

CBD & South Eastern Light Rail Project

Royal Randwick Racecourse Response to Environmental Impact Statement

Submitted to Department of Planning and Infrastructure

Robert Bird Group

1.0	Executive Summary		1
2.0	Racecourse Characteristics and Operations		4
	2.1 2.2 2.3	Racecourse Site Characteristics RRR Precincts, Site Uses and Access RRR Operational Requirements	4 5 7
3.0	3.0 Precinct Based Impacts		13
	3.1 3.2 3.3 3.4 3.5 3.6 3.7 3.8 3.9 3.10 3.11 3.12 3.13 3.14	Heritage Stormwater and Flooding Utilities, Services and Water Supply	13 16 24 26 28 29 30 35 35 36 37 38 38 40
Ap	pendic	es	
Α		pact Review Drawings & Bagot	
В	Traffic and Safety Technical Review - Draft Traffix		
С	Access Impact Assessment Parking and Traffic Consultants		
D	Flooding Review Letter WMAwater		
Е	Service:	s Report	
F	Landscape Review Realm Studios		
G	Civil and Structural Technical Review		

1.0 Executive Summary

This is submitted by the Australian Turf Club (ATC) in response to the exhibited Environmental Impact Statement prepared for the CDB and South East Light Rail project (CSELR) (SSI 6042) lodged by Transport for NSW. The project has been submitted as State Significant Infrastructure with the NSW Department of Planning and Infrastructure (the Department) under the provisions of the *Environmental Planning and Assessment Act 1979*.

This project has been identified by a number of Government policies including the *NSW Long Term Transport Masterplan*, *Sydney's Light Rail Future – Expanding public transport*, *revitalising our city*, and the *Draft Metropolitan Strategy 2031*.

The ATC is a major supporter of the State Government and TfNSW initiative for light rail and recognises the importance of this project to NSW its associated benefits and opportunities for the community, business and key stakeholders including the Royal Randwick Racecourse (RRR), University of NSW (UNSW), Prince of Wales Hospital (POW), Randwick City Council (RCC), City of Sydney Council and the Centennial and Moore Park Trust.

The ATC, RCC and UNSW have been instrumental in their support of the introduction of light rail into the Municipality by partnering to jointly investigate and promote the construction of such a system. The ATC believes the project will provide enormous improvement to public transport, increase connectivity to the CBD, and provide opportunities for workers, residents and visitors.

In order to analyse the EIS the ATC has brought together a team of specialist consultants to review the EIS for the CSELR specifically focussing on the potential impacts of the CSELR on the existing and future operational requirements and masterplan for RRR.

Thoroughbred racing has been conducted at RRR for over 150 years. The course was one of the top three in the world where it gained its nickname of "Headquarters". It has a colourful history both from a racing and eventing perspective with the Rolling Stones having performed here and World Youth Day celebration where over 300,000 pilgrims attended the site.

The ATC is committed to the revitalisation of RRR and has invested over \$35 million on construction of the busway, taxi rank and days stalls in 2009 and \$169 million on the redevelopment of the new grandstand in 2013. A total investment to date of \$204 million. The ATC has further plans for a new \$65 million equine stabling facility (approved) and a \$110 million hotel development (awaiting Department approval). In all the RRR masterplan is a multibillion dollar investment that will ensure the ongoing operations of the racecourse, the New South Wales Thoroughbred Racing Industry, the Randwick Specialised Centre, employ thousands during both construction and on completion, stimulate economic growth and provide additional revenue to the State in direct and in direct taxation.

The ATC has worked closely with RCC and its neighbours with its masterplan integrated into the Randwick Comprehensive Development Control Plan 2013 (Randwick DCP) in June 2013. The ACT has also worked closely with the TfNSW team now for many months to provide commentary on the developing design.

The ATC is however concerned about a number of issues that haven't as yet been resolved and in its view must be resolved prior to the tender phase of the project. The purpose of this submission is to identify and analyse the implications and potential impacts of the CSELR on RRR so as to inform TfNSW and assist in the development of the most efficient and effective outcomes for the project and ensure the ongoing operations and viability of the racecourse.

Key areas requiring further design and consideration are as follows:

- Confirmation on the final route of the project which could have major impacts on the RRR site if changed from what is identified in the EIS.
- Consideration of the sensitive and frequent nature of daily equine movements both in and around the site.

- Safety concerns relating to the potential spooking of horses during racing and training by construction and passing Light Rail Vehicles (LRV's) both trackside and around the existing and future equine stabling facilities.
- Design and location of the proposed Randwick Light Rail Vehicle (LRV) Stabling Facility and resultant loss of buildings, access, visual and amenity impacts.
- Loss of access (or significantly restricted access functionality) to a number of business critical RRR vehicle and pedestrian gates during both construction and on completion. The design of the RRR stop which necessitates the deletion of the ATC's recently constructed busway with incomplete resolution of its replacement design and integration with the light rail stop and pedestrian thoroughfares.
- Suitability and adequacy of the current RRR Stop location and layout, in terms of safety and functionality to best support RRR activities and events.
- Proposed relocation strategy or design of functioning buildings, infrastructure, services, structures and car parks, and how these might be replaced.
- Impact on approved and proposed developments including the equine stabling facility, hotel, standing event consent and Department of Planning and Infrastructure's (DOP&I) draft Urban Activation Precinct plans.
- Noise and vibration on sensitive locations within RRR including administration/ commercial buildings, equine stables, residential accommodation and race tracks.
- Acoustic analysis of the impact of loss of trees surrounding RRR and the potential impact on surrounding residents during events;
- Urban design details and fabric including design and materiality of LR Stops, paving material, tree replacement and public domain finishes and fixtures.
- Impacts to visual amenity adjacent the racecourse on Alison Road through the loss of trees, removal
 of fencing, design/material for Wansey Road retaining wall structure and construction of the LRV
 Stabling Facility.
- No detailed analysis of construction impacts on occupants of buildings within close proximity of construction activities including the Upper High Street Stabling precinct occupied by over 200 thoroughbred horses and the ATC Administration Building.
- Detailed strategy to address any loss of heritage fabric.
- Minimal design and performance detail for intersections and carriageways for all roads surrounding the racecourse, including access arrangements to the Spectator Precinct, infield and Wansey Road gates; for both passenger vehicles and heavy vehicles.
- No detail on flood impact assessment or mitigation measures.
- Impact on utilities services and infrastructure supporting RRR, and the future ability of services to augment RRR.
- Details on the design, visual, amenity and landscaping interface issues between RRR and the LRV Stabling Facility and other areas of the course.
- Details on the design, visual, amenity and landscaping interface issues between RRR Spectator Precinct and the RRR Stop.
- Analysis on whether the project is designed to cater for the future impacts of the RRR masterplan, population growth demands and coordination with Urban Activation Precinct forecasts.
- Analysis on whether the design caters for growth in events proposed for RRR as a function of its application for a Standing Events Consent.

This submission has been prepared in order to highlight to both the proponent and the Department those issues of concern and be proactive in providing recommendations on how these issues of concern may be resolved.

The ATC understands that there are a number of aspects of the proposal that will be the subject of further investigation, coordination and resolution during the detailed design phase of the project however the ATC requires comfort in the approved documentation that will be tendered to a third party contractor that these issues have been adequately addressed either through approved design documentation or consent conditions. The ATC is extremely concerned that the current level of documentation does not provide this level of comfort.

The ATC is confident if its recommendations are implemented, the development of the light rail proposal will be one which all parties will be proud and the subsequent benefits will flow to the State Government, municipality constituents, the major landowners and stakeholder, the New South Wales Thoroughbred Racing industry and the ATC.

The ATC has and will continue to provide the necessary resources to assist in resolving these issues highlighted in this submission in a constructive and commercially viable way. The ATC seeks to continue to work in close collaboration with TfNSW and the NSW Government to address these issues to ensure the ongoing viability of RRR and the successful co-existence with the CSELR Project.

2.0 Racecourse Characteristics and Operations

2.1 Racecourse Site Characteristics

The ATC is the long term lessee of RRR. The ATC has worked in partnership with current and previous Governments to ensure that the racecourse and its associated facilities remain available to the community and support the racing industry of NSW.

The site is recognised for its significance to NSW and has recently been nominated as a State Significant Development Site in the *State Environmental Planning Policy (State and Regional Development)* 2011

The RRR site is identified in folio identifiers 1/130234, 1642/752011 and 1588/752011.

The RRR site has an area of approximately 82 hectares and is currently leased to the ATC on a 99 year lease term. The lease was recently renewed in 2008 for World Youth Day. The ATC also leases a property located on the corner of Alison and Doncaster Road which is owned by the Centennial and Moore Park Trust.

Figure 1 – Site Plan and Masterplan Developments Approved and Proposed

The racecourse is one of two premier racecourses in Australia and plays an irreplaceable role in the health of the Thoroughbred Racing industry of New South Wales. The site hosts two thoroughbred racing carnivals throughout the year, held in autumn and spring which currently attract crowds of up to 30,000 a day. This is forecast to increase to 40,000 plus with the recent announcement by the State Government of "The Championships" which is a new internationally significant event to be held in autumn with an additional \$13 million of prize money on offer. This event has been designed to significantly increase the international participation in the autumn carnival and the international profile of RRR on the national and international stage. As a thoroughbred racing, training and spectator facility, RRR is a heritage significant, cultural landmark both locally and nationally, and increasingly in an international context.

The site is also a significant non raceday event precinct with over 300,000 people attending these types of events throughout the year with the largest event being a capacity of 55,000.

RRR forms part of a system of regional open spaces including Centennial Park, Moore Park, Queen's Park, and a number of golf courses extending down to Eastlakes and Botany Bay. That said, it is only the Spectator Precinct that is open for public use and currently only during events. The remainder of the site is predominantly "gated" and used for thoroughbred racing and training purposes, carparking or ancillary racing infrastructure.

The RRR site is one of the largest recreation areas in the highly urbanised Eastern Suburbs. Regionally, the site is strategically significant due to its relative close proximity to a number of key inner Sydney features including:

- UNSW main campus immediately to the South.
- Prince of Wales Hospital to the south-east.
- Centennial Park immediately to the north.
- Sydney Airport 6km.
- Sydney CBD 6km.
- Beaches (Bondi Beach 5km and Coogee Beach 3km).

Locally, the RRR site has an interface with many different localities each with a distinct character. The site is also a major local employment generator.

2.2 RRR Precincts, Site Uses and Access

The ATC has been working closely with Randwick City Council on a Masterplan for the site as identified in Figure 1 above. The RRR site uses are complex and varied – it functions as areas for public entertainment, equine training and facilities, major public events and race day carnivals.

