



Our Ref: MLOU:TM:2389526

19 February 2018

Lake Macquarie Council
Box 1906,
Hunter Region Mail Centre, NSW 2310

Attention: Chris Dwyer, Principal Development Planner
Development Assessment and Compliance

Dear Sir,

**RE: DA/1950/2017 - SENIORS HOUSING - RESIDENTIAL CARE FACILITY
LOT 1938 DP 704459
120 REDHEAD ROAD, REDHEAD NSW 2290
REQUEST FOR ADDITIONAL INFORMATION**

I refer to Council's letter dated 21 December 2017 requesting additional information relating to DA/1950/2017 for proposed additions to a residential care facility.

Updated documentation is attached to this correspondence and the key issues raised by Council are addressed as follows:

Visual Amenity

Matters raised by Council:

Visual Amenity

The landscape plan and planting design requires further refinement to assist in the mitigation of the visual impacts of the proposal, particularly to the south western roof ridge of the 80 bed RACF and the southern gable elevation of the southern-most wing. Consideration of the large roof form and its skyline silhouette, combined with a revised planting design to provide a vegetated back drop to the roof form, particularly on the south western end, is requested. It is possible that the impact could also be mitigated by the continuation of street frontage planting of the full length of the street frontage.

Streetscape

With regard to the above visual mitigation comments, it is recommended that endemic tree planting along the full extent of Redhead Road is provided. In this regard the planting of *Araucaria heterophylla* across the front setback is not supported.

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The proposed carparking area within the front setback should be reduced by using the existing internal road way for access, similar to the existing parking to the north.

There may also be opportunities to improve the existing internal streetscape amenity at the main entrance by providing small tree vegetation proportional to existing dwellings and reflective of the Redhead coastal context.

Landscape Area

Planting along the southern boundary is critical to providing internal visual amenity and visual screening of the development to southern residential neighbours, however the proposed planting is unlikely to achieve these objectives. A revised planting design including tree species that improve visual separation and amenity is requested.

Diversity of locally indigenous tree species as advised by the consulting arborist does not appear to have been implemented. The list of replacement species recommended by arborist should be reflected across the site including compensatory planting of native endemic trees removed due to works. The planting of Norfolk Island Pines and palms in preference to endemic Eucalyptus species in peripheral parts of the site is not supported.

The future of the existing stand of trees in the south eastern corner of the site near the detention basin requires clarification. Retention of this stand of trees is supported.

Edge Treatment

It is requested that the landscape plans and documentation be revised to include a suitable edge treatment (such as pathway or similar) between the development area and retained native vegetation/asset protection zone, in an effort to minimise edge impacts (such as weed invasion) into retained areas of native vegetation.

A revised visual assessment, landscape plan and documentation is requested to address the above comments.

Applicants Response:

A revised landscape design package is included in **Attachment B**.

Visual Amenity

Figure 1 demonstrates how the proposed landscaping treatment will positively contribute toward the maintenance of visual amenity for residents to the south. The design provides for screen planting, comprising Bracelet Honey Myrtles with a mature height of 8m along the southern boundary. The retention of the established stand of vegetation located south of the existing independent living units is now proposed and will be supported by additional planting across the site, all of which will substantially screen the proposed development.

Redacted

Figure 1. Proposed landscaping toward southern boundary.

The amended Landscape Design Package includes a species list reflective of council's comments.

Where possible, endemic tree planting is proposed along the road frontage however the design also allows for the retention of the existing community of MU 34a coastal sand wallum heath. It is understood that shrubs dominate this vegetation community with a likely maximum height of 2m.

Consideration has been given to a modification of the design of the proposed car park located toward the south east of the site as per council's request. We note that this car park is located close to the site entry; is directly opposite some Independent Living Unit garages; and sits adjacent to a pedestrian crossing providing connectivity via a pedestrian path through the independent living units toward the western part of the site.

The proposed layout aims to remove the incidence of conflict in car movements and ensure pedestrian safety. This is achieved by minimising reverse movements for vehicles and consequently, we request that Council support the retention of the car park as originally designed.

Edge Treatment

A retaining wall will be utilised as an edge treatment between the existing clumps of MU 34a vegetation and the proposed new wing. As required to manage bushfire threat, landscaping toward the western extent of the site will be retained as a native "managed grassland". This grassland is proposed to continue through and under the proposed stand of Red Bloodwoods shown in **Figure 1**, to become an integrated area. Weed control will be managed to the south by the fire trail and to the east by the loading zone.

