



Douglas Partners

Geotechnics | Environment | Groundwater

Report on
Environmental Management Plan
Spectator Precinct, Royal Randwick Racecourse
(Extension of Day Stalls EMP)

Randwick

Prepared for
Australian Turf Club

Project 71976.08
July 2013

Integrated Practical Solutions



Document History

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The undersigned, on behalf of Douglas Partners Pty Ltd, confirm that this document and all attached drawings, logs and test results have been checked and reviewed for errors, omissions and inaccuracies.

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Report on Environmental Management Plan Spectator Precinct, Royal Randwick Racecourse, Randwick (Extension of Day Stalls Environmental Management Plan)

1. Introduction

Douglas Partners Pty Ltd (DP) has prepared this Environmental Management Plan (EMP) on behalf of the Australian Turf Club (ATC). The purpose of this EMP is to establish procedures for the ongoing management of localised contamination in the western section of an area identified as the Spectator Precinct (the site) located within the St Leger Lawn at the Royal Randwick Racecourse. This EMP is an extension of the EMP that is already in place for the New Day Stalls site which adjoins the western boundary of the Spectator Precinct. A plan showing the location of the site and the identified contamination is provided in Drawing 1, Appendix A. In particular, the EMP focuses on the contamination associated with a buried former road profile that extends from the south-western portion of the New Day Stalls site into the western section of the Spectator Precinct. In this regard it is noted that whilst the buried road profile has been identified in the western portion, the possibility of encountering these profiles in other portions of the site (i.e., the Spectator Precinct) does exist.

The EMP has been prepared based on the findings of DP's report titled, *Supplementary Contamination Assessment, Spectator Precinct, Randwick Racecourse, Randwick* (DP reference 71976.03, dated February 2012). The EMP must be implemented in order to comply with the consent conditions. The consent conditions for the site, therefore, forms the basis of an effective enforcement mechanism for the EMP.

All contractors and site personnel undertaking works on the site requiring the disturbance of soil underlying building floor slabs, landscaped areas or road pavements (referred to herein as intrusive works), such as the installation of a new underground service or maintenance of existing services must comply with the requirements of this EMP. A copy of this EMP must be issued to all personnel responsible for the ongoing operation and management of the site. It should be made immediately available to all persons engaged to undertake intrusive work on the site and should form part of the information package for any contract where intrusive works (including routine in-ground repair and/or maintenance works) are planned or anticipated. The induction of staff working on the site must advise on the existence of this document and an outline presentation given as briefly described in S. 4 of the EMP.

1.1 Objectives of the EMP

The objective of this EMP is to establish post construction procedures for ongoing environmental management of the site with respect to the potential residual contamination beneath part of the site. Further, the EMP also aims to provide procedures that will assist in ensuring that the capping is effectively maintained.

The EMP is a working document and provisions must be made to update or modify the plan when required. It is considered appropriate for small maintenance works involving minor intrusive works. In

the event that any major construction works, including redevelopment or major alterations affecting the substrate, ground slabs or pavements are planned in the future, then the requirements of this EMP must be taken into consideration and incorporated into any such plans. Further, a specific Environmental Construction Plan is required to be developed to cover any such planned construction works and should outline the extent of the works proposed and any necessary associated safeguards including occupational health and safety measures and the relevant requirements of the EMP.

The site to which the EMP applies is shown on Drawing 1, Appendix A.

1.2 Site Location and Identification

The Spectator Precinct, is located within the Randwick Racecourse and is bounded by and includes the Fig Tree Lawn to the west, the racetrack to the south, and Alison Road to the east. The location of Spectator Precinct is shown on Drawing 1, Appendix A. The site forms part of Lot 1 in Deposited Plan 130234 and has been leased to the Australian Turf Club. The local government authority is Randwick City Council.

The land use is, and will continue to be, a commercial land use, that is, used for horse racing purposes and the site specifically, will continue to be used as spectator stands for the foreseeable future.

1.3 Site Description

The Spectator Precinct site covers an area of approximately 5 ha. It is bounded by and includes the Fig Tree Lawn to the west, the racetrack to the south, and Alison Road to the east. A site plan showing the limits of the area to which the EMP applies is appended as Drawing 1, Appendix A.

