

# Referral Response - Building Surveying

<b>Application Number:</b>	DA17/1092
<b>Referral Officer</b>	Drago Vrh
<b>Referral Unit</b>	Building Surveying
<b>Date of referral</b>	14 November 2017
<b>Land to be developed (Address):</b>	Lot 2 DP 1108408 13 - 15 Park Road WALLACIA NSW 2745
<b>Proposed Development:</b>	Staged Construction of Wallacia Memorial Park including Cemetery for 88,000 Burial Plots, Chapel & Related Crematorium & Function Rooms, Administration Building, Services Outbuilding, Parkland Areas, Internal Roads, Car Parking & Associated Landscaping & Site Servicing Works

## Recommendation

No objections - subject to conditions

## Detailed assessment

I have reviewed the application and plans.

The proposal is to construct a;

Chapel  
Crematorium  
Function Room  
Administration Building  
Outbuildings

to service a memorial ( burial ) park.

The classifications will be 9b, 8, 5, and 10a.

No objection is raised to the application subject to the recommended building conditions being included should consent be granted.

Yours sincerely,

Name Drago Vrh  
**Position Building Surveyor**

## Recommended Conditions:

### General

- 1 The development shall not be used or occupied until an Occupation Certificate has been issued.
- 2 A Construction Certificate shall be obtained prior to commencement of any building works.

### Environmental Matters

- 3 Erosion and sediment control measures shall be installed **prior to the commencement of works on site** including approved clearing of site vegetation. The erosion and sediment control measures are to be maintained in accordance with the approved erosion and sediment control plan(s) for the development and the Department of Housing's "Managing Urban Stormwater: Soils and Construction" 2004.

## **BCA Issues**

- 4 All aspects of the building design shall comply with the applicable performance requirements of the Building Code of Australia so as to achieve and maintain acceptable standards of structural sufficiency, safety (including fire safety), health and amenity for the on-going benefit of the community. Compliance with the performance requirements can only be achieved by:
- (a) complying with the deemed to satisfy provisions, or
  - (b) formulating an alternative solution which:
    - complies with the performance requirements, or
    - is shown to be at least equivalent to the deemed to satisfy provision, or
  - (c) a combination of (a) and (b).

It is the owner's responsibility to place on display, in a prominent position within the building at all times, a copy of the latest fire safety schedule and fire safety certificate/ statement for the building.

- 5 The owner of a building, to which an essential fire safety measure is applicable, shall provide Penrith City Council with an annual fire safety statement for the building. The annual fire safety statement for a building must:
- (a) deal with each essential fire safety measure in the building premises, and
  - (b) be given:
    - within 12 months after the last such statement was given, or
    - if no such statement has previously been given, within 12 months after a final fire safety certificate was first issued for the building.
    - As soon as practicable after the annual fire safety statement is issued, the owner of the building to which the statement relates:
      - must also provide a copy of the statement (together with a copy of the current fire safety schedule) to the Commissioner of New South Wales Fire Brigades, and
      - prominently display a copy of the statement (together with a copy of the current fire safety schedule) in the building.

## **Construction**

- 6 Stamped plans, specifications, a copy of the development consent, the Construction Certificate and any other Certificates to be relied upon shall be available on site at all times during construction.

The following details are to be displayed in a maximum of 2 signs to be erected on the site:

- the name of the Principal Certifying Authority, their address and telephone number,
- the name of the person in charge of the work site and telephone number at which that person may be contacted during work hours,
- that unauthorised entry to the work site is prohibited,
- the designated waste storage area must be covered when the site is unattended, and
- all sediment and erosion control measures shall be fully maintained until completion of the construction phase.

Signage but no more than 2 signs stating the above details are to be erected:

- at the commencement of, and for the full length of the, construction works onsite, and
- in a prominent position on the work site and in a manner that can be easily read by pedestrian traffic.

All construction signage is to be removed when the Occupation Certificate has been issued for the development.

**7 Prior to the commencement of construction works:**

(a) Toilet facilities at or in the vicinity of the work site shall be provided at the rate of one toilet for every 20 persons or part of 20 persons employed at the site. Each toilet provided must be:

- a standard flushing toilet connected to a public sewer, or
- if that is not practicable, an accredited sewage management facility approved by the council, or
- alternatively, any other sewage management facility approved by council.

(b) All excavations and backfilling associated with the erection or demolition of a building must be executed safely and in accordance with the appropriate professional standards. All excavations associated with the erection or demolition of a building must be properly guarded and protected to prevent them from being dangerous to life or property.

(c) If an excavation associated with the erection or demolition of a building extends below the level of the base of the footings of a building on an adjoining allotment of land, the person causing the excavation to be made:

- must preserve and protect the building from damage, and
- if necessary, must underpin and support the building in an approved manner, and
- must, at least 7 days before excavating below the level of the base of the footings of a building on an adjoining allotment of land, give notice of intention to do so to the owner of the adjoining allotment of land and furnish particulars of the excavation to the owner of the building being erected or demolished. The owner of the adjoining allotment of land is not liable for any part of the cost of work carried out for the purposes of this condition, whether carried out on the allotment of land being excavated or on the adjoining allotment of land, (includes a public road and any other public place).

(d) If the work involved in the erection or demolition of a building is likely to cause pedestrian or vehicular traffic in a public place to be obstructed or rendered inconvenient, or involves the enclosure of a public place, a hoarding or fence must be erected between the work site and the public place:

- if necessary, an awning is to be erected, sufficient to prevent any substance from, or in connection with, the work falling into the public place,
- the work site must be kept lit between sunset and sunrise if it is likely to be hazardous to persons in the public place, and
- any such hoarding, fence or awning is to be removed when the work has been completed.

**8 Construction works or subdivision works that are carried out in accordance with an approved consent that involve the use of heavy vehicles, heavy machinery and other equipment likely to cause offence to adjoining properties shall be restricted to the following hours in accordance with the NSW Environment Protection Authority Noise Control Guidelines:**

- Mondays to Fridays, 7am to 6pm
- Saturdays, 7am to 1pm (if inaudible on neighbouring residential premises), otherwise 8am to 1pm
- No work is permitted on Sundays and Public Holidays.

Other construction works carried out inside a building/tenancy and do not involve the use of equipment that emits noise are not restricted to the construction hours stated above.

The provisions of the Protection of the Environment Operations Act, 1997 in regulating offensive noise also apply to all construction works.

## **Certification**

**9 Prior to the commencement of any earthworks or construction works on site, the proponent is to:**

- (a) employ a Principal Certifying Authority to oversee that the said works carried out on the site are in accordance with the development consent and related Construction Certificate issued for the approved development, and with the relevant provisions of the Environmental Planning and Assessment Act and accompanying Regulation, and
- (b) submit a Notice of Commencement to Penrith City Council.

The Principal Certifying Authority shall submit to Council an "Appointment of Principal Certifying Authority" in accordance with Section 81A of the Environmental Planning and Assessment Act 1979.

### Information to accompany the Notice of Commencement

Two (2) days before any earthworks or construction/demolition works are to commence on site (including the clearing site vegetation), the proponent shall submit a "Notice of Commencement" to Council in accordance with Section 81A of the Environmental Planning and Assessment Act 1979.



# Referral Response - Environmental Health -

## Biodiversity

<b>Application Number:</b>	DA17/1092
<b>Referral Officer</b>	Jenna Hore
<b>Referral Unit</b>	Environmental Health - Biodiversity
<b>Date of referral</b>	12 June 2018
<b>Land to be developed (Address):</b>	Lot 2 DP 1108408 13 - 15 Park Road WALLACIA NSW 2745
<b>Proposed Development:</b>	Staged Construction of Wallacia Memorial Park including Cemetery for 88,000 Burial Plots, Chapel & Related Crematorium & Function Rooms, Administration Building, Services Outbuilding, Parkland Areas, Internal Roads, Car Parking & Associated Landscaping & Site Servicing Works

### Recommendation

Not supported

### Detailed assessment

I have reviewed the application and associated documentation, including the updated information and information provided in submissions, in regards to flora and fauna for DA17/1092. I have not undertaken an inspection of the site. The following comments are provided for your consideration and assessment:

#### Biodiversity

- The site is currently a golf course, so whilst there is some vegetation across the site, it is generally highly modified.
- A Flora and Fauna Assessment Report has been prepared for the site by Travers Bushfire and Ecology (October 2017). The site contains some scattered remnants of Cumberland Plain Woodland (Critically Endangered under the *NSW Biodiversity Conservation Act 2016* and the commonwealth *Environment Protection and Biodiversity Conservation Act 1999*), and River-flat Eucalypt Forest (Endangered under the *NSW Biodiversity Conservation Act 2016*). These are generally highly modified with little to no understory, however they do meet the definition of the EECs at a state level, with some patches meeting the definition at the federal level. Regardless of their current level of modification, they are of biodiversity value, containing rare patches of these communities and habitat for associated fauna.
- There is a significant number of exotic plantings across the site and weeds are present in some of the native patches, particularly along the waterways.
- Despite the poor condition of much of the native vegetation, the presence of the native vegetation is important, providing hollows, foraging resources, and general biodiversity resources.
- A Tree Assessment Report has been prepared by Travers Bushfire and Ecology (October 2017). There are some considerable discrepancies within the report with many instances where trees listed for retention in the tables are shown as being removed in the maps and vice versa. This appears to have been rectified in the updated information.
- The Landscape Masterplan has been updated to include a species list for plantings and is generally consistent with the recommendations of the flora and fauna report and the Vegetation Management Plan.
- A Vegetation Management Plan (VMP, Travers Bushfire and Ecology (10/4/2018)) has been prepared for the areas of the site that are proposed to be regenerated or restored as Cumberland Plain Woodland, River Flat Eucalypt Forest or other natural area. In general the VMP is suitable, however I request some small modifications be made prior to approval:
  - The VMP does not currently reference the best practice guidelines for western Sydney: *Recovering Bushland on the Cumberland Plain: Best practice guidelines for the management and restoration of bushland* (DEC, 2005). The VMP is to include reference to these guidelines and that all works within the

proposed VMP areas.

- The VMP should include the reuse of Large Woody Debris (LWD) on site. All native trees over 15cm DBH that are scheduled for removal are to be reused on site within the VMP areas in line with benchmark values of LWD in CPW and RFEF communities. This excludes the reuse of hollows which has already been included in the VMP.
- The use of fire as a management tool has not been included in the VMP. This VMP is to look further in to the use of fire for restoration purposes at this site.
- Whilst the VMP details activities for 5 years, it is to specify that the areas of the site that are proposed to be regenerated or restored as Cumberland Plain Woodland, River Flat Eucalypt Forest or other natural area are to be retained and managed in perpetuity in order to maintain the percentage weed cover at 5% or less.
- There is no reference to ongoing maintenance of the habitat boxes. Habitat boxes are to be monitored annually to ensure they are maintained and free of pest animals. Further, the habitat boxes are to be maintained, and replaced where necessary, for a period of 30 years. This is to be included within the VMP.
- Submissions from local residents have raised the possibility of the presence of a yet-to-be-described, rare species of orchid within the golf course grounds. My previous correspondence to the Planner in relation to this requested that "*In light of this new information, it is recommended that a targeted survey and assessment be undertaken by a qualified botanist with experience in orchids for the presence of this undescribed species. The survey is to be undertaken during likely flowering time. It is suggested that the botanist be provided the contact details regarding the submission so that information can be provided with regard to locations, flowering times, etc.*" It is my understanding that this information was provided to the applicant, however, the updated information provided does not make any mention of this and there have been no further surveys, and the possible presence has not been addressed. This must be addressed by the applicant prior to any further assessment. Alternatively, Council may wish to engage an independent botanist who specialises in orchids to undertake a survey. I can provide assistance with coordinating this.

Please refer back to the Senior Biodiversity Officer when the issues raised above have been fully addressed.

Yours sincerely,

Jenna Andrews  
**Senior Biodiversity Officer**

# Referral Response - Environmental Health -

## Biodiversity

<b>Application Number:</b>	DA17/1092
<b>Referral Officer</b>	Jenna Hore
<b>Referral Unit</b>	Environmental Health - Biodiversity
<b>Date of referral</b>	15 November 2017
<b>Land to be developed (Address):</b>	Lot 2 DP 1108408 13 - 15 Park Road WALLACIA NSW 2745
<b>Proposed Development:</b>	Staged Construction of Wallacia Memorial Park including Cemetery for 88,000 Burial Plots, Chapel & Related Crematorium & Function Rooms, Administration Building, Services Outbuilding, Parkland Areas, Internal Roads, Car Parking & Associated Landscaping & Site Servicing Works

### Recommendation

Not supported

### Detailed assessment

I have reviewed the application and associated documentation in regards to flora and fauna for DA17/1092. I have not undertaken an inspection of the site. The following comments are provided for your consideration and assessment:

#### Biodiversity

- The site is currently a golf course, so whilst there is some vegetation across the site, it is generally highly modified.
- A Flora and Fauna Assessment Report has been prepared for the site by Travers Bushfire and Ecology (October 2017). The site contains some scattered remnants of Cumberland Plain Woodland (Critically Endangered under the *NSW Biodiversity Conservation Act 2016* and the commonwealth *Environment Protection and Biodiversity Conservation Act 1999*), and River-flat Eucalypt Forest (Endangered under the *NSW Biodiversity Conservation Act 2016*). These are generally highly modified with little to no understory, however they do meet the definition of the EECs at a state level, with some patches meeting the definition at the federal level.
- There is a significant number of exotic plantings across the site and weeds are present in some of the native patches, particularly along the river course.
- Despite the poor condition of much of the native vegetation, the presence of the native vegetation is important, providing hollows, foraging resources, and generally biodiversity resources.
- The majority of vegetation is proposed to be retained, however, I believe that there is opportunity to retain additional vegetation, particularly some of the more significant trees, including hollow bearing trees.
- A Tree Assessment Report has been prepared by Travers Bushfire and Ecology (October 2017). There are some considerable discrepancies within the report with many instances where trees listed for retention in the tables are shown as being removed in the maps and vice versa.
- The Landscape Masterplan has not identified plant species to be used on site.
- The application states that they will restore areas of Cumberland Plain Woodland and vegetation within the riparian areas. A vegetation management plan should be prepared.