Flora and Fauna

Targeted Surveys

Matter raised by Council:

The conclusions and recommendations within the Biodiversity Assessment are generally supported, however the following information is requested:

- Targeted surveys for *Cryptostylis hunteriana* and *Chamaesyce psammogeton* during the peak flowering period for the species. Potential habitat for these species occurs on the subject site however the surveys were undertaken outside the flowering periods, making detection impossible. Council has two records of *Cryptostylis hunteriana* approximately 1 km north of the subject site, in similar habitat. The species peak flowering period is late November to February in Lake Macquarie LGA.

Applicants Response:

A revised Biodiversity Assessment has been prepared by NGH Environmental (**Attachment C**), dated January 2018.

Targeted surveys for *Cryptostylis hunteriana* and *Euphorbia psammogeton* (previously referred to as *Chamaesyce psammogeton*) were conducted on the 14th December 2017. Parallel transects were undertaken for targeted searches where practicable. No observations of these species were recorded during the surveys.

Further details are provided within the Biodiversity Assessment.

Asset Protection Zone

Matter raised by Council:

Clarification is sought from a qualified bushfire consultant regarding the extent of clearing required to establish and manage the inner protection area APZ required by the RFS, in particular any impacts to native vegetation in the western extent of the site, mapped as Moderate/Good condition MU 34 coastal sand wallum heath.

Clarification is also sought from the ecological consultant that the western extent of the site, mapped as Moderate/Good condition MU 34 coastal sand wallum heath, was surveyed for *Tetratheca juncea*. It does not appear that any clearing/management required in this area for an APZ has been assessed.

It is requested that a Fuel Management Plan be provided for native vegetation in the western extent of the site, mapped as Moderate/Good condition MU 34 coastal sand wallum heath, specifying required fuel management establishment and maintenance requirements.

Comment: The broad-scale clearing of this area is not supported and does not appear necessary to comply with Planning for Bushfire Protection (RFS 2006). This area contains potential foraging and breeding habitat for threatened species, including Long-nosed

Potoroo (*Potorous tridactylus tridactylus*) and New Holland Mouse (*Pseudomys novaehollandiae*). Ideally this area should be retained in as natural state as possible, whilst still complying with RFS General Terms of Approval. It is noted that the Landscape Design Report nominates this area as 'heath planting (existing/new)', however it is not clear if this considers APZ requirements.

Applicants Response:

Clearing required for Asset Protection Zone

Correspondence from Newcastle Bushfire Consulting is included in **Attachment D**. Key issues addressed in this documentation are summarised below:

The eastern wing of the building requires a minimum 27 metre asset protection zone which is measured to the northern property boundary. The western wing of the building requires a minimum 33 metre asset protection zone which will retain some of the MU 34a coastal sand wallum heath.

The asset protection zone is to be treated as an inner protection area with landscape management relevant for the site. It allows for a maximum 10-30 % of the Inner Protection Area to be landscaped with shrubs but always away from buildings glazing and vent openings.

The mass planting diagram shown in the Landscape Design Package, included in **Attachment B**, achieves the above if shrubs remain unconnected. The overall area of revegetated shrubs should not exceed 30% and the retention of *tetratheca juncea* within the retained shrubs is supported.

The identified asset protection zone is shown in **Figure 2**.

Fuel Management Plan

It is requested that a requirement for preparation of a Fuel Management Plan be recommended as a condition of consent, and not required prior to determination of the DA. It is our view that the Fuel Management Plan relates to the ongoing operation and management of the asset protection zone and will not impact on the determination of the DA.



Figure 2. Asset Protection Zone.

Impacts to Tetratheca Juncea

Matter raised by Council:

Clarification regarding survey effort is requested as outlined above. It is also requested that the ecological consultant provide:

- A clear plan overlying the development footprint including earthworks and asset protection zone, with T. juncea records at the site.
- A response to the significant impact criteria contained in Table 7 of Council's Tetratheca juncea Planning and Management Guidelines.

Comment: Council's Tetratheca juncea Planning and Management Guidelines require a biodiversity offset for impacts to T. juncea which are:

- 75% retention of clumps onsite, or
- Strategic area wide assessment, with agreed outcomes in a planning agreement, supported by relevant planning documents (eg DCP and management plan).

Where there is no alternative to the loss of T. juncea plants a suitable biodiversity offset is to be provided and may be offsite. Suitable offsets are:

- Replacement ratio of 5:1 for loss of area of known habitat or modelled habitat; or
- Replacement ratio of between 3:1 and 5:1 for plant clumps lost. Offsets may include acquisition of offset land in an area identified as a priority for reservation (eg purchase and dedication with management plan, Biodiversity Stewardship site, purchase and retire T. juncea species credits) or similar arrangement. Offset areas need to be well connected to other patches of native vegetation.