The re-development at the site included the construction of a new replacement Paddock Stand in the southern section, structural modifications to the existing QEII Stand, construction of a new Parade Ring, construction of a new Owners and Trainers Pavilion adjacent to the Parade Ring, construction of a tunnel for the passage of horses from the parade ring to the existing tunnel that currently starts under the QEII Stand and relatively minor civil and structural works such as localised cut and fill, retaining walls etc.

The surrounding land uses, beyond the Randwick Racecourse boundaries, includes a mix of residential and commercial land uses. It is important to note, however, that the site lies within the overall context of Randwick Racecourse which extends immediately adjacent to the site in all four directions.

2. Contamination at the Site

Antecedent investigations conducted by DP at the site and the adjoining New Day Stalls Site (in chronological order) included:-

- *Report on Preliminary Waste Classification, Proposed New Day Stalls, Randwick Racecourse, Alison Road, Randwick*, reference 45236, dated 28 November, 2007 (DP, 2007);
- *Report on Supplementary Waste Classification Proposed New Day Stalls, Randwick Racecourse, Alison Road, Randwick*, reference 45236.03, dated 15 April, 2008(DP, 2008);
- *Final Report on Contamination and Validation Assessment, New Day Stalls site, Randwick Racecourse*, reference 45236.08, dated March 2010 (DP, 2010a);
- *Environmental Management Plan, New Day Stalls site, Randwick Racecourse*, reference 45236.08, dated March 2010 (DP, 2010b);
- *Preliminary Contamination, Salinity and Acid Sulphate Soil Assessment, Proposed Spectator Precinct, Randwick Racecourse*, reference 71976.01-1 dated September 2010 (DP, 2010c);
- *Supplementary Contamination Assessment, Proposed Spectator Precinct, Randwick Racecourse*, reference 71976.03 dated February 2012 (DP, 2012).

Whilst the above-mentioned reports relate to the site and the adjoining land parcel, the key reports that have been referenced for preparing this EMP are:

- *Final Report on Contamination and Validation Assessment, New Day Stalls site, Randwick Racecourse*, reference 45236.08, dated March 2010 (DP, 2010a);
- *Environmental Management Plan, New Day Stalls site, Randwick Racecourse*, reference 45236.08, dated March 2010 (DP, 2010b);
- *Supplementary Contamination Assessment, Proposed Spectator Precinct, Randwick Racecourse*, reference 71976.03 dated February 2012 (DP, 2012).

DP (2010a) which focussed on the Day Stalls site was the subject of a statutory audit by a NSW EPA accredited auditor. The assessment identified the presence of PAH contamination associated with a buried road profile and residual *in situ* asbestos pipes at nominal depths of 1 – 1.8 m below ground level (bgl) in the south-western portion of the New Day Stalls site. It is noted that the Day Stalls site adjoins the western boundary of the current study area (Spectator Precinct). The results of DP (2010a) also showed that the concentration of contaminants in the fill above and below the buried road profile was within the threshold criteria for a commercial/industrial land use. In view of the nature of the contamination at the New Day Stalls site, that is, the immobile PAH associated with the buried road profile and the *in situ* asbestos pipes, the DP report recommended that a 'Cap and Contain' Strategy would be the most suitable means of rendering the Day Stalls site suitable for the proposed development. The strategy therefore, comprised the capping and containment of the road tar impacted profile and the residual asbestos-containing pipes under the existing filling material and management of the contamination in perpetuity by means of an Environmental Management Plan (EMP) as agreed by all parties, including Randwick Council and an NSW EPA accredited site auditor.

DP (2010b), that is, the Days Stalls EMP, outlined the requirements for managing the capped, contaminated road profile and the residual *in situ* asbestos pipes at the Day Stalls site under normal

commercial usage. The EMP also included an unexpected asbestos finds protocol and procedures for any intrusive works that may require breaching of the cap at the New Day Stalls site.

DP (2012) focussed on the current study area i.e., the Spectator Precinct. The site history and field observations suggested that the site had a relatively low potential for contamination. During DP (2012) the deepest fill at the Spectator Precinct was encountered in the western section of the site (north-western corner of the St Leger Lawn).

