge of the kerb. 4.7RH Reinstate the soil surface adjacent to the "hardstand". 5.1RH Provide three rows of bundled tyres, six tyres high, chained together around the frontal perimeter of the adjacent Flag Point 5. The bundled tyres must be faced with dense conveyor belting securely connected to the bundles. 5.2LH Install 3m width of artificial grass verge behind existing "wavy-kerb" (called a Wilson Kerb) for length of kerb, plus taper for 2.5m at each end. In the interim, remove sand material from the surface of the covered 750mm width of "hardstand" material that is located behind Wilson kerb. 5.2 – 6.5 LH Replace existing barrier devices with earth backed concrete barrier or 3 high guardrail to CAMS 1LoP specification. Note if guardrail option chosen additional engineering certification will be required due to soil and sub-soil characteristics. Location of barrier alignment between entry and exit of Turn 6 to be subject of further discussion with CAMS. Additional speed attenuation devices may be required. A two row tyre buffer faced with conveyor belt will be required at this location – dimensions (length and position) to be to be subject of further discussion with CAMS. 5.4LH Install "hardstand" for 20m at the departure end of the Wilson kerb. 5.9RH Reinstate the soil surface at the edge of the Track. Install concrete edge strips on both sides of circuit 5.9 – 6.3 7.8LH,SC Reinstate the soil surface at the edge of the CCTV cover. 7.7RH,SC Reinstate the surface of the eroded limestone material for approx 20m. 6.6RH Secure the steel drainage grate. 6.7LH Repair the surface to the concrete apron at the drainage sump.

6.7-7.0 LH 1LoP barrier to be increased in height to 1000mm

7.0LH Run off area at this location does not meet minimum specification.

"Straight ahead" area is skewed to the right and depth of run off is shy of minimum (using V8 Supercar speed profile) by approx 20m. Use of GP2 car or A1GP car profile will result in significantly increased figures of departure from minimum requriements.

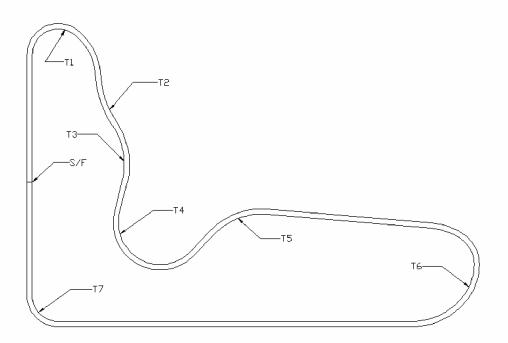
Further discussion with CAMS to be required in order to reach an agreeable solution.

Additional rows of tyre buffers may be required, as well as tyre inserts to reduce final impact speed with barrier to an acceptable level.

In the interim, the 2 row tyre buffer system to be faced with dense conveyor belting and securely attached to tyre buffers in recommended manner (See NTSC information paper)

7.1LH The curved white line on the driver's right at the Pit Entry area shall be removed and replaced with a straight white line commencing 3.0m before the raised ripple-strip and terminating at the speed restriction line. This requirement shall be verified by the NTSC before remedial work is commenced.

BARBAGALLO RACEWAY



NATIONAL TRACK SAFETY COMMITTEE

INFORMATION PAPER

CONVEYOR BELT FACING OF TYRE BUFFERS

1. Introduction

The use of conveyor belt as facing for tyre buffers is encouraged by the National Track Safety Committee as it has been proven to significantly assist the operation of the tyre buffer in most circumstances.

This paper offers some reasons for its use and sets out guidelines for the assembly and attachment of conveyor belting to tyre buffers and to first line of protection.

A video tape showing the method of construction of conveyor belting at the Australian Grand Prix is available for viewing from CAMS.

2. Background

Tyre buffers have been utilised in motor sport applications for many years as vehicle speed attenuation devices especially at race tracks. Tyre buffers, when properly constructed, are a cheap, reliable and virtually indestructible method of absorbing impact loads when an errant vehicle approaches a first line of protection.

It is important that the differentiation between a "buffer" and a "barrier" is very clear.