Applicants Response:

A revised Biodiversity Assessment has been prepared by NGH Environmental dated January 2018. The assessment is included within **Attachment C** and is summarised as follows:

A plan overlying the development footprint including earthworks and asset protection zone, with T. juncea records at the site is provided in **Attachment A**.

Targeted Tetratheca juncea flora surveys were conducted on the 28th September 2017 using parallel belt transects spaced at 4-5m, in accordance with the EPBC referral guidelines (SEWPaC 2011). Recorded locations of Tetratheca juncea and survey tracks are provided in **Figure 3**.

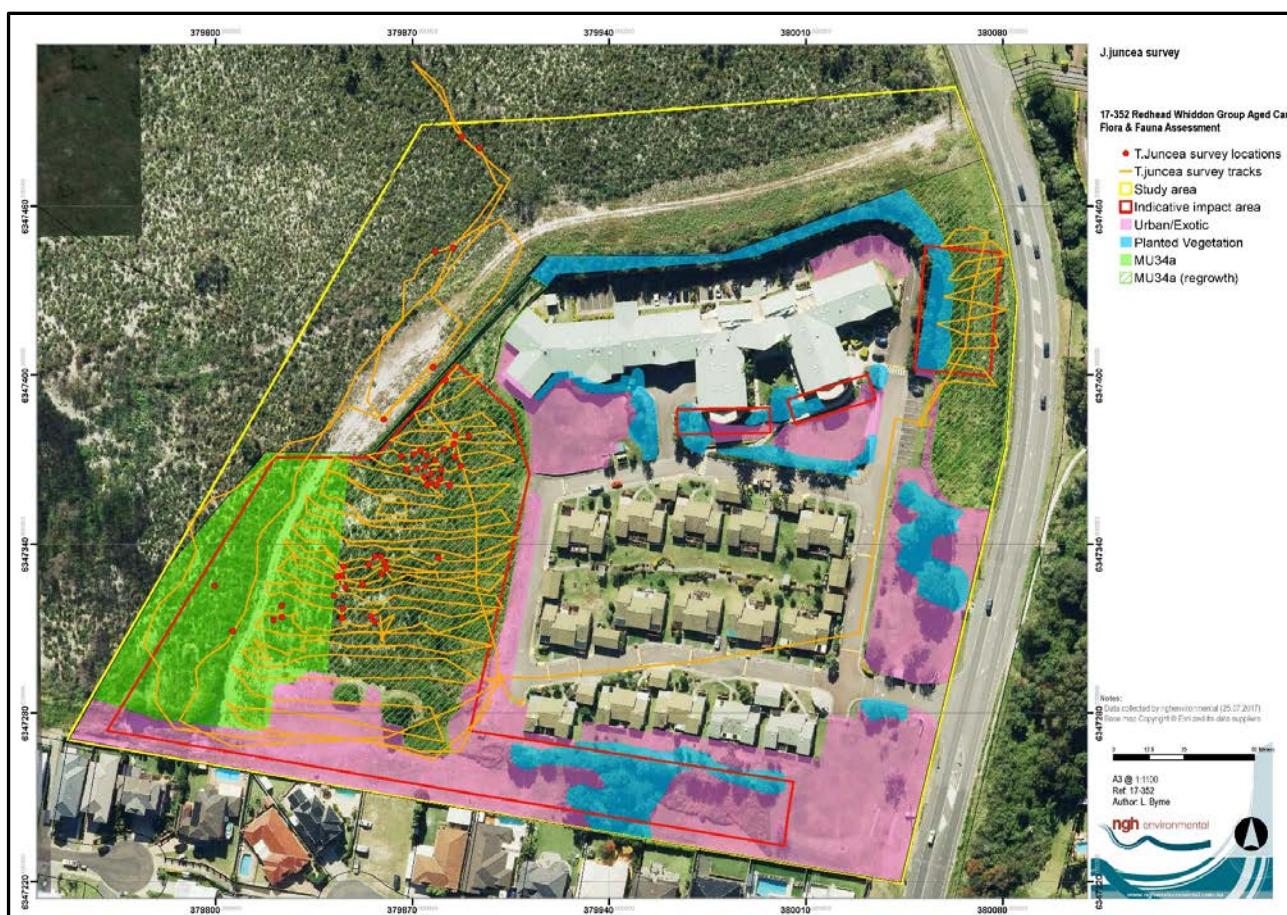


Figure 3. Tetratheca juncea records and survey tracks.