Precincts

The Masterplan which was integrated into the Randwick Comprehensive Development Control Plan 2013 (Randwick DCP) in June 2013. The master plan includes the redevelopment of the recently completed spectator precinct, a new equine stabling complex, hotel, centre of excellence building, car park and exhibition and convention facilities. The Masterplan also identifies the site into a number of precincts. A summary of these precincts and key uses is detailed below:

- Racetracks occupying the majority of the site and centrally located within the site. The Racetracks include the Infield Precinct and Mid-field Precinct. There are 7 racetracks two are used for racing and all 7 tracks may be used for training of thoroughbreds each morning.
- Spectator Precinct comprising the main spectator assembly and viewing area on racedays and events with a concentration of buildings/structures, a number of which are significant in heritage and landscape terms. It contains the grandstands, betting facilities, food and beverage facilities, grassed spectator areas, horse floats, day stalls for horses during race days, the ATC administration and services buildings, the major fences along Alison Road and gateways for pedestrians, carparking, vet clinic and drug testing laboratory, and the race day operations areas involving event management, trainers and jockey facilities, loading dock and outside broadcast vehicle parking and the parade ring. The spectator precinct is generally located in the north-west corner of the site, adjacent to the proposed location of the Light Rail Vehicle (LRV) Randwick Stabling Facility.
- Lower High Street Precinct comprising predominantly stabling uses located in a band extending from behind buildings fronting Doncaster Avenue, Anzac Parade and along High Street up to the High Street access point and tunnel (Gate 21), the second major vehicle entrance for the RRR site allowing vehicular traffic to the stables and the Infield Precinct. The tunnel is also utilised daily for horses to access the infield predominantly from the High Street stabling precinct. This area also contains the only equine pool on the site, which is utilised by all thoroughbreds training on site, and horse walking machines. There are some 300 stables located in this area housing a similar number of horses. The majority of these stable complexes also provide accommodation, offices, administration areas and amenities for stable hands.
- Upper High St Precinct a section of high ground rising some 30 metres to the south-east corner of the RRR site. Sited along High Street and Wansey Road, it contains stables with access from Wansey Road (in only) via Gate 12 and High Street (out only) via Gate 13. There are over 200 stables located in this area housing a similar number of horses. The majority of these stable complexes also provide accommodation and amenities for stable hands. These horses predominantly utilise a series of internal pathways to access the on grade track crossing for morning training sessions.
- Infield Precinct a grassed area in the centre of the racetrack that is primarily used for morning training sessions and for car parking on racedays. This precinct is connected to the High Street access point (Gate 21) by an under-track equine and vehicular tunnel. The infield is also connected to the Spectator Precinct by an under-track pedestrian tunnel. The area is also serviced by an over ground track crossing which allows horses to access each training track as well as provide heavy vehicle access to the infield and an exit to Alison Road from Gate 1 and Gate 8 for spectator vehicles on larger event days (the below track tunnel culvert size does not cater for heavy vehicles). The infield is also the main focal point for stage setups during the Future Music festival and other large non raceday events. Drive in cinema events are held in the area. The infield also hosts the trainer's pavilion where trainers view the horses during morning training and barrier trials.
- Mid-field Precinct an area between the main racetracks and training tracks adjacent to the Spectator Precinct. Containing mainly grass, gardens and spectator pad sites, it also houses structures including the finishing post, digital big screens and track maintenance sheds.
- Facilities Management Precinct an area consisting of several single storey buildings and one two storey building used for site maintenance workshops, cleaners areas, administration functions and

parking with main entry off Alison Road as well as directly from Doncaster Avenue via gates 19 and 20a. During the week the parking areas are used by staff and non raceday event patrons. During race days it also serves as a parking area for staff, VIP member parking, bookies, jockeys, stewards and media. Members pay an annual fee to park in this location versus the current free parking on the infield. The main gate in this location also houses the security office which is specifically located in this area to monitor and provide service to main gate users as well as the main CCTV, induction and crowd control room.

Site Uses

Raceday events and equine activities

The RRR is the premier racecourse in NSW and is critical to the future of the thoroughbred racing industry in NSW.

Training / Trackwork of 600 horses takes place 365 days a year from 4:00am to 8:30am every day. Post trackwork, the horses will be walked and utilise the equine pool throughout the day. It is one of the largest thoroughbred training facilities in Australia.

There are approximately 43 racedays at Royal Randwick throughout the year with the majority of days held on either a Saturday or Wednesday. The Autumn and Spring racing carnivals are two of the three major thoroughbred race carnivals in Australia

Non-raceday events

Between racedays the Spectator Precinct facilities and infield are available for non raceday events. The ATC will also be opening a new venue on Level 4 of the new grandstand facility for a 7 day a week members bar and restaurant and a separate area for a 7 day a week public restaurant.

The largest annual event held at Royal Randwick is currently the Future Music and Goodlife Festival. This event is held in February/March each year over two days (Saturday and Sunday) and in 2014 will be catering for 50,000 patrons on the Saturday and 20,000 patrons on the Sunday. The event setup commences a fortnight prior with significant volumes of heavy and small vehicles (approximately 150) accessing the site and predominantly the infield. The event bump out is a 1 week process with a similar number of vehicles.

Site Access

Access to RRR for service vehicles for equine transport, supplies for both equine and event purposes, cars and pedestrians is of major importance to the ATC for the site to function effectively. Attachment B includes an Access and Gate Use Plan which identifies the access points around the site and the associated uses of each gate. Flexibility of functioning for each of these gates is important depending on the use of the site for a specific event.

Reconfiguration of any intersection as a result of the project will need to provide for the existing access arrangements and potentially supplement existing capacity in the event of capacity loss elsewhere. Heavy articulated vehicle access, up to B Double length and weight must be provided to all major access points, road design and intersection design.

Current development applications at RRR

The ATC has lodged a Preliminary EIS for a standing events consent for which Director Generals Requirements have been issued. This application requests a similar consent to the Sydney Cricket and Sports Ground and Centennial and Moore Park which provides for up to eight (8) temporary major non raceday events during a calendar year and unlimited temporary minor events up to 20,000 persons at one time. A major event could be up to the maximum approved site capacity of 55,000 patrons.

The master plan also provides for construction of a new eight-storey, 170-room hotel and associated restaurant, bar, restaurant, conference facilities and basement parking along the northern boundary of the site. An EIS for this development has been submitted and is currently under assessment by the Department of Planning and Infrastructure (the Department). The proposed new facilities are expected to

enhance the experience of racegoers and expand the scope of events held at RRR. The hotel design and location will be a unique offering for the accommodation market in Sydney given its unique location and design.

Refer appendices which include a Site Plan, Future Development Plan and Precinct Plan.

For further details on all State Significant approvals and applications please refer to the link below.

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=5310

Recommendation

- 1. The site is currently approved for 55,000 patron capacity. All traffic and pedestrian modelling for the light rail design should be tested against this approved capacity.
- A detailed construction staging program and management plan must be prepared to identify how the
 project will be managed around existing and future events and provide the necessary transport and
 pedestrian capacity to service events during construction.
- In the event TfNSW requires a change to the use of any access point it must first be agreed by the ATC to ensure there are no conflicts with the existing operations or an alternative access provided to provide equivalent capacity.
- 4. The design of light rail needs to cater for the approved developments not yet constructed, the applications currently being processed by the Department and Council as well as the RRR masterplan and proposed UAP.

2.3 RRR Operational Requirements

Continuous Operating Environment

RRR is a Continuous Operating Environment. This means that it is an environment in which:

- a) all services are available and operating on a continuous basis that is 24 hours per day, seven days per week; and
- b) safe and unimpeded access for pedestrians, horses and vehicles is available on a continuous basis.

Recommendations

 TfNSW should prepare design documentation and management plans in consultation with the ATC to confirm to the Department and the ATC that the Continuous Operating Environment will not be compromised for the duration of construction of the project and in the permanent completed operational state.

Equine Operational Requirement

Royal Randwick is in use as a horse training venue 365 days a year and the majority of the year for event purposes. There are also very few days throughout the year where an event is not occurring on the site.

In regards to training and equine movements around the site some of the key ATC management issues and procedures are listed below which include construction requirements:

- There are approximately 500 horses stabled on-course at any one time
- 600 horses utilise the course for training purposes. There are approximately 100 horses that access the stables from outside the course boundaries.
- There is an equine pool located in the proximity of Gate 21
- No equipment is left in thoroughfares or equipment is left in thoroughfares or equipment.
- Gates must be closed at all times to ensure horses do not escape the racecourse which can cause serious injury to both horses and humans.
- Horses have right of way at all times
- There is a 15kmh limit for vehicles in equine precincts;

- When thoroughbred horses approach RRR users and visitors must:
 - Pull over in vehicle and wait till they pass
 - No sudden movements No sudden noises No loud music/car radios
- No dogs or other pets permitted on course at any Time
- Workers and staff on site must acknowledge horse training and stay away from track at all times.
- Any early morning deliveries cannot be between training times e.g. 4:00am and 8:30am.
- At no time is any person or vehicle allowed on any tracks or outside the construction zone unless written approval from the ATC is received.
- 2.4m solid hoardings must be installed around the whole of the construction area.
- Cranes and sequence of construction must not be able to cast shadows on the track during training or racedays.

2.3.1 Equine Stabling Facilities

RRR provides stables for approximately 500 of Australia's finest and most valuable thoroughbred racehorses Including ancillary service horses and ponies. There are also approximately 100 horses that access the racecourse from off site stabling facilities not owned or controlled by the ATC. The stables are occupied by horses that reside at the racecourse during their racing and training program with other horses moving in as horses leave to their spelling farms for agistment.

Internal operations of the stables are in accordance with Racing New South Wales guidelines for housing horses which included the need to provide separation between horses of different trainers. The stables are licensed by the ATC to trainers in various blocks ranging from 10 to 66. All stables are currently occupied and there is a waiting list for trainers wanting to locate at RRR. _There are approximately 20 trainers who currently have license agreements with the ATC.

The stables are utilised in different configurations depending on the trainer's preference with trainers being particular about certain design elements of stabling complexes. In addition to equine accommodation, most of the trainers have commercial office space in their stabling facility (for administration of stabling and training activities) as well as residential accommodation for equine handlers and trainers. All trainers have staff working in the stables on a daily basis. Most staff start work at about 3:00am to prepare for when the track opens at approximately 04.00. All trainers organise independently of the ATC equine supplies food deliveries, veterinary services, waste removal and bedding materials. There are a minimum 50 deliveries a day for trainers to the stabling facilities – including feed, gear, bedding, supplies, waste and maintenance vehicles, straw, shavings and refuse removal. Waste removal occurs every day. These suppliers are provided by a range of vehicles sized from cars and vans to articulated semi trailers.

Large and small horse floats frequently access the stables precinct to float horses to and from the racecourse. Horse float vehicles often have a lower freeboard (150mm above ground) for ease of equine access to and from the float via a ramp.

Appropriate access is critical through Wansey Road and High Street gates to provide for the needs of trainers, barrier trials, track maintenance and horse transport movements.

Horses can be delivered to and from the stables any time of the day or night (24 hours a day). There could be as many as 40 equine truck movements per day around the site. Some horses are sent out to farms for a spell, whilst others are coming in from the farm to be prepared for racing or being moved to and from other stabling complexes. There are increased equine movements during and on either side of large race days and carnival events.

It is noted in the EIS that there will be a need to demolish stabling facilities in the Upper High Street precinct. There is no discussion on where these horses and trainers will be relocated during and after construction.

2.3.2 Daily Equine Activities

Horses train between 4:00am and 8:30 am on the training tracks. They enter the infield from the 1600m crossing and also the High Street tunnel. They then return to the stables the same way. Horses start to leave the stables at 03.45 to be at the track at 04.00 sharp when the track opens. The tracks shut at 08.30. Most of the horses are back in the stables by 09.00. The horses are washed, fed and watered and either remain in the stables or continue their exercise regime in horse walkers or the equine pool.

Track work staff access RRR through the Wansey Road / Upper High Street gates (i.e. Gate 12). There will be at least 80 staff working in the Upper High Street and 100 Lower High St stable complex and they need access via Gate 12 for Upper and Gate 21 and 15 for Lower High St. It is usual that approximately 30 staff vehicles access the RRR via Gate 12. There are further vehicle access required by vets, farriers and visitors to the stables.

Horses carry out various activities throughout the day including – general walking around the equine areas, farrier and veterinarian servicing, horse walking in the walkers provided, exercise in the horse pool, feeding and grooming in the stable areas. This can be carried out anywhere in the Upper and Lower High Street areas.

In addition to the above, trainers will also meet and greet horse owners/investors and parade their horses in the stable compounds for the owners. This is for the trainers to ensure their respective owners are satisfied with the training regime and the horse's welfare.

All horses are generally in the stables by 5pm in the afternoon.

Figure 2 – Equine Movement Zone Diagram



Recommendations

The proponent should:

- In consultation with the ATC, prepare a Race Horse Management Plan which sets out the construction and management procedures both during and after construction of TfNSW and it's a third party contractor when dealing with horses. The Management Plan should include clear guidelines of construction and associated exclusion zones and project personnel education and induction processes to mitigate the risk of an event occurring that could result in damage or injury to a horse at RRR. The Management Plan must acknowledge and address the equine considerations which are included in this response.
- Identify a relocation strategy for the horses and trainers that will be demolished. It should be noted
 that there are limited areas available for relocation on the RRR site and the ATC would recommend
 the construction of the approved stabling complex to accommodate the relocation requirements in
 whole and in part.

 Ensure all intersections and access points impacted by the project are relocated and designed to cater for the existing capacity requirements and sensitive to the specific requirements of equine transport vehicles.

2.3.3 Events and Associated Activities

The EIS has a number of errors or omissions in relation to the operational access requirements of the RRR. The operational access requirements of the RRR are clarified below.