Based on the above comments and review of the proposal, the proposed application is unsatisfactory. Prior to further assessment by the Senior Biodiversity Officer, the following must be addressed by the applicant.

- The applicant is to resubmit the Tree Assessment report fixing all the discrepancies between the tables and the maps.

2. The applicant is to ensure that all 'weed' species are prioritised for removal above the removal of an native species. There are instances where privet is retained instead of natives.
3. Additional consideration is to be given to the retention of the following trees: T133, T238, T244, T247, T784, T876, T877, and all habitat trees/hollow-bearing trees. The trees in the patch of Cumberland Plain Woodland that falls within the APZ area of the Chapel should also be reconsidered. As stated in the Flora and Fauna Assessment Report, it is unlikely that clearing will be required for the APZ as they already generally meet the IPA requirements. No native trees should be cleared without a clear and demonstrated need and unless all alternatives have been considered.
4. A Vegetation Management Plan is to be prepared for the site. The VMP is to be jointly prepared by a Landscape Architect and an Ecological Consultant or Bush Regenerator with theoretical and practical experience in bushland restoration and management on the Cumberland Plain (a Certificate IV in Conservation and Land Management or equivalent is required as a minimum). It is to be informed by both the Flora and Fauna Assessment Report and the Landscape Masterplan. The VMP is to:
  - be consistent with relevant environmental legislation and policies, including, but not limited to, the NSW Biodiversity Conservation Act 2016, the Biosecurity Act 2016 the Water Management Act 2002, the Rural Fires Act 1997 as well as the federal Environment Protection and Biodiversity Conservation Act 1999, and guidelines such as the Rural Fire Services Planning for Bushfire Protection 2006 and Recovering Bushland on the Cumberland Plain: Best practice guidelines for the management and restoration of bushland (DEC, 2005).
  - Identify and map the various vegetation management zones across the site and the primary objectives for each zone.
  - A detailed plan that clearly outlines how vegetation should be protected and managed in each zone both during construction/establishment of the development and the ongoing future management of the vegetation over the life of the development.
  - In areas identified as Cumberland Plain Woodland and River Flat Eucalypt Forest, the focus is to be on best practice bush regeneration methods and habitat improvement and augmentation.
  - Specify a plant species list to be used on site with a clear focus on species from the Cumberland Plain. This is to align with the Landscape Plan, which should also have a planting palette that is dominated by species native to western Sydney.
  - The VMP is to identify potential future impacts on the vegetation from the development and road, including access, weed encroachment, pest animals, stormwater etc, and is to outline how these impacts will be managed in the long term.
  - Project tasks should be defined and described, including a schedule detailing the sequence and duration of works necessary for the initial 5 years of the implementation of the VMP.
  - Costings for the initial 5 years of implementation of all components and stages of the work including materials, labour, watering, maintenance, monitoring and reporting should be included.
  - Processes for monitoring and review, including a method of performance evaluation should be identified. This should include replacing plant losses, addressing deficiencies, problems, climatic conditions and successful completion of works.

Please refer back to the Environment team when the issues raised above have been fully addressed.

Yours sincerely,

Jenna Andrews  
**Senior Biodiversity Officer**

# Referral Response - Environmental Health - Environmental Management

<b>Application Number:</b>	DA17/1092
<b>Referral Officer</b>	Teresa Dalton
<b>Referral Unit</b>	Environmental Health - Environmental Management
<b>Date of referral</b>	29 June 2018
<b>Land to be developed (Address):</b>	Lot 2 DP 1108408 13 - 15 Park Road WALLACIA NSW 2745
<b>Proposed Development:</b>	Staged Construction of Wallacia Memorial Park including Cemetery for 88,000 Burial Plots, Chapel & Related Crematorium & Function Rooms, Administration Building, Services Outbuilding, Parkland Areas, Internal Roads, Car Parking & Associated Landscaping & Site Servicing Works

## Recommendation

Not supported

## Detailed assessment

I have reviewed the additional information response by URBIS Doc ref: SA6970 dated 21 May 2018 and Acoustic Studios Doc ref: 20180320 CMC3216.0002.Let dated 20 March 2018. The information submitted to the Environmental Health Team is deficient for the purposes of enabling a thorough assessment of the application. In this regard, the following must be submitted to enable further consideration of the application:

### 1. Acoustic

#### Intensification of use of the Clubhouse

The Clubhouse will be used as a wedding and wakes function centre which may intensify its existing approved use.

Further information is therefore required to be provided relating to noise impacts the operation and use of the club would generate and impact on nearby residents for the day and night. Noise impacts include but are not limited to entertainment/music, delivery times of service vehicles, vehicles and noise from guests entering and exiting of vehicles and effects on sleep disturbance

### 2. Construction

A Construction Noise and Vibration Management Plan will need to be prepared prior to CC. Conditions of consent will be applied to achieve the relevant criteria.

### 3. Air Quality

In my previous response, it was noted that there the air quality impact assessment contained a calm wind conditions figure of 7.5% for the Badgerys Creek automatic weather station, whilst the meteorological input into the dispersion model used a calm wind conditions figure of only 2.5%. In this respect a statement addressing this variation and its potential impact on the modelling results, and therefore impacts, was requested. It appears this statement has not been provided. This item needs to be addressed.

In addition, further information needs to be provided regarding seasonal inversion effects on the air quality and emissions from the crematorium, its effect on the neighbouring residents and surrounding areas.

### 4. Availability of Sewerage Services

The Civil Engineering Services Report Appendix K which was to address sewerage management was not submitted.

Other buildings on the site do not appear to be connected to sewer. There are limited existing sewer lines however there is no proposal within the application as to how future sewer or waste water connections are to occur specifically areas east of the Clubhouse.

If any areas are not connected to Sydney Water, or proposed to be connected to sewer, Council must be provided further information demonstrating how connection to the current sewer line is to occur.

Alternatively, a Waste Water Report, prepared from an appropriately qualified person outlining how the proposal will comply with Councils On-Site Sewer Management (OSSM) and Greywater Reuse Policy is to be submitted to council. Information to be provided to council is listed in Table A1 of the Council's Policy.

The report must also provide detail on management of the potential impact the wastewater disposal may have on burial locations, areas of public access, and salinity at the site.

## **5. Waste Management**

The site has been identified through the DIPNR, 2002 'Salinity Potential in Western Sydney' as having 'moderate salinity potential'. The report states that scattered areas of scalding and indicator vegetation have been noted but concentrated levels have not been mapped. Saline areas may occur in this zone, which have not been identified or may change if risk factors change adversely.

Further assessments are required as recommended in the Preliminary Geotechnical, Groundwater and Salinity Assessment (Document Id 7912803) report ***which states that additional assessments would need to be carried out to confirm improved characterisation of the site salinity conditions, such as low lying areas/drainage depressions.*** This aspect is particularly important if wastewater is to be disposed of on-site.

## **6. Land Contamination**

Report on Preliminary Site Investigation - Contamination by Douglas Partners project #76652.02 dated 6 November 2017 recommends further intrusive investigation is carried out to determine:

- The extent of each potential area of environmental concern (PAEC) and identify any further potentials contaminants of concern.
- Current possible contamination of land/grounds through leakage from asbestos piping, chemical storage/sheds and hazardous building materials and chemicals stored /spilt in sheds and areas of filling on site, 2x1000L above ground storage tanks containing diesel and the other with petroleum
- The presence of hotspots of pesticides, herbicides and fertilisers contaminants in the soil.
- The extent of each PAEC and identify any further potentials contamination of concern.

Given the above, the requirements of clause 7 of SEPP 55 have not been met, and site suitability for the proposed development has not been established.

The applicant is required to prepare and submit a Detailed Site Investigation of the site. The DSI is to be prepared by a suitably qualified and experienced land contamination consultant in accordance with NEPM 2013 and relevant NSW EPA Guidelines. Should remediation be required, a Remediation Action Plan will also need to be prepared and submitted to Council prior to determination of the application.

Yours sincerely,

Teresa Dalton

**Environmental Health Officer**

# Referral Response - Environmental Health - Environmental Management

<b>Application Number:</b>	DA17/1092
<b>Referral Officer</b>	Teresa Dalton
<b>Referral Unit</b>	Environmental Health - Environmental Management
<b>Date of referral</b>	10 May 2018
<b>Land to be developed (Address):</b>	Lot 2 DP 1108408 13 - 15 Park Road WALLACIA NSW 2745
<b>Proposed Development:</b>	Staged Construction of Wallacia Memorial Park including Cemetery for 88,000 Burial Plots, Chapel & Related Crematorium & Function Rooms, Administration Building, Services Outbuilding, Parkland Areas, Internal Roads, Car Parking & Associated Landscaping & Site Servicing Works

## Recommendation

Not supported

## Detailed assessment

I have reviewed the application and plans submitted by Catholic Metropolitan Cemeteries Trust C/- Urbis Pty Ltd. I have not undertaken an inspection of the site.

The following comments are provided for your consideration and assessment:

### Noise impact

Unsatisfactory for the following reasons:

#### **Acoustic Report prepared by Acoustic Studio reference 20171024 dated 24th October 2017**

Noise source from the operation of the clubhouse is not a part of the assessment as the operation of the centre will not change from its current operations. Conditions will be provided to ensure that the current legislation and guidelines are adhered to.

Further information needs to be provided on the operating hours of the clubhouse including delivery times of goods and services associated with the operation and maintenance of the clubhouse.

Operating hours of the cemetery 7am-5pm Mon-Fri and 7am-12pm Saturday

Sensitive land uses have been identified and taken into account when establishing data logger locations.

Acoustic assessment method has been carried out according to the NSW INP. Building services and plant (including furnaces) impact on receivers assessed against NSW Industrial Noise Policy 2000. Traffic noise for activities of the operations of the site and operational noise associated with the proposed buildings and traffic noise from internal noise were assessed.

The acoustic report does not however state that the distance the noise meter was located from the most affected point (INP states if this is more than 30m from the residence, the logger should be located at the most affected point within 30 m of the residence).

### Construction

Relevant guidelines and standards have been referenced in developing the project noise criteria. Noise Policy for

Industry (2017) does not apply as the assessment was carried out prior to the date of Policy coming into effect.

The report states construction noise and vibration assessment associated legislation from NSW DECC, Australian Standards and POEO Act 1997 apply. *Design noise and vibration limits have been set for the project for construction activities*. No detail has been provided on the type of equipment being used during construction, distance from the most sensitive receiver, vibration effects and sound power output of the equipment.

As recommended in the acoustic report, a Construction Noise and Vibration Management Plan should be provided and approved by council prior to the commencement of construction. Furthermore as per the report's recommendations, noise monitoring is recommended to ensure that compliance is being maintained. Managing of communication and complaints from and with the community to the site manager should be carried out as per information provided in the acoustic report.

Conditions will be applied to ensure that additional noise control measures are put in place and construction best practice presented on the report to minimise the noise impacts on the neighbourhood.

#### External Noise

#### Traffic Noise emissions

It is acknowledged that the background noise reading taken for the purpose of this report may not provide an accurate background and ambient noise levels were dominating around the site such noise associated with the golf course.

Statement is provided that compliance with Road Noise Policy will be met relating to places of worship day 50dBA Night 40dBA Residential 55dBA and Night 50dBA. To ensure compliance is met conditions will applied.

#### Mechanical Plant

While a statement indicating sound mitigation measures will be implemented for the furnaces (and number of) and mechanical plant, further acoustic information and compliance with NSW INP and POEO Act 1997 will be will need to be provided once the specific brand of furnace has been decided. Location of flue will also need to be provided.

#### Chapel

Data from noise assessment indicates compliance with INP however conditions will be applied to ensure that offensive noise and noise levels are no more than 5dBA from the background noise. Time restrictions as mentioned in the SOEE report will be condition to operating hours of 7am-6pm daily. Statement required to confirm seating number of chapel at full capacity is 100 people.

#### Noise Intrusion from Internal Roads

Minimal impact of noise intrusion from internal roads on the clubhouse however conditions will be applied to ensure that requirements of AS2107 are achieved for the proposed new buildings but not the established clubhouse.

#### Operational Noise Impact

##### Traffic

Traffic noise generation predicted car traffic is correct in relation to data provided by RMS on nearest location station at Parker Road Kingswood. It would not be expected that there would be a substantial increase in traffic to the current operations/patrons of the site however it is acknowledge that there is a predicted 2dBA noise level increase form traffic flow during operations of the site. Therefore no mitigations to manage noise from traffic will be required. Conditions will apply for the management of noise from traffic should substantiated complaints arise.

##### Crematorium

Noise level predictions have been provided for 1 furnace from 7am-6pm however the development states that 2 furnaces will be operating on a worst case scenario of 24 hours a day 365 days/year. Further detailed assessment needs to be provided on source noise levels of the furnace and equipment mechanical plant for day, evening and night.

##### Building Services

As mentioned in the report, final plant equipment has not been decided therefore further detailed assessment

needs to be provided on accumulative operational noise impact from building services equipment day, evening and night; noting that evening background noise 29dBA at the most sensitive receiver allows for maximum noise output of 34dBA

### Kitchen

No information has been provided on noise sources from mechanical equipment operating from the kitchen or catering area. Further detailed assessment needs to be provided on the operational noise impact on residence from the coolroom compressor fans and exhaust fans for day, evening and night.

### Building Use

While the SOEE report recommends that conditions of consent can be applied achieve the relevant criteria it will be recommended that a qualified acoustic engineer will be required to provide a detailed acoustic report to council prior to conditions being placed on the consent to begin construction. The acoustic report must show compliance with the relevant legislation in relation to the predicted *accumulative* noise levels of all equipment/mechanical plant, building services, and traffic and patron noise prediction/modeling during operations of the site in the day evening and night at the most sensitive receivers. A map showing noise contours during construction and operation of the site should be detailed in the report including expected noise barriers from buildings and the environment and indications of the most sensitive receivers to the operation of the noise sources.

Proposed noise control measures will be conditioned to be implemented.

### Air pollution/odour

Satisfactory subject to review and approval by consultant qualified in assessing air quality reports:

#### **Assesment carried out by Northstar Airquality ref:18.1014FR1V3 sated 2 November 2017**

6 (group C development after 2005) of the Protection of the Environment Operations (Clean Air) Regulation 2002 and in accordance with the Approved Methods for Modeling and Assessment of Air Quality in NSW and Australian Cemeteries & Crematoria Association

Assessment has been carried out as worst case scenario of 24 hours/day operation 365 days/year with resulting statement that the assessment indicates that the operation can be performed with no exceedance of the relevant air quality criteria

Assessment requirements have been modelled off the NSW EPA Air Quality Impact Assessment, Approved Methods for the Modeling and Assessment of Air Quality in NSW, Approved Methods for the Sampling and Analysis of Air Pollution in NSW and the National pollution Inventory for Crematoria.

