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8 October 2012

Your Ref: 642/2012

Our REF: 2/12

The General Manager
Camden Council
PO Box 183
CAMDEN NSW 2570

Attention: Ms J Vella

Dear Joanne

Re: Lot 10 in DP 845472 No 90 Werombi Road, Grasmere – DA 642/2012

Reference is made to Development Application 642/2012 lodged with Council in respect of the above property and Council's letters of 16 July 2012 and 10 August 2012 requesting additional information. The following provides a response to the letters and a verbal request regarding potential asbestos within the building.

Please note that as a result of the heritage comments, the building has been redesigned and amended plans are submitted under separate cover. Amendments to the plans were generally discussed at a meeting on Wednesday 26 September 2012.

16 July 2012

1 – Contamination assessment to be provided

Attached is the required contamination assessment undertaken by GeoEnviro. The Phase 1 Assessment concludes that:

Contamination Assessment

"The scope of this Phase 1 -Preliminary Contamination Assessment comprises of a site history appraisal, a visual site inspection and limited borehole drilling. The conclusions presented in this report are professional opinions based solely upon visual observations of the site and its vicinity, limited borehole investigation and our interpretation of the documentation made available. The quantitative level and extent of any contamination present could not be determined from this limited scope of work and the assessment has not undertaken any independent validation of the advice provided."

Based on the historical information gathered, the site was originally part of a large parcel of land used for agricultural activities in the 1940's. The agricultural activities within the site appeared to have ceased in the 1970's. The existing building and other buildings within the facility appeared to have been constructed in the 1980's.

The proposed site did not appear to have been subjected to major ground disturbance or landfill activities. The test pit investigation revealed the site to be predominantly underlain by natural clayey soil overlying shale at relatively shallow depths of less than 1.1m to 2.3m below existing ground surface. Some minor fill up to about 0.6m was encountered on the surface in TP 3 and this was placed to form a level building platform for the existing building. The fill appeared to consist mainly of Silty Clay of high plasticity with a trace of asphalt and concrete fragments. There were no obvious signs of significant building rubbish or asbestos encountered in the boreholes.

Based on the results of this preliminary study, we consider the risk of significant soil contamination within the proposed building site to be generally considered low.

We note that though rubbish fill and/or asbestos were not encountered in the boreholes, it may still be present elsewhere away from the borehole locations as the boreholes were drilled at discrete location. All rubbish fill containing building material (eg concrete, bricks and pipes) if encountered during building platform construction should be removed from the site and disposed to a OEH approved landfill in accordance with regulatory requirements. Should asbestos be encountered during site preparation and construction, we recommend the procedure based on "Unexpected Asbestos Finds" protocol as outlined in Appendix E should be adopted.

Salinity Assessment

"Our comments and assessment on soil salinity are as follows;

- The topsoil and the insitu soil were assessed to be non to slightly saline with ECE ranging from 0.32 to 3.01 dS/m. In BH 4 (1.8-1.9m) the interbedded shale and clay was assessed to be moderately saline and this is considered typical of Bringelly shale.*
- The laboratory test results indicate the insitu soil to have low concentrations of Sulphate and in an environment where the lowest soil pH is 4.9, the soil was assessed to be Mildly Aggressive to buried concrete.*
- The laboratory test results indicate the insitu soil to have low concentrations of Chloride and low resistivity of 1500 ohm cm and in an environment where the lowest soil pH is 4.9, the insitu soil may be classified as Mildly Aggressive to buried steel structures.*
- The Emerson tests indicate that the site to be underlain by Moderately dispersive soil.*
- The CEC and ESP indicate the insitu soil to be Sodic to Very Sodic*

Based on the laboratory test results, the proposed development should adopt a good soil and water management strategy to minimise impact of soil degradation caused by stormwater runoff and infiltration."

The report provides a series of recommendations in respect of the salinity issues.

2 – Provide copies of Mott McDonald Plans

Copies of the plans have previously been provided to Council.

3 – Airport Assessment.

The attached report prepared by Aviation Solutions Ltd addresses this aspect of the proposal. In terms of potential lighting impacts the report provides the following recommendations:

1. All external building lighting will be designed in accordance with AS1158.3 (Road Lighting) including:
 - a. Clause 2.5.3.1 Environmental Parameters
 - b. Clause 2.5.3.2 Glare control
 - c. Clause 2.5.3.3 Upward Light
 - d. Type (4) Luminaire Classification (a) “the maximum intensities are directed below the horizontal”
2. All lighting will also be designed with Australian Standard 4842-1997 ‘Control of the obtrusive effects of outdoor lighting.
3. On completion of the design Mott MacDonald will provide a design certificate to certify that the external lighting design complies with the above standards and appropriate clauses.