The analytical and statistical results of DP (2012) showed that the fill within the Spectator Precinct was compatible with a commercial/industrial land use except at TP223 at a depth of 1.8 - 2.2 m bgl. At TP223, which is located in the western section of the Spectator Precinct, a buried road profile is present at a nominal depth of 1.8 - 2.2 m bgl. Samples collected from the buried road profile indicated the presence of total PAH (175.7 mg/kg) and B(a)P (14 mg/kg) concentrations that exceed the adopted site assessment criteria (SAC) of 100 mg/kg and 5 mg/kg, respectively. The results of toxicity characteristic leaching procedure tests (TCLP) showed that the leachable concentration of PAH in the road profile was below the laboratory practical quantitation limits (PQL) suggesting that the PAH associated with the road materials is immobilised. On the other hand, the analytical results of samples collected from the fill profiles that are present above and below the buried road profile showed that the contaminant concentrations were generally low and within the adopted SAC.

This buried road profile was also encountered in the Days Stalls site (adjoins the western boundary of the current study area) and appears to extend from the Day Stalls site into the western section of the Spectator Precinct. In this regard, it is noted that, in view of the buried road profile, the Day Stalls site is the subject of an EMP (discussed above).

2.1 Current Conditions

The site has been excavated or filled depending on requirements of the design. Where filling has been placed this has been uncontaminated fill or virgin excavated natural material (VENM) sourced from the site. With the exception of the buried road profile at a nominal depth of 1.8 – 2.2 m bgl, the fill material in the remainder of the site (including the material overlying and underlying the buried road profile) is suitable from a health-based perspective with regard to the SAC detailed in the DP (2012) and can be considered to be suitable to remain, or be used, within the Spectator Precinct site.

3. Cap and Contain Remediation Strategy

A number of options were considered for the remediation of the site in order to make it suitable for the ongoing use as Spectator Stands. In view of the nature of the contamination i.e., the former road profile at depths of 1.8 – 2.2 m bgl in the western portion of the site, the low leachability of the chemical contaminants, the suitability of the overlying fill material from a health-based perspective, the absence of unacceptable groundwater impacts through chemical contaminant migration and the low sensitivity use of the site (commercial), a 'Cap and Contain' strategy was adopted. The adopted Cap and Contain strategy was considered to be the most practical, efficient and cost effective option. The strategy results in a substantial reduction in health and environmental risk whilst also achieving the minimisation of waste. In this situation, the strategy involves leaving the contaminated profile in place,

that is, located under the existing uncontaminated fill and the constructed engineered surfaces (pavements, building slabs etc) which all act as capping layers over the former road profile. This strategy is both technically feasible and is easy to manage and maintain in the long term. It, therefore, attains an optimal balance of risk reduction, environmental integrity, cost and long term manageability.

3.1 Cap Construction

The Cap and Contain remedial strategy seeks to minimise the potential exposure of the site workers (strappers, gardeners, maintenance workers etc) to the pathways (routes) to the underlying contaminants. To achieve this, the site was capped with a range of cap types depending on the construction in any area. The cap types that were adopted in various areas of the site are shown in Drawing 1 and described below. There is no warning marker layer incorporated into the cap design because of the obvious visual characteristics of the contamination and the depth at which the contamination occurs.

The total cap thickness is based on the engineering designs of the construction elements, such as building slabs and landscaped areas which occupy a significant proportion of the site, plus the depth of the overlying fill. With the exception of the buried road profile, the fill over the remainder of the site has been shown to not be contaminated. Further, the fill that is present above and below the buried road profile at the Spectator Precinct as well as, the Day Stalls site has also been shown not to be contaminated. In this regard, the buried road profile extends from the south-western section of the Day Stalls site into the western section of the Spectator Precinct, and within the Spectator Precinct is limited to western section of the St Leger Lawn which is currently a landscaped area. Consequently, the capping structure for the western section of the Spectator Precinct essentially comprises the 1.8m of overlying fill that has been shown to be within the adopted SAC. Furthermore, given that the buried road profile is an extension of the contamination seen at the Day Stalls site, it is considered prudent to provide information on the capping structures utilised at the Day Stalls site as well. In this regard, high access areas such as the car parks, roads and the Day Stalls buildings have concrete slabs or bitumen pavements, including the imported pavement layers (sub-base, base course etc), acting as the capping layer. More information on specific capping structures is provided below:

3.1.1 Pedestrian Pavements, Hardstands and Roads

Pavement depths of varying thickness which were constructed on the Day Stalls site also extend into the Spectator Precinct. The imported pavement material, concrete or asphalt surfaces together with the overlying uncontaminated fill form a part of the capping system.

3.1.2 Building Slabs

The permanent concrete building slab and the underlying profile of uncontaminated fill form part of the capping system under the buildings on the adjoining Day Stalls site.