Start-up operating temperature of primary and secondary combustion chambers 300°C-800°C after preheating to 850°C average time of cremation 90minutes per body at 800°C-1000°C

The NPI states that the above temperature and residence time for combustion is correct. The applicant is using 1<sup>st</sup> and 2<sup>nd</sup> Chamber in the crematoria and has stated there will be no odour emissions as a result of this process (on the proviso that the equipment is operating efficiently).

Equipment used in the crematoria must to meet the POEO (Clean Air) Regulation 2010 (non-scheduled activities in NSW) where the operation of a plant and equipment should be performed to minimise air pollution. The most stringent in-stack emission limits have been adopted and shown to be compliant with the relevant criteria in the assessment. In addition the assessment shows compliance with the relevant criteria with ambient air quality adopted are predicted to be achieved (as per POEO Act 1997 requires).

Best Available Techniques (BAT) are referenced to minimise pollution emissions however it is noted that the report acknowledges that the ACCA wet scrubbing is not recommended due to cost and disposal of waste liquid. The use of modern and well maintained cremators not normally requiring wet scrubbers. Assessment is proposing dry scrubbers /filtration to reduce mercury.

The assessment states that the proposed operation will contribute to less than 1.5% of the relevant criteria at Warragamba Dam with emissions of the proposal to contribute to <1% of the relevant criteria at Warragamba Dam.

Dispersion modeling predictions of principal toxic air pollutants are in compliance with the impact assessment criteria in the Approved Methods for the Modeling and Assessment of Air Pollutants in New South Wales (2017). Statement is required indicating if there is to be an impact off dispersion of pollutants as a result of there being a variation of results of 7.5% calm winds in Badgerys Creek automatic weather station and 2.5% difference shown in 2015 modeling in Appendix B for calm weather.

Recommended emission controls of dry scrubber/filtration unit should be put in place to ensure that Mercury levels are kept below emission limits stated in the Approved Methods for the Modeling and Assessment of Air Pollutants in New South Wales. Ongoing monitoring as stipulated in the assessment must be adhered to as per requirements listed in Appendix A of the assessment.

The assessment states that continuous monitoring requirements of (Department for Environment, Food & Rural Affairs UK 2012) abated cremators. It is recommended that monitoring parameters in table 8.5 of the ACCA Environmental Guidelines for Crematoria and Cremators be followed.

As per the ACCA Guidelines, the facility must ensure that operations and maintenance of equipment in a good condition must be maintained following parameters in 8.5 Internal auditing and reporting in the ACCA Environmental Guidelines for Crematoria and Cremators.

The stated method and frequency of monitoring referred to in the assessment is deemed acceptable and will be conditioned to be adhered to.

Further information needs to be provided regarding proposed airport and possible affects relating to the crematorium operation i.e. air quality affect and effect of heat from crematorium. It is recommended that the development application be referred to the Air Services Australia for further comments on the effects of the crematorium over the flight path.

In addition, further information needs to be provided regarding seasonal inversion effects on the air quality and emissions from the crematorium, its affect on the neighbouring residents, creeks and Warragamba Dam water.

Due to the complexity of the application it is recommended that Council employ the services of a consultant qualified in assessing air quality reports specifically for crematoriums to ensure that the proposal is within compliance of the relevant legislation and standards

## **Waste**

Satisfactory subject to conditions:

### Waste Management Plan

Plan mentions compliance with Penrith City Council's DCP 2014, Protection of the Environment Operations Act 1997 and NSW EPA Waste Classification Guidelines Part 1 Classifying Waste and compliance with AS2601: The demolition of structures as referenced in the EP&A Regulation 2000

Testing for waste classification of excavated material is to be conducted by the project manager with the proposal of implementing a waste management plan based on the results. It is recommended that no construction certificate be issued until the testing for waste type and development of waste management plan (including disposal location) is provided to Council and approved by Council in writing. Reference is required to be made to section 143 of the Protection of the Environment Operations Act with information provided as to type of waste identified and nominated facility for depositing of the classified waste. Conditions of consent will reflect this

requirement.

Asbestos waste (and the management of the waste) from the existing sheet lining in the outbuildings has been identified in the management plan. Disposal of asbestos according to the relevant legislation has been referenced. Asbestos piping has been identified in the contaminated land report

Details and receipts of waste materials from construction must be made available for council to view. This will be conditioned in the conditions of consent

Storage of waste is approximately 3 meters from Park Road. Conditions will be made to ensure that no members of the public are to have access the waste storage area and that the waste is covered and secured at all times to prevent rubbish and dust from dispersing from the bin. Staff will be required to carry out daily collection of any windblown material

#### Wastewater

Unsatisfactory for the following reasons:

Waste Management Plan for Liquid Waste requires further details

Further information on sediment control for washing of vehicles needs to be provided. Identification of areas where truck are to be hosed down and location of storm water drains to be identified. Sediment erosion controls measures need to be detailed around areas where pollution could occur from liquid waste

Storm water pollution prevention methods proposed to be developed by the contractor needs to be provided to Council prior to the issue of Construction Certificate

Specific details of how waste water is to be disposed of needs to be supplied including advice provided by Sydney Water

#### Operational waste management plan

Reference has been made to compliance with Penrith Councils Penrith DCP 2014, C5 Waste Management conditions will be placed to ensure continual compliance.

Further information required on liquid, clinical or hazardous waste relating to the body preparation prior to burying or cremating needs to be identified with nominated waste facility stipulated

Health Grease Trap locations and Sydney water trade waste agreement will be required to be submitted to council prior to the issue of occupation Certificate. Conditions will be applied to ensure compliance

#### **Land contamination and Geotechnical Report by Douglas Partners project #76652.02 dated June 2017**

Unsatisfactory for the following reasons:

Preliminary site investigation on the land has occurred providing only basic information on possible contaminations, salinity, acid sulphate soil information.

Current possible contamination of land has been identified: asbestos piping, chemical storage/sheds and hazardous building materials and chemicals stored /spilt in sheds and areas of filling on site. 2x1000L above ground storage tanks containing diesel and the other with petroleum needs to be further investigated for possible ground contamination through leakage.

The presence of hotspots of pesticides, herbicides and fertilisers contaminants in the soil also need to be identified through further testing.

While the report states that the type of contamination of potential areas of environmental concern (PAEC)

associated with these areas is low to medium hazard rating (level 1 to 2), it is agreed that further intrusive investigation is carried out to determine the extent of each PAEC and identify any further potentials contamination of concern.

Salinity has been identified through the DIPNR, 2002 'Salinity Potential in Western Sydney' as having 'moderate salinity potential'. Further investigation on salinity levels are required due to the evidence of scalding and indicator vegetation on historical mapping.

No known occurrence of acid sulphate soils were identified using the NSW OEH acid sulphate risk mapping of the site

Sensitive receptors & site history information was provided albeit history information was limited due to access and confidentiality of the assessment. Areas where the golf course was developed, sheds were built and removed and ground disturbance were identified.

No notices have been identified on NSW EPA website. A review of Council holds environmental report(s) relating to the subject property (Land ID 82667). Report Title: Environmental Assessment of Stockpiled Fill - Wallacia Golf Course, 13 Park Road Wallacia NSW 2745 (Ref: DL2940\_S000025 Revision 2) The assessment report provided to council indicated that soil samples carried out on the fill used on the premises did not contain any volatile, semi volatile hydrocarbons, pesticides or PCBs. PAH and heavy metals were detected however were below NEPME. No asbestos was detected in the soils however foreign material was found which may contain asbestos.

Whilst the areas of fill were deemed satisfactory for the use of the land as a golf course, further detailed site investigation should be undertaken to determine the associated risk of exposure to asbestos and chemicals to the community and workers during the digging up of soil for burials and during the construction phase of the site. Should any excavated soil be reused onsite, contamination assessment of excavation materials (soil) must be carried out and a report submitted to council for approval prior to the reuse of the materials. This will be addressed as a condition of consent.

Further detailed site investigation (DSI) should be undertaken including intrusive investigation, sampling analysis and assessment to determine land use suitability focusing on the identified PAEC. DSI should follow the requirements of the National Protection Authority (NSW EPA) Guidelines:

- Guidelines for the NSW Site Auditor Scheme 3<sup>rd</sup> Edition (EPA 2017)
- Guidelines for Consultant reporting on Contaminated Land Sites (EOH 2011)
- Sampling Design Guidelines (EPA 1995)
- Other Guidelines made or approved by the EPA that are relevant to the site such as Australian Standards or guidance on a specific issues

It is recommended that a hydrological risks assessment is carried out. The risk assessment will be based upon data and knowledge gained from the desktop assessment and the intrusive site investigation. The scope of the risk assessment required will be dependent on site specific factors such as intended annual burial rate, the local vulnerability of groundwater and the scale of the site proposed.

### **Geotech report**

Detailed plans of the burials be provided indicating the layout of the burial plots. The following must be take into consideration (practice guides cemeteries burials and the water environment):

- Burial plots should be at least 250 m away from a borehole, spring or well used for the supply of drinking water.
- Burial plots should be at least 50 m away from all other boreholes, springs or wells.
- Burial plots should be at least 50 m away from a river or wetland
- Burial plots should be at least 10 m away from field drains (this also includes old agricultural drainage systems no longer in use as they can act as preferential pathways).
- If bedrock is encountered in the trial pit, that area of the site should not be used for burials.

The area of the site is not suitable for burial if there is standing water at the bottom of the burial pit when first dug.

Based on the above comments and review of the proposal, the proposed application is unsatisfactory. Prior to further assessment by the Environment Team, the above matters must be addressed by the applicant. Please refer back to the Environment team when the issues raised above have been fully addressed.

Yours sincerely,

Teresa Dalton  
**Environmental Health Officer**



# Referral Response - Environmental Health - Public Health

<b>Application Number:</b>	DA17/1092
<b>Referral Officer</b>	Teresa Dalton
<b>Referral Unit</b>	Environmental Health - Public Health
<b>Date of referral</b>	12 June 2018
<b>Land to be developed (Address):</b>	Lot 2 DP 1108408 13 - 15 Park Road WALLACIA NSW 2745
<b>Proposed Development:</b>	Staged Construction of Wallacia Memorial Park including Cemetery for 88,000 Burial Plots, Chapel & Related Crematorium & Function Rooms, Administration Building, Services Outbuilding, Parkland Areas, Internal Roads, Car Parking & Associated Landscaping & Site Servicing Works

## **Recommendation**

No objections - subject to conditions

## **Detailed assessment**

I have reviewed the additional information provided by the applicant reference SA6970 dated 21 May 2008. I have not undertaken an inspection of the site.

Confirmation received that the premises is not conducting body preparation and/or embalming. Conditions will be placed to state 'premises is not to conduct body preparation and/or embalming unless prior approval from council is obtained'.

Confirmation received item 4 is for the purpose of holding 12 deceased adult bodies encased in suitable coffins in a refrigerated body. Conditions will be placed to ensure that no more than 12 bodies are held at one time to ensure suitable refrigeration of bodies is maintained.

### Body holding room

A statement has been received that bodies are to be kept for no longer than 48 hours. Conditions will be placed to ensure compliance with relevant legislation and regulations relating to holding of bodies

Body bags and clinical waste disposal not required as no body preparation occurring on site

### Burial of bodies

A statement has been provided that should 'shallow burial' be carried out prior approval from NSW Department of Health will be obtained in accordance with compliance with NSW Health Policy Directive 'Shallow Burial' Document Number PD2013\_045. Conditions will be placed to ensure approval is obtained prior to shallow burials are carried out.

### Burial in Vaults

Confirmation received that no bodies will be placed in above-ground burial structures. Conditions will be placed to ensure that no above-ground burial structures are performed.

### Body cremation

Confirmation received bodies bought to the crematorium will be placed in refrigeration therefore do not need to comply with the requirement where cremation is carried out within 4 hours of the delivery.

## Registers

Confirmation received registers for all activities (cremation, mortuary) to be created and kept on site. Conditions will be placed to ensure compliance with requirements under the Public Health (Disposal of bodies) Regulation 2002.

## Infectious Diseases

As no body preparation is occurring on site, complying with the guidelines specified in Part B of the Australian Guidelines for the Prevention and Control of Infection in Healthcare as published by the National Health and Medical Research Council is not required

## **Further information regarding the location of plant room for ventilation and refrigeration compressors/fans/equipment**

Compliance with AS4674-2004 Design. Construction and Fit-out of a Food Premises. The response provided from the applicant is requesting enforcement of conditions relating to the Building Code of Australia.

BCA volume 1, footnote states that Footnote: OTHER LEGISLATION AFFECTING BUILDINGS In addition to any applicable provisions of the Environmental Planning and Assessment Act 1979, the Environmental Planning and Assessment Regulation 2000 and this Code, there is a variety of other regulatory provisions, including legislation, regulation and departmental policies that impose requirements affecting the design, construction and/or performance of buildings in NSW specifically -

- 8. Dining Rooms and Bars 8.1 Administering Agency NSW Food Authority Relevant Legislation Food Regulation 2010
- 11. Food Premises 11.1 Administering Agency NSW Food Authority Relevant Legislation Food Regulation 2010

The Building Code specifically relates to the following areas of a restaurant/food premises

- Exits must be in accordance with the Building Code of Australia.
- Adequate space must be provided for patrons and staff to access dining and serving areas. These areas must be designed in accordance with the Building Code of Australia.
- Cold and Frozen Storage Rooms Doors must be able to be opened from the inside and an alarm fitted in accordance with the Building Code of Australia.
- Mechanical Exhaust The Building Code of Australia (BCA) requires a commercial kitchen to be provided with a mechanical ventilation system that complies with Australian Standard 1668.1-1991 (The use of ventilation and air conditioning in buildings – Part 1) and Australian Standard 1668.2-1991 (The use of ventilation and air conditioning in buildings – Part 2) where: any single apparatus has: - a total maximum electrical power input exceeding 8 kilowatts (kW), or - a total gas power input exceeding 29 mega joules per hour (MJ/h), or the total maximum power input to more than one apparatus exceeds: - 0.5kW electrical power for each 1m<sup>2</sup> of floor area of the room or enclosure, or - 1.8MJ gas for each 1m<sup>2</sup> of floor area of the room or enclosure dishwashers and other washing and sanitising equipment that vent steam into the area to the extent that there is, or is likely to be, condensation collecting on walls and ceilings equipment installed on the premises after the mechanical ventilation system has been designed and installed must not impair the efficiency of the system or the natural ventilation
- Toilet Facilities - including: number of toilets staff and public toilet facilities to be equipped with appropriate hand washing facilities toilet facilities to be clean and in good repair toilets located within the food premises are to be separated from areas where food is handled, displayed or stored by an air lock equipped with self-closing doors, or fitted with self-closing doors and provided with mechanical ventilation that operates when in use and thirty

(30) seconds after the cubicle is vacated

AS4674-2004 Design Construction and Fit out of a food premises provides criteria to ensure that food businesses are designed, constructed and fitted out in compliance with the requirements of the Australian Food Standards Code, Standard 3.2.3, Food Premises and Equipment. Therefore conditions will be placed to ensure the food premises proposed in the development application must comply with AS4674-2004 Design Construction and Fit out of a food premises.