It is also recommended that Council impose a condition of consent that any construction crane be fitted with a warning type light at the top of the crane.

In terms of potential wildlife strike hazard or to minimise bird populations being attracted to the building, the report provides the following recommendations:

1. Select plant species in the landscape design that are unlikely to provide fruits and seeds that will attract birds/bats. Some airports (e.g. Adelaide, Parafield, Sydney, Gold Coast, Townsville) provide proponents of new developments with a preferred landscape palate to select from and a list of plant species to avoid. Camden Airport may be in a position to advise on species selection.
2. Avoid retention basins and ponds in the landscape design. A small fountain/pond is unlikely to contribute greatly to the strike hazard, but large open water bodies would and should not be included in the development unless a more detailed investigation could determine there would be minimal attraction to birds.
3. Design open drains/swales (if included) to limit hydro-retention period and ensure relatively steep sides (slope 1:4).
4. Prevent residents and staff from feeding birds. Do not provide bird baths and actively discourage artificial feeding.
5. Develop a waste management strategy for the construction phase which obliges workers to dispose of food wastes in closed bins.
6. Design a central area for rubbish bins that is enclosed or netted to prevent bird access for when the facility is operational. This is particularly important for industrial waste bins where food wastes are likely to be placed.

10 August 2012

4 – Stormwater Assessment

Mott McDonald has undertaken additional assessment of stormwater runoff. The attached letter from Mott McDonald dated 18 September 2012 addresses this issue and other matters raised by Council in the correspondence.

5 – Heritage Assessment

Having regard to the matters raised in relation to the proposed building. The plans will be amended to reduce any impact on the cottage. The amended heritage impact statement is attached with recommendations provided.

6 – Acoustic Assessment

SLR Consulting has undertaken an assessment of the potential noise impacts from mechanical plant and potential impacts on existing residents during demolition and construction of the building. The report recommends the following:

Noise control

The construction contractor will, where reasonable and feasible, apply best practice mitigation measures including:

- Maximising the offset distance between noisy plant items and nearby noise sensitive receivers.
- Avoiding the coincidence of noisy plant working simultaneously close together and adjacent to sensitive receivers.
- Minimising consecutive works in the same locality.
- Orientating equipment away from noise sensitive areas.
- Carrying out loading and unloading away from noise sensitive areas.
- Erection of temporary acoustic barriers (particularly to shield the residences to the east of the site).

Vibration mitigation measures

The following vibration mitigation measures will be implemented by the construction contractor:

- Relocate any vibration generating plant and equipment to areas within the site in order to lower the vibration impacts.
- Investigate the feasibility of rescheduling the hours of operation of major vibration generating plant and equipment.
- Use lower vibration items of construction plant and equipment.
- Minimise consecutive works in the same locality (if applicable).
- Schedule a minimum respite period of at least 0.5 hour before activities commence which are to be undertaken for a continuous 4 hour period.

The noise and vibration measures to be implemented are listed in **Table 18** of the assessment.

7 – Contamination Assessment

Refer to above and attached.

8 – Salinity Assessment

Refer to above and attached.

9 – Hydraulic/Wastewater Assessment

Mott McDonald has undertaken an assessment of the potential impact of the proposed redevelopment on the existing system. The attached letter dated 18 September 2012 addresses this aspect of the proposal.

10 – Sydney Water Requirements

Mott McDonald has undertaken an investigation of the issues raised by Sydney Water. The following provides details of the outcomes of such investigation:

Redevelopment of Paling Court and the surrounding independent living units (ILUs) will increase the sewage flow into existing Sewage Pumping Station (SPS) No 1, which is a private SPS owned and operated by Carrington Aged Care Pty Ltd.

It has been found that this SPS has an unusual and unsatisfactory configuration in that its wet well is large in diameter (6.1 metres) compared with its shallow depth (2.1 metres), and that the pumps do not cut-in until the sewage depth reaches 1.0 metre. This means that there is 29,000 litres of sewage in the well before a pump cuts in, a quite excessive figure particularly in periods of low inflow. Detention time in the SPS is many times what would be acceptable in normal practice based on relevant design codes and practices mentioned later.

There are two sewage pumps in the existing SPS. Normally one would be a standby pump. Observation during a recent morning peak flow period several hours long showed that the two pumps alternated in duty each half hour but that there was always one pump running. This was only just enough to keep up with the incoming flow in the peak period, indicating that there is no spare capacity for dealing with an increase in peak dry weather flow.