3.1.3 Landscaped Areas

Areas planted with grass, trees or shrubs (over both the Day Stalls as well as the Spectator Precinct sites) were planted in accordance with the Landscape Plan as follows:

- The sub-grade was prepared over the general fill as per the requirements of the planned landscaping activity in the area;
- Imported topsoil was placed over the fill material to a minimum depth of 200 mm and topped with 50-75 mm of mulch or other materials as specified elsewhere.

3.1.4 Service and Stormwater Trenches

Following bulk excavation at the Day Stalls and Spectator Precinct sites, service trenches were excavated across the site. Service trenches were excavated through the fill and/or site VENM. The existing service trenches have been excavated through materials that are not contaminated and the backfill to the trenches is not considered to be contaminated. The services were laid, bedded and backfilled with uncontaminated fill sourced from the site.

4. Personnel and Responsibilities

It is the Australian Turf Club's (ATC) responsibility to implement this EMP and to undertake all measures required to manage the residual contamination at the site. ATC must nominate a specific employee/ person responsible for implementing the EMP (the EMP Officer). It is also the responsibility of the ATC to issue all workers involved in the maintenance of pavements and/ or intrusive works at the site with a copy of the EMP (and where relevant a specific EMP for the works), and to ensure that they understand their responsibilities under the EMP and know whom they should contact regarding any issues relating to the EMP, particularly when intrusive works are planned or about to be implemented.

Workers being inducted to the site must be advised on the requirements of the EMP, the nature and purpose of the capping system, the underlying contamination and the need to report breaches of the cap and to reinstate such breaches in a timely manner.

5. Management of Contaminants

The management strategy adopted for the contaminated buried road profile at the site is to leave the impacted material *in situ* whenever possible. The capping must be maintained in a condition which provides an appropriate, permanent barrier between the contaminated substrate and site users. The contaminants are recognised as a road pavement type material consisting of a black "bituminous" type material which is in fact a road tar, binding together a graded aggregate. There is no odour associated with the tar material.

All site occupants and staff must be made aware of their responsibility to inform the EMP Officer if any damage is sustained to the capping layer which will require repair or the need to breach the cap for intrusive works. It is the EMP Officer's responsibility to assess any damage to the cap or proposed cap breaches with respect to the ongoing functionality of the cap as a barrier layer. In addition, it is the EMP Officer's responsibility to make inspections of the cap to ensure that no damage has been sustained which may impact the suitability of the cap as a barrier layer or to ensure that the cap has been re-instated to a suitable standard following intrusive works.

Records should be maintained of cap inspections and any damage (including during planned works) assessed for its potential to impact the soundness of the cap and its effectiveness as a physical barrier. These records should include the date of inspection, identification of personnel conducting the inspection, photographs of any damage and recommendations for repair or further re-instatement works as required. A sample pro forma for capping inspections is attached as Appendix B. Records also need to be kept of all repair works undertaken on the site capping to demonstrate that all required reinstatement works have been implemented and certified by the EMP Officer.

For any activities which require excavation/disturbance of the cap (e.g. excavations, repairs or installation of additional services), a Safe Work Method Statement (SWMS) should be prepared, generally in accordance with the following:

- Description of appropriate personal protective equipment (PPE) and hygiene provisions. As a minimum, the PPE should include the availability of disposable dust masks (P1 or P2) and leather gloves in addition to standard PPE such as safety boots, hard hats etc. Standard hygiene provisions should include bans on smoking and eating on the job, washing hands on completion of the work, etc;
- Materials at a depth of 1.8 m – 2.2 m bgl displaying properties of bituminous tar/ a buried road profile should be considered to be contaminated and treated accordingly;
- Prepare temporary areas to receive clean and contaminated soils resulting from excavations;
- Careful excavation and segregation of materials above the cap (uncontaminated soils) and below the cap (contaminated soils). Contaminated profiles are to be stockpiled on an impervious, non-soil base and cleaned up afterwards (e.g. concrete slab, plastic sheet etc);
- Conduct the works with minimal disturbance of contaminated profiles including provisions to condition (moisten) excavations and excavated materials to prevent dust emissions;
- Asbestos conduits are to be immediately placed in unbroken sections into plastic bags labelled 'Asbestos' and double bagged and sealed. Asbestos waste is to be disposed of as Special Waste (Asbestos) to a landfill licensed to accept this type of waste. During the removal of conduits from the excavation, a P2 face mask will be worn;
- Remove and dispose excess contaminated soils in accordance with regulatory requirements where required, for example, classification of material to be disposed off-site in accordance with the *Waste Classification Guidelines*, NSW EPA 2008 and as amended July 2009;
- Reinstatement contaminated soils below the cap where practical with Virgin Excavated Natural Material (VENM) where necessary and reinstate the cap; and
- Records should be maintained of all works including contaminated soils encountered, including soil/fill descriptions, depth and location on site, and disposal arrangements.