#### Lower level floor plan catering:

The function of the 'kitchen on the lower level floor' is the kitchen used for full food preparation or plating up only of food for the conference rooms. Additional details on the kitchen to show compliance with the Australian Standards based on its function/use

Bar area specifically hand washing facilities; warm water common spout and hands free, slop sink for waste liquids, floor waste drainage or mop sink

Cool room connected to sewer for the waste water from the condenser

#### Ground floor plan

Further details requiring the following:

Compliance with AS4674-2004 Design Construction and Fit out of a food premises for the kitchen and bar area.

Details of the following are required:

Hand washing facilities warm water common spout and hands free

Staff toilets (including hand washing facilities)

Fixtures fittings and equipment locations in the bar and kitchen including materials to be used; smooth impervious and can be effectively cleaned

Floor waste drainage locations or mop sink

Exhaust system location and compliance with AS1668.1 & 1668.2

Wash up areas (double bowl sink or dishwasher that is capable for sanitizing of equipment)

Cool room connected to sewer for the waste water from the condenser

#### Garbage area

Must comply with AS4674-2004 Design Construction and Fit out of a Food Premises in relation structure being smooth impervious, fitted with a hose tap connected to a water supply, graded and drained to a waste disposal system.

The application has been referred to James Plant ([James.Plant@health.nsw.gov.au](mailto:James.Plant@health.nsw.gov.au)) from NSW Health for review and comments in relation to compliance with the Public Health Act 2010 and Public Health Regulations 2012  
Yours sincerely,

Teresa Dalton  
**Environmental Health**

#### **Recommended Conditions:**

##### **General**

- 1 The proprietor of the food business shall ensure that the requirements of the NSW Food Act 2003, NSW Food Regulation 2010 and the Australian and New Zealand Food Standards Code are met at all times.
- 2 The development shall not be used or occupied until an Occupation Certificate has been issued.

A satisfactory inspection from an authorised officer of Council's Environmental Health Department is required prior to the issue of the Occupation Certificate. The occupier is to contact the Environmental Health Department to organise an appointment at least 72 hours prior to the requested inspection time.

- 3 The business is to be registered with Penrith City Council by completing the "Registration of Premises" form. This form is to be returned to Council prior to the issuing of the occupation certificate and operation of the business.
- 4 Premises is not to conduct body preparation and/or embalming unless prior approval from council is obtained.
- 5 A person who buries a body contained in a coffin must place the coffin so that its upper surface is not less than 900 millimeters below the natural surface level of the soil where it is buried as required under the Public Health Regulation 2012.

Above ground burial structures are not permitted to be used on the premises.

Should 'shallow burial' be carried out, prior approval from NSW Department of Health will be obtained in accordance with compliance with NSW Health Policy Directive 'Shallow Burial' Document Number PD2013\_045. Conditions will be placed to ensure approval is obtained prior to shallow burials are carried out.

- 6 A person must not use a holding room for any purpose other than the storage of bodies.

## **Health Matters and OSSM installations**

- 7 The construction, fit out and finishes of the food premises must comply with Standard 3.2.3 of the Australian and New Zealand Food Standards Code, and AS4674-2004 *Design, Construction and Fitout of Food Premises*.
- 8 Cooking appliances which exceed a total maximum power input of 8kw for electrical, or a total gas input of 29MJ/h for a gas appliance are required to have a kitchen exhaust system installed in accordance with Clause F4.12 of the Building Code of Australia and Australian Standard AS1668 Parts 1 & 2.

Detailed plans together with calculations for the system must be provided as part of the development application or as part of the Construction Certificate application.

The exhaust hood must completely cover the equipment to be ventilation and extended at least 200mm beyond the perimeter of the equipment. The exhaust hood must be provided with a condensation gutter around its base. The gutter must be at least 50mm wide by 25mm deep. Where abutting walls are located the hood must be constructed so as to finish flat against the wall surface.

The low edge of a canopy type exhaust hood must be at least 2000 mm above floor level.

Prior to the issuing of an Occupational Certificate, and operation of the business, the exhaust system shall be certified by an appropriately qualified person to comply with the Building Code of Australia and Australian Standard AS1668 Parts 1 & 2. A copy of the certification and supporting documentation must be provided to Council's Environmental Health Department if Council is not the Principal Certifying Authority

- 9 A Food Safety Supervisor, with a current Food Safety Supervisor Certificate recognised by the NSW Food Authority, must be appointed by the business prior to commencement of the business.

- 10 Details of the kitchen, bar and food preparation and storage areas must be prepared by a suitably qualified person and certified in accordance with Standard 3.2.3 of the Australian and New Zealand Food Standards Code and AS 4674-2004 *Design, Construction and Fitout of Food Premises* to the satisfaction of the Certifying Authority prior to a Construction Certificate being issued.

Lower level floor plan catering:

The function of the 'kitchen on the lower level floor' is the kitchen used for full food preparation or plating up only of food for the conference rooms. Additional details on the kitchen to show compliance with the Australian Standards based on its function/use

Bar area specifically (but not limited to):

Hand washing facilities; warm water common spout and hands free,

Slop sink for waste liquids,

Floor waste drainage or mop sink

Cool room and keg room (including location) connected to sewer for the waste water from the condenser

Details of the finish of the walls and ceiling (note acoustic panels not permitted in food preparation areas);

Details and location of coving to all floor wall joins

Construction material of shelving indicating lowest shelf at least 150mm above ground level

Details of materials used on benches in kitchen

Location of personal staff storage area

Any fluorescent light fittings being fitted with a smooth faced diffuser and identified on the plan;

Ground floor plan

Further details requiring the following (but not limited to):

Hand washing facilities warm water common spout and hands free

Staff toilets (including hand washing facilities)

Fixtures fittings and equipment locations in the bar and kitchen including materials to be used; smooth impervious and can be effectively cleaned

Floor waste drainage locations or mop sink

Exhaust system location and compliance with AS1668.1 & 1668.2

Wash up areas (double bowl sink or dishwasher that is capable for sanitizing of equipment)

Cool room connected to sewer for the waste water from the condenser

Garbage area

Must comply with AS4674-2004 Design Construction and Fit out of a Food Premises in relation structure being smooth impervious, fitted with a hose tap connected to a water supply, graded and drained to a waste disposal system.

No fit out works shall commence on the site will be granted until after the above plan has been supplied to Council and Council has advised the Certifying Authority in writing that it is satisfactory.

- 11 Hand basins must be serviced with hot and cold water through a single outlet, able to be mixed at a temperature of at least 40°C and fitted with a hands free operation. Where sensor taps are installed the basin must not be more than 6 metres from the hot water system. Disposable paper hand towels and soap must be provided and serviced from a dispenser adjacent to each hand basin.
- 12 Staff toilets must be provided on the premises. Where a toilet adjoins a food preparation area it must be separated by an air lock and its doors must be fitted with self closing devices. Toilets intended for customer use must not be accessed through areas where open food is handled, displayed or stored.
- 13 A hand basin must be located within the toilet cubicle. Hand basins must be freestanding, serviced with hot and cold water through a single outlet, able to be mixed at a temperature of at least 40°C and fitted with a hands free operation. Where sensor taps are used the basin must not be more than 6 metres from the hot water system. Disposable paper hand towels and soap must be provided and serviced from a dispenser adjacent to each hand basin.

- 14 Hot water services must be positioned at least 75mm clear of the adjacent wall surfaces, and mounted at a minimum 150mm above the floor level on a non-corrosive metal stand. The hot water system must be sized to meet the demands of the food business during peak operating and cleaning periods and be able to provide sufficient hot water throughout the working day. Discharge from the hot water system must enter the sewer through a tongue dish in accordance with Sydney Water's requirements.
- 15 The floor of the food premises must be finished in an approved non absorbent material, evenly laid, or graded and drained to a trapped floor waste. All floor wastes in the food preparation, service and scullery area must be fitted with a sump removable basket and grate, a minimum 200mm in diameter, and finished in all stainless steel.
- 16 Approved, recessed coving must be provided at all intersections of the floor with the walls within all food preparation, service, storage and scullery areas. All coving must have a minimum concave radius of 25mm and be installed so as to be integral to the surface finish of both floor and wall in such a manner as to form a continuous, uninterrupted surface.
- 17 The walls of the food preparation area must be of solid construction and finished with glazed ceramic tiles or other approved material to a height of 2 metres. The intersection of tiles and render must have a flush finish, or be splayed at a 45 degree angle to eliminate a ledge that would allow dust and grease to accumulate.
- 18 The walls at the rear of cooking appliances must be surfaced with an impervious material, such as stainless steel, which extends from the canopy to the floor. Where a cooking appliance is sealed to the wall, the material must be lapped over the top edge of the appliance to provide a grease and vermin proof seal. Cooking appliances must only be sealed to walls made of a non-combustible material.
- 19 The ceiling in the preparation, service and scullery areas must be constructed with a rigid, non-absorbent, smooth faced material free from open joints, cracks and crevices and be painted with a light coloured washable paint. The intersection of the walls and ceiling must be tight jointed, sealed and dust proofed. Drop-in panel style ceilings are not permitted.
- 20 Service pipes, electrical conduits, refrigeration condensate pipes shall be enclosed or chased into walls, floors or plinths. Where it can be demonstrated that this is not feasible pipes and conduits fixed on brackets, providing a minimum of 25 mm clearance from the adjacent wall and 100 mm from the floor or adjacent horizontal surface, can be used. All openings in walls, floors and ceilings, through which service pipes and conduits pass, must be vermin proof.
- 21 Appliances used to store potentially hazardous food must have a capacity to keep foods hotter than 60°C, refrigerated foods less than 5°C, and frozen foods less than 18°C and be provided with a digital thermometer, accurate to 1°C that can be easily observed from outside the appliance.
- 22 The meter box must be provided with an approved non-absorbent, smooth faced cover. The cover is to be splayed at an angle of 45 degrees to the wall at the top and made tight fitting to the wall surfaces.
- 23 All utensils and equipment must undergo a washing, sanitising and rinsing cycle. The sanitising rinse cycle must achieve a water temperature of 80°C for 2 minutes or 75°C for 10 minutes.
- 24 All wash sinks and food preparation sinks must be serviced with hot and cold water through a single outlet. Wash sinks must be supplied with water at a temperature of not less than 54 °C for washing.
- 25 The food preparation sink must be separated from all other sinks by a minimum distance of 2 metres or have an approved form of physical barrier that separates the sink.
- 26 The cleaners sink must be serviced with hot and cold water through taps fitted with hose connectors. Cleaner's sinks must be located outside of areas where open food is handled.
- 27 All fixtures, fittings and equipment must be provided with smooth and impervious surfaces, free from cracks and crevices to enable easy cleaning.

All fittings and fixtures must be built into the wall and floor so as to be free from joint, gaps and cavities to enable easy cleaning or alternatively, supported on one of the following:

- a. Plinths – plinths must be an integral part of the floor, constructed of solid materials similar to the floor at least 75mm in height and coved at the intersection with the floor. All plinths must have a smooth and impervious finish. All fittings and fixtures must be properly sealed to the plinth so to be free from gaps, cracks and cavities.
- b. Wheels or castors – fittings and fixtures can be supported on wheels or castors. The wheels and castors must be capable of supporting and easily moving a full loaded fitting. All wheels and castors must be provided with a restraining device.
- c. Legs – fittings and fixtures can be supported on legs but must be constructed of a non-corrosive, smooth metal or moulded plastic. All legs must be free from cracks and crevices. All legs must have a clearance space between the floor and the underside of the fitting of at least 200 mm.

NOTE: False bottoms under fittings are not permitted (AS4674-2004 – Section 4.2 and 4.3).