Our conclusion is that there is insufficient capacity to deal with the 25% increase in dry weather flow that will result from the proposed redevelopment, and that the current geometry of the SPS is unacceptable as it results in an excessively long detention time. Long detention times cause septicity, and septicity causes problems at sewage treatment plants as well as excessive odours.

Our proposal is for a new SPS to be constructed alongside the existing wet well, and that the existing well would be used for additional storage only, often called "emergency storage". The new SPS would be deeper than the existing wet well and smaller in diameter and would have a normal configuration with only a small volume of sewage in the bottom of its wet well during normal operation. The anticipated dimensions are approximately 3 m diameter and 4 or 5 m deep. The sewage level in the new wet well would remain below the floor level of the existing well except under abnormal conditions such as power failure. Package pumping stations with precast concrete wet wells are available on the market for a reasonable cost.

Three pumps are proposed, the same model as the two existing pumps. The existing pumps could be moved to the new SPS. The new control system would be configured to enable two and probably all three pumps to run in parallel when required. The size of the delivery main from the SPS will need to be reviewed.

A further problem is that sanitary items flushed down toilets in the nursing home buildings are causing pump blockages. The pumps are quality units of the cutter type but are unable to handle the sanitary items. It is proposed that this be dealt with by installing a mascerator just upstream of the SPS. One of the common applications of the unit proposed involves installation just upstream of SPSs to protect normal sewage pumps from blockage and damage by mascerating items such as sanitary items into smaller pieces that will not block regular sewage pumps.

Literature is attached on the proposed mascerator unit. It would be installed in a new concrete chamber upstream of but near to the existing and proposed pumping stations. It is anticipated that the time required for design and installation of a mascerator facility is similar to the time for design and installation of a package sewage pumping station.

All of these works could be in operation by the time that the first of the redeveloped aged care facilities is available for occupation.

11 – Swept Paths

The attached plans show how rigid vehicles enter the loading dock area to collect garbage and deliver goods to this area. Such vehicles will need to reverse onto the internal driveway in order to service the development. A turning area could be provided, but given the fall of the land and the intention to retain trees that have been identified for retention, it is not possible to provide a turning area within or close to the building. Given the infrequent servicing of the building by such vehicles, it is considered appropriate for vehicles to reverse out of the loading dock area.

Additional request for Information

Asbestos Management

An additional request has been made to provide information on asbestos removal from the building, if asbestos is detected during the demolition stage. An inspection of the building has revealed no traces of asbestos, particularly as the building was constructed in the early 1980's when asbestos was not used in construction. Notwithstanding this aspect, it is considered that the following provides details of systems that should be undertaken by the contractor during the demolition stage and can be imposed as suitable conditions of development consent.

Asbestos removal

Any asbestos sheeting detected during the demolition phase will need to be removed in accordance the National Occupational Health and Safety Commission (2005) *Code Of Practice For The Safe Removal Of Asbestos 2nd Edition* (Reference 13).

However, the safe removal of asbestos will be undertaken by suitably qualified and approved contractors in accordance with the Code of Practice and in consultation with WorkCover, with further details to be submitted with the Construction Certificate.

A Management Plan will need to be prepared, which addresses issues such as air monitoring and other matters that need to be considered as part of the safety aspects for safe removal of asbestos, including informing senior staff of Carrington Centennial Care, so that adjoining residents can be advised of any potential hazardous situation that may arise.

Site management

The following provides details of the management practices to be employed during the removal of the asbestos.

Dust

During the course of works dust control measures shall be undertaken to ensure that dust generated from the site is controlled within acceptable levels. These control measures will be developed giving consideration to the site conditions by the contractor.

Occupational health and safety – asbestos removal

An Occupational Health and Safety (OH&S) plan is an essential part of the work, to ensure the health and safety of all personnel working on or visiting the site. All work would be undertaken in accordance with the provisions set out by the *Occupational Health and Safety Act* (2000) and associated Regulations 2001, and any other regulations or directions set out by regulatory authorities. Typically the OH&S plan would consider a broad range of issues including (but not limited to) the following:

- Characterisation of potential hazards including hazardous materials and site activities;
- Air and dust monitoring required within and at the boundary of the work area;
- Personnel and equipment movements to and from the work area;
- Training, instruction, and induction of site workers/visitors; and
- Clear outline of responsibilities for health and safety.

