PERTH
SYDNEY

TOWN PLANNING
AND URBAN DESIGN

11 October 2013

Our Ref: 213.164L3

General Manager
City of Canada Bay Council
Locked Bag 1470
DRUMMOYNE NSW 1470

RE: DEVELOPMENT APPLICATION NO.197/2013 - PROPOSED RESIDENTIAL AGED CARE FACILITY AT 65-71 ST ALBANS STREET, ABBOTSFORD

Dear Sir/Madam,

We refer to Council's letter dated 22 August 2013 and the matters raised as issues to be addressed by the applicant. This letter has been prepared as the applicant's response to those matters to enable the Joint Regional Planning Panel (JRPP) to consider the additional work that the applicant has undertaken to address Council's concerns.

This letter includes in "*italics"* the matters raised by Council in its letter dated 22 August 2013. Each of these matters is addressed by the applicant under the heading "Applicant's Comments".

1. Matters raised by Council in relation to access:

1(a) compliance with clause 26:

SEPP (Housing for Seniors or People with a Disability) 2004

Clause 26 - Location and access to facilities

This is considered to remain the fundamental issue in respect to the application. The SEPP requires that residents of the facility have access to services outlined within subclause 1. In this respect access is deemed to comply subject to standards outlined within sub clause 2(b) and 3 which relate to minimum travel distance (400m) and subsequent path of travel gradients. The additional information submitted by The Planning Group on the 15 July 2013 did identify revised paths of travel though in this regard conceded that distances would remain beyond 400m.

The view presented, in previous correspondence that non compliance with provisions of clause 26 results in a prohibition of the development is maintained.

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During a meeting held at the Council's offices on 21 August 2013 an alternate scheme was discussed involving the raising of the footpath level forward of the site to enable a lift access to be provided at the north east corner which would connect to a footpath and crossing (to be constructed at the applicants expense) and provide a link to the existing footpath on the eastern side of St Albans Street.

Applicant's response to 1(a):

The applicant demonstrated during the meeting held on 21 August 2013 with Council representatives that a suitable access pathway can be made available to a public transport service within 400m of the site. This proposed access pathway is in compliance with the numerical standards nominated by Clause 26 of the *State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004* (**Seniors Housing SEPP**).

The access pathway will be created at the applicant's expense by regrading and reinstating the existing footpath located to the northeast frontage of the site and reinstating the footpath in the St Albans Street road reserve located across the Sydney Water pumping station. A link will then be provided to the existing footpath on the eastern side of St Albans Street. The footpath will then continue across St Albans Street.

The reinstatement and improvement of the current footpath on St Albans Street, at the Applicant's expense, will provide for a public benefit for all pedestrians including residents within the proposed development and throughout the wider neighbourhood. In particular, the reinstatement of the footpath on St Albans Street will greatly improve access to Henry Lawson Park.

In addition, the reinstatement and regrading of the footpath supports Council's policy in relation to accessibility within the local government area. Council at its meeting held on 20 July 2004 adopted the "Accessibility Action Plan for Parks, Open Space and Facilities" (AAP). The AAP was prepared by Council in response to its legislative responsibilities under the *Commonwealth Disability Discrimination Act 1992* (Cth) (DDA). The AAP includes a number of "strategies" with timeframes for implementation:

STRATEGIES

The strategies contained within the Action Plan provide a framework for creating an accessible community. They aim to:

- *Improve access for all people to Council parklands and buildings*
- *Develop continuous accessible paths of travel which will link transport systems, commercial and recreational precincts.*
- *Ensure future public building works in Canada Bay will be accessible to all.*

If completed in the ten (10) year timeframe, Council can clearly demonstrate:

- *A number of fully accessible park and building and at least one wheelchair friendly picnic area per park.*
- *At least one disabled toilet for each park/building.*
- *Improved parking, lighting, walkways, playgrounds and improved access to the main features of each park.*

The AAP includes a number of "standards" forming Council's adopted criteria to meet current Australian disabled access standards. In particular a standard included within the AAP provides for "Walkway Maintenance and Edging":