- 28 All food preparation benches must be constructed in stainless steel or finished in a smooth and non-absorbent approved material that is free of joints.
- 29 All storage cabinets (internal and external surfaces) must be finished in a smooth and non-absorbent approved material that is free of joints.
- 30 Light bulbs or tubes are to be shatterproof or fitted with approved light diffusers (covers or shields) to prevent contamination of food by glass from a broken light globe or tube. Light fittings must be free from any feature that would collect dirt or dust, harbour insects or make the fitting difficult to clean. Light fittings must be recessed into ceilings or equipment where possible. Heat lamps must be protected against breakage by a shield extending beyond the bulb.
- 31 Shelves must be smooth and impervious; free from joints, cracks and crevices; and able to be easily cleaned. The lowest shelf must be at least 200mm off the floor to allow easy cleaning underneath. Approved materials must be used, such as galvanised piping, stainless steel or laminated plastic. Shelves are to be sealed to the wall or kept clear of walls to allow easy access for cleaning (>40 mm).
- 32 The coolroom and/or freezer room floor must be finished with a smooth even surface and graded to the door. A sanitary floor waste must be located outside the coolroom and freezer adjacent to the door. All metal work in the coolroom and freezer room must be treated to resist corrosion.
- 33 Condensation from coolrooms and refrigeration motors must discharge to sewer via a tundish with air gap separation in accordance with Sydney Water requirements.
- 34 The coolroom and freezer room must be provided with:
  - A door which can at all times be opened from inside without a key and
  - An approved alarm device located outside the room, but controlled only from the inside.
- 35 Sufficient lockers must be provided in the food preparation area or store room specifically for the storage of cleaning materials, employees' clothing and personal belongings.
- 36 The storeroom must be constructed in accordance with AS4674-2004 by providing the following:
  - A smooth, even, non-slip floor surface.
  - Coving at all intersections of the floor and walls with approved, recessed coving to a minimum concave radius of 25mm, so as to be integral to the surface finish of both floor and wall in such a manner as to form a continuous, uninterrupted surface. "Feather edge skirting" and non-rebated coving are not permitted.
  - Walls must be provided with a smooth even surface and painted with a light coloured washable paint to enable easy cleaning.
  - The ceiling must be constructed with a rigid, non-absorbent, smooth faced material free from open joints, cracks and crevices and be painted with a light coloured washable paint. The intersections of the walls and ceiling must be tight-jointed, sealed and dustproof. Drop in panel style ceilings are not permitted.
  - Shelving or storage racks must be designed and constructed to enable easy cleaning.
- 37 All garbage must be stored in accordance with the requirements of the Food Safety Standards of the Australian and New Zealand Food Standards Code and the *Protection of the Environment Operations Act 1997* to prevent the harbourage of vermin or generation of odours.
- 38 Smooth and impervious surfaces (walls and floors) must be provided to all waste storage areas and rooms. Floor areas must be graded and drained to a floor waste gully connected to the sewer. Open waste storage areas must be appropriately covered and bunded to avoid stormwater entering the sewer. Waste storage rooms must be adequately ventilated and proofed against pests. The area or room must be provided with water service hose connectors to enable easy cleaning.
- 39 Rubbish bins must be cleaned regularly to remove the food scraps stuck on the bin surface and to minimise the emission of odour that attracts insects and vermin. Bins may be cleaned either by the rubbish collecting contractors or inside a rubbish room constructed to the above specifications.  
Bins, hoppers and other containers used for storing garbage or recyclable material shall be:
  - a) constructed of impervious material such as metal or plastic; and
  - b) have tight fitting lids
  - c) bins that cannot be lifted for draining after cleaning shall have drainage bungs at the base.
- 40 The grease arrestor must not be installed in any kitchen, food preparation or food storage area. The grease arrestor shall be installed in accordance with Sydney Water's requirements.

- 41 A person who operates a mortuary or crematory must notify the Director-General of the Ministry of Health of the following prior to the issuing of the Occupation Certificate:
- the name and location of the mortuary or crematory,
  - the name and address of the person who operates the mortuary or crematory,
  - the telephone number of the mortuary or crematory or of the person who operates the mortuary or crematory,
  - in the case of a mortuary—the name and address of any funeral director that has access to the mortuary.
- The person who operates the mortuary or crematory must notify the Director-General of any change in the particulars.
- 42 The construction and operation of the mortuary shall comply with the Public Health Act 2010, Public Health Regulation 2012, Clause 86 and Schedule 2 of Local Government (General) Regulation 2005, NSW Health Guidelines for the Funeral Industry and any other relevant standards, guidelines or codes of practice published or endorsed by the NSW Ministry of Health.
- 43 Refrigerated body storage facilities in a body preparation room or holding room shall not be used for any other purpose than to store bodies. No more than 12 deceased in suitable coffins are to be refrigerated in the body holding room. Deceased are not to be held in the room for no more than 48 hours from the time of being received. Deceased must be refrigerated immediately upon delivery or cremated within 4 hours if not refrigerated upon delivery.
- 44 An operational manual covering all processes associated with the cremation process which ensures compliance with all relevant legislation and guidelines needs to be assessed and approved by Council prior to the issuing of the Occupation Certificate. The operational manual shall also identify monitoring procedures and procedures for handling malfunctions and non-compliance with relevant legislation, guidelines and procedures.
- 45 A cemetery authority must maintain a register of all burials carried out at the cemetery. An entry relating to each burial must be made immediately after the burial has been carried out. Each entry must include the following:
- the name, age and last address of the person whose body or remains have been buried,
  - the date of the person's death,
  - the date of the burial,
  - the section and allotment where the burial has been made,
  - the name of the person (if any) who continues to hold any right of burial in that allotment,
  - the name of the funeral director who transported the body to the cemetery,
  - the fees paid to the cemetery authority for the burial.
- The cemetery authority must keep a copy of the register at the cemetery and make it available for inspection on request by an authorised officer.
- 46 A cremation authority must maintain in the approved form a register of all cremations carried out at the crematory. A cremation authority must:
- make in the register an entry relating to each cremation immediately after the cremation has taken place, and
  - make in the register an entry relating to the disposal of cremated remains as soon as they have been disposed of.

# Referral Response - Environmental Health - Public Health

<b>Application Number:</b>	DA17/1092
<b>Referral Officer</b>	Teresa Dalton
<b>Referral Unit</b>	Environmental Health - Public Health
<b>Date of referral</b>	11 December 2017
<b>Land to be developed (Address):</b>	Lot 2 DP 1108408 13 - 15 Park Road WALLACIA NSW 2745
<b>Proposed Development:</b>	Staged Construction of Wallacia Memorial Park including Cemetery for 88,000 Burial Plots, Chapel & Related Crematorium & Function Rooms, Administration Building, Services Outbuilding, Parkland Areas, Internal Roads, Car Parking & Associated Landscaping & Site Servicing Works

## Recommendation

Not supported

## Detailed assessment

I have reviewed the application and plans by Altis Architectures reference DA1101 Project no 2731.01, dated 17/10/17. I have not undertaken an inspection of the site.

Further information is required regarding the following:

Confirmation as to whether the premises is conducting body preparation and/or embalming if so, the location of the body preparation rooms and compliance under the Public Health Regulation, disposal of bodies

Should the bodies be prepared on site the following information is required:

- location of hand wash basin supply of warm water and hands free
- construction and locations of slabs/tables and fittings to comply with smooth impervious and can be effectively cleaned
- location of one or more impervious containers, each fitted with an elbow operated or foot operated closed lid, for the reception and storage of solid waste arising from the preparation of bodies and storage of all screenings from floor drains
- floor drains location and materials of drains for the removal of body waste. waste licensing details for the removal/collection of the body fluids

Confirmation that item 4 called mortuary is:

- area for refrigeration of bodies or holding of unrefrigerated bodies (statement required)
- size of the mortuary big enough to hold adult bodies

Body holding room

A statement confirming that the body is to be kept for no longer than 48 hours

Information on disposal bins and waste services provided for body bags and clinical waste

Plant room for ventilation and refrigeration compressors/fans/equipment

Burial of bodies:

Confirmation that all bodies will be buried no less than 900mm below the natural surface level of the soil where the body is buried. A statement to be provided that should 'shallow burial' be approved, compliance with NSW Health Policy Directive 'Shallow Burial' Document Number PD2013\_045

Burial in Vaults

Confirmation that bodies to be placed in vaults are prepared off site (has been embalmed and hermetically

enclosed)

#### Body cremation

confirmation bodies bought to the crematorium is cremated within 4 hours of the delivery. If body is placed in a holding room, statement confirming this is required

#### Registers

Confirmation of registers for all activities (cremation, mortuary) to be created and kept on site

#### Infectious Diseases

Statement confirming compliance with clause 57 of the Public Health Regulation 2012 a person must, when carrying out any procedure on a body, comply with the guidelines specified in Part B of the Australian Guidelines for the Prevention and Control of Infection in Healthcare as published by the National Health and Medical Research Council.

#### Lower level floor plan catering:

Further details requiring the following:

Compliance with AS4674-2004 Design Construction and Fit out of a food premises.

The function of the 'kitchen on the lower level floor' Is the kitchen used for full food preparation or plating up only of food for the conference rooms. Additional details on the kitchen to show compliance with the Australian Standards based on its function/use

Bar area specifically hand washing facilities; warm water common spout and hands free, slop sink for waste liquids, floor waste drainage or mop sink

Cool room connected to sewer for the waste water from the condenser

#### Ground floor plan

Further details requiring the following:

Compliance with AS4674-2004 Design Construction and Fit out of a food premises for the kitchen and bar area.

Details of the following are required:

Hand washing facilities warm water common spout and hands free

Staff toilets (including hand washing facilities)

Fixtures fittings and equipment locations in the bar and kitchen including materials to be used; smooth impervious and can be effectively cleaned

Floor waste drainage locations or mop sink

Exhaust system location and compliance with AS1668.1 & 1668.2

Wash up areas (double bowl sink or dishwasher that is capable for sanitizing of equipment)

Cool room connected to sewer for the waste water from the condenser

#### Garbage area

Must comply with AS4674-2004 Design Construction and Fit out of a Food Premises in relation structure being smooth impervious, fitted with a hose tap connected to a water supply, graded and drained to a waste disposal system.

It is recommended that the application also be referred to James Plant ([James.Plant@health.nsw.gov.au](mailto:James.Plant@health.nsw.gov.au)) from NSW Health for review and comments in relation to compliance with the Public Health Act 2010 and Public Health Regulations 2012

Yours sincerely,

Teresa Dalton

**Environmental Health**

# Referral Response - Environmental Health - Waterways

<b>Application Number:</b>	DA17/1092
<b>Referral Officer</b>	Tim Gowing
<b>Referral Unit</b>	Environmental Health - Waterways
<b>Date of referral</b>	20 June 2018
<b>Land to be developed (Address):</b>	Lot 2 DP 1108408 13 - 15 Park Road WALLACIA NSW 2745
<b>Proposed Development:</b>	Staged Construction of Wallacia Memorial Park including Cemetery for 88,000 Burial Plots, Chapel & Related Crematorium & Function Rooms, Administration Building, Services Outbuilding, Parkland Areas, Internal Roads, Car Parking & Associated Landscaping & Site Servicing Works

## Recommendation

Not supported

## Detailed assessment

I have reviewed the documentation provided with the application and my review included in the following:

Wallacia Cemetery Water Sensitive Urban Design Strategy and Stormwater Management Plan prepared by Stormy Water Solutions dated 11 October 2017 (ECM # 8202284)

Stormwater Layout Plans, prepared by Warren Smith & Partners, Job number 5936000, Issue 2 September 2017 (ECM # 8202279)

Additional Information Response Wallacia Memorial Park prepared by URBIS, 21 May 2018

Letter from Martens, dated 22 March 2018 prepared in response to Council's letter dated 23 February 2018 (ECM 8063701)

Watercourse Assessment prepared by Travers bushfire and ecology, October 2017, Reference # A17162W

Civil Engineering Services Report, prepared by Warren Smith & Partners, Issue 20 October 2017

Statement of Environmental Effects prepared by URBIS 3/11/2017

Landscape Plans prepared by Florence Jaquet Landscape Architect, DA Issue, 24/10/2017

Landscape Design Response prepared by Florence Jaquet Landscape Architect Cemetery Specialists, dated 20/10/2017

Preliminary Geotechnical, Groundwater and Salinity Assessment: Proposed Wallacia Cemetery, prepared by Martens consulting engineers, October 2017

In relation to stormwater management, I am of the view that insufficient information has been provided to demonstrate compliance with Council's WSUD Policy.

Based on a review of the revised documentation and additional information and plans provided a

number of ponds, swales, wetlands and bioretention systems are proposed. In response I provide the following comments:

- I was not able to open the MUSIC Modelling saved in ECM. As such, was not able to complete an assessment of the strategy against the requirements of Council's WSUD Policy.
- The concept drainage plans prepared by Warren Smith and Partners do not incorporate all of the details outlined in the Stormwater management report prepared by Stormy Water Solutions. In this regard, the concept plans prepared by Warren Smith and Partners need to be amended to reflect the commitments made in the Stormwater report and supporting MUSIC modelling.
- In relation to water conservation, the stormwater report does not include a commitment to incorporate rain water harvesting and reuse and no details on how the requirements will be met as required by Council's WSUD Policy. Council's WSUD Policy includes a requirement for water conservation measures to be incorporated into the development.
- It is also noted that no operation and maintenance manual has been prepared for the proposed stormwater treatment measures associated with the development.

As raised in my initial review, in relation to the risks and management of groundwater, the Preliminary Geotechnical, Groundwater and Salinity Assessment prepared by Martens concluded that while the risk to groundwater was relatively low, however the report recommended a number of further investigations including that further assessment of groundwater conditions should be undertaken to determine the risk and management considerations for groundwater and specially recommended:

- Detailed surveying of the groundwater well locations and levels to obtain more accurate groundwater data,
- Ensure groundwater monitoring period includes a minimum of 2-3 significant wet weather events and corresponding dry weather periods, and
- Detailed groundwater modelling (using MODFLOW) of the site to determine groundwater levels over the entire site.

In response to these concerns, in the letter from Martens, dated 22 March 2018, it was suggested that additional groundwater monitoring is required and is currently being carried out. The letter also suggested that if burial plots are proposed in the vicinity of MW104 and MW117, the additional groundwater monitoring wells and monitoring would be required to better determine groundwater levels in these areas. In reviewing the landscape plans, it appears that burial plots are proposed in the vicinity of these wells.

As such, it is suggested that additional details are required in relation to the potential impact on groundwater and prior to finalising the assessment of the application, the following information should be prepared.

#### **1. Electronic version of the MUSIC modelling**

I was not able to open the MUSIC modelling which was saved in ECM. The files were in a drains format, As such this needs to be resubmitted.

#### **2. Revised Concept Plans**

The plans must reflect the MUSIC modelling and stormwater management strategy. The plans shall be prepared in accordance with Council's WSUD Technical Guidelines and include cross-section details, swale sizing details and planting details (vegetation type and density) etc. The GPT types and other treatment measures including details on access for maintenance must also be shown on the plan.

#### **3. Water Conservation**

Details on water conservation measures as outlined in Section 3.1 Council's WSUD Policy will also need to be provided.

#### **4. Operation and Maintenance**

A Draft Operation and Maintenance manual should also be provided for the proposed stormwater treatment measures. The manual should include details on the cleaning / maintenance requirements as well as provide an estimation on the annual and lifecycle costs associated with the proposed treatment measures.