Tyre buffers are a linked group of empty car tyres which can be placed in front of a nominally rigid barrier.

A *tyre barrier* is where earth filled tyres are placed in front of a vertical earth bank to form a nominally rigid barrier. The use of the tyres in a tyre barrier is to provide a durable vertical face to the barrier where un-faced earth may erode over time. It is deemed that tyre barriers do not provide any buffering properties nor are they considered to deflect. They should be considered to be solid, immoveable and rigid.

The use of tyres as vehicle speed attenuation devices in Australia dates back to the 1970's. Early versions of tyre buffer stacks were tied together with rope and plastic strapping, however it was found that these fastenings did not allow the full benefits of the system to be exploited.

An improved fastening system, using welded 6mm steel rod was introduced in the early 1908's and this system was later modified by experience gained by National Track Safety Committee personnel assisting with the engineering, development and construction of Australian Grand Prix circuit in Adelaide which utilised 5mm chain and shackles which allowed for easier and faster assembly of the buffers, this method is particularly useful on temporary circuits and circuits where tyre buffers are required at short notice.

In the early stages, there were however some drawbacks with the use of tyre buffers. The possibility of dislodged tyres ending up on the track proper, and the tendency of the upper part of a deep tyre buffer (three or more rows) to deform upon impact and create a potential launch ramp for vehicles had to be taken into account when deploying such buffers.

In 1994 an experiment with placing a double row tyre buffer with second hand conveyor belting was carried out at the Adelaide Parklands circuit, for the Australian Grand Prix. This experiment, undertaken deep in the run off area at Turn 16 and utilised 8mm thick nylon belted material, was subject to several occurrences where vehicles connected and, whilst showed some deficiencies with relatively thin nylon belted material was generally considered to be benificial.

The material was replaced the following year with thicker (12 to 15mm) material, this time steel belted. The fastening of the conveyor belt to the existing tyre buffers and also the attachments between the ends of the conveyor belt and the first line of protection were improved.

The locations around the circuit where conveyor belting was used to cover tyre buffers was also increased.

During the event, a number of locations were conveyor belting have been installed to face tyre buffers where struck by cars, both Formula One cars and cars in the support categories and in general, the results have proved to be eminently satisfactorily. These results showed:

- 1. The impact load was shared between many of the tyre bundles in the tyre stack (than would have been the case otherwise), resulting in a stiffer buffer.
- 2. The rate of the deceleration, whilst higher was more uniform.
- 3. Total containment of tyre stacks was ensured
- 4. Less down time in clearing up the accident
- 5. Facing tyre buffers with conveyor belting leads to a substantial improvement in the aesthetic appearance.
- 6. Sign writing/advertising (i.e. paint) can be applied directly to the conveyor belt.

The use of conveyor belt facing had since been used in many areas at Albert Park for the Australian Grand Prix, and has been used in isolated areas at other circuits eg Bathurst, Oran Park, Winton.

Following the success of the initial use of conveyor belting facing, the FIA Circuits and Safety Commission have supported its use at many circuits world wide and have undertaken scientific tests which prove, without doubt, the benefits of facing tyre buffers with conveyor belt.

The enclosed video includes tests conducted at Transport Research Laboratories in the UK. After viewing it, it will be apparent that the results are manifold.

3. Where to use conveyor belting

Conveyor belting can be used at many places around the circuit but is most useful in front of multi row tyre buffers. It is most useful and recommended for those areas where head on impacts or impacts at greater than 60 degrees are likely. Conveyor belting should be used to increase the vehicle attenuation properties of tyre buffers. However, it should be noted that for this to occur, a minimum of two rows of tyre buffers must be present.

Conveyor belting can be used in other areas, for example for facing a earth backed tyre wall in order that advertising sign writing may be applied or in areas where simple containment of tyre buffers is required.

The thickness and type of conveyor belting will depend on the purpose of which it is being used. Generally, areas where the facing material is used to assist the load transfer in a tyre buffer system should utilise thicker, steel belted/corded conveyer belt.

4. Assembly

When facing tyre buffers with conveyor belting, it is essential that each end of the conveyor belt is securely attached to the first line of protection and that any joints or attachments of the conveyor belting to the first line of protection are protected from any possible impact by vehicle.