(Source: NGH Environmental, 2018)

Areas within the site that contain *Tetratheca juncea*, that are outside of the identified impact areas are to be demarcated and protected. This is shown in the Landscape Design Package.

Although the loss of *Tetratheca juncea* is not considered as being significant, as the loss of individuals is greater than 75% of those within the proposed work area is unavoidable, Lake Macquarie *Tetratheca juncea* guidelines determine that an offset site is required.

Suitable offsets are considered to be:

- Replacement ratio of 5:1 for loss of area of known habitat or modelled habitat; or
- Replacement ratio of between 3:1 and 5:1 for plant clumps lost.

It is also a requirement that the offset site be retained and managed in perpetuity. Options for securing an offset include:

- Acquisition of land with species credits retired via Biodiversity Stewardship Agreement and management actions implemented;
- Retiring of existing species credits for *Tetratheca juncea* listed on the OEH biodiversity credit register (located within Lake Macquarie LGA); and
- Payment into the Biodiversity Conservation Fund.

The assessment identified that the loss of 65 individuals of *Tetratheca juncea* would require that 195 credits be secured utilising an offset option listed above (at a 3:1 ratio).

Utilising the publicly available offset payment calculator, the estimated cost of retiring 195 credits of *Tetratheca juncea* and providing payment to the Biodiversity Conservation Fund is approximately \$15,202.68 (incl. GST) as of the 12th December 2017.

It is proposed that a biodiversity offset strategy be prepared in consultation with Council wherein the preferred offset method would be developed and secured prior to construction of the development. A requirement for a biodiversity offset strategy could be recommended as a condition on the development consent.

Further details are provided within the Biodiversity Assessment.

Acoustic Impacts

Matter Raised by Council:

A revised acoustic report is requested addressing the following:

- the type and location of mechanical plant including air conditioning, and its potential to cause offensive noise nuisance to adjacent residential premises;
- potential construction noise or vibration, and with the project likely to exceed a sixth months construction period, and the proximity to the residential area, the provision of a Construction Noise and Vibration Management Plan;
- potential noise to adjacent residents from the loading and unloading to the laundry and kitchen areas; and
- clarification as to whether maintenance will involve the use of compressors and rattle guns etc. within the garden machinery maintenance workshop.

Applicants Response:

BSE have prepared a response to the issued raised by council relating to acoustic impacts. The response is included within **Attachment F** and is summarised as follows:

Mechanical Plant and Equipment

As the project is yet to progress into detailed design development, details of the exact model/make of mechanical plant required to service the development is yet to be determined. Notwithstanding, the proposed type of air conditioning plant proposed to be installed within the new buildings consists of a new energy recovery VRV/VRF system.

The proposed plant locations are shown in **Figure 4**. The proposed mechanical plant shall be enclosed on four sides with standard louvres and open to sky to enable adequate ventilation. Additionally, large exhaust fans with sound power level of greater than 80dBA shall be provided with attenuators.

Taking into account existing ambient noise, EPA requirements, the location and type of proposed mechanical services plant and the noise criteria as outlined in the Environmental Noise Assessment report, BSE confirm that the architectural and

Construction Noise and Vibration Management Plan

Loading Areas and Service Vehicle Access

Service vehicle access are proposed to be limited to 7am to 10pm only. Taking into account existing ambient noise, EPA requirements, the location and amount of proposed service vehicle traffic and the noise criteria as outlined in the Environmental Noise Assessment report, BSE confirm that the potential noise of service vehicle traffic shall be less than the maximum noise criteria.

The proposed maintenance workshop is enclosed and well setback from the neighbouring boundary line. Maintenance equipment may include the use of light weight compressors and compressed air powered equipment. However, the use of this equipment is limited to daylight hours and the location/orientation of the workshop will mitigate excessive noise.

Maintenance Workshop

The maintenance workshop will be utilised for both the storage and maintenance of equipment. The workshop would be enclosed and well setback from the neighbouring boundary line.

Maintenance equipment may include the use of domestic-rated light weight compressors and compressed air powered equipment for inflation of wheelchair tyres and similar. The use of this equipment is limited to daylight hours and the location/orientation of the workshop will mitigate excessive noise.

Development Engineering

Cut and Fill

Matter raised by Council:

The proposed development includes retaining of earthworks up to 5 metres deep. Details of the proposed retaining system and associated aesthetic impacts are requested.