- The RRR operates 365 days per year.
- Day to day access for ATC staff and deliveries is required 24 hours per day, 7 days per week.
- ATC utilise all entrances and exits on a daily basis.
- Access and service is required to be maintained to all areas within the RRR at all times. It is
 imperative heavy vehicle access is provided at all crossings into the racecourse to required standards.
- The RRR 'front entrance (associated with Gates 2 and 5) is maintained to event standard presentation and in keeping with a world class racecourse facility. Pedestrian flow paths must be designed to worlds best practice standards to ensure safe access and egress to the site and that "crush" situations do not occur particularly at events such as music festivals.
- Private and public transport access and service must be maintained both during and on completion of construction of the project.

Royal Randwick has a number of events both with dates known and unknown that will take place over the duration of light rail construction—refer attached the current calendar of events for the RRR. The ability to hold all of these events needs to be maintained. The access and operational requirements for the RRR varies depending on the nature and scale of the event or activity. It is unclear from the EIS documentation as to how the proponent is proposing to cater for these events during and on completion of construction. Table 1 below explains the operational and access requirements for major and minor events at the RRR.

The Traffic and Transport Report attached includes an Access and Gate Usage Plan which identifies the location and usage of each RRR gate access point, including for different types of events.

Table 1 - RI	RR Event	Requirements
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Event	Requirements		
Major Events	Include Race Days & Music Festival. Numbers people > 5,000.		
Major Raceday Event	Horses are collected at the stables on race days. The volume of heavy articulated truck movements are dictated by the number of runners on the day. A busy day will see at least 50 horse transport movements. Horses that are racing also have to be returned to their stables after their races. Trucks bumping in and out horses use High Street access gate and typically arrive via Anzac Parade given the load limit on Doncaster Avenue.		
	Key requirements on major racedays include:		
	 Construction works will not be permitted during these events Permanent and temporary hoardings will need to be fully maintained and inspected prior to the event. 		
	 A large amount of plant and equipment "overlay" will be delivered by heavy articulated vehicles and installed for Race Day events. 		
	 This can involve up to a 2-3 week setup of marquees prior to Race Days (Primarily Autumn and Spring Racing Carnivals) and 1-2 weeks removal. Co- ordination and co-operation is essential. 		
	 Maintaining <u>all</u> (both heavy and light) vehicle and pedestrian egress through the existing arrangement will be required. 		
	 Safety of pedestrian, vehicle occupants and horses is paramount and inspections of any temporary construction materials must be carried out well in advance of utilisation and signed off by an experienced safety auditor. 		
	 Any temporary access and egress routes which may need to be established across the Site for these events must be approved by the ATC stakeholders. 		
	 Maintaining the egress through all access and egress points for pedestrians will be required. Egress routes will need to be established across the Site for 		

Event	Requirements
	these events (dependant on event and construction stage).
	 Event management plans will be required to be supplied and approved by the ATC at least 3 weeks prior to each event.
Major Music Festival Event	 The Future Music Festival occurs in March on a Saturday and Sunday involving up to 55,000 patrons attending. The event is a music festival which has stages and activities located in and around the infield and the Spectator Precinct. This event has a 2 week bump in and one week bump out period, Up to 100
	articulated vehicles are required to access the site during bump in and out's. Construction works will not be permitted during this major annual event.
	 Constitution works will not be permitted during this major annual event. Maintaining access and egress for <u>all</u> vehicle types is essential two weeks prior and 1 week after the event;
	Pedestrian queuing and crush control is essential to cater for the volume of pedestrians moving in and around the site;
	Coordinated access to/from the event construction site is very important during the bump-in/bump-out period and event requirements.
	 Additional traffic control and monitoring will be required by the proponent pre, post and during the event;
	 Event control group meetings must be mandatory for up to 6 months prior to the event to ensure all construction management details are agreed;
	 Further information on the event can be found on the DOPI's website and the ATC strongly encourages the proponent to review these documents thoroughly.
Minor Events	Includes Daily Events, Barrier Trials & University Exams. Numbers people < 5,000 people per day. Construction allowed subject to conditions.
Barrier Trials Requirements	Barrier Trials – Barrier trails are conducted at least twice a month. These horses are saddled in the Stripping Stalls area at the Mile. All of the traffic on trial days accesses the property via Gate 10, Wansey Road. There can be as many as 150 vehicles using this gate in-bound during the trials. Most of them are vehicles of trainers, owners, industry personnel. The rest make up horse floats that transport the horses to the trials. There can be as many as 15 floats bringing horses to the trials. Some of these horse floats are heavy articulated vehicles.
	 Key requirements during Barrier Trials include: Barrier Trials will be conducted between 7.30am and 2pm on scheduled days. Approximately once every 2 weeks. These dates are amended based on weather. Demolition and "loud" construction works will not be permitted during these times. The Barrier trials are carried out on various race tracks and in all the areas shown in Figure 2
	 Access to the spectator precinct is required. Increased vehicle and pedestrian movement entering & departing Alison Road and Wansey Road gates on these days.
University Exam	University exams will be held from time to time in areas within the RRR
Requirements	 The exams involve up to 60,000 students who attend over a 3 week period entering and exiting the site via Ascot Street, Doncaster, Avenue and Alison Road Gates for exams.
	The main location for exams will be in the spectator precinct
	 Exams are considered all-day events. Peak periods for this traffic will be from 0800 0930, 1130 – 1400 and again from 1600 – 1800 each day
	Construction works will be permitted during exams - yet noisy works adjacent to the spectator precinct needs to be minimised during these times
Normal Daily Activities	Over 200 ATC staff and contractors operate in the office and on the grounds every day.
	 Additionally up to 200 Stable hands and trainers are on course training and managing the hoses and stables every day.
	Horse race training occurs every morning from 4.00am until 8.30am.
	 Servicing of the Spectator Precinct and stables precinct occur throughout the day with a combination of passenger, light and heavy articulated commercial vehicles. Access to all these areas must be maintained in its current form and to cater for
	heavy vehicles 365 days a year. — During construction within close proximity to administration and stables a
	management strategy for impacts of acoustics, vibration, and safety must be provided to ensure minimal disruption to the occupants of these buildings.

- The ATC does not consider the EIS adequately addresses the existing and future event profile of the site;
 The applicant should, in consultation with the ATC, provide a detailed Event Management Plan for the site identifying the impacts of light rail and how the site will operate during construction and on completion of the proposal;
- The applicant should, in consultation with the ATC, provide a detailed Traffic and Transport Management Plan (TMP) for the site identifying the impacts of light rail and how the site will operate during construction and on completion of the proposal. This TMP will supersede the existing ATC TMP on completion of the project.
- All pedestrian flow paths should be designed to cater for the approved capacity of the site and meet world's
 best practice in crowd control, access and egress and pedestrian safety for a facility such as RRR.
 Pedestrian dwelling areas around traffic intersections and pedestrian road crossings should be designed to
 cater for maximum crowd capacities;
- A safety audit of the design should be provided as part of the application by an experienced consultant with international experience noting the design complies with worlds best practice standards;
- All intersections entering and exiting the site should cater for both the demand of heavy and light vehicle traffic generated by such events and offer no less than the existing capacity.
- It is imperative that the design cater for heavy vehicles crossing the light rail lines at all existing crossover
 points.
- All intersections where crossings are located into RRR should be traffic light controlled and cater for all directional movements in and out of the racecourse;
- A detailed management strategy should be provided for the Spectator Precinct and surrounding major event
 pedestrian and traffic locations to identify the required manned management points, labour requirements
 and who will provide the labour to manage these points. Areas of specific concern are the pedestrian flow
 paths on either side of the proposed event stop. The ATC should not be required to provide any
 management of these areas outside it gates.
- The proponent should provide evidence of consultation and approval of design by the parties the ATC is
 required to consult with as part of its Event Management Plan to ensure the parties are satisfied the light rail
 design caters for the approved crowd capacity of the site. These parties include NSW Police, Sydney
 Buses and the Roads and Maritime Service.
- In its Event Management Plan modelling the proponent should provide evidence that the design and a
 management strategy provides for an equivalent if not improved capacity to cater for the potential of parallel
 events at the Sydney Cricket Ground, Moore and Centennial Park and RRR. This study should also
 contemplate UNSW requirements on such event days and the potential need to supplement the light rail
 system with buses, if necessary.

3.0 Precinct Based Impacts

This section describes the ATC's issues in relation to the main location of precincts and areas of impact at RRR, as follows:

- Randwick LRV Stabling Facility
- RRR Spectator Precinct
- Alison Road Frontage
- Approved Equine Stables Precinct (being the corner of Alison Road and Wansey Road, and the general location of the Wansey Road stop)
- Upper High Street Stop (being the corner of Wansey Road and High Street)
- Lower High Street Precinct (being the location of High Street and Anzac Parade)

3.1 Randwick LRV Stabling Facility

The Randwick Stabling Facility is proposed to be located on land that is partly owned by the ATC, and partly owned by third parties one of which, the Centennial Park Trust owned site is the subject of a lease agreement with ATC for the purpose of car parking and site maintenance and servicing requirements of RRR. The Randwick Stabling Facility also has a substantive interface with the RRR Spectator Precinct and Alison Road frontage with potential for impacts on RRR stakeholders. These matters are detailed below.

3.1.1 Loss of Functional Buildings and Spaces

The EIS (Section 5.2.10) makes the incorrect assumption that the site of the proposed Randwick Stabling Facility "contains a number of buildings that are currently not used". This assumption is incorrect and the buildings are currently an active part of the ATC operations. In particular, the ATC operate the following operational buildings at this site:

- Heritage Office;
- Work Sheds including metal workshop, paint shop, plumbers shop, wood workshop, and associated tradesman amenities, cleaners, trade waste, skip bin and recycling;
- Security office and amenities;
- Storage areas;
- Car parking for members industry and racecourse workers;
- Signage
- Bore water infrastructure
- Valet parking
- Hire car layover and drop off



Figure 3 - Area of RRR Impacted by LRV Stabling

Light Rail Stabling options did not fully consider impacts on ATC infrastructure and operations in key areas such as:

- Demolition of key functional buildings;
- Reconfiguration of intersections and access gates;
- Pedestrian paths;
- Loss of parking;
- Construction in close proximity to the ATC's administration building;

Modification and loss of these facilities and infrastructure will significantly compromise current ATC operations.

- Approval and reconstruction of all buildings and associated infrastructure including entry gates, parking, layback, bore water pumps and signage which is being demolished must take place in a location of no lesser size, capacity, functionality and of a design satisfactory to the ATC. All design, approvals, construction and associated costs must be at the proponent's cost.
- Security Office and amenities will need to be reconstructed within the vicinity of the revised main entry gate location for surveillance purposes.
- The proponent should conduct a full audit of buildings including inclusions, infrastructure, parking etc and provide a report including design of proposed solutions.
- Completion of any replacement facility or infrastructure is to occur prior to demolition of the existing facilities to ensure that the functional capacity of RRR is maintained both during and post construction.
- All parking lost as a result of the construction of the LRV Stabling facility is to be replaced within the immediate vicinity of the lost parking spaces. The ATC calculates the loss of parking in this location to be a minimum of 715 cars.
- The ATC recommends a replacement carpark be designed on the existing main Spectator Precinct driveway and taxi way. In order to cater for the number of cars lost, a deck carpark facility will be required. All design, approvals and construction and associated costs must be at TFNSW's cost. Refer to Woods Bagot appendix identifying an indicative concept plan of the proposed deck carpark solution providing 740 replacement spaces.

3.1.2 Access

The proposed LRV Randwick Stabling Facility will impact on pedestrian and vehicular access through Gate 19 and Gate 20a (refer appendix C for further details).

The construction of the Randwick Stabling Facility LRV entry and exit tracks will also heavily impact on Gate 1. These issues have been addressed in Section 3.2 of this submission below (Spectator Precinct and Main Entrance).

Recommendation

- The loss of this capacity must be taken into account in the revised design of Gate 1 and may necessitate the reconfiguration of gates 2, 5 and 18 to pick up the lost vehicle and pedestrian capacity at these gates;
- The ATC would propose the reconfiguration of the intersection at Alison and Doncaster Roads to cater for vehicles entering and exiting the Spectator Precinct through the Alison Road frontage of the LRV Stabling facility;
- The ATC proposes an investigation into the relocation of buses servicing the racecourse in a configuration consistent with the existing ATC busway with the same Alison Road frontage and on the southern side of the LRV tracks. Refer to the appendix identifying ATC proposed solutions.
- The ATC is particularly concerned about the footpath dimensions on the southern side of Alison Road to cater for crowds and the conflict with cyclists. The ATC would recommend a detailed analysis of these issues be provided by the proponent;
- A dedicated pedestrian path along the southern side of Alison Road from the Doncaster Road to Wansey Road intersections should be provided with any proposed cycle path located on the northern side of Alison Road.