All operations and activities conducted on the site must fully comply with the provisions of relevant NSW legislation including, in particular, the relevant environmental and occupational health and safety (OH&S) legislation, and should include measures to minimise contaminant migration/cross contamination of otherwise uncontaminated soils.

A qualified contaminated land consultant and/or hygienist should undertake inspections when contaminated material is encountered and following the completion of the works to confirm the following:

- The work was conducted in accordance with the approved SWMS;
- The work has not resulted in any adverse human health or environmental impact; and
- Site capping has been appropriately reinstated.

6. Groundwater Extraction

It is unlikely that groundwater will be encountered during works for which this EMP applies. Further, even though groundwater has been shown not to be contaminated, works which will encounter groundwater will generally need their own Environmental Control Plans which will need to include the management of groundwater. In the event that groundwater is encountered the groundwater will need to be collected and stored in a suitable container (tank or similar), tested and analysed. The water may need to be disposed off-site by a licensed liquid waste contractor.

7. Legislative Requirements

All operations and activities conducted on the site must fully comply with the provisions of relevant NSW environmental legislation and occupational health and safety (OH&S) legislation, as well as any further requirements imposed by the relevant authorities, e.g. NSW EPA under *the Contaminated Land Management Act, 1997*, *Occupational Health and Safety Act, 2000*, *Working with Asbestos, WorkCover 2008*, and the *Protection of the Environment Operations Act, 1997* and the associated Regulations.

8. Contingency Plan

If a breach of the capping layer occurs and the buried road profile is exposed at any time without the prior preparation and implementation of relevant management procedures or works specific Environmental Control Plan, access to the area must be immediately restricted by the EMP Officer, the affected area delineated and cordoned off through placement of barriers or other appropriate means. The breach should be rectified as soon as possible and in accordance with the provisions as outlined in Section 5 of the EMP.

9. Conclusion

This document outlines the requirements for managing capped, contaminated fill at the site under normal commercial usage. If any works are planned requiring penetration of the capping or pavements at the site, a suitably qualified environmental consultant should be engaged to develop specific site management procedures.

10. Limitations

Douglas Partners (DP) has prepared this report for a project at the Spectator Precinct which is located within the Royal Randwick Racecourse, Randwick in accordance with DP's proposal dated 17 July 2013. Acceptance of the proposal was received from Mr Andrew Steventon of the Australian Turf Club, on 17 July 2013. The report is provided for the exclusive use of the Australian Turf Club for this project only and for the purpose(s) described in the report. It should not be used for other projects or by a third party. In preparing this report DP has necessarily relied upon information provided by the client and/or their agents.

The results provided in the report are indicative of the sub-surface conditions only at the specific sampling or testing locations, and then only to the depths investigated and at the time the work was carried out. Sub-surface conditions can change abruptly due to variable geological processes and also as a result of anthropogenic influences. Such changes may occur after DP's field testing has been completed.