Council's WSUD Technical Guidelines are available on Council's Website and were prepared to outline how to comply with the requirements of Council's WSUD policy and outline Council's requirements in relation to the contents of a WSUD Strategy and detail required for concept designs to be lodged with the development application. The guidelines refer to resources which guide the development of suitable plans for submission with a development application.

## **5. Groundwater / Water Management**

It is also suggested that the recommendations provided in relation to the management of groundwater in the report prepared by Martens be completed prior to the approval being granted. Specifically, these included:

That further assessment of groundwater condition be undertaken for contamination of the groundwater risk and management considerations, including:

- Detailed surveying of the groundwater well locations and levels to obtain more accurate groundwater data,
- Ensure groundwater monitoring period includes a minimum of 2-3 significant wet weather events and corresponding dry weather periods, and
- Detailed groundwater modelling (using MODFLOW) of the site to determine groundwater levels over the entire site.

In response to these concerns, in the letter from Martens, dated 22 March 2018, it was suggested that additional groundwater monitoring is required and is currently being carried out. The letter also suggested that if burial plots are proposed in the vicinity of MW104 and MW117, the additional groundwater monitoring wells and monitoring would be required to better determine groundwater levels in these areas. In reviewing the landscape plans, burial plots are proposed in the vicinity of these wells.

As such, it is suggested that additional details are required in relation to the potential impact on groundwater. In this regard, I suggest the Preliminary Geotechnical, groundwater report should be finalised prior to the approval being granted.

**Note:** As suggested in my initial review, I also recommend that Council engage a suitably qualified consultant to provide a comprehensive assessment of the proposal in relation to the risks and management of groundwater.

**Note:**

The referral assessment did not include the review of site flooding or any OSD requirements, as such I recommend that proposal is referred to Council's Engineering Stormwater Supervisor for further assessment.

Should you require additional information regarding this matter please contact me.

Regards

Tim Gowing



# Referral Response - Environmental Health - Waterways

<b>Application Number:</b>	DA17/1092
<b>Referral Officer</b>	Tim Gowing
<b>Referral Unit</b>	Environmental Health - Waterways
<b>Date of referral</b>	22 November 2017
<b>Land to be developed (Address):</b>	Lot 2 DP 1108408 13 - 15 Park Road WALLACIA NSW 2745
<b>Proposed Development:</b>	Staged Construction of Wallacia Memorial Park including Cemetery for 88,000 Burial Plots, Chapel & Related Crematorium & Function Rooms, Administration Building, Services Outbuilding, Parkland Areas, Internal Roads, Car Parking & Associated Landscaping & Site Servicing Works

## Recommendation

Not supported

## Detailed assessment

I have reviewed the documentation provided with the application and my review included in the following:

Watercourse Assessment prepared by Travers bushfire and ecology, October 2017, Reference # A17162W

Civil Engineering Services Report, prepared by Warren Smith & Partners, Issue 20 October 2017

Stormwater Layout Plans, prepared by Warren Smith & Partners, Job number 5936000, Issue 1 September 2017

Statement of Environmental Effects prepared by URBIS 3/11/2017

Landscape Plans prepared by Florence Jaquet Landscape Architect, DA Issue, 24/10/2017

Landscape Design Response prepared by Florence Jaquet Landscape Architect Cemetery Specialists, dated 20/10/2017

Preliminary Geotechnical, Groundwater and Salinity Assessment: Proposed Wallacia Cemetery, prepared by Martens consulting engineers, October 2017

In relation to stormwater treatment, insufficient information has been provided to demonstrate compliance with Council's WSUD Policy.

Based on a review of the plans, a number of ponds, swales, wetlands and bioretention systems are proposed. However, no MUSIC Modelling has been submitted in support. In relation to water conservation, other than some references to water harvesting and reuse, no details on how the requirements will be met. It is also noted that no operation and maintenance manual has been prepared for the proposed stormwater treatment measures associated with the development.

In relation to the risks and management of groundwater, the Preliminary Geotechnical, Groundwater and Salinity Assessment prepared by Martens concluded that while the risk to groundwater was relatively low, however the report recommended a number of further investigations including that further assessment of groundwater conditions should be undertaken to determine the risk and

management considerations for groundwater and specially recommended:

- Detailed surveying of the groundwater well locations and levels to obtain more accurate groundwater data,
- Ensure groundwater monitoring period includes a minimum of 2-3 significant wet weather events and corresponding dry weather periods, and
- Detailed groundwater modelling (using MODFLOW) of the site to determine groundwater levels over the entire site.

From the report, it is also unclear from the report about the interactions between the ground water and proposed wetlands / stormwater treatment measures.

As such, prior to finalising the assessment of the application, the following information should be prepared and submitted for Council's consideration.

### **1. WSUD Strategy**

The information submitted with the development application should also include a WSUD Strategy which includes information on the following:

- WSUD Principles, Objectives and Targets
- Site analysis which identifies any possible constraints for the implementation of WSUD
- Details in the proposed WSUD measures including concept designs of the proposed measures.
- Details of proposed GPTs should also be included to ensure that the proposed devices are modelled appropriately in MUSIC and are suitable for use in the Penrith LGA.

### **2. Music Modelling**

a) The modelling completed shall be revised to inform development of a stormwater treatment system and WSUD strategy for the development site. The design must meet the following environmental pollutant retention criteria:

- 90% Gross Pollutants
- 85% Suspended solids
- 60% Phosphorus
- 45% Nitrogen, and
- There are also requirements to meet water conservation and flow management targets (refer to WSUD Policy)

b) The MUSIC model needs to include a report which clearly identifies catchment breakup, splitting of surface types and all other assumptions that have been made in the model. This must include detail down to the sub-catchment level. Electronic copies of the modelling are also to be submitted to Council for review.

c) Modelling parameters for the determination of the size and configuration of WSUD elements must be in accordance with MUSIC Modelling Guidelines for New South Wales (eWater User Guide which is provided with the MUSIC Software (2011) and with the parameters developed for use in Penrith.

Council has developed a range of parameters to be used in the Stormwater modelling which is available in Council's WSUD Technical Guidelines (available [www.penrithcity.nsw.gov.au](http://www.penrithcity.nsw.gov.au)).

The applicant is encouraged to use MUSIClink which is available in the latest version of MUSIC as it allows the model to be prepared using Council's required parameters.

### **3. Concept Plans**

The plans shall be prepared in accordance with Council's WSUD Technical Guidelines and include Cross-section details (showing filter depth, extended detention, media layers and sub-soil drainage detail etc.), basin sizing details and planting details (vegetation type and density). The type of device / treatment measures and location including details on access for maintenance must also be shown on the plan.

### **4. Operation and Maintenance**

A Draft Operation and Maintenance manual should also be provided of for the proposed stormwater treatment measures. The manual should include details on the cleaning / maintenance requirements as well as provide an estimation on the annual and lifecycle costs associated with the proposed treatment measures.

Council's WSUD Technical Guidelines are available on Council's Website and were prepared to outline how to comply with the requirements of Council's WSUD policy and outline Council's requirements in relation to the contents of a WSUD Strategy and detail required for concept designs to be lodged with the development application. The guidelines refer to resources which guide the development of suitable plans for submission with a development application.

## **5. Groundwater / Water Management**

It is also suggested that the recommendations provided in relation to the management of groundwater in the report prepared by Martens be completed prior to the approval being granted. Specifically, these include:

That further assessment of groundwater condition be undertaken for contamination of the groundwater risk and management considerations, including:

- Detailed surveying of the groundwater well locations and levels to obtain more accurate groundwater data,
- Ensure groundwater monitoring period includes a minimum of 2-3 significant wet weather events and corresponding dry weather periods, and
- Detailed groundwater modelling (using MODFLOW) of the site to determine groundwater levels over the entire site.

Further it's suggested that additional information is required on the interactions between the ground water and proposed stormwater treatment measures as well as existing waterbodies and bores located within the vicinity of the proposed development including offsite.

**Note:** I also recommend that Council engage a suitably qualified consultant to provide a comprehensive assessment of the proposal in relation to the risks and management of groundwater.

### **Note:**

The referral assessment did not include the review of site flooding or any OSD requirements, as such I recommend that proposal is referred to Councils Engineering Stormwater Supervisor for further assessment.

Should you require additional information regarding this matter please contact me.

Regards

Tim Gowing



# Referral Response - Public Domain Amenity & Safety

<b>Application Number:</b>	DA17/1092
<b>Referral Officer</b>	Olivia Kidon
<b>Referral Unit</b>	Public Domain Amenity & Safety
<b>Date of referral</b>	8 December 2017
<b>Land to be developed (Address):</b>	Lot 2 DP 1108408 13 - 15 Park Road WALLACIA NSW 2745
<b>Proposed Development:</b>	Staged Construction of Wallacia Memorial Park including Cemetery for 88,000 Burial Plots, Chapel & Related Crematorium & Function Rooms, Administration Building, Services Outbuilding, Parkland Areas, Internal Roads, Car Parking & Associated Landscaping & Site Servicing Works

## Recommendation

No objections - subject to conditions

## Detailed assessment

The abovementioned application has been assessed with regard to Crime Prevention through Environmental Design (CPTED) and community safety principles.

The Plan of Management for the development briefly outlines the security measures that will be in place for the cemetery, while the Landscape Design and Visual Impact Assessment documents outline the plans for fencing and lighting of the site.

Cemeteries can be popular locations for people to congregate and engage in antisocial activities such as vandalism, loitering in car parks and the consumption of alcohol. The following conditions must therefore be applied to enhance the safety and security of all users of this development.

Kind regards

Olivia Kidon  
Community Safety Coordinator

## Recommended Conditions:

### General

#### 1 Lighting

- Pedestrian pathways, laneways and access routes in outdoor public spaces throughout the development that are intended to be used at night, must be lit to the minimum Australian Standard of AS 1158. Lighting must be consistent in order to reduce the contrast between shadows and illuminated areas and must be designed in accordance with AS4282 – Control of the obtrusive effects of outdoor lighting.

#### 2 Car Parking

- All car parks must be well lit, with consistent lighting to prevent shadowing or glare.
- All surfaces in the car parks must be painted in light coloured paint or finished in light coloured concrete to reflect as much light as possible.

#### 3 Landscaping

- Landscaping throughout the cemetery grounds must be regularly pruned to ensure that site lines are maintained. This is particularly important throughout the areas with high numbers of visitors, such as the Chapel, Function and Administration Building, and around the burial sites.

#### **4 Building Security & Access Control**

- All vehicle and pedestrian entry/exit gates throughout the site must be locked outside of the cemeteries designated hours of operation.
- Intercom, code or card locks or similar must be installed on all entries to the various buildings on site.
- Australian Standard 220 – door and window locks must be installed in all buildings.
- Security patrols must be provided outside of the cemeteries hours of operation.
- Monitored alarm systems to be provided to all buildings on site.
- CCTV must be provided to cover communal public space areas. Cameras must be of sufficient standard to be useful for police in the event of criminal investigations. Lighting is to be provided to support cameras at night (alternatively infra-red cameras are recommended). Signage must be displayed to indicate that CCTV cameras are in use.

#### **5 Graffiti/Vandalism**

- Graffiti resistant coatings must be used to external surfaces where possible, including signage, furniture, retaining walls etc.
- Procedures must be in place to ensure the prompt removal and/or repair of graffiti or vandalism to the buildings, fencing, common areas. This includes reporting incidents to police and/or relevant authorities.

# Referral Response - Heritage Advisor

<b>Application Number:</b>	DA17/1092
<b>Referral Officer</b>	Clare Aslanis
<b>Referral Unit</b>	Heritage Advisor
<b>Date of referral</b>	18 December 2017
<b>Land to be developed (Address):</b>	Lot 2 DP 1108408 13 - 15 Park Road WALLACIA NSW 2745
<b>Proposed Development:</b>	Staged Construction of Wallacia Memorial Park including Cemetery for 88,000 Burial Plots, Chapel & Related Crematorium & Function Rooms, Administration Building, Services Outbuilding, Parkland Areas, Internal Roads, Car Parking & Associated Landscaping & Site Servicing Works

## Recommendation

No objections

## Detailed assessment

DA for change of use Golf Course to cemetery and Function Centre.
CA advised site is not heritage listed, however in the vicinity of several heritage sites and a Conservation area.
The project was presented by CA to Heritage Committee on evening of 6th December.
To be further discussed at next Heritage Advisors Day in January 2018.



# Referral Response - Major Developments -

## Engineer

<b>Application Number:</b>	DA17/1092
<b>Referral Officer</b>	Dennis Urena
<b>Referral Unit</b>	Major Developments - Engineer
<b>Date of referral</b>	13 June 2018
<b>Land to be developed (Address):</b>	Lot 2 DP 1108408 13 - 15 Park Road WALLACIA NSW 2745
<b>Proposed Development:</b>	Staged Construction of Wallacia Memorial Park including Cemetery for 88,000 Burial Plots, Chapel & Related Crematorium & Function Rooms, Administration Building, Services Outbuilding, Parkland Areas, Internal Roads, Car Parking & Associated Landscaping & Site Servicing Works

### Recommendation

Not supported

### Detailed assessment

#### Not supported

I have reviewed the application and the following plans against the Development Engineering Referral Checklist attached:

Prepared By	Report /Drawing No.	Title	Revision & Date	ECM #
Warren Smith & Partners	5936000	Engineering Plans	Rev 2, 9 March 2018	8202279
GRC Hydro		Flood Assessment	October 2017	7912810
Stormy Water Solutions	Report	WSUD and Stormwater Management Plan	11 October 2017 (received 22 May 2018)	8202284
Transport Planning P'ship	17257-Park Rd Cemetery, Wallacia TIA_171026	Traffic Impact Assessment	26 October 2017, 18 May 2018	8202281
Ignite		Site Plans	17 October 2017	7912960
Florence Jacuer Landscape Architect	L101-L504	Landscape Plans	17 April 2018	8202278
Degotardi Smith & Partners	34820A02.DWG	Site Survey Plans	B - 28 September 2017	7913006

A number of deferral items from the initial assessment has not been addressed. In this regard, prior to further assessment by Development Engineering, the following matters shall be addressed by the applicant –

### Stormwater Drainage and Flooding

- The flood assessment report prepared by GRC Hydro dated October 2017 has been reviewed. In this regard, the following matters shall be addressed –

- Figure 5 (proposed peak flood depths) and Figure 6 (Proposed Flood hazard) shall be reviewed and updated to show the proposed detention basin 2A;
- The proposed basins (and associated batters/levees) shall be located clear of the 1% AEP floodway.
- Further OSD Design details shall be provided addressing the following –
  - OSD Systems are required to release water after the peak storm event to provide capacity for future events. Therefore, any proposed OSD systems should not include any existing ponds, rainwater tanks, water retention basins or dams.
  - Detention storage areas is to be located at a level that is above the 1:5 ARI Flood level and outside/clear of the 1% AEP flood;
  - A plan view, pit, swale, weir, outlet, section detail etc. for each detention basin proposed shall be shown on the stormwater drainage plans. Each section detail shall also include the existing creek level / outlet connection in the detail.
- The provision of rainwater tanks for rural outbuildings and structures must follow and be sized in accordance with clause 5.3 of Council's Stormwater Drainage Specification for building developments. Larger tanks are required to a maximum 90,000l for land zoned E3 or E4 in accordance with Section C3.8 of the DCP 2014.
- All vegetated swales shall be provided with reduced levels / invert levels to demonstrate that the system drains to their respective OSD basins.
- The pre-existing and post development catchment plan for each OSD and drainage system shall be shown on the plans. The designer shall also demonstrate/include upstream/external stormwater catchments draining through the site and included as part of the OSD storage or considered as bypassing.