3.1.3 Utilities and Services

There are a number of essential services which are located in an around the proposed LRV Randwick Stabling Facility, as follows.

- CCTV Head End is located in the Security Building, at the main entrance from Allison Rd.
- Main head end for security systems, at the main entrance from Allison Rd.
- Demolition of security office and amenities will affect the current Fire Indicator Panel which will need to be relocated.
- There is also likely to be power, water and drainage services containing asbestos in this location.
- This current flood modelling for this area has major flooding implications for the downstream residents in Doncaster Avenue. The proponents submission has provided no detailed information on how flooding issues in this location or others is being addressed.

- Main head end for CCTV and security systems will need to be relocated, including all associated cabling infrastructure to a location satisfactory to the ATC.
- Fire Indicator Panel which will need to be relocated including approvals from Fire Brigade authority;
- The proponent must ensure the ATC remains a continuous operating environment during any construction works.
- A detailed flood report including recommendations should be provided to the ATC for review prior to approval. There should be no detrimental effect to any of the ATC's surrounding land.
- All utilities and services within RRR in this location will need to be diverted and relocated to ensure full operational capacity of the RRR is maintained and no loss of existing system capacity.

3.1.4 Visual and Amenity Impacts

The masterplan for RRR envisages design excellence to world's best practice for its facilities and would expect the proponent to deliver equivalent design solutions for the project where it impacts on RRR. The EIS acknowledges the extensive investment made by the ATC on the grandstand and surrounding area. The EIS documentation describes the visual impact to be highly adverse during construction and operation. The currently proposed solutions are not an acceptable or world class urban design outcome for either the stabling facility or a facility such as RRR which is of state and national significance with an international profile. This treatment will significantly diminish the experience of RRR for spectators and patrons.

Noise mitigation is proposed via 6 metre high acoustic walls to the perimeter of the LRV Randwick Stabling Facility. The noise wall, while essential for noise control will have an extreme and detrimental visual effect on the main address point for both pedestrian and vehicles to RRR and the main Spectator Precinct. This is in stark contrast to the current parkland setting of this area.

A detailed urban planning review and consideration of the visual impact of this interface is required to ensure adequate visual screening and mature landscaping is able to be provided such that the quality of amenity established by the design of the new grandstand facility can be maintained. Alternatively the site should be masterplanned and introduced into the UAP precinct to provide for oversight development to be controlled by the ATC to ensure the design is in keeping with the greater racecourse masterplan.

Recommendations

- The stabling facility must be fully enclosed.
- All external walls must be treated fully with landscaping and screening to interface and compliment the existing RRR Spectator Precinct, Centennial Parkland and its surrounds.
- A shadow analysis must be conducted to understand the implications on the ATC's adjoining buildings, racing infrastructure and landscaping and provided to the Department and adjoining land owners for comment;
- A detailed analysis and report should be commissioned to confirm there will be no adverse impacts to air quality from cleaning processes proposed to be carried out in the stabling facility;
- A detailed acoustic analysis should be provided to the Department and surrounding landowners confirming acoustic impacts and proposed mitigation measures.

3.1.5 Noise

No noise contours have been provided within the EIS for the LRV Randwick Stabling Facility. As such, the ATC has not been able to assess the impacts of this facility on the amenity of RRR. Acoustic emissions must be considered the time trams access and depart the stabling facilities, the cleaning and maintenance uses proposed and access of vehicles throughout the night to carparking. This is of particular concern given the adjacent residential development and its close proximity to equine facilities such as the day stalls and Theatre of the Horse.

Recommendations

 A detailed acoustic report and Noise Management strategy is provided to determine the impact on the adjoining properties and beyond;

3.2 Spectator Precinct and Main Entrance

3.2.1 Loss of Functional Buildings and Spaces

The RRR Stop will be located immediately adjacent to the main entrance for the RRR. The RRR Stop will require the removal of the Alison Road Swab Building and existing Busway, and cause the loss of a minimum 150 car parking spaces in areas associated with the SWAB Building and existing Busway. These losses will detrimentally impact on the operational capacity of the racecourse unless the lost capacity is replaced.

The Swab building has been development approved for a 100 capacity conference facility, membership office and cafe.

Recommendation

- Reconstruction of the capacity of the Swab building must be provided by the proponent to the satisfaction of the ATC.
- The design of the proposed new Swab facility must be integrated into the event RRR Stop design and new replacement development approval provided.
- Approval and reconstruction of all buildings and associated infrastructure including entry gates, fencing, queuing areas and shelters, ticket offices, turnstiles, landscaping etc that is being demolished must take place in a manner, location, design of no lesser size and functionality and of a design satisfactory to the ATC. All design, approvals, construction and associated costs must be at the proponent's cost;
- Any buildings and/or infrastructure which is being demolished must be reconstructed and completed prior to the commencement of demolition to ensure that the functional capacity of RRR is maintained.

3.2.2 Access

Gate 1 is the RRR's main entry for vehicles and pedestrians to the Spectator Precinct, on a day to day basis and especially during minor-events. This gate and surrounds provides the only heavy vehicle access to the infield for bump-in/bump-out traffic associated with events as well as heavy vehicles access to the Spectator Precinct loading dock and surrounds. Gate 1 is required to provide a safe entry and exit for pedestrians, light, medium and heavy vehicles, 24 hours a day, 7 days a week, 365 days of the year. In addition to in-field access, Gate 1 provides access to:

- The Spectator Precinct for staff, visitors and event patrons; ,
- Staff, visitors and event patrons to the Administration Building
- The TAB facilities in the Officials' grandstand which are open 7 days a week.



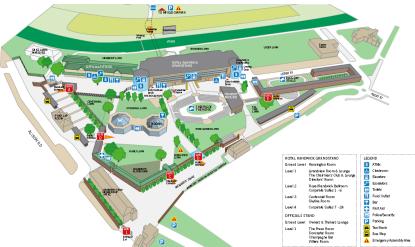


Figure 4 & 5 - Spectator Precinct Location and Plan

Due to the intersection not being traffic light controlled Gate 1 is currently closed during major events and access is via Doncaster Avenue. During major events the Ascot Street entry is used for equine vehicles, higher layover and taxis entering and exiting the taxi way. The Ascot Street gate is also used for ATC parking on Anson Land on major racedays including valet parking services. During minor events the majority of patrons enter and exit via Gate 1.

Gate 1 – Construction

The construction of the Randwick Stabling Facility LRV entry and exit tracks will impact on accessibility through Gate 1 for both pedestrians and vehicles do to the proposed entry and exit tracks from that facility overlapping both the access path and the security office.

The EIS indicates that access via Gate 1 will be compromised during construction. It is not acceptable for access via Gate 1 to be significantly compromised during construction, especially in such a way as to impact on the capability of RRR to host its scheduled events. The Proponent will need to provide alternative access acceptable to the ATC and/or schedule construction works to ensure that the functional capacity of RRR is not diminished in relation to pedestrian access, all types of vehicle access both to the Spectator Precinct and the infield.

The EIS states that the internal road network within the racecourse means that the temporary closure of Alison Rd access points during construction would not be a significant impact.

This shows a lack of understanding and consultation on behalf of the proponent of the operations of the racecourse. The internal road system is not able to support this change for many reasons some of which are identified below:

- Risks associated with mixing equine and vehicles;
- Road and pedestrian path design capacity;
- Connectivity and operational functionality;
- The quantum of vehicles, pedestrian and equine movements throughout the various precincts. If TfNSW intend to modify the access arrangements in such a way then access and traffic impacts will need to be assessed in detail for a full range of day to day activities and events.

Recommendation

The proponent should provide a detailed traffic management and construction staging plan to identify
the impact during construction of proposed traffic and pedestrian management strategies to ensure
the existing volumes of traffic, pedestrians and equine movements are catered for throughout
construction safely.

Gate 1 – Operation

The LRV tracks will present increased risks for pedestrians and vehicles at Gate 1.

Restrictions at this Gate are not acceptable given the volume of pedestrians, light and heavy vehicles access this gate. In addition the proposed design of the RRR LRV Stop involves the removal of the existing Busway. The Gate 1 entry via the Busway currently provides the only connecting through-route for heavy vehicles via the internal road connecting to the infield. Loss of the only bump-in/bump-out heavy vehicle access to the infield (via Gate 1 and the Busway) will significantly impact on the functional capacity and ongoing operations of the RRR unless an alternate route is found.

Recommendation

- This intersection will need to be signalised
- The Gate 1 intersection must retain its existing right turn in and out capability;
- Shift access to the LRV Stabling facility to the Doncaster Road end of the site to lessen the conflict of uses at Gate 1;
- The ATC has recommended to the proponent that the ATC's design for the Cowper Street intersection be constructed to provide alternative access to the infield for heavy and light vehicles during events and the bump in and out thereof;

Hotel Development

The Light rail alignment will impact on the entry and access arrangements of the proposed hotel, as submitted in the EIS, which is currently under assessment by the Department of Planning and Infrastructure. Key issues are as follows:



Figure 6 - Proposed hotel and light rail interface

The ATC requires a right hand turn from Alison Road into the hotel development. To the west of Darley Road, Alison Road is shown in the EIS as having three lanes by using existing spare carriageway width at this location. This spare width was relied on to accommodate the right turn lane to the hotel. The ATC has been negotiating this arrangement for many months through the department with RMS and Sydney Buses. All issues relating to both RMS and Sydney Buses queries were responded to by the ATC noting the intersections ability to cater for this proposed arrangement without detrimental affects to the operation of the intersection.

In the proponents design the right hand turn lane has not been accommodated.

- The Alison Road /Darley Road intersection needs to be designed to cater for the ATC's proposed hotel development which is a State Significant project;
- The appendices identify an indicative intersection arrangement design that caters for both the proposed right hand turn and the light rail corridor.

- The J86-Energy Australia Kiosk would require relocation into an underground chamber given the importance of this frontage to the presentation of the racecourse;
- The proposed RRR entry sign design will require redesign/ relocation.
- Existing ATC fig trees to Alison Road should be retained.
- The north east corner of the hotel room wing, will hang over the public path by a minimum of a metre and an easement for overhang will be required by the proposed owner of that property;
- The vertical levels of the light rail should be designed to tie into the proposed hotel ramp grades / lengths leading into the porte cochere, car park and loading dock.

3.2.3 Administration Building

The light rail tracks pass only a few metres to the north of the Administration Building, and LRV would travel within approximately one (1 metre) of the building. Potential implications on the function and operation of this building include:

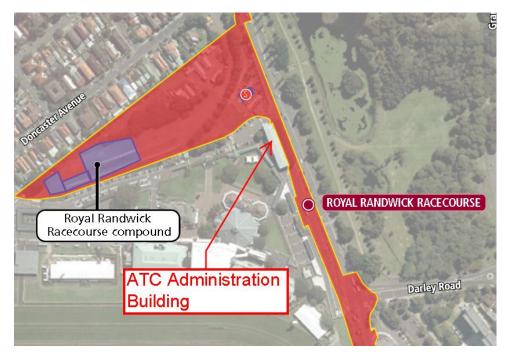


Figure 7 -Administration building

- the structural integrity of the building;
- existing services to building;
- awnings and external structures;
- vibration associated with ground works, construction and operation.
- internal acoustic environment;
- Loss of shade due to tree removal;
- Air conditioning system overload as a result of increased loads
- The EIS does not justify the close proximity of the electrical power cables to the Administration Building. In particular, the close proximity of the light rail power lines to the Administration Building has possible health effects and potential impacts on the performance of Visual Display Units and other electronic equipment.

The light rail alignment will also require the removal of perimeter fencing, gates and trees which currently forms the interface between the Administration Building and Alison Road. Removal of these items will result in:

- A loss of formal pedestrian access around the Alison Road frontage of the building and a resultant safety risk for pedestrians (including ATC staff and visitors, spectators and event patrons) moving around the outside of the building.
- A hazardous exit from the building to Alison Road for ATC staff and visitors utilising the Administration Building.
- Increased risk of vandalism and theft to the Administration Building.
- Significantly increased noise levels inside the building.