Prior to commencing any works, a specific OH&S Plan would be prepared by the Contractor covering the following aspects:

- Identification of the work area and exclusion zones;
- Induction of personnel;
- Hazard identification;
- Location of all underground/aboveground services;
- Details of specific work practice procedures to be followed within the designated risk area;
- Monitoring protocols to identify a potentially hazardous practice; and
- Emergency information and Incident reporting.

Occupational Health and Safety Planning involves the development and implementation of systems and procedures into a Health and Safety Plan included in a site Work Method Statement.

The objectives of these documents are to ensure the health and safety of those undertaking specific tasks on site and the wider community if necessary.

A Health and Safety Plan should be developed for any site work and would typically include the following:

- A clear health and safety policy;
- Requirements for worker health assessments and inductions;
- Identified health and safety training requirements;
- Requirements for occupational health protection and monitoring;
- Site/location specific emergency plan;
- Site/location specific emergency contact details;
- Permit to work/clearance procedures, and
- Task specific safe work method statements.

Emergency procedures

Even when extreme care is taken, an emergency situation can occur such as the inhalation of noxious fumes. In the event of encountering a potentially dangerous situation or the detection of any suspect material, fieldwork is to cease immediately and the matter reported to the site manager for immediate assessment and action.

To minimise the results of an emergency situation, at least one, if not all, field personnel working on site should be aware of basic first aid procedures and all field personnel must have immediate access to a first aid kit.

Emergency phone numbers should be made available at the induction including ambulance, fire brigade, police and the nearest hospital.

In addition, the mobile phone numbers of the environmental site officer (ESO) and the site manager as well as the Client project manager will be made available.

Control of site entry and exit

Fencing will be erected where necessary to secure portions of the Site. Shade cloth will be erected on all perimeter fences. Entry to the work site will be controlled through the introduction of a sign-on/sign-off log system at the entry point. Alternative entrances to the specific areas of the work site will only be used in the event of an emergency.

Carparking Provision

The proposed development provides for 41 carparking spaces within the basement parking area and a further 39 at-grade spaces (total 80). It would be noted that Council granted approval to Consent to Development Application 702/2011 for modifications to the existing carpark and landscape embellishment. The approved plans showed the provision of 80 at-grade carparking spaces.

As part of the proposal to redevelop Paling Court, the subject of DA 642/2012, an application under Section 96 of the EP&A Act 1979 has been lodged with Council to modify DA 702/2011 to reflect DA 642/2012.

Council has requested details of carparking provision based on the fact that there will be an increase in the number of beds proposed in DA 642/2012 with no increase in on-site carparking provision.

As stated at a meeting of 22 August 2012, the provision of 80 spaces (approved vide 702/2011) was based providing as many spaces that could be accommodated within the parking area and not on a numerical requirement.

It should be noted that the existing Residential Aged Care Facility (RACF) known as Paling Court has no carparking requirement, as the consent for this facility was approved in the late 1970's, with the facility completed in 1981. The only carparking provided is for the Independent Living Units (ILU's) and essentially these spaces remain.

The proposed redevelopment of Paling Court RACF results in an increase of 76 beds. It should be noted that residents of this facility will not have vehicles and that the parking provided is to accommodate staff and visitors to this facility. The traffic assessment prepared by this firm addressed the carparking requirement for the RACF.

The traffic assessment considered both Camden Council's Development Control Plan 2011 and the standards that apply to SEPP (Housing for Aged and Disabled Persons 2004). The report stated that:

"The SEPP provides a carparking rate of 1 space per 10 beds; plus 1 space per 2 employees; plus 1 ambulance space. The number of spaces to be provided is therefore 22. The proposed development provides 41 spaces within two carparking areas, accessed via the same point off the internal driveway system. Such allocation of spaces includes 4 accessible (disabled) spaces in accordance with AS/NZS 2890.6."

Based on the above, the proposed development provides an additional 19 spaces above the above requirements within the basement parking area and 58 spaces in excess of these standards when the at-grade spaces are taken into consideration.

As such we are of the opinion that the provision of 80 carparking spaces more than satisfies the requirement for this facility and that DA 702/2011 should not be used as the basis of carparking provision.

It would also be noted that the existing carparking area is essentially not linemarked and staff and visitors park where space is available.

Should you require any further information please do not hesitate to contact the undersigned.

Sincerely yours,

RAAD RICHARDS
CHIEF EXECUTIVE OFFICER

CARRINGTON CENTENNIAL CARE

MICHAEL J BROWN
DIRECTOR
MICHAEL BROWN PLANNING STRATEGIES