Applicants Response:

Opus have prepared an amended civil design package, included in **Attachment G**. The plans show the location of retaining walls proposed for the development. Specific detail relating to retaining wall construction is provided in **Attachment H**.

The Landscape Design Package, included in **Attachment B**, includes section drawings demonstrating how the retaining walls will be incorporated into the overall landscape design. Extracts are shown in **Figure 5** and **Figure 6**.

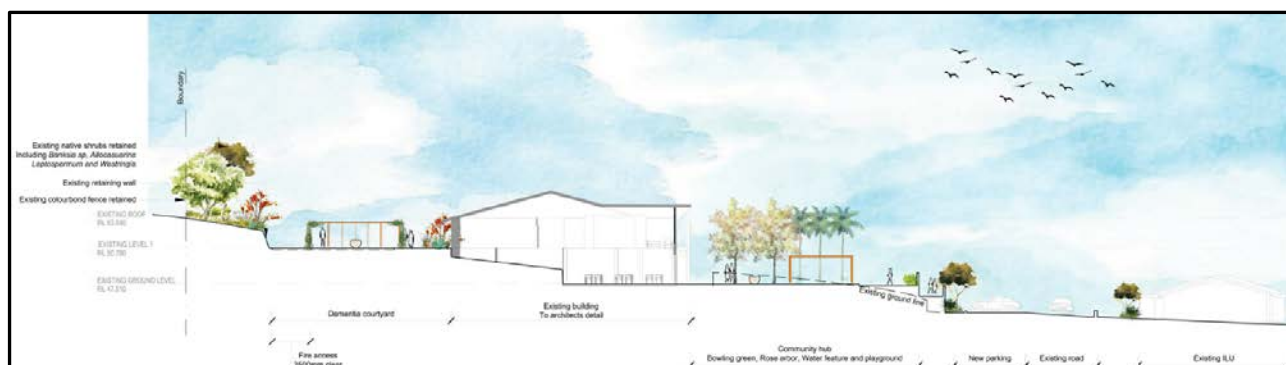


Figure 5. Section CC (North – South).



Matters raised by Council:

- Full calculations and designs for stormwater detention. The design must demonstrate that the development does not increase peak stormwater discharges off the site for all storms up to the 1% flood.
- A 'MUSIC' model for stormwater quality controls on the site.
- Demonstration as to how overland stormwater flows will be controlled so that flows do not impact on the residential properties to the south.
- Details of stormwater harvesting and the reuse of stormwater on the site.

Opus International Consultants (Australia) Pty Ltd have prepared a Stormwater Management report, included in **Attachment I**. The report supports the Stormwater Drainage Plan included as part of the Civil Design Package in **Attachment G** and is accompanied by a Stormwater Management Report and Music and Drain Modelling, included as separate attachments (**Attachments I – K**).

Waste Management

Matters raised by Council:

- Number and size of bins proposed to be used for each waste type;
- Intended service frequency of bins for each waste type;
- Demonstration on a scaled plan the intended location of bin storage area(s) and that the size of bin storage area(s) is adequate for the proposed number of bins;

- Demonstration on a scaled plan where bins are to be presented for collection and who will be responsible for moving the bins to and from the collection area(s);
- If a private contractor is to be used for waste collection, confirmation from the proposed contractor of the destination of each waste type.

Applicants Response:

The location of the proposed waste storage area, with specific bin types is shown in **Figure 7** and included within the Architectural Design Package. Waste collection will be carried out by a private contractor with up to five (5) collections per week.

Waste collection vehicles will empty bins from the service yard.