These issues have not been assessed in the EIS.

Further, the Administration Building has not been identified as a sensitive receptor in relation to noise from the stabling facility, so no noise impact assessment has been provided in the EIS.

Recommendation

The proponent must provide to both the Department and the ATC:

- specialist technical reports outlining the impacts and associated recommendations including design and specifications to mitigate any impacts of the above issues during construction and operation for review by the Department and the ATC;
- A detailed pedestrian modelling report confirming the design is satisfactory for the maximum loads envisaged during major events along the whole length of the Spectator Precinct Alison Road frontage including signalised crossing locations on Alison Road;
- A safety in design report confirming the design complies with all applicable standards and best practices as well as NSW Police Department requirements;
- A design showing the proposed pedestrian and crowd control fencing including proposed secure zones during construction and operation.

3.2.4 RRR Light Rail Stop

The RRR Stop is located at the main entry/exit gateway to RRR (being Gates 2 and 5) and needs to complement the operations of the racecourse and other modes of transport during a range of events.

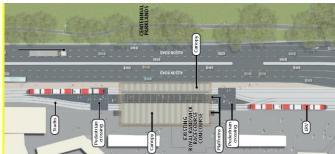


Figure 8 - EIS image or Randwick Stop



Figure 9 – Arial image of existing busway

Randwick Racecourse is currently approved to cater for events up to 55,000 patrons during major events. This should be used as the benchmark for major event capacities. It is unclear whether the functional capacity of the RRR Stop has been designed to cater for patron numbers of this magnitude in the most safe and efficient way to worlds best practice standards. In addition to design considerations around the number and length of the platforms (which TfNSW is best placed to determine the design requirements), the ATC has significant concerns about the location and layout of the RRR Stop – as follows:

- Poor public egress along Alison Road to the east, west and potentially north of the RRR Stop. It is not clear on which side of the light rail tracks the pedestrian pathway will be located. However, the alignment is shown hard up against the Administration Building suggesting a footpath along the Alison Road kerb, between the light rail tracks and Alison Road traffic lanes. On this basis it is not clear how pedestrians will safely access RRR and the RRR Stop. In particular, because of this rail alignment and the stop layout there is no public egress between the Administration Building and the light rail tracks, so pedestrians would be required to cross the light rail line in order to connect with the pedestrian footpath that would continue west-and east wards between light rail tracks and road corridor. It is also unclear how this footpath would connect to the Gate 1 pedestrian entry and to the footpath west of Gate 1 with the implication being that pedestrians would be required to cross back across the light rail lines around Gate 1. This is additionally complicated by the lack of design resolution in relation to Gate 1 and that Gate 1 will be required to remain open during events to provide access to reconstructed parking facilities. A footpath located between the light rail tracks and the traffic lanes of Alison Road is not a safe pedestrian environment. Further, it is not considered likely to be a satisfactory arrangement to have pedestrians crossing the light rail tracks multiple times in a short section of footpath especially with consideration of the large numbers of pedestrians funnelling through this area during major events at the RRR.
- The ATC invested millions of dollars in 2009 to reduce the patron safety risks through separating its patrons from Alison road. This was done through the installation of a busway to ensure that loading and unloading of buses could be carried out in a non-traffic environment away from the Alison Road carriageway. The TFNSW plan to relocate the buses to Lane 1 of Alison Road will be a backward step in terms of the pre-busway arrangement, with the added complication of a busy and active light rail line between the main entry/exit point for RRR and the buses.
- It is not clear how taxis would load/unload and queue around RRR Stop in the proposed arrangement.
- It is not clear whether the grade separation between station platform and RRR entrance concourse will be able to comply with accessibility requirements or whether this regrading will require the reconfiguration of the existing ticket and turnstile gates.
- During the construction period the EIS indicates that the busway will be closed. Closure of the busway will affect
 event patron access between the proposed bus area on Alison Road and the RRR main entrance difficult during
 major events.

As detailed above, there is a potential major conflict with pedestrians, patrons, passengers, buses and taxis in relation to the exhibited layout of the RRR Stop.

Recommendation

- Further design options need to be considered in consultation with the ATC and other referral authorities such as RMS, Sydney Buses and the NSW Police;
- Investigations to establish the parameters of the station/stop and finalise the design detail and associated supporting documentation as to how the RRR Stop integrates with other modes of transport particularly in relation to special event operations;
- ATC recommends that TfNSW identifies options to relocate the bus stop and taxi zone out of the Alison road
 corridor (e.g. by providing slip bays set back from Alison Road and possibly on the southern side of the rail
 tracks) to improve safety of pedestrians and patrons, maximise pedestrian thoroughfare widths and
 minimise impacts on the capacity of Alison Road.
- The design and supporting documentation must be developed to confirm the relocation of ATC signage, lighting, CCTV, public address, ticket and turnstile gates, fencing and all other key pieces of infrastructure associated with the RRR Stop facility and reconcile against the existing arrangements.
- TfNSW must provide a detailed construction management and staging plan to explain how major event pedestrian and vehicle activity will be safely and efficiently managed around the RRR Stop construction zone and the balance of the Alison Road frontage.

Heritage

In addition to the functional and safety issues raised above, the ATC also note that the area around the RRR main entrance contains a large amount of heritage – including heritage items and interpretive features.

The ATC Masterplan for the Spectator Precinct includes the redevelopment of the old Swab building which currently sits in the middle of the busway frontage on Alison Road. The Department has approved a design by Tonkin

Zulaikha Greer at the same time the new grandstand was approved to convert the building into a new 100 seat conference facility, with heritage display and cafe bar. This building is proposed to be demolished to cater for the new Light Rail Stop at RRR.

There is no clear concept, detailed o design or planning response or mitigation measures provided in the EIS for the reconfiguration of this key area to ensure that the area will both function at the capacities required, replace the key items of heritage interpretation and provides an appropriate front door entry sequence to this State Significant site. The proposed removal of Swab building will require changes to the (approved) racecourse entry concourse and Spectator Precinct layout and design and this must be understood by the ATC prior to approval being granted.

The area contains a large number of interpretive heritage measures in relation to Randwick Racecourse.

Recommendations

The proponent must provide a detailed concept design incorporating the replacement Swab building, how it
proposes to retain these interpretive heritage features wherever possible or alternative / replacement
interpretive features, proposed finishes and landscaping for this key area of the site.

Landscaping

This location is the main front door/entry sequence to RRR. It currently displays a number of manicured landscape features which identify the character of landscaping within the RRR and its surrounds. The EIS does not provide details of the proposed replacement landscaping for this extremely important area of the site. As a function of the design there is a proposed large grade separation between the proposed stop to be located at the Alison Road level and the entry/exit gates to the course which are approximately 3 metres above the Alison Road level. Both these areas have high quality landscaped features which should be mimicked in the EIS design. Please refer to Appendix F for details on landscape issues.

Recommendation:

Detailed landscaping plans need to be provided to address the main pedestrian entrance to RRR and ensure it is consistent with the quantum and quality of the existing landscaping currently located at this key gateway/frontage.

3.2.5 Services

The following services and utilities are expected to be impacted in the vicinity of the RRR Stop, and will require relocation or diversion (as necessary):

- External lighting and signage.
- In ground infrastructure electrical and communications.
- CCTV installation.
- Public address system.
- Fire Boosters
- Water
- Irrigation

3.3 Alison Road Frontage

The light rail is proposed to run immediately adjacent to the racecourse along its Alison Road frontage between the hotel site and the Wansey Road.



Figure 10 – Alison Road Frontage with indicative Light Rail line shown in red

Along this frontage the racetracks are located close to the RRR site boundary, which also contains an internal access road (providing infield access for heavy vehicles from Gate 1), a stewards' tower as well as old entry gates (of heritage significance) which were being preserved within the hotel development application. The current boundary between RRR and Alison Road is defined by a series of large significant trees which contribute considerably to the visual context and amenity of the racecourse.

Loss of trees along Alison road will impact on the visual context and amenity of the race course. The closer alignment of the light rail, combined with the removal of significant trees may also impact on the safety of horses during training, trackwork, barrier trials and race events.

The proposed Alison Road light rail alignment appears to require the removal of the stewards' tower and the old entry gates. The ATC also believes the trainers pavilion, cottage (refer below) and other items located near the corner of Alison and Wansey may require demolition for light rail construction purposes.

Given the RRR event stop will impede access for heavy vehicles to the infield via the access track around Alison Road frontage a new access will be required to be constructed. The ATC, prior to commencement of the light rail project, had designed a new infield crossing and intersection at Cowper Street and Alison Road to provide heavy vehicle access to the infield for bump in and out of major events such as the Future Music Festival (refer http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=6134 for detailed information)

- The proponent must provide details of its proposed temporary construction fencing and permanent fencing and visual screening solutions (including new tree plantings). These solutions must be of high quality, in keeping with the materiality and landscaping of RRR and the surrounding area and be to the satisfaction of the ATC to ensure safety during racing and aesthetically satisfactory for representation of the area both to the Spectator Precinct patrons and television coverage of the racing. Any replacement trees should in a mature state.
- The fencing solution must ensure the security of the racecourse site and ensure the width of the existing
 access road is maintained, there is a satisfactory zone for landscaping on the racecourse side of any
 proposed fence and that the fence is constructed ground to a height that screens the view of light rail
 vehicles from the track;
- A plan must be lodged with the Department and for ATC approval identifying the proposed location and design of relocated of racing or services infrastructure currently located within the zone between the existing RRR boundary and the race tracks. These plans and designs must be approved by the ATC prior to construction:
- There must be no affectation of the race tracks or associated infrastructure;
- The proponent must provide a design and construct a new intersection and race track crossing substantially
 in accordance with the plans provided to the proponent at the intersection of Alison Road and Cowper Street
 to cater for articulated heavy vehicles access to the infield.
- Any relocation of buildings, infrastructure or services must be at the proponents cost.

3.4 Stables Precinct

3.4.1 Approved Stabling Facility

The ATC has a Project Approval to construct a consolidated state-of-the-art stable and horse training facility providing accommodation for up to 600 horses and to be located on the corner of Alison and Wansey Roads—. The new stable facilities will replace existing stable facilities currently located on the Upper and Lower High Street corners of the RRR site. The complex will also provide additional capacity to reduce the need for stabling external to the racecourse.

Figure 11- Aerial Image of location for the new stabling complex and indicative light rail impact



Figure 11- Aerial Image of location for the new stabling complex and indicative light rail impact

The scope of the approved stables redevelopment includes:

- Six two-storey stable buildings, each housing 100 horses, sand rolls, wash-bays and accommodation for 10 strappers / stable-hands.
- 12 two-storey mechanical horse walkers (24 machines in total).
- Tie-up stalls for 50 visiting horses for Barrier Trials.
- Pony Enclosure for 20 to 25 ponies.
- Exercising facilities including a 'Bull Ring', Parade Rings, and Equine Pool.
- Parking for some 110 vehicles, comprising 80 permanent and 30 over-flow parking spaces. Includes loading and parking facilities for heavy articulated vehicles.
- Waste and storage equipment
- Ferrier facility
- Modifications to the existing vehicle access from Wansey Road, relocating it further north of the existing Wansey Road access.

The proponents EIS does not assess the potential impacts of light rail on the approved horse stable facilities. It appears that all light rail options through this section would impact on the building footprint and access arrangements for the approved horse stabling facility.

- The proponent must provide the Department with report identifying any impacts of the light rail on the approved stabling facility including recommendations on appropriate mitigation measures for the Department and ATC approval;
- Any amendments to the approved design and associated approvals must be managed and completed by the proponent at its cost prior to construction commencement of the light rail to ensure the revised design is able to be constructed.
- The estimated construction cost of the revised design must not exceed the cost of the original approval. If the cost does exceed the original approval cost the additional cost the proponent must compensate the ATC for this cost:
- The proponent must ensure that the ATC has the existing capacity to access the stabling site for construction during construction of the light rail project.

3.4.2 Existing Residence

There is an existing residence located within the RRR on the corner of Alison Road and Wansey Road. Access is currently available to the existing residential cottage as described above via Gate 8 and Gate 10. This residential dwelling does not appear to be considered in the environmental impact assessment and it is unclear whether this dwelling or any other building, infrastructure or services within the ATC's boundaries in this location will need to be relocated to provide for the light rail.