It may be possible for the conveyor belt to be "wrapped around" concrete barriers or triple high guard rail.

A preferred attachment is to sandwich the conveyor belting between two 10mm by 75mm steel strips, fastened by 12mm bolts, positioned each 200mm. These attachments should then be anchored to the first line of protection via at least four lengths of 5mm chain or the equivalent wire strand cable.

The conveyor belting should also be attached to at least each second stack of tyres, at the second tyre from the bottom and the second tyre from the top of the stack. Fastening must be done with at least 8mm round head bolts utilising at least 40mm diameter washers on the conveyor belt and the inside of the tyre.

Should the conveyer belt be higher than the tyre stack, it may be bent over at the top and fastened appropriately.

It is vitally important that, although the conveyor belting will "hold in" the individual tyres in the tyre buffer system, each of the tyre stacks and the tyre buffer bundles must be assembled and affixed in accordance with the appropriate diagrams in the Track Operators Safety Guide.

5. Types of conveyor belt.

Conveyor belting comes in many types, the most common being

- Nylon cord belted and
- Steel cord belted.

It is strongly recommended that steel corded belt be used in all applications.

Experience has shown that belt less than 12mm (approx) thick is not as durable and useful as thicker material.

Track Operators could determine the availability of such belt from mining companies and/or suppliers.

6. General

During the next round of triennial inspections, due to the commence in August 1999, the NTSC will be considering the installation of conveyor belting in a number of locations.

We have taken the liberty of including a short video which demonstrates the method used for erecting and assembling conveyor belt onto tyre buffers as undertaken by the contractors during the 1999 Australian Grand Prix.

This also includes some excerpts of demonstration tests undertaken by TRL (Transport Research Laboratories) in the UK on a number of different tyre buffer configurations.

The general conclusion reached by experts after these tests had been completed and analysed was that conveyor belt facing of tyres **does** produce worthwhile results, not only with regard to vehicle speed attenuation, but in many other areas as well.

It is worth noting that the tests were undertaken with the belt attached to the tyres only - not to the barrier behind the tyres, as is recommended in this paper. Performance of the buffer would therefore be increased if the belting was attached to the barrier as well as the tyres.

The tyres were also not connected in the manner used by the majority of Australian circuits. Where we (mostly) use either chain or steel rod to fasten the tyres in *stacks*, then chain those *stacks* together to form *bundles*, the tyres used in the demonstrations were in fact bolted together.

As can be seen from Test 1, an un-faced and bolted tyre bundle would be time consuming to restore to its original condition, due to the amount of destruction which occurs, thus consuming resources in doing so. Tests using conveyor belt shows that there is almost zero maintenance required following impact.

BMK:bmk 15 September, 1999



Appendix G

WASCC Site Plans of Barbagallo Raceway (for V8 Supercars Event)

- First Aid
- FESA and Police Site
- Fuel Dispensing Area
- Free Water Dispensing Point
- Emergency helicopter pad
- A Race Office (ground floor), Race Control (2nd floor) Media Centre (ground floor)
- **Medical Centre**
- P1 Pit Ticket Box
- **T1** Ticket Box
- **BS** Bus Stop