- *All paths need to comply with Australian Standards for gradients.*
- *An audit needs to be undertaken for all parks and facilities for compliance with Australian Standards requirements (1:14 longitudinal, 1:20 sideways) in order to identify overall requirements in preparation for project costings.*
- *Final costings for path upgrades completed.*
- *All paths need to have edging with compatible surfaces that are well-drained and maintain the same level of weight-bearing support as the path surface. For example, a paved path that borders on a grassed area will need to be well-drained to support suitable access from the paved area.*
- *Surfaces will need to be even across transition zones (to provide an unobstructed, firm and continuous path of travel) with minimal level changes in excess of 5mm (AS1428.1 clause 5.1b).*
- *All pathways to be audited on a regular basis (at least 6 monthly) for significant variations in surfaces (eg gaps, tree roots, raised pavers, substantial overgrowth of vegetation etc).*
- *Identified path maintenance to be completed immediately following reports.*
- *Maintenance to be completed in accordance with gradient standards (1:14 longitudinal 1:20 sideways). For example, in repairing raised pavers caused by tree roots, simply concreting over gaps that leave even small areas of pathway outside gradient slope requirements will not be deemed to be appropriate maintenance.*
- *All steps are to have their top and bottom steps marked with Tactile Ground Surface indicators for people with visual disabilities (AS/NZS 1428.4:2002).*

The AAP provides for specific actions in relation to Henry Lawson Park, including improvements recommended to footpaths around the park and to connect to the park from St Albans Street and along the foreshore. The footpath improvements proposed by the applicant are clearly supported by Council's adopted policy and will assist in achieving the aims under the AAP and Council's legislative responsibilities. In particular:

> *The Action Plan aims to eliminate discriminatory practices and to promote full access for people with a disability to all Council owned/ managed community facilities, amenities and services, thereby providing the same opportunities for community participation for all residents.*

Council's website also states: :

> *Council has an obligation to comply with legislative responsibilities under the Commonwealth Disability Discrimination Act (DDA 1992). The Act states its primary aim is to eliminate, as far as possible, discrimination against persons on the grounds of disability, to ensure, as far as practicable, that people with a disability have the same rights to equality as the rest of the community; and to promote recognition and acceptance of this principle within the community.*

Council supports a range of initiatives to promote access and equity within the City of Canada Bay. These include:

- *Administration of the City of Canada Bay Access Committee*
- *Hosting an annual Access Forum*
- *Access planning - including the development and implementation of the Accessibility Action Plan (AAP) and Pedestrian Access and Mobility Plan (PAMP)*

…

The City of Canada Bay recognises walking is an important travel mode, both for solely pedestrian-based journeys and also as part of trips for which the main mode of travel is by bus, rail and car. Increasing the proportion of journeys that are undertaken on foot can make a significant contribution to achieving a better quality of life and environment for all. Further benefits can be derived from encouraging walking which include improved health, better environmental conditions, decreased traffic congestion and improved safety.

To achieve these benefits Council has adopted its Pedestrian Access and Mobility Plan (PAMP) as the prioritised methodology of establishing where pedestrian ramps should be installed and how they should be maintained within the Local Government Area. Pedestrian access ramps are installed to support safer and easier use by all community members including Seniors, people with a disability and people with prams. Additionally Council seeks to ensure that where possible all relevant Australian Standards, Acts and legislation are considered in both the selection of locations and for the construction of these facilities

The footpath improvements proposed by the applicant support Council's stated policy aims within the AAP and as noted on Council's website. An assessment of the footpath improvements has been undertaken in the responses to 1(b), 1(c), 1(d), 1(e) and 1(f) as follows.

1(b) Footpath level:

An on-site inspection was undertaken with Council's engineers to review this suggested solution to achieve compliance with Clause 26. The engineers and planning staff raise concerns with this proposal as follows:

• A significant increase in the existing footpath level will be required;

Applicant's response to 1(b):

The proposal involves changes to the existing footpath along part of the St Albans Street frontage of the site. The footpath works as proposed will ensure that the distance to the public transport service will not be more than 400 metres.