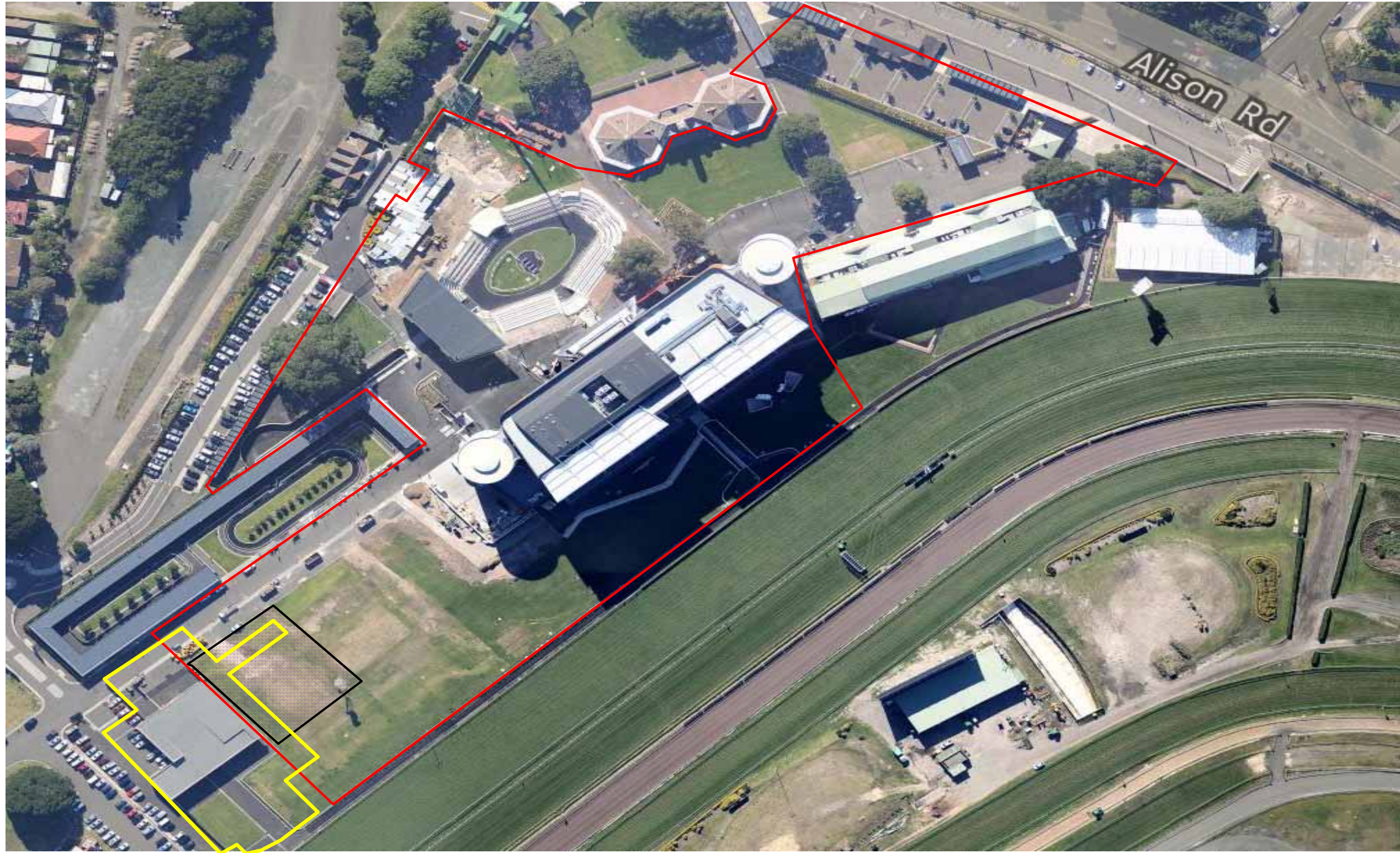
DP's advice is based upon the conditions encountered during the investigations reported herein. The accuracy of the advice provided by DP in this report may be limited by undetected variations in ground conditions between sampling locations. The advice may also be limited by budget constraints imposed by others or by site accessibility.




This report must be read in conjunction with the attached notes and should be kept in its entirety without separation of individual pages or sections. DP cannot be held responsible for interpretations or conclusions made by others unless they are supported by an expressed statement, interpretation, outcome or conclusion given in this report.

Douglas Partners Pty Ltd

Appendix A

Drawing
and Notes About this Report



LEGEND	
	Spectator Precinct Boundary
	Areas within Spectator Precinct Where Buried Road Profile May Be Encountered
	Areas within Adjoining Day Stalls Site Currently Being Managed under Days Stalls EMP



Client: Australian Turf Club		
DRAWN BY: NSA	SCALE: As shown	OFFICE: Sydney
APPROVED BY		

TITLE:	Areas Where Contamination (Buried Road Profile) May Be Encountered
	Spectator Precinct
	Royal Randwick Racecourse, Randwick

Project	71976.08
Drawing No:	1
Revision:	A

About this Report

Douglas Partners



Introduction

These notes have been provided to amplify DP's report in regard to classification methods, field procedures and the comments section. Not all are necessarily relevant to all reports.