Gate Opening Times Public

Friday 7am

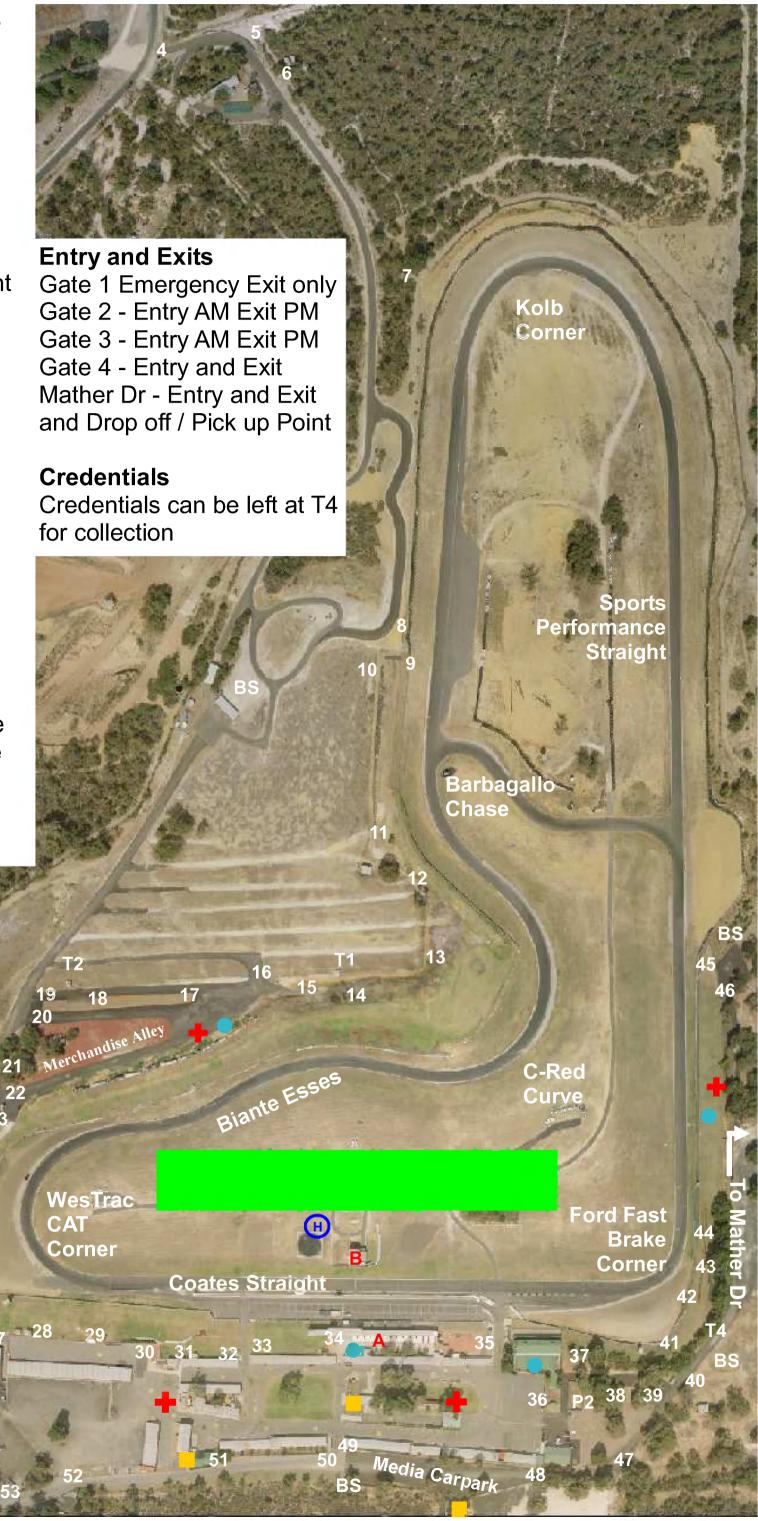
Saturday 6:30am

Sunday 6:00am

Notes:

Lost Children to the Race Office **EFTPOS located in Race Office**

Scale 1:5000 29 April 2008







Appendix H

Aerial Photos from V8 Supercars Event

(Provided by WASCC)











Appendix I

Stakeholder Feedback on Draft Report

The following documents have been provided by DSR and include feedback from various stakeholders following their review of the Draft Stage 1 Report.

Following our meeting of the 29th of January and in accordance with your requests for further and better information, we are pleased to comment as follows:

1. Our view on the GHD report to date considers this to be a robust report that recognises the WASCC and the Barbagallo Raceway as the best option, although it needs expansion and improvement.

Increasing recognition is evident that the Management of the WASCC and Barbagallo Raceway is possibly the only entity with the experience and technical ability to run events such as the V8 Supercar round in Western Australia.

The recognition that the WASCC is committed to the ongoing maintenance and upkeep of the Barbagallo Raceway facility.

V8 Supercars Australia has their own view. Their view caters only for their own longevity and does not provide for the greater Motorsport community of Western Australia. The WASCC is committed to the long term and beneficial development of motorsport for the greater Western Australian community.