#### Road Design

- A detailed concept plan of the intersection treatment for the Road 1 (Entrance A - Main entry access) off Park Road shall be shown on the Civil drawings in accordance with the recommendations in the Traffic Impact Assessment prepared by The Transport Planning Partnership Pty Ltd dated 26 October 2017.
- A detailed concept plan of the driveway treatment for the Road 2 access off Park Road (Entrance B – Staff only access opposite existing workshop) shall be shown on the Civil drawings. Access details shall be in accordance with Council standard detail - SD1005.
- A detailed concept plan of the driveway treatment for the Road access off Park Road (fronting the club house) shall be shown on the civil drawings.
- A detailed concept plan of the driveway treatment for the Road access off Mulgoa Road (north west of the site) shall be shown on the civil drawings. Please note that the existing bus stop is within close proximity to the access point.
- All proposed roads shall be labeled (i.e. Road 1) on drawings C6.02-C6.09 and generally coincide with the Site Plans prepared by Ignite.
- Details of the proposed carpark modifications adjacent to the club house shall be provided. It is also unclear of what is proposed within the front setback of the club house and the parking arrangements.
- Traffic sign posts and pavement markings in accordance with AS 1742 – Manual of Uniform Traffic Control Devices are to be provided where required.
- Engineering drawings have shown existing trees in accordance with the survey plans. However, details of trees proposed for removal shall be clearly defined. **Note:** Penrith City Council's Tree Preservation Order defines a tree as "a perennial plant with a self-supporting stem which has a girth of 300mm or more, measured at a distance 400mm above the ground and has a height in excess of 3.0m).

#### REFERRAL CHECKLIST

	YES	NO	Not Applicable
<b>Pre-lodgement advice has been reviewed</b>		X	
<b>Proclaim has been checked for property affectations</b>	X		
<b>Exponare been checked for property affectations</b>	X		
<b>Is the site affected by mainstream flooding?</b>	X		
<b>If Yes, then</b>			

Have flood levels been issued by DFP&WQ?		X	
Are proposed/ existing levels to AHD?	X		
Has a flood report been submitted?	X		
Is the proposal consistent with LEP and DCP provisions?			
Is the proposal outside the floodway?	X		
Is the flood risk associated with the development acceptable (access, hazard & evacuation)?	X		

**Additional Comments:**

<b>Is the site affected by local flooding?</b>	X		
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If Yes, then

Are proposed/ existing levels to AHD?	X		
Has an overland flow report been submitted?	X		
Is the proposal consistent with LEP and DCP provisions (same as mainstream flooding)?	X		
Is the proposal compliant with Council's draft Overland Flow Policy?	X		
Is the proposal outside the floodway?	X		
Is the flood risk associated with the development acceptable (access, hazard & evacuation)?	X		

**Additional Comments:**

<b>Has a Stormwater Concept plan been provided?</b>	X		
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If Yes, then

Does the proposal have a legal drainage connection?	X		
Is the stormwater concept plan consistent with LEP and DCP provisions (water quantity and quality)?		X	
Is the proposal consistent with Council's draft stormwater policy?		X	
Can the site drain by gravity?	X		
For sites requiring OSD does the site storage and PSD comply? Is the OSD system within a common area accessible from the street?		X	
Is the stormwater concept plan compatible with landscaping and architectural plans?		X	

**Additional Comments:**

<b>Carparking, Access and Manoeuvring details have been provided?</b>	X		
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If Yes, then

Has a traffic report or statement been provided?	X		
Is RMS concurrence required (traffic generating developments and access from classified roads)	X		
Has the Traffic Section provided comments?		X	
Has the proposal's impact on the surrounding road network been considered?		X	
Does the proposal comply with the DCP controls?		X	
Is the proposal compliant with AS 2890.1/2/6 ie garages, aisle and handle widths, gradients, turning paths, ramps etc?			X

Is adequate sight distance available?		X	
Have service and emergency vehicles been provided for?	X		
<b>Additional Comments:</b>			
<b>Are proposed earthworks and site levels satisfactory?</b>	X		
<b>If Yes, then</b>			
Has a geotechnical report been provided for the earthworks including salinity, contamination, acid sulphate soils and material source?	X		
Are existing and proposed levels clearly indicated?	X		
Is the scale of earthworks appropriate?	X		
Have suitable controls pertaining to retaining walls been applied?	X		
Is the proposed change in levels satisfactory with respect to impacts on flooding?	X		
<b>Additional Comments:</b>			
<b>Is the proposal for subdivision?</b>		X	
<b>If Yes, then</b>			
Has a subdivision concept plan been provided?			
Is the layout, road and drainage network consistent with relevant LEP's and DCP's?			
Is the proposed road and drainage network consistent with Council's Engineering Design Guidelines?			
Has adequate provision been made for pedestrians, cyclists and public transport?			
Has a stage 2 Road Safety Audit been provided?			
Has the application made provision for any works in kind proposals?			
Are the proposed waterbodies satisfactory? – refer to separate checklist			
Suitable provision has been made for water quantity and quality?			
<b>Additional Comments:</b>			
<b>Does the proposal require External Works?</b>	X		
<b>If Yes, then</b>			
Has the condition of the road frontage, including all infrastructure, been assessed?	X		
Is road and/or drainage construction required?	X		
Are service lead in works required?	X		
<b>Additional Comments:</b>			

# Referral Response - Major Developments -

## Engineer

<b>Application Number:</b>	DA17/1092
<b>Referral Officer</b>	Dennis Urena
<b>Referral Unit</b>	Major Developments - Engineer
<b>Date of referral</b>	23 November 2017
<b>Land to be developed (Address):</b>	Lot 2 DP 1108408 13 - 15 Park Road WALLACIA NSW 2745
<b>Proposed Development:</b>	Staged Construction of Wallacia Memorial Park including Cemetery for 88,000 Burial Plots, Chapel & Related Crematorium & Function Rooms, Administration Building, Services Outbuilding, Parkland Areas, Internal Roads, Car Parking & Associated Landscaping & Site Servicing Works

### Recommendation

Not supported

### Detailed assessment

#### Not supported

I have reviewed the application and the following plans against the Development Engineering Referral Checklist attached:

Prepared By	Report /Drawing No.	Title	Revision & Date	ECM #
Warren Smith & Partners	241636	Civil Engineering Services	20 October 2017	7912629
GRC Hydro		Flood Assessment	October 2017	7912810
Transport Planning P'ship	17257-Park Rd Cemetery, Wallacia TIA_171026	Traffic Impact Assessment	26 October 2017	7912964
Ignite		Site Plans	17 October 2017	7912960
Degotardi Smith & Partners	34820A02.DWG	Site Survey Plans	B - 28 September 2017	7913006

The proposed application in its current form is considered unsatisfactory. In this regard, prior to further assessment by Development Engineering, the following matters shall be addressed by the applicant –

### Stormwater Drainage and Flooding

- The flood assessment report prepared by GRC Hydro dated October 2017 has been reviewed. In this regard, the following matters shall be addressed –
  - Figure 5 (proposed peak flood depths) and Figure 6 (Proposed Flood hazard) shall be reviewed and updated to show the proposed detention basin 2A;
  - The proposed basins (and associated batters/levees) shall be located clear of the 1% AEP floodway.
- The applicant shall submit the Stormwater Management Plan (SWMP) by Stormy Water Solutions as

referred to on page 9 of the Warren Smith and Partners - Civil Engineering Services Report dated 20 October 2017. Please note that a design report including a stormwater drainage plan for each basin and drainage system consistent with the computer modelling layout, a summary of the DRAINS modelling results, catchment plans, all assumptions and model parameters used shall be submitted with the Development Application.

- The Warren Smith and Partners - Civil Engineering Services Report dated 20 October 2017 – page 9 also makes reference to a RORBS model being used to calculate the required volume of the basins/tanks. Site specific analysis shall be undertaken using an appropriate computer model, Council's preferred model is DRAINS.
- Further OSD Design details shall be provided addressing the following –
  - OSD Systems are required to release water after the park storm event to provide capacity for future events. Therefore, any proposed OSD systems should not include any existing ponds, rainwater tanks, water retention basins or dams.
  - Detention storage areas is to be located at a level that is above the 1:5 ARI Flood level;
  - A maintenance program shall be prepared and included in the Stormwater Management Report;
  - A plan view, pit, swale, weir, outlet, section detail etc. for each detention basin proposed shall be shown on the stormwater drainage plans. Each section detail shall also include the existing creek level / outlet connection in the detail.
- The drainage line between pits 2/17 and 3/17 on stormwater drawing C6.03 is within/under the existing club house building. In this regard, an additional pit may be required to ensure that the pipe is clear of any existing structures.
- The provision of rainwater tanks for rural outbuildings and structures must follow and be sized in accordance with clause 5.3 of Council's Stormwater Drainage Specification for building developments. Larger tanks are required to a maximum 90,000l for land zoned E3 or E4 in accordance with Section C3.8 of the DCP 2014.
- All Water Sensitive Urban Design (WSUD) measures such as vegetated swales, bio retentions, rain gardens, stormwater quality devices etc. shall be shown on the stormwater drainage plans.
- All vegetated swales shall be provided with reduced levels / invert levels to demonstrate that the system drains to their respective OSD basins.
- The pre-existing and post development catchment plan for each OSD and drainage system shall be shown on the plans. The designer shall also demonstrate/include upstream/external stormwater catchments draining through the site and included as part of the OSD storage or considered as bypassing.
- The extent of the 1% AEP flood and any overland flow paths upstream of the OSD basins shall be shown on the stormwater drainage plans.
- Erosion and sediment control plan shall be provided for the road and drainage works.
- The applicant should demonstrate how existing soil type and associated constraints (e.g. salinity and poor percolation) have been considered in the drainage design. The designer shall also consider the recommendations outlined in the Preliminary Geotechnical Report prepared by Martens Consulting Engineers – October 2017.

## Road Design

- All proposed roads shall be labeled (i.e. Road 1) and generally coincide with the Site Plans prepared by Ignite.
- A longitudinal section of the centreline of the internal roadways showing the chainages, reduced level of existing surface levels, and design level of the road, design grades, shall be provided on the plans
- A typical cross-section of each road shall be provided on the plans.
- A detailed concept plan of the intersection treatment for the Road 1 (Entrance A - Main entry access) off Park Road shall be shown on the Civil drawings in accordance with the recommendations in the Traffic Impact Assessment prepared by The Transport Planning Partnership Pty Ltd dated 26 October 2017.
- A detailed concept plan of the driveway treatment for the Road 2 access off Park Road (Entrance B – Staff only access opposite existing workshop) shall be shown on the Civil drawings. Access details shall be in accordance with Council standard detail - SD1005.
- A detailed concept plan of the driveway treatment for the Road access off Park Road (fronting the club house) shall be shown on the civil drawings.
- A detailed concept plan of the driveway treatment for the Road access off Mulgoa Road (north west of the site) shall be shown on the civil drawings. Please note that the existing bus stop is within close proximity to the access point.
- Details of the proposed carpark modifications adjacent to the club house shall be provided. It is also unclear of what is proposed within the front setback of the club house and the parking arrangements.
- Traffic sign posts and pavement markings in accordance with AS 1742 – Manual of Uniform Traffic Control

Devices are to be provided where required.

- Engineering drawings have shown existing trees in accordance with the survey plans. However, details of trees proposed for removal shall be clearly defined. **Note:** Penrith City Council's Tree Preservation Order defines a tree as "a perennial plant with a self-supporting stem which has a girth of 300mm or more, measured at a distance 400mm above the ground and has a height in excess of 3.0m).

**Internal Note to Planner –**

- The Stormwater Management Plan (SWMP) by Stormy Water Solutions has not been provided with the DA package.
- The WSUD plans/report has not been provided with the DA package.
- This development may need to be referred to Sydney Water – Special Use development

The Flood Assessment report is currently being reviewed by Mylvaganam Senthilvasan and additional comments are forthcoming.

Should you have any queries regarding the above, please do not hesitate to contact me.