A change to the existing footpath level along the frontage of the site is required to facilitate the construction of an access pathway compliant with clause 26 of the Seniors SEPP.

However, Council would, as normal practice, require redundant driveways to be removed and footpaths to be reinstated as conditions of consent which inevitably would require a change in levels to the footpath. As a result, the changes to the footpath levels proposed would have likely been required in any event, notwithstanding the requirement to comply with clause 26 of the SEPP.

As Council would be aware, the level difference between the street and the footpath is a major impediment to the public access to the lots and also to the park as well as for passengers in vehicles parking in the street. Further, significant amenity improvements to the streetscape will be achieved through the raising of the footpath levels including better pedestrian accessibility and improved relationship of the footpath to the street.

To assist Council and the JRPP in its assessment of this matter, the applicant has completed Council's "Driveway Construction and Ancillary Works Application Form" and was submitted to Council on 11 October 2013 (Receipt No. 9994) inclusive of the required fee and drawing information to detail the revised footpath.

1(c) Jacaranda tree:

- *An existing established Jacaranda tree will need to be removed;*

Applicant's response to 1(c):

The applicant has carefully considered Council's concerns. ***Three*** new trees will replace the two trees that are to be removed as a result of the pathway realignment. Those new trees will be located so as to be consistent with the other street trees along St Albans Street and as detailed in the sketch prepared by Umbaco dated 9 October 2013 attached at **Appendix A**. **Figure 1** as follows is an extract from this sketch.

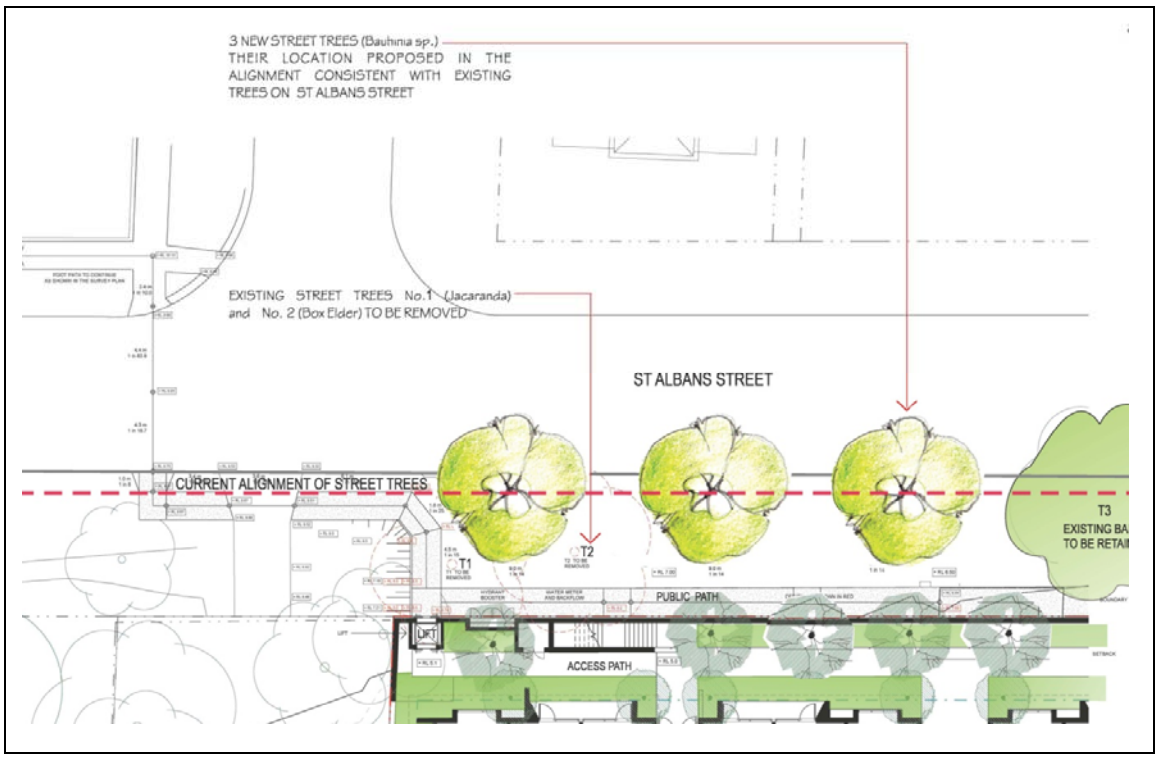

Figure 1: Location of Proposed Replacement Street Trees in St Albans road reserve – extract from sketch by Umbaco date 9 October 2013