The report at this stage underestimates the contribution the club makes to Western Australia. A detailed list of participants is attached. This list will readily testify to how many "users" and spectators the WASCC actually bring to the Barbagallo Raceway facility.

Whilst V8 Supercar Racing is important to the WASCC and to Western Australia, it must be recognised that in Western Australia V8 Supercars Australia are no more than three days of a well planned and well executed entertainment package, they are not a business in their own right! They are an adjunct to the robust business of the WASCC.

It should also be noted that during major events, the WASCC does engage outside organisations for services such as catering and traffic management.

The business case for a comprehensive motorsport and social precinct is a strong one and the WASCC will continue to support this in every way that is beneficial to the greater Western Australian motorsport community.

Our list of and number of participants at our race way facility is as follows:

1.1 Events and Activities at Barbagallo Raceway

1.1.1 Regular Activities (Activities scheduled on a regular basis, several times per year)

User Group	Activity and Frequency	No. participants (per activity)	No. support staff (per activity)	No. spectators (per activity)	No. Crew to assist participants (per activity)	Total People
WA Sporting Car Club Inc.	Race Meetings – 8	130	150	600	300	9440
WA Sporting Car Club Inc.	Regularity Trials – 3	70	40	150	50	930
WA Sporting Car Club Inc.	Super Sprints – 3	100	20	50	30	600
Historic Competition Motorcycle Club of WA Inc.	Race Meetings – 4	80	30	150	50	1240
WA Sporting Car Club Inc.	Driver Training – 3	16	6	0	0	66
WA Sporting Car Club Inc.	Hill Climbs - 5	60	20	30	10	600
HSV Owners Club of WA	Super Sprints - 4	50	15	100	10	700
WA Sporting Car Club Inc.	Private Practice	30	4	20	10	1216

	(weekday) - 19					
WA Sporting Car Club Inc.	Private Practice (weekend) - 10	70	10	100	30	2100
Historic Competition Motorcycle Club of WA Inc.	Private Practice (Tuning Days) – 4	60	10	50	20	560
Motor Cycle Racing Club of WA Inc.	Race Meetings - 7	120	50	400	300	6090
Motor Cycle Racing Club of WA Inc.	Private Practice (Tuning Days) - 9	70	10	100	30	1890
Motor Cycle Racing Club of WA Inc.	Private Practice (weekday) – 10	30	5	20	15	700
Motor Cycle Racing Club of WA Inc.	Motor cycle rider training - 13	70	20	150	25	3445
Fastlane Racing Driver School	Racing Car School - 35	10	5	4	0	665
Fastlane Racing Driver School	Testing Days – 60	3	3	0	0	360
No Limits Car Club	Driver Training – 11	30	12	60	0	
						1122
Perth Soapbox Club Inc.	Events at Jack's Hill – 12	40	12	20	0	864
Trackskill	Driver Training – 35	24	10	25	0	2065
Warren's Ultra Fast Karts	Go Kart Hire on Raceway - 150	20	6	10	0	5400
Warren's Ultra Fast Karts	Go Kart Hire on Jack's	15	6	10	0	4650

	Hill – 150					
Police Department	Driver Training – 40	20	5	0	0	1000
Trakdayz	Motor Cycle Rider Training - 10	70	20	150	25	2650
Wheel Chair Sports WA	Events 12	6	2	6	0	168
WA Sporting Car Club Inc.	Drift Battles - 6	40	40	1,000	100	7080
WA Sporting Car Club Inc	Drifting Practice – 12	40	20	300	60	5040
WA Sporting Car Club Inc	Ute Muster – 1	130	10	0	300	440

New Business since July 2008

User Group	Activity and Frequency	No. participants (per activity)	No. support staff (per activity)	No. spectators (per activity)	No. Crew to assist participants (per activity)	Total People
V8 Race	Motor racing experience – 20	200	12	500	0	14240
Fastrack Racing	Motor racing experience – 10	200	10	300	0	5100
Champion Ride Days	Motor Cycle Rider Training – 5	70	20	100	0	950
Powercruise	Motor car activity, show and shine – 1	700	40	18,000	1500	20240