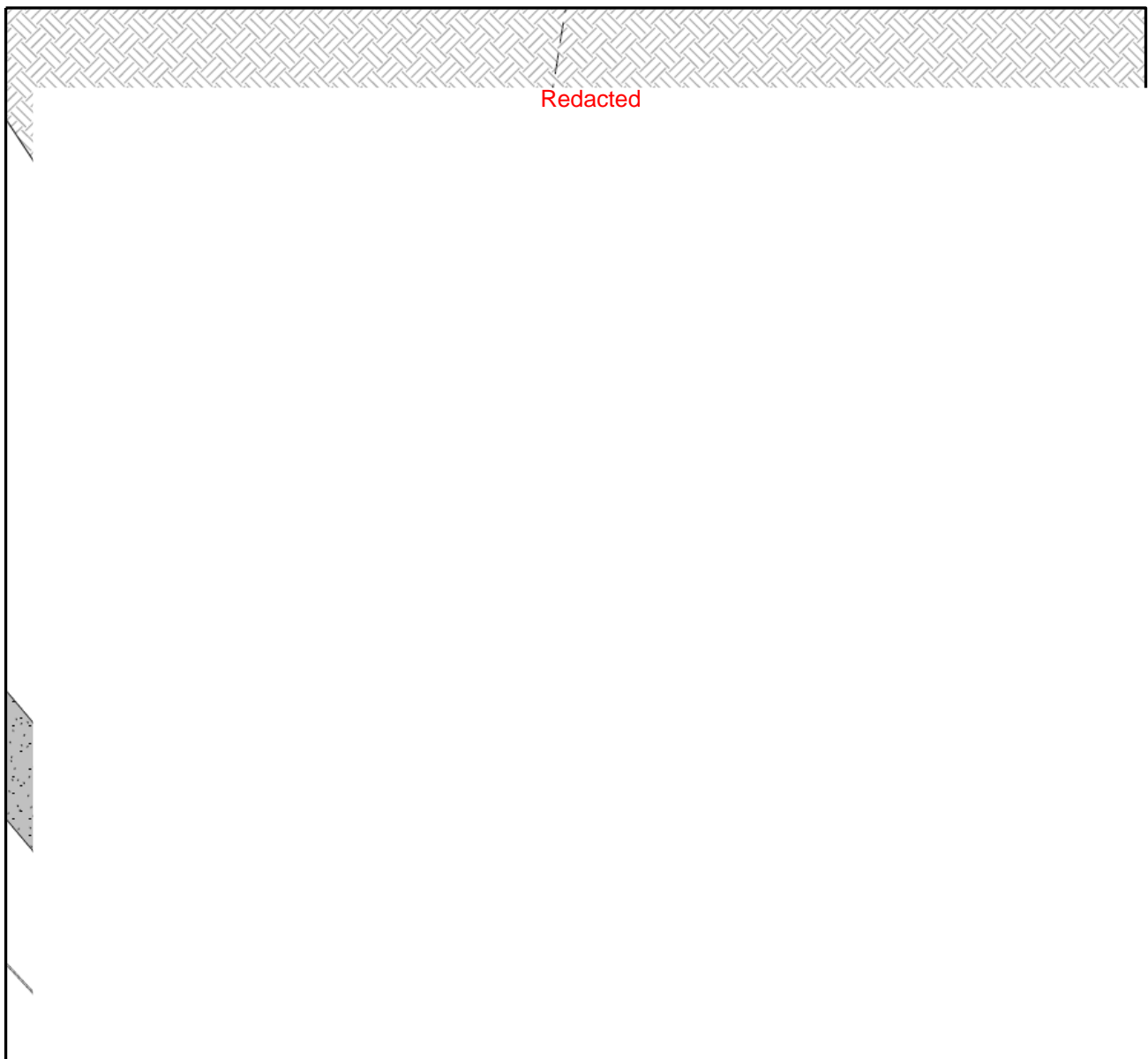


Figure 7. General Arrangement Plan with Waste Storage.

External Authorities

Matter raised by Council:

Council has received responses from the NSW Rural Fire Service, Subsidence Advisory NSW and Ausgrid and I invite you to review these responses on Council's application tracking website.

Applicants Response:

Comments received by external agencies have been reviewed and no further comments are provided in this instance.

Submissions

Matter raised by Council:

A number of submissions in the form of objections to the proposal have been made and are available on Council's application tracking website. To assist in the planning assessment process, you are invited to review and address these submissions.

Applicants Response:

Comments received during the public notification period have been extensively reviewed and key issues have been addressed in the attached amended package of technical reports and designs. A response to the key issues raised is provided in **Attachment M**.

Should you wish to discuss the above matter further, please do not hesitate to contact me on 4978 5100 or marionl@adwjohnson.com.au.

Yours faithfully,



Marion Lourens
Senior Town Planner
ADW JOHNSON

Encl:

- | | | | |
|----|--------------------------------|----|---|
| A. | Amended Architectural Design | H. | Retaining Wall Construction Details |
| B. | Landscape Design Package | I. | Stormwater Management Report |
| C. | Biodiversity Assessment | J. | Music Modelling |
| D. | Bushfire Consultant Commentary | K. | Drains Modelling |
| E. | Visual Impact Assessment | L. | Development Servicing Report |
| F. | Acoustic Commentary | M. | Response to submission made during public notification. |
| G. | Civil Design Package | | |