Recommendation

- The proponent provide a report to the Department and the ATC assessing the impacts on this infrastructure to determine impacts including noise, vibration, access and residential amenity both during construction and operation;
- Any building, infrastructure or services requiring relocation as a result of Light Rail should be designed, approved and constructed at the proponent's expense.

3.4.3 Access

24 hours access to the site needs to be maintained. In respect to the preferred light rail alignment, the EIS indicates that access through Gates 8, 9 and 10 during construction and operation would be impacted or prevented. These access points are used to provide access to the existing residential dwelling, barrier trial access, service vehicles and egress on event days. This access will need to be maintained at all times for all vehicles including heavy articulated vehicles.

Gate 8 provides an existing access point to the infield which is used outside of horse training hours for equine vehicles, raceday heavy vehicle access and as an exit for the infield carpark at the end of large racedays. This is not identified in the property access plan provided in the EIS. Gate 8 is constrained as an alternative in-field access point due to its location within the equine area and its vertical alignment across the Alison Road footpath. Gate 8 is also the nominated Alison Road access point for the approved equine stabling facility. On racedays the gate is used to supplement Gate 21 on High Street to allow vehicles to exit onto Alison Road west bound. Loss of access via Gate 8 during construction or operation is not acceptable.

Gate 10 is an existing access for heavy vehicles and equine transport on race days and for light vehicles at all times. Gate 10 is currently constrained by residential amenity impacts and the ATC has agreed with Randwick City Council not to use this gate during the bump in and out of the Future Music Festival. Gate 10 (modified by the proposed new stabling Project Approval) is also a nominated access point for the approved equine stabling facility. It is likely that the cantilevered shared pathway around the Wansey Road Stop would impact on future access to the racecourse at Gate 10 or in the vicinity of Gate 10. Loss of access via Gate 10 during construction or operation is not acceptable.

- The proponent must provide the Department and the ATC a report identifying the construction management plan confirming the ATC ongoing access, at their current capacity, during construction;
- The proponent must provide a report and design documentation confirming the configuration and replacement of existing capacity of these access points on completion of the project.

3.5 Wansey Road and High Street Stop

3.5.1 Loss of Functional Buildings and Structures

The EIS notes there are two proposed options for the alignment of the Wansey Road light rail route. The ATC understand there are further options being considered by the proponent in addition to the alignments contemplated in the EIS. The ATC cannot adequately carry out appropriate due diligence on the proposal until the proponent confirms its preferred alignment. The comments below are based on the EIS design.

The alignment of light rail along the western side of the existing Wansey Road carriageway, and the location and layout of the High Street Stop, will require the demolition of a number of existing buildings and structures in this precinct of the RRR, as identified below:

- A water tank which is used for irrigation of the RRR.
- Existing equine stables located along the Wansey Road frontage as well as on the corner of High Street and Wansey Road (some of the equine stable buildings/structures are identified in the EIS but not all that the ATC believe will need to be demolished).
- Buildings located on the corner of High Street are part of an integrated stabling complex leased to trainers, and comprise commercial office space, store areas, off street parking and residential accommodation.



Figure 12 – Water tank and stabling complex impacts during and post construction

The stabling complex at the corner of Wansey and High Streets houses over 200 of Australia's finest horses. These are thoroughbred racehorses that can at times be temperamental and agitated due to their athletic traits. Thoroughbred horses can be easily scared or spooked and due to heard pack mentalities, and in close proximity to each other, as in a stabling environment, can jointly react if scared or spooked. Stables can be a dangerous location for horses when spooked and it is not uncommon for spooked horses to be cast in their stable or badly or permanently injured. These horses are also valuable animals and therefore the risk of either one or multiple horses being injured or worse is a major risk that has not been addressed in the proponents EIS.

The existing stable complexes are at capacity with a waiting list for trainers to occupy stabling facilities at RRR.

There are no locations available to temporarily or permanently house replacement stables other than the proposed new stabling facility to be located at the corner of Alison and Wansey Roads.

It is unclear given the configuration of the existing stable complex as to how many stables will be directly impacted by construction or which licenses will be required to be renegotiated.

The ATC also believes that given the amount and type of construction required in this location that all of the horses in this location will be required to be either temporarily or permanently relocated. *This issue again has not been addressed in the proponents EIS*.

Recommendation:

- All buildings and structures, infrastructure and services removed, including stables and associated
 infrastructure will need to be reconstructed prior to commencement of light rail works in this location. All
 design, approvals and construction will be at the proponents cost;
- The proponent will need to assist the ATC and cover all costs of consultation with racing industry stakeholders regarding the relocation of stables and the renegotiation of any licenses and agreements.
- Any partial demolition of buildings will require relocation of services including in ground infrastructure, external lighting and signage, power and lighting installation, communications, CCTV and security;
- A detailed Equine Management Plan must be produced for this area.
- The ATC recommends the immediate construction of the new stabling complex at the proponents cost prior
 to construction commencing of the project in the Wansey Road precinct to ensure the safety of horses and
 no detrimental impact on the Trainers businesses or the ATC's operations or business.

3.5.2 Access

Light rail alignment along Wansey Road (including the High Street Stop) impacts (or prevents) access through Gates 11 and 12 during construction and operation. Gate 12 is the principal entrance to the Upper High Street stabling precinct for equine vehicles and other service vehicles (including heavy vehicles and light vehicles), and provides access to the one-way system which exits at Gate 13 on High Street.

There are currently no alternate entry points off High Street and entrance to this precinct via Gate 13 is not feasible due to the lack of internal turning capacity for heavy vehicles and equine vehicles.

Access is needed to the Gate 12, 24 hours a day 7 days a week. TfNSW will need to relocate the Gate 12 access ramp to an alternate location on High Street. However, it is noted that any provision for an additional point off High Street in the vicinity of the Wansey Road intersection will necessitate further demolition of existing stabling building.

3.5.3 Noise and Vibration

Construction of High Street Stop will create noise and vibration impacts affecting up to 209 horses in the Upper High Street Precinct. However, the EIS has not identified equine stables as sensitive receivers, and so has not undertaken a noise and vibration impact assessment on horses. It is expected that all 209 horses currently stabled in the upper High Street Precinct will require alternative stabling arrangements during construction.

The EIS has also not considered the additional commercial and residential accommodation uses located within the stables buildings, and so has not included these as sensitive receptors for noise impact assessment. Further assessment of the extent of noise and vibration impacts on the Upper high Street stabling precinct is required.

3.5.4 Structural Stability and Landscaping

The alignment of the light rail on the western side of Wansey Road will require the construction of a substantial retaining wall to and the removal of a number of significant trees which currently define the boundary of the RRR site. Detailed landscaping treatment needs to be provided to address the loss of trees and boundary details.

3.6 Lower High St Precinct

Construction of a proposed substation on the corner of High Street and Anzac Parade may impact on existing stable accommodation buildings. Directly impacted stables buildings will need to be relocated.

Due to the close proximity of the substation to the stables (where they are relocated or not) electromagnetic field (EMF) impacts on horses and people should be considered in the location and design of the substation.

RRR has a different access pattern for horses, managers and other stakeholders on race days (and other event days). TfNSW needs to consider the access arrangements for the racecourse on race days (and other event days) to ensure there are no impacts on race days (and other event days).

3.7 Traffic management

Royal Randwick has a number of events that will take place over the duration of the light rail construction and ongoing. The ability to hold all of these events needs to be maintained.

The ATC has carried out a patron survey of a major race-day event at RRR. This pedestrian traffic modelling identifies the following key parameters of race-day patron movements, which needs to be taken into account during the construction planning and programming, and the final RRR Stop design:

- Arrivals demand is driven in part by surges from bus arrivals and Alison Road pedestrian crossing cycles.
- Arrivals are spread more evenly that departures, with the peak arrival 5-minute period having a total of 530 people through the main concourse.
- Departures are more concentrated, with 1,480 people exiting RRR during the peak 5-minute period.
- High bus frequency and event day management allowed for high mode share
- Event demand is heavily reliant on buses; so an effective bus operation is required.

In addition, the ATC has prepared detailed Traffic Management Plans for a range of events scheduled to be held at RRR in the coming years. Of the most significance is the Traffic Management Plan prepared for Future Music, a two-day music event held in March every year, which caters for up to 55,000 people. It is recommended that TfNSW review this Traffic Management Plan as the benchmark for major event capacities and to understand the complex event-related access arrangements that are put in place around this event. Detailed review is required as to how to maintain the presentation, amenity, safety and access arrangements for RRR events up to 55,000 people.

3.7.1 Alternate In-field Access

The light rail alignment causes impacts during construction and operation which would restrict in-field access via Gate 1, and to a lesser extent Gate 8. The ATC has investigated solutions for addressing in-field access constraints, and identified a potential solution through an improvement to the Cowper Street intersection to create a cross-track access road to the RRR from the intersection.

Previous studies concluded that the levels in this area are critical as there is a level difference between Alison Road and the racetrack, which would need to be negotiated by Semi-trailers and B-Doubles. The alignment of the light rail would remove the westbound kerbside lane from Alison Road. The narrowed carriageway width would be insufficient to accommodate 5 lanes, meaning that the right turn lane proposed to serve the Cowper Street cross-track road will not be possible. The light rail should be designed to ensure that a cross track access via the Cowper Street intersection remains viable.

3.7.2 Alison Road Capacity and Safety

The Alison Road light rail crossing will involve relocating the westbound stop line 50 metres to the east, which will impact on the capacity of the intersection. Also the extensive distance from the new stop line to the pedestrian crossing on Doncaster Parade is potentially unsafe. No detail as to how pedestrians crossing Alison Road will be catered for.

3.7.3 Alternate Accesses

The EIS states that the existing internal road network within RRR means that the temporary closure during construction of the Alison Road entry point (Gate 1) would not be a significant impact. Alison Road is the main gate to Randwick Racecourse and is the most used access point at Randwick Racecourse including, pedestrians, cars, service vehicles, deliveries, heavy vehicles, emergency vehicles, taxis. Closing Alison Road gate would have a major impact to RRR.

In particular, it would sever access for Heavy vehicles accessing the racecourse daily for supplies and event, and it would sever access for heavy vehicle access to the infield. This would also put further strain on Doncaster road which is currently at its limits.

Table 15.8 further states that access to RRR via Wansey Road (at Gate 12) would need to be closed to vehicle traffic with vehicles redirected to High Street access (presumably Gate 13 or 21.

The ATC advises that the internal road system is not suitable to support this change – the primary reason for this is that the internal roadway is within the equine area and the road cannot be shared between horses and vehicles due to the associated risks to the racehorses. There are further reasons which also preclude this option; including design capacity of the road and lack of appropriate connectivity.

3.7.4 LRV Stabling Facility Access (Ascot Street)

The EIS states that access to the LRV Randwick Stabling Facility would be via Ascot St (entry only) and Doncaster Ave (south of Allison Rd) – exit only. This is inconsistent with text in 5-83 and Figure 5.50 (page 5-70) which states that both access points would be entrance/exit. ATC supports the arrangement of a 1-way system with entrance off Ascot Rd and exit via Doncaster Ave. If either of these access points is modified to be entry and exit then the implications for the intersections should be further assessed.

The EIS states that the Randwick Stabling Site Office (to be used during construction) will be operated independently of the racecourse. Traffic management or Boom gates are likely to be required by TfNSW to control this access in particularly on event days. As stated in 6-47 the construction contractor(s) would be responsible for incorporating known special events into the construction program and detailed responses and contingencies in the construction traffic management plan.

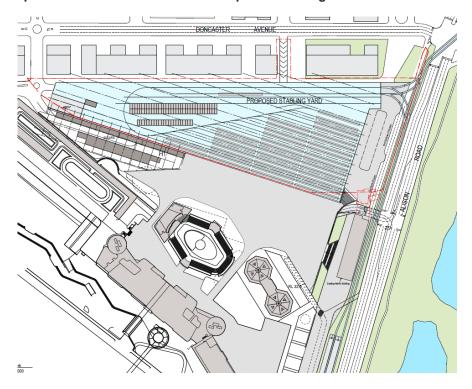
Recommendations

Details on the ATC's proposed intersection solutions are provided in Appendix C. Below are extracts from this report of key intersection design recommendations.