Regards

Dennis Urena

Senior Engineer – Major Developments

### REFERRAL CHECKLIST

	YES	NO	Not Applicable
<b>Pre-lodgement advice has been reviewed</b>		X	
<b>Proclaim has been checked for property affectations</b>	X		
<b>Exponare been checked for property affectations</b>	X		
<b>Is the site affected by mainstream flooding?</b>	X		
<b>If Yes, then</b>			
Have flood levels been issued by DFP&WQ?		X	
Are proposed/ existing levels to AHD?	X		
Has a flood report been submitted?	X		
Is the proposal consistent with LEP and DCP provisions?			
Is the proposal outside the floodway?	X		
Is the flood risk associated with the development acceptable (access, hazard & evacuation)?	X		
<b>Additional Comments:</b>			
<b>Is the site affected by local flooding?</b>	X		
<b>If Yes, then</b>			
Are proposed/ existing levels to AHD?	X		
Has an overland flow report been submitted?	X		
Is the proposal consistent with LEP and DCP provisions (same as mainstream flooding)?	X		
Is the proposal compliant with Council's draft Overland Flow Policy?	X		
Is the proposal outside the floodway?	X		
Is the flood risk associated with the development acceptable (access, hazard & evacuation)?	X		

**Additional Comments:**

<b>Has a Stormwater Concept plan been provided?</b>	X		
<b>If Yes, then</b>			
Does the proposal have a legal drainage connection?	X		
Is the stormwater concept plan consistent with LEP and DCP provisions (water quantity and quality)?		X	
Is the proposal consistent with Council's draft stormwater policy?		X	
Can the site drain by gravity?	X		
For sites requiring OSD does the site storage and PSD comply? Is the OSD system within a common area accessible from the street?		X	
Is the stormwater concept plan compatible with landscaping and architectural plans?		X	
<b>Additional Comments:</b>			
<b>Carparking, Access and Manoeuvring details have been provided?</b>	X		
<b>If Yes, then</b>			
Has a traffic report or statement been provided?	X		
Is RMS concurrence required (traffic generating developments and access from classified roads)	X		
Has the Traffic Section provided comments?		X	
Has the proposal's impact on the surrounding road network been considered?		X	
Does the proposal comply with the DCP controls?		X	
Is the proposal compliant with AS 2890.1/2/6 ie garages, aisle and handle widths, gradients, turning paths, ramps etc?			X
Is adequate sight distance available?		X	
Have service and emergency vehicles been provided for?	X		
<b>Additional Comments:</b>			
<b>Are proposed earthworks and site levels satisfactory?</b>	X		
<b>If Yes, then</b>			
Has a geotechnical report been provided for the earthworks including salinity, contamination, acid sulphate soils and material source?	X		
Are existing and proposed levels clearly indicated?	X		
Is the scale of earthworks appropriate?	X		
Have suitable controls pertaining to retaining walls been applied?	X		
Is the proposed change in levels satisfactory with respect to impacts on flooding?	X		
<b>Additional Comments:</b>			
<b>Is the proposal for subdivision?</b>		X	

If Yes, then

Has a subdivision concept plan been provided?			
Is the layout, road and drainage network consistent with relevant LEP's and DCP's?			
Is the proposed road and drainage network consistent with Council's Engineering Design Guidelines?			
Has adequate provision been made for pedestrians, cyclists and public transport?			
Has a stage 2 Road Safety Audit been provided?			
Has the application made provision for any works in kind proposals?			
Are the proposed waterbodies satisfactory? – refer to separate checklist			
Suitable provision has been made for water quantity and quality?			

**Additional Comments:**

**Does the proposal require External Works?**

X

If Yes, then

Has the condition of the road frontage, including all infrastructure, been assessed?	X		
Is road and/or drainage construction required?	X		
Are service lead in works required?	X		

**Additional Comments:**



# Referral Response - Traffic Engineering

<b>Application Number:</b>	DA17/1092
<b>Referral Officer</b>	Graham Green
<b>Referral Unit</b>	Traffic Engineering
<b>Date of referral</b>	26 June 2018
<b>Land to be developed (Address):</b>	Lot 2 DP 1108408 13 - 15 Park Road WALLACIA NSW 2745
<b>Proposed Development:</b>	Staged Construction of Wallacia Memorial Park including Cemetery for 88,000 Burial Plots, Chapel & Related Crematorium & Function Rooms, Administration Building, Services Outbuilding, Parkland Areas, Internal Roads, Car Parking & Associated Landscaping & Site Servicing Works

## Recommendation

No objection subject to conditions

## Detailed assessment

I have reviewed the application, plans and Traffic Impact Assessment provided to date.

The following comments are provided for your consideration and assessment in relation to the proposed development.

## SEPP Infrastructure 2009 or Roads Act 1993 requirements

The development fronts Mulgoa Road and Park Road which are both RMS classified roads and require referral to the RMS.

The RMS referral response letter dated 15 June 2018 is noted including their requirements / conditions for the proposed accesses at intersection of Road 1 (Entrance A - Main entry access) with Park Road, Road 2 access off Park Road (Entrance B – Staff only access opposite existing workshop), driveway treatment for the Road access off Park Road (fronting the club house) and driveway treatment for the Road access off Mulgoa Road (north west of the site).

## Parking

The proposed number of parking spaces is acceptable subject to review and concurrence from Environmental Planning.

The parking arrangements are subject to further details as requested in the Development Engineering referral response dated 13 June 2018 and any acceptance and conditions.

## Access, Circulation and Traffic Generation

The Road Design matters in the RMS referral response dated 15 June 2018 and in the Development Engineer's referral response dated 13 June are requested to be addressed.

## Conclusion

The proposed development is acceptable to Traffic Engineering subject to the Road Design matters in the RMS referral response dated 15 June 2018 and in the Development Engineer's referral response dated 13 June being addressed and conditioned.

Yours sincerely

Graham Green 26 June 2018

**Senior Traffic Engineer**



# Referral Response - Traffic Engineering

<b>Application Number:</b>	DA17/1092
<b>Referral Officer</b>	Graham Green
<b>Referral Unit</b>	Traffic Engineering
<b>Date of referral</b>	23 November 2017
<b>Land to be developed (Address):</b>	Lot 2 DP 1108408 13 - 15 Park Road WALLACIA NSW 2745
<b>Proposed Development:</b>	Staged Construction of Wallacia Memorial Park including Cemetery for 88,000 Burial Plots, Chapel & Related Crematorium & Function Rooms, Administration Building, Services Outbuilding, Parkland Areas, Internal Roads, Car Parking & Associated Landscaping & Site Servicing Works

## Recommendation

Awaiting additional information

## Detailed assessment

I have reviewed the application, plans and Traffic Impact Assessment by The Transport Planning Partnership dated 26 October 2017.

The following comments are provided for your consideration and assessment in relation to the proposed development.

## SEPP Infrastructure 2009 or Roads Act 1993 requirements

The Traffic Impact Assessment report incorrectly states that Park Road is a Council local road and it does not nominate the classification for Mulgoa Road. Park Road and Mulgoa Road are RMS classified roads.

The development fronts Mulgoa Road and Park Road which are both RMS classified roads and require referral to the RMS.

The RMS will then be able to provide their requirements for any additional Traffic Impact Assessment data including their requirements for the proposed accesses at intersection of Road 1 (Entrance A - Main entry access) with Park Road, Road 2 access off Park Road (Entrance B – Staff only access opposite existing workshop), driveway treatment for the Road access off Park Road (fronting the club house) and driveway treatment for the Road access off Mulgoa Road (north west of the site) prior to consideration of possible future RMS acceptance and conditions.

## Parking

The proposed number of parking spaces is acceptable subject to review and concurrence from Environmental Planning.

## Access, Circulation and Traffic Generation

The Road Design matters in the Development Engineer's draft referral response are requested to be addressed including:

- All proposed roads shall be labelled (i.e. Road 1) and generally coincide with the Site Plans prepared by Ignite.
- A longitudinal section of the centreline of the internal roadways showing the chainages, reduced level of existing surface levels, and design level of the road, design grades, shall be provided on the plans
- A typical cross-section of each road shall be provided on the plans.
- A detailed concept plan of the intersection treatment for the Road 1 (Entrance A - Main entry access) off Park Road shall be shown on the Civil drawings in accordance with the recommendations in the Traffic Impact Assessment prepared by The Transport Planning Partnership Pty Ltd dated 26 October 2017.
- A detailed concept plan of the driveway treatment for the Road 2 access off Park Road (Entrance B – Staff only access opposite existing workshop) shall be shown on the Civil drawings. Access details shall be in accordance with Council standard detail - SD1005.

- A detailed concept plan of the driveway treatment for the Road access off Park Road (fronting the club house) shall be shown on the civil drawings.
- A detailed concept plan of the driveway treatment for the Road access off Mulgoa Road (north west of the site) shall be shown on the civil drawings. Please note that the existing bus stop is within close proximity to the access point.
- Details of the proposed carpark modifications adjacent to the club house shall be provided. It is also unclear of what is proposed within the front setback of the club house and the parking arrangements.
- Traffic sign posts and pavement markings in accordance with AS 1742 – Manual of Uniform Traffic Control Devices are to be provided where required.
- Engineering drawings have shown existing trees in accordance with the survey plans. However, details of trees proposed for removal shall be clearly defined. **Note:** Penrith City Council's Tree Preservation Order defines a tree as "a perennial plant with a self-supporting stem which has a girth of 300mm or more, measured at a distance 400mm above the ground and has a height in excess of 3.0m).

### **Conclusion**

Based on the above comments and review of the proposal, the proposed application is unsatisfactory. Prior to further assessment by Traffic Engineers, the above matters must be addressed by the applicant. Please refer back to the Traffic Engineers when the issues raised above have been fully addressed.

Yours sincerely

Graham Green 23 November 2017

**Senior Traffic Engineer**

# Referral Response - Waste Services

<b>Application Number:</b>	DA17/1092
<b>Referral Officer</b>	Joshua Romeo
<b>Referral Unit</b>	Waste Services
<b>Date of referral</b>	16 November 2017
<b>Land to be developed (Address):</b>	Lot 2 DP 1108408 13 - 15 Park Road WALLACIA NSW 2745
<b>Proposed Development:</b>	Staged Construction of Wallacia Memorial Park including Cemetery for 88,000 Burial Plots, Chapel & Related Crematorium & Function Rooms, Administration Building, Services Outbuilding, Parkland Areas, Internal Roads, Car Parking & Associated Landscaping & Site Servicing Works

## Recommendation

Not supported

## Detailed assessment

Councils Waste Services department has reviewed the application DA17\_1092 no.1 COM located at Lot 2, DP 1108408, 13 Park Road, Wallacia. The current proposal will consist of Golf course and associated supporting infrastructure. The waste collection infrastructure and collection proposal is not supported or approved in its current state. **Upon addressing the issues outlined below, the conditions of consent will be provided by Waste Services.**

## Meeting Request

Waste Services advises a meeting with the applicant be arranged to discuss potential options to accommodate the various waste infrastructure outlined below.

## Architectural Plans

The submitted internal, external and engineering plans do not allow an in-depth review of the on-site waste collection infrastructure to be conducted. The amended plans will need to be submitted detailed the provisions outlined below.

## Waste Infrastructure

The commercial on-site waste infrastructure is to be built in accordance with the provisions outlined in section 3.2.9 of the 'residential flat building guideline document':

To allow for the safe and efficient collection of a various waste streams within commercial developments, on-site collection is required in accordance with section 3.2.1 and wider provisions outlined in section 3.2 of the 'Residential Flat Building Guideline Document'.

- The current configuration proposed the 'Waste Management Plan Operational' document proposes bins will be presented kerbside weekly. This configuration is not supported.

Commercial developments to provide on-site collection infrastructure in accordance with section 4.3.2 Waste Collection Rooms of the 'Residential Flat Building Guideline' document. Room size to be built in accordance with generation rates outlined in the 'Commercial Waste Generation Rates Guideline' document.

All development applications to be submitted with an accompanying 'Plan of Operations', outlining proposed:

- Bin Infrastructure Sizes
- On-site waste collection infrastructure
- Collection Frequency
- Waste Collection Vehicle Dimensions & on-site manoeuvres

- Hours of Collection
- Access to Waste Collection Room

The following is required to be addressed in amended plans submitted to council for review

**Waste Infrastructure Guidelines**

For further specific waste operational and infrastructure information please see “Waste Guideline Document: Residential Flat Buildings” located at the following link:

<https://www.penrithcity.nsw.gov.au/Building-and-Development/Development-Applications/Forms/>

# Referral Response - Waste Services

<b>Application Number:</b>	DA17/1092
<b>Referral Officer</b>	Joshua Romeo
<b>Referral Unit</b>	Waste Services
<b>Date of referral</b>	14 June 2018
<b>Land to be developed (Address):</b>	Lot 2 DP 1108408 13 - 15 Park Road WALLACIA NSW 2745
<b>Proposed Development:</b>	Staged Construction of Wallacia Memorial Park including Cemetery for 88,000 Burial Plots, Chapel & Related Crematorium & Function Rooms, Administration Building, Services Outbuilding, Parkland Areas, Internal Roads, Car Parking & Associated Landscaping & Site Servicing Works

## Recommendation

Not supported

## Detailed assessment

Council's Waste Services department has reviewed the application DA17\_1092 no.1 COM located at Lot 2, DP 1108408, 13-15 Park Road, Wallacia. The current proposal will consist of a cemetery, chapel, function rooms, administrative buildings, service building, parklands and internal roads. The waste collection infrastructure and collection proposal is not supported or approved in its current state. **Upon addressing the issues outlined below, the conditions of consent will be provided by Waste Services.**

## Previous Response

The amended architectural's submitted do not address or acknowledge the previous waste referral comments dated 16/11/18. The following provisions outlined below are required to be addressed and submitted to Council for review.

## Waste Management Plan

The development application has not submitted a 'waste management plan' and a 'plan of operations' outlining the on-site waste collection infrastructure and how the site will be serviced.

## Commercial Waste Management

The commercial on-site waste infrastructure is to be built in accordance with the provisions outlined in section 2.2.1 of the 'Residential Flat Building Guideline' document:

To allow for the safe and efficient collection of a various waste streams within commercial developments, on-site collection is required in accordance with section 2.2.1 and wider provisions outlined in section 2.2 of the 'Residential Flat Building Guideline' document.

- The current configuration proposed the 'Waste Management Plan Operational' document proposes bins will be presented kerbside weekly. This configuration is not supported.

Commercial developments proposed include but not limited to Function Rooms, Chapel, Administration Building and Services Outbuilding are to provide on-site collection infrastructure in accordance with section 3.5.2 Waste Collection Rooms of the 'Residential Flat Building Guideline' document. Room size to be built in accordance with generation rates outlined in the 'Commercial Waste Generation Rates Guideline' document.

All development applications to be submitted with an accompanying 'Plan of Operations', outlining proposed:

- Bin Infrastructure Sizes
- Collection Frequency
- Waste Collection Vehicle Dimensions
- Hours of Collection

- Access to Waste Collection Room

The following is required to be addressed in amended plans submitted to council for review

### **Waste Infrastructure Guidelines**

For further specific waste operational and infrastructure information please see “Waste Guideline Document: Residential Flat Buildings” located at the following link:

<https://www.penrithcity.nsw.gov.au/Building-and-Development/Development-Applications/Forms/>