DP's reports are based on information gained from limited subsurface excavations and sampling, supplemented by knowledge of local geology and experience. For this reason, they must be regarded as interpretive rather than factual documents, limited to some extent by the scope of information on which they rely.

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This report is the property of Douglas Partners Pty Ltd. The report may only be used for the purpose for which it was commissioned and in accordance with the Conditions of Engagement for the commission supplied at the time of proposal. Unauthorised use of this report in any form whatsoever is prohibited.

Borehole and Test Pit Logs

The borehole and test pit logs presented in this report are an engineering and/or geological interpretation of the subsurface conditions, and their reliability will depend to some extent on frequency of sampling and the method of drilling or excavation. Ideally, continuous undisturbed sampling or core drilling will provide the most reliable assessment, but this is not always practicable or possible to justify on economic grounds. In any case the boreholes and test pits represent only a very small sample of the total subsurface profile.

Interpretation of the information and its application to design and construction should therefore take into account the spacing of boreholes or pits, the frequency of sampling, and the possibility of other than 'straight line' variations between the test locations.

Groundwater

Where groundwater levels are measured in boreholes there are several potential problems, namely:

- In low permeability soils groundwater may enter the hole very slowly or perhaps not at all during the time the hole is left open;

- A localised, perched water table may lead to an erroneous indication of the true water table;
- Water table levels will vary from time to time with seasons or recent weather changes. They may not be the same at the time of construction as are indicated in the report; and
- The use of water or mud as a drilling fluid will mask any groundwater inflow. Water has to be blown out of the hole and drilling mud must first be washed out of the hole if water measurements are to be made.

More reliable measurements can be made by installing standpipes which are read at intervals over several days, or perhaps weeks for low permeability soils. Piezometers, sealed in a particular stratum, may be advisable in low permeability soils or where there may be interference from a perched water table.

Reports

The report has been prepared by qualified personnel, is based on the information obtained from field and laboratory testing, and has been undertaken to current engineering standards of interpretation and analysis. Where the report has been prepared for a specific design proposal, the information and interpretation may not be relevant if the design proposal is changed. If this happens, DP will be pleased to review the report and the sufficiency of the investigation work.

Every care is taken with the report as it relates to interpretation of subsurface conditions, discussion of geotechnical and environmental aspects, and recommendations or suggestions for design and construction. However, DP cannot always anticipate or assume responsibility for:

- Unexpected variations in ground conditions. The potential for this will depend partly on borehole or pit spacing and sampling frequency;
- Changes in policy or interpretations of policy by statutory authorities; or
- The actions of contractors responding to commercial pressures.

If these occur, DP will be pleased to assist with investigations or advice to resolve the matter.

About this Report

Site Anomalies

In the event that conditions encountered on site during construction appear to vary from those which were expected from the information contained in the report, DP requests that it be immediately notified. Most problems are much more readily resolved when conditions are exposed rather than at some later stage, well after the event.

Information for Contractual Purposes

Where information obtained from this report is provided for tendering purposes, it is recommended that all information, including the written report and discussion, be made available. In circumstances where the discussion or comments section is not relevant to the contractual situation, it may be appropriate to prepare a specially edited document. DP would be pleased to assist in this regard and/or to make additional report copies available for contract purposes at a nominal charge.

Site Inspection

The company will always be pleased to provide engineering inspection services for geotechnical and environmental aspects of work to which this report is related. This could range from a site visit to confirm that conditions exposed are as expected, to full time engineering presence on site.

Appendix B

Capping Pro Forma

Capping Inspection Pro forma

Project: Spectator Precinct, Royal Randwick Racecourse.

Location:

Requirements	Acceptance/Comments
Description of capping condition;	
Does capping provide an appropriate permanent impermeable barrier between the contaminated substrate and site users;	
Description of any damage;	
Description of any deteriorating areas;	
Description of any exposed materials;	
Estimated depth of any exposed materials;	
Photographs of any damage noted in the capping;	
Sketch plan of the location of any damage;	
Notification of Capping Breach required?	
Planned remedial action including short and long term actions;	
Timeframe for completion of the remedial actions;	

INSPECTION Officer

Initial Inspection undertaken.

_____ Name, Designation _____ Inspection Date

Inspection of cap reinstatement undertaken.

_____ Name, Designation _____ Inspection Date

SIGNOFF BY EMP Officer

Inspection(s) is considered to be suitable.

_____ EMP Officer _____ Date