New Business for 2009

User Group	Activity and Frequency	No. participants (per activity)	No. support staff (per activity)	No. spectators (per activity)	No. Crew to assist participants (per activity)	Total People
WA Sporting Car Club	Aussie Racing Cars – 1	180	250	5000	500	5930
Private Promoter	Monster Truck Show -	20	40	15000	0	15060
WA Sporting Car Club	Burn Out Competition - 3	30	40	5000	60	15390

1.1.2 Special Events (Events which occur less frequently than regular activities eg. only once or twice per year)

User Group	Activity	No. participants	No. support	No. spectators	No. Crew to assist participants (per activity)	Total People
WA Sporting Car Club Inc.	V8 Supercar Round, 9-11 May 2008	120	1,000	23,000	2,000	26120
WA Sporting Car Club Inc.	SuperTruck Nationals, 19 & 20 July 2008	180	250	3,000	500	3930
WA Sporting Car Club Inc.	Drift Australia Championship Round	64	70	3,500	200	3834
Historic Competition Motorcycle Club of WA	Australian Historic Road Racing Championships	200	70	1500	400	
	Note: This is an event held every 5 years/					2170

New Business for 2009

User Group	Activity	No. participants	No. support staff	No. spectators	No. Crew to assist participants (per activity)	Total People
Motor Cycle Racing of Club of WA	Kings International Motor Cycle Racing	130	70	7,500	250	7950
Powercruise	Motor car activity, show and shine – 1	700	40	18,000	1500	20240

Total number of persons attending Barbagallo Raceway Wanneroo in a calendar year, from these activities, is 202,235

Notes:

There are various other users of the Raceway for one to three days per annum that conduct club motor sport and or driver / motor cycle rider training. The number of participants, and support staff vary depending upon the type of activity.

If you should require any further details or clarification then please do not hesitate to contact us.

Yours sincerely

Russell Sewell

Chairman of the Advisory Board of the WASCC

February 3rd 2009

File Ref: #781750

Your Ref:

Enquiries: John Royle, Economic Development 9405 5361

5 March 2009

Mr Bruce Campbell
Facility Planning Coordinator
Department of Sport & Recreation
PO Box 329
LEEDERVILLE WA 6903

Dear Bruce

COMMENTS ON DRAFT: REPORT FOR BARBAGALLO RACEWAY - JAN 2009

It is with pleasure we received the eagerly anticipated Draft Report for Barbagallo Raceway by consultants GHD Pty Ltd, commissioned by the Departments of Housing & Works and Sport & Recreation.

The City of Wanneroo regards the importance of the current State Government Review highly, as the City feels that decisions made following this review will have a significant impact on economic development strategies for motor sports, tourism, and wider automotive industries in Wanneroo.

Please find my provisional comments on the draft study report(s) as follows:

- The recommendation for the implementation of Infrastructure Option 3 upgrade an upgrade of the track to full FIA standards funded by the State Government is strongly supported.
- Whilst it is understood that the focus of the report is on the retention of the V8 Supercars and its impact on the raceway facilities, I feel that the additional benefits of an upgrade on supporting local employment and business growth are understated and warrant greater emphasis.
- Was any benchmarking undertaken with other tracks in Australia to assess financial comparisons? It is felt that this may help understand potential revenue models associated with an upgraded facility and add a level of confidence to the figures.

- In relation to the upgrade of Wattle Av, the City's Executive Management Team have endorsed a recommendation to support a feasibility study into the upgrade of this road, subject to the support of the Department of Sport and Recreation to an upgrade of the raceway.
- The City will be submitting a report separately containing a detailed analysis of the economic value of the raceway to the region and outlining its support for the upgrade of the raceway. The absence of any financial support from the State Government the future economic value of the Raceway to the region would be significantly jeopordised. The consequences of an upgrade not taking place and the associated loss of V8 Supercars and other significant races from Barbagallo Raceway, will have a significant negative effect on the tourism market in Wanneroo and adjoining local government areas. More importantly, as detailed in the City's report, the region would lose any long term advantage in developing its automotive and related industries which would in turn lead to a loss of highly valuable strategic employment opportunities.
- The formation of a collective group from the key stakeholders including WASCC and the City of Wanneroo for promotion and marketing of major events including V8 Supercars is supported. I recommend specific key performance indicators be put in place to ensure visitor and revenue targets are established for the long term with business management plans put in place to achieve these objectives.