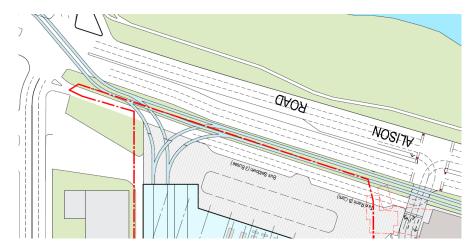
Spectator Precinct Alison Road Transport Interchange Solution - RL 29



Spectator Precinct Alison Road Transport Interchange Solution – RL 32



Doncaster and Alison Road Solution





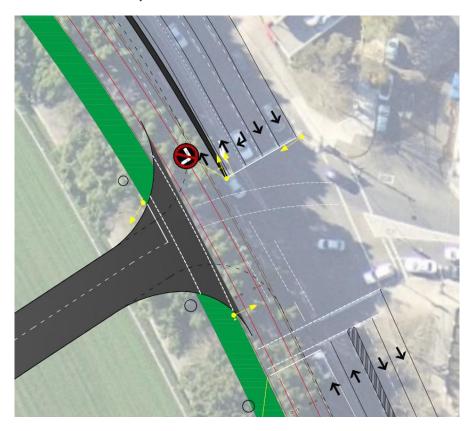
Gate 1/ Main Spectator Precinct Entry Solution



Alison and Darley Road Intersection Solution



Alison Road and Cowper Street Solution



3.8 Car Parking

Loss of car parking as a result of the light rail is set out in Table 3.

Parking Location	Number of Spaces
ATC Land - Members Car Park (centennial Park land) (Due to LRV Stables)	270
ATC Land - Triangle Site and Gate 19 Laneway (Due to LRV Stables)	230
Anson land (Due to LRV Stables)	370
ATC Land - Main Drive (Due to Alison Rd gate relocation and entry adjustment)	65
ATC Land – Taxi way	90
ATC Land - Busway and SWAB building area (Due to Light Rail Randwick Stop)	150
Rear of Officials (Due to Light Rail Randwick Stop)	100
Potential Total Impact	1275
Likely Immediate Direct Impact	715

3.9 Noise and Vibration

3.9.1 Impacts on Horses and Stable Buildings

The EIS has failed to assess noise and vibration impacts on horses and equine stabling facilities. Key shortcomings in the noise impact assessment in relation to horses and equine stables are:

- No construction Noise Management Levels have been established for equine stables for day, evening or night.
- No noise assessment has been provided of construction works on the potential impacts to horses stabled in the approved stabling facility on the corner of Alison Road and Wansey Rd.
- Construction of High Street Stop will create noise issue affecting up to 209 horses.
- Light rail vehicles will travel very close to existing approved stabling facilities, however no noise or vibration assessment has been provided in relation to operational impacts to horses stabled in existing stables or the approved stabling facility on the corner of Alison Road and Wansey Rd. In particular, horse/equine stables have not been identified as a sensitive receptor, however horses are very nervous animals and the Wansey Road track inclination could cause unacceptable rolling stock noise and vibration. TfNSW should assess whether standard trackform is appropriate in close proximity to equine stables.
- Number of Peak activity shifts has not been specified for worksites adjacent to the RRR this will affect the noise impacts.
- Buildings located on High Street near the corner of High Street and Wansey Road includes equine stables, commercial (office) uses, and residential accommodation, which have not been identified as sensitive noise receptors.

3.9.2 Noise from the LRV Randwick Stabling Facility

Issues raised in relation to noise from the LRV Randwick Stabling facility are as follows:

- No noise contours are provided for the LRV Randwick Stabling Facility as part of the EIS.
- The commercial receiver on the Randwick Racecourse site has not been identified as a sensitive receptor in relation to noise from the LRV Randwick Stabling Facility.
- EIS (p15-53) states that Warning Bells would be tested in the Randwick Stabling Facility. However, Technical Paper 11 (p. 68) has not modelled this noise sources and states that warning bells would not be tested at the LRV Randwick Stabling Facility.

As such, a complete assessment of the noise impacts on the RRR facilities and spaces, including the Spectator Precinct, cannot be completed. In further assessing the operating and construction noise impacts from the LRV Randwick Stabling Facility, the entry area behind Gate 1 should be considered an Active Recreational receiver.

3.10 Visual Amenity

Key issues of concern in relation to visual amenity are as follows:

- RRR is known for its landscaped gardens and parkland feel. The proposal includes extensive tree removal, manicured garden and lawn removal, flag pole and signage removal, lighting removal, gate and fencing removal which contributes to significant visual impacts. There is insufficient detail in relation to the manner in which TfNSW intends to resolve significant visual amenity issues during construction and operation. Landscape planning and design needs to be in keeping with the current size, shape and quality of landscaping to maintain character and amenity at RRR. Solutions need to be agreed with the ATC satisfaction prior to project approval.
- Loss of trees along Alison road will impact on the visual context, character and amenity, wind mitigation on track and surrounding facilities, loss of shade to stabling and training facilities as well as (potentially) safety of horses during race events. Temporary (construction) and permanent visual screening solutions (including new mature tree plantings) are to be to the satisfaction of the ATC and must not encroach onto ATC land such that they impede access around the internal access road which runs on the south side of the racecourse track. Trees also provide a screen for the racecourse and the areas adjacent to the horse barriers used at the commencement of the race.
- Construction of the light rail could affect soil quality impacting on the capability of the soil at the RRR to provide for tree planting – which contributes significantly to the visual context and amenity of RRR.
- The LRV Randwick Stabling Facility will significantly detract from the visual amenity of the RRR Spectator Precinct including from removal of significant trees. The proposed solution for a 6m high acoustic screen is not acceptable and will significantly diminish the spectator experience of RRR. If the LRV Randwick Stabling Facility is to stay in its current location then it must be enclosed and external walls treated fully with landscaping and signage and the interface must be activated to compliment the RRR Spectator Precinct where possible.
- Patron access locations should be swept and cleaned before all events to ensure area is presentable for events.
- The proponent ensures there is a management strategy for litterbins, rodent eradication, graffiti removal and repairs and maintenance.
- All lighting needs to be reviewed by ATC to ensure disruption is not caused to horses and stables.



- A detailed landscape design plan should be provided by the proponent for each of the areas of RRR impacted during and post construction.
- All electrical substations should be undergrounded and particularly on the Alison Road frontage surrounding the Spectator Precinct;
- The LRV stabling facility should be enclosed and included in the UAP Structure Plan for airspace development to be controlled by the ATC. This development would form the gateway to the Randwick Municipality and RRR as well as provided an iconic bookend to the proposed hotel development. In addition the development would serve the purpose of enclosing the LRV Stabling Facility which would deal with visual, acoustic and air quality issues.
- Landscaping and project materials along the route must be of high quality and in keeping with the quality of materials proposed by the City of Sydney.

3.11 Heritage

There is a substantial heritage impact on the racecourse. By eliminating the few remaining parts of the original infrastructure of the racecourse the ATC loses the ability to reference the early days of the sandy course. As the Club's history in Randwick goes back to 1860 the ATC has a responsibility to interpret its historical significance to the community. Removing heritage and potential heritage undermines the clubs ability to connect with its past and its racing community, and undermines the ability of the racecourse to showcase the long term role of racecourse infrastructure.

As such, the ATC agrees with all of the issues raised in the Godden Mackay Logan report appended to the EIS. In particular:

- The SWAB building is one of the oldest buildings on the racecourse. It is an iconic fixture at the entrance of the course. Visually it gives integrity to the Official Stand which would look incompatible wedged between a new grandstand and a new light rail station. The past use of building lends to its historical significance. It was planned to be a permanent museum to display the ATC Heritage Collection six days per week generating revenue through admission and coffee/gift shop. The museum would provide educational interaction with the community. The "Heritage Precinct" area was for outdoor obvious heritage interpretation i.e. flags, plaques, moveable heritage etc.
- Similarly to the SWAB building the boundary wall with the old ticket windows is one of the oldest remnants of the
 racecourse, and should be used for heritage interpretation. The ticket windows identify the original entrance to the
 racecourse with one of the last sandstone AJC logos.
- The collection images on the RRR light posts work in sympathy with the Official Stand and the SWAB building in interpreting the personality of Royal Randwick.
- The unique stirrup design in on-ground stencilling in the bus way area would be removed as part of the development, another heritage interpretation that would be lost.
- The removal of significant trees along Alison Road frontage would reduce the aesthetic significance of the racecourse and undermine the connection to earlier phases of the racecourse's history.
- The Gate 1 gatehouse provides wall space for the display of collection items and a fitted out records storage room.
- As expressed by Godden Mackay Logan this stables area "reflects the expansion and development of the racecourse during the twentieth century". While the individual pieces do not have great significance it is important to recognise that together with the other elements listed here they make up the history of the Racecourse and its position within the greater history of the local area. Removing it all reduces the connections between the racecourse and its local environs and divorces it from future engagement.

Recommendations:

Heritage interpretation measures in relation to Randwick Racecourse should be to the satisfaction of the ATC.

3.12 Stormwater and Flooding

3.12.1 Flooding

The EIS notes that there are limited earthworks expected due to the relatively flat site, however that the RRR site is known to flood. In particular, the light rail alignment intersects an existing overland flow path, which traverses the proposed LRV Randwick Stabling Facility site.

In order to protect the LRV Randwick Stabling Facility the EIS indicates that levels at the facility could be raised. However, this would lead to a reduction in the current flowpath as well as loss of significant storage for local or regional flood events. The impact on flood events from filling has not been assessed in the EIS.

Further, limiting track water depths to 15 mm or less for whichever event is larger of a 10 yr ARI or the design ARI of the adjacent road is improbable if the track levels are to be kept in line with the proposed design methodology of adopting rail levels similar to existing ground levels. Based on existing flood levels around the RRR inundation depths in excess of 15 mm are predicted along Alison Rd. It is unclear whether TfNSW intend to raise the vertical alignment of the light rail tracks in order to provide the design flood immunity specified. Raising the vertical alignment of the light rail tracks would impeded overland flow paths as well as result in the loss of significant storage for local or regional flood events – which has not been assessed in the EIS.

TfNSW should provide details of the proposed solution to flood protecting the light rail alignment, and the LRV Randwick Stabling Facility, and demonstrate that it will not cause exacerbated flood impacts on the RRR. At this stage it is not clear whether compliance with the NSW Floodplain Development Manual through can be achieved.

3.12.2 Stormwater Management

The following stormwater management issues are raised:

- The existing stormwater culvert, assumed to collect stormwater from upper Alison Road, which discharges to the detention basin located to the east of the existing infield tunnel, will require redirecting.
- Opportunity to integrate Wansey Road works with future stabling development could result in an efficient stormwater infrastructure arrangement with treatment benefits for both schemes.
- Water Sensitive Urban Design measures, including measures to prevent the discharge of oils, greases and pollutants into land and water adjacent to ATC land, need to be included in the EIS.

3.13 Utilities, Services and Water Supply

The light rail alignment (including the LRV Randwick Stabling Facility) will impact of a large number of existing utilities services for RRR, including gas, water services, stormwater, communications, electricity and sewer. Specific utilities services impacts on concern are:

- The RRR Stop location contains a fire hydrant booster distribution and a designated area for Fire Brigade fire truck accessibility. Hydrant network must be fully traced to ensure hydrants being removed do not limit coverage and are replaced adequately or impact on the precinct wide fire engineered solution.
- Gas and water pipework is located immediately below the RRR Stop location and maintaining service to the site without periods of water / gas being isolated to service the site. Vibration also to be considered in relation to pipework below rail stop.
- Existing kiosk type substation and in ground HV/LV cable from substation located adjacent to RRR Stop and on Wansey Road will be impacted and may need to be relocated.
- All services near Administration building will almost certainly be required to be relocated or excavated deeper.
- Hydrant ring main diversion works may be necessary.
- Stormwater and sewer drainage diversion network may be necessary.
- Power supply for electrically controlled gates will need to be rewired.
- All CCTV infrastructure will need to be modified during construction and operations.
- All communications and or intercom to impacted gates will need to be modified during construction and operations.

Impacts on utilities and services will require utilities and services to be redirected and relocated/diverted as necessary ensure the functions of the RRR (including the full range of events) can be maintained.

3.13.1 Electricity Network Capacity

Light Rail will be consuming an electrical load of 6MW from the three new substations proposed either on or adjacent to the RRR. ATC has already been classified as a large load customer and will not be permitted to increase their current race day maximum demand requirement. Given the obvious constraints in the local electricity network, a full assessment should be completed to demonstrate that the surrounding local electricity network infrastructure is adequate without further constraining existing operations or growth for other users.

Given the existing constraints, the ATC considers the existing electrical distribution feeders to the area must be upgraded to cater for the significant load which will be required by light rail. In particular, any new development (including the light rail) is expected to necessitate either a new HV feeder from the Clovelly Zone Substation or peak load will need to be totally offset by standby generation.

TfNSW also need to confirm whether minimum setbacks and blast protection offsets will be contained within the land acquisition footprint for substations located on land currently leased by the ATC.

3.13.2 Future Conduit Capacity

Physical capacities and future access is required under light rail track / conduit paths / culverts / pipes, particularly in areas of the site bordered by the new track and the LRV Randwick Stabling Facility.

3.13.3 Bore Water and Irrigation

The following water supply issues are identified:

- The light rail alignment on Wansey Road requires the demolition of the water tank which supplies the irrigation network for the entire site.
- The LRV Randwick Stabling Facility will require the demolition of bore infrastructure.
- Construction works could result in settlement, contamination and base-flow reduction, which could impact on water availability for existing bore-water users. The EIS also notes the high groundwater at the RRR but does not provide detailed measures to be implemented to prevent contamination of bore water. ATC relies on bore water to maintain racetracks, gardens and lawns and racing at RRR.

- A new tank will need to be constructed in a location acceptable to the ATC, with consideration of the existing distribution network and diversions or new pipework distribution. The proponent must consult with the ATC to provide both the Department and ATC with a satisfactory relocation strategy for all water and irrigation infrastructure.
- Alternative bore infrastructure will need to be provided to the satisfaction of the ATC.
- The proponent should ensure that the construction and operation of the LRV Randwick Stabling Facility can be carried out such that there is no impact to the supply of clean bore water in the underlying aquifer for use at the RRR.
- All statutory approvals, design, construction and other associated costs will be at the expense of the proponent.

3.14 Other Issues

3.14.1 Air Quality

There is no detail regarding the sand or cleaning plant emissions for the Light Rail Stabling Facility. It is assumed that supply of sand/grit will be delivered to site in bulk. Measures to minimise and control dust pollution are required.

Buildings to be demolished may contain asbestos and other hazardous material. No Hazardous materials assessment has been carried out on the ATC of either its buildings or site.

Recommendation:

- A hazardous materials report should be provided to the Department and the ATC including recommended remediation procedures for building and site remediation works.
- All statutory health and safety requirements are to be followed to ensure the safety of ATC staff, RRR visitors, patrons and horses are protected.
- A detailed report on air quality control procedures within the LRV Stabling Facility must be provided to the Department and ATC.

3.14.2 Electromagnetic Field Radiation (EFR)

The ATC is concerned that EFR emissions may impact on both human and equine health as well as electronic equipment in its various facilities. The EIS does not provide detailed analysis of the implications or proposed shielding to cater for such impacts.

Recommendation:

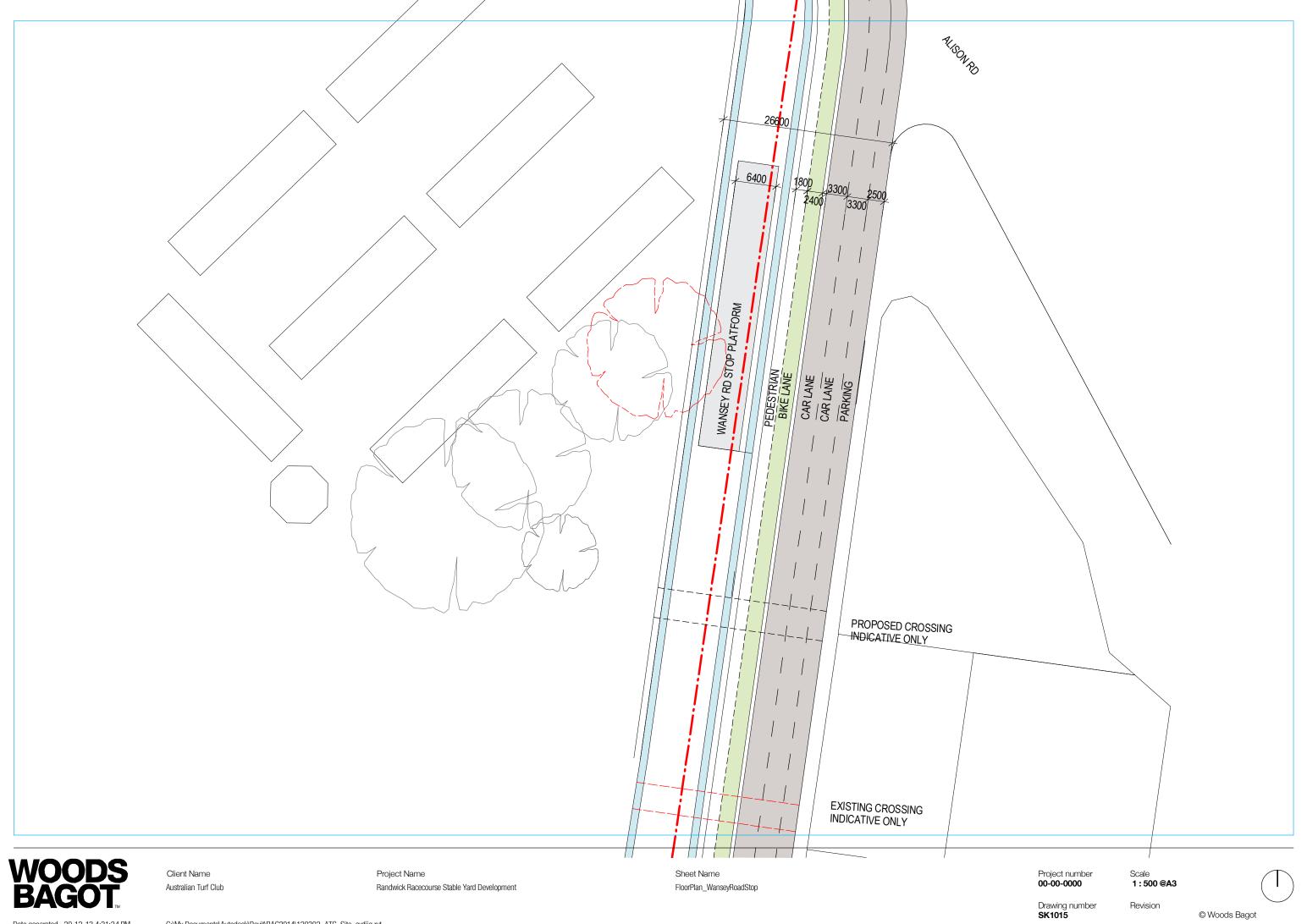
An EMF assessment should be provided. The EMF assessment should include:

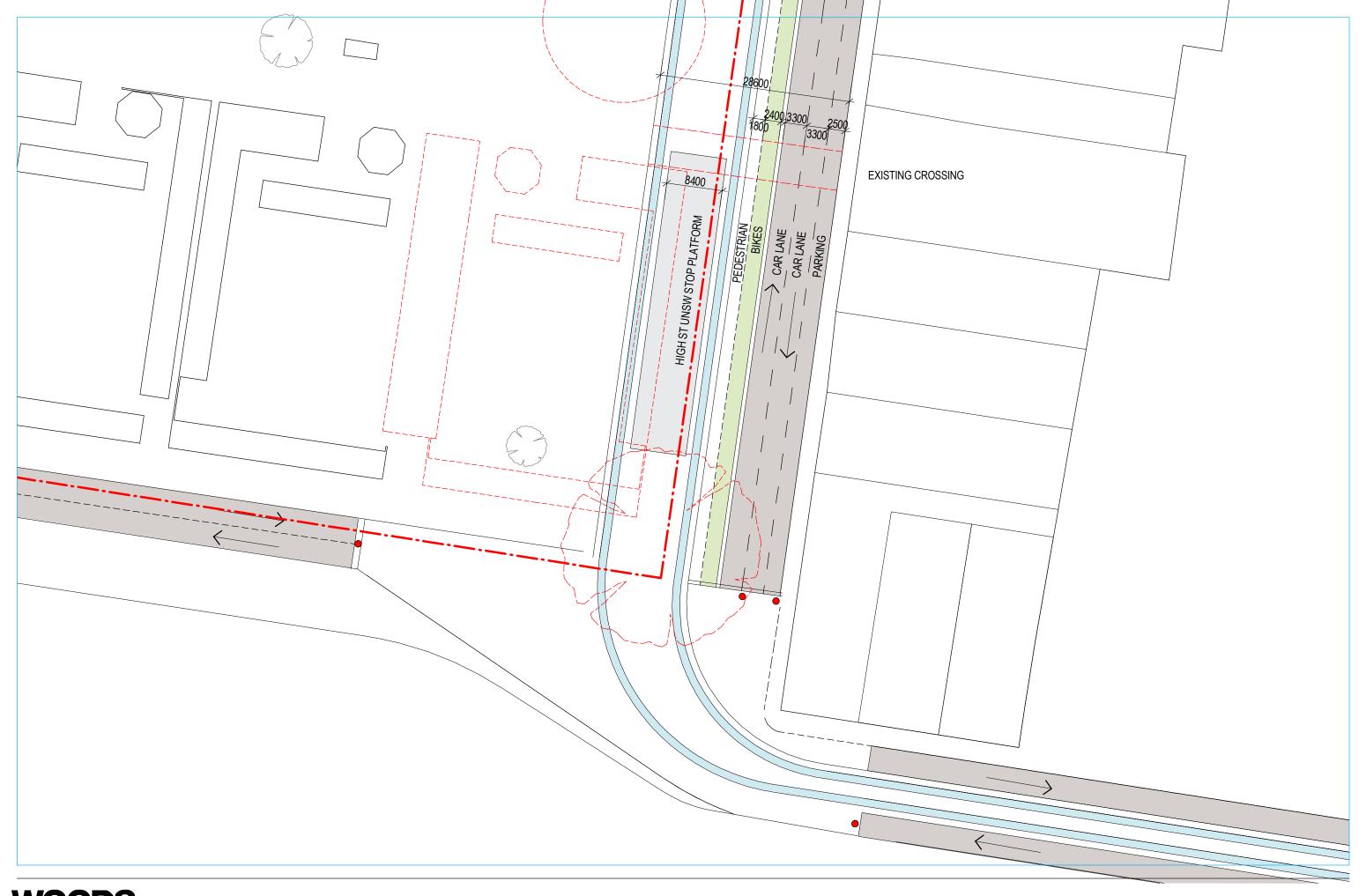
- Consideration of impacts on people and Visual Display Units in the Administration and any other buildings located in a zone of influence (from light rail power sources).
- Impacts on the hotel development.
- Consideration of impacts on any other areas where new power sources are in the vicinity of people or horses.
- The potential impacts on horses from operation of substations at High Street and Anzac Parade, the proposed Stabling Yard and the site boundary adjacent to Alison Road.

3.14.3 Urban Activation Precinct

All works associated with the CSELR need to consider the proposed UAP Structure Plan currently drafted by Department of Planning and Infrastructure and cater for the increased population demands.

- Detailed capacity modelling and report should be provided to the Department and ATC identifying the ability of the project to cater for the proposed UAP populations;
- Driveways and intersections should be designed in keeping with the locations identified in the UAP Structure Plan;
- The design, engineering and construction of the project should cater for the UAP including future basement structures, service provision through and under the light rail infrastructure and the ability to develop adjacent and possibly over the light rail;
- There should be no battered retaining walls designed within the racecourse;
- Alison Road, Wansey Road and High Street retaining walls and structure must be designed to include penetrations at adequate intervals to cater for future service provision,







Client Name Australian Turf Club Project Name Randwick Racecourse Stable Yard Development Sheet Name FloorPlan_UNSWHighStStop Project number **00-00-0000**

Drawing number **SK1016**

Scale 1 : 500 @A3

Revision

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