In summary, I wish to express my support for the recommendations listed in the Draft Report and look forward to working with the State Government and stakeholders to ensure the Raceway meets the needs of local and WA community members for decades to come.

Yours faithfully,

John Royle MANAGER, ECONOMIC DEVELOPMENT

MWA Feedback

- 1. While the AJS facility is not the subject of the study, it needs to be highlighted there will be costs that will need to be met by someone if relocation or work is required. IF option 2 or 3 was to go ahead cost cannot be an after thought, and thought also is required on where the club will go. The study mentions in passing this may be an issue, however it is not mentioned in costings, or under issues or even seen as a threat on the SWOT. For example I know the club and MWA would not like to see the Barbagallo project held up because there is a bunfight over cost of moving or modifying the AJS facility. The detailed implications for the AJS club are likely to only be realised when detailed planning is completed, but it does need to be highlighted in the report so that when it does get raised it is not a surprise.
- 2. There will be legislative requirements to remove some of the Option 3 land north of wattle avenue as it is gazetted under the Off Road Vehicle Act. This is not a simple rezoning. If the ORV committee advising the minister doesn't support the de-gazetting there is a chance the Minister will not support either. This could be a threat and it should be noted. At the least there will be a fair degree of red tape to cut through above and beyond a rezoning application, at worst it could delay the project (or though unlikely even stop option 3 completely)
- 3. There does not seem to be much emphasis on the substantial benefit of being capable to conduct elite level motorcycle events under Option 2 or 3. These events have the capacity to attract significant spectator numbers, while not being in the same sphere as V8's are certainly getting up there.

The opportunity is that with an Option 3, should the V8's not continue to come to WA, the capacity is there to attract a range of events to replace the V8's.

As the 'other' large user group promoting significant events, MCRC have shown expertise in organising and promoting at the elite level. However, organisation of such events involves considerable time and effort from largely volunteer management. There may be an opportunity for an outside organisation to take on the promotion of these type of elite level events which may add to the sustainability of an improved venue.

Options on Management structure should explored; it may continue to be that WASCC is the managing body, but it may be appropriate, given the level of public funding required and the proposed expansion to multiple tracks, that they do so with reference to a more public board or committee and that a percentage of access, subject to appropriate fees and charges, be allocated for motorcycling.

Rick Gill EXECUTIVE DIRECTOR

Motorcycling Western Australia

P. 08 9371 5333 F. 08 9371 5311

CAMS Feedback

Dear Bruce

Further to our telephone discussions I can confirm that CAMS is supportive of the direction taken in the Preliminary Project Concept and Business Case reports and looks forward to the development of a Master Plan for an improved motor sport facility at Barbagallo.

As a part of CAMS overall commitment to all of its stakeholders, we hope that the undertaking of such a project will not adversely impact the financial ability of our clubs and competitors to use the facility. As a result CAMS would like to register its interest in having a direct representative on the proposed over arching committee that sits above the WASCC for this facility.

In addition we are not conformable with having email extracts included in the report however general statements relating to our correspondence are acceptable. Accordingly we would appreciate if this amendment be made to the report.

CAMS still remains committed to ensuring that the interests of all stakeholders are catered for in this proposal and reaffirms its position of promoting multi-purpose, multi-use venues that have an overarching benefit to the community as a whole not just the sport.

Accordingly, CAMS looks forward to being involved in any discussion relating to this project moving forward.

Should you have any further queries please do not hesitate to contact me.

Regards

Michael Masi Manager - Motor Racing & Motor Sport Development d: 61 3 9593 7784 m: 61 408 815 615 e: michael.masi@cams.com.au



GHD

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Rev No.	Author	Reviewer		Approved for Issue		
		Name	Signature	Name	Signature	Date
0	T Perchard	R Barnard				10.10.08
1	T Perchard	R Barnard	2	J Thorburn		09.03.09