Mr Scott Gatenby, an arborist from Apex Tree and Garden, has considered the alternate footpath position and the impact on the existing site vegetation and advised that it is suitable to remove two (2) trees and provide for replacement trees on a similar alignment to the existing street trees in St Albans Street. His comments on the removal of the tree can be found at **Appendix B**, which advises in summary:

> *Tree #1: Jacaranda mimosifolia (Jacaranda)*
>
> *The tree is required to be removed to allow for an Australian Standards compliant footpath to the proposed Aged Care Facility.*
>
> *The existing footpath ends in a relatively steep unpaved rubble surface leading up to the driveway to the Sydney Water facility. In order raise the level of the footpath in this area, it is proposed to remove the tree and replace it with two new Bauhinia spp. planted in alignment with the other Bauhinias in the street, There is ample opportunity for replanting two replacement trees on the footpath to augment the existing street tree rhythm to the south of Trees #1 and #2 by installing the new trees in line with the existing Bauhinia trees.*
>
> *The tree is a common species and is easily replaced. The proposed changes would also allow for the replacement of what is obviously an unsatisfactory footpath adjacent to this tree.*

The applicant suggests that a condition of consent is included in any approval granted by the JRPP:

> **Replacement Street Trees in St Albans Street road reserve**
>
> *The street trees to be removed in the road reserve in St Albans Street as a result of the reinstatement of the proposed regraded footpath are to be replaced by three (3) new trees in an alignment in accordance with the details shown in sketch prepared by Umbaco dated 9 October 2013. Details of which are to be shown in a detailed landscape plan which is to form part of the relevant Construction Certificate.*

1(d) Impact on streetscape:

> • *The extent of fill would require significant retaining walls which would have a detrimental impact on the existing streetscape;*

Applicant's response to 1(d):

The alternate footpath location requires fill in part due to the ordinary grade of the land having already been altered in the road reserve adjacent to the driveway to the Sydney Water site. In this regard, it is considered that the proposed footpath seeks to reinstate as much as possible the ordinary topography of the road reserve area so as to bring about a more usable footpath. This benefit is proposed not only for the proposed development, but also for the wider public who could then use the footpath to access Henry Lawson Park instead of using the road carriageway or the steep dirt track adjacent to the Sydney Water site driveway.

The proposed regraded footpath has also been considered in terms of the design of the proposed development and its setback to the boundary at the St Albans property boundary as shown in Figure 2 as follows:

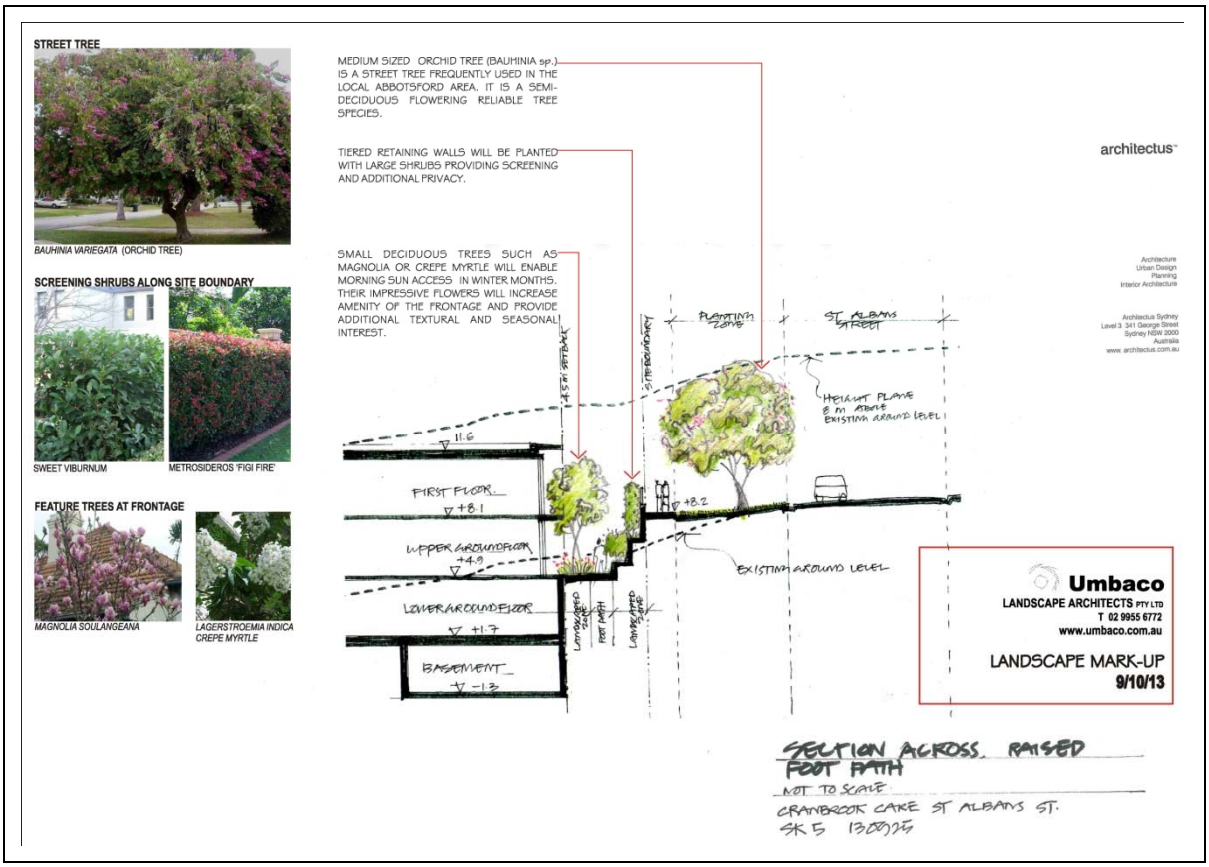

Figure 2: Section taken through proposed regraded footpath

This section demonstrates the landscape treatment along the St Albans Street boundary which is sympathetic to and improves the St Albans streetscape. This sketch information is included at **Appendix A**.

The applicant suggests that a condition of consent is included in any approval granted by the JRPP:

> ***Landscaping within front setback area to St Albans Street***
>
> *The landscaping between the setback of the proposed development and the boundary of the site to St Albans Street is to generally be in accordance with the details shown in sketch prepared by Umbaco dated 9 October 2013. Details of which are to be included in a detailed landscape plan which is to form part of the relevant Construction Certificate.*

1(e) – Raised Levels

> • *Resolving the change in levels between the raised footpath and the existing Charlton Street levels would be problematic;*

Applicants Response to 1(e):

The applicant has submitted detailed information as part of the "Driveway Construction and Ancillary Works Application Form" which demonstrates the proposed levels. See comments above in 1(a) – (d) which resolves the above concern.

1(f) Private works on public land:

> • *It is considered inappropriate and unacceptable to undertake such works on public land with the sole purpose of achieving compliance with a State Environmental Planning Policy for a private development.*

Applicant's response to 1(f):

See the applicant's comments in respect of Item 1(a). Further, the applicant's accessibility consultant Mr Mark Relf from Accessibility Solutions considers that there is significant community benefit in terms of enabling a continuous accessible path of travel to the top of Henry Lawson Park and along St Albans Street. Mr Relf goes on to say:

> *In my experience with Seniors Housing developments there is often public domain infrastructure upgrade works to remove access barriers for people with disabilities and the nature of works proposed for this development is consistent with many other such projects.*

Please refer to **Appendix C** for a copy of the full assessment of the suitable access pathway as proposed.

1(g) 400m to bus stop:

> *In respect to the distance calculation of the revised scheme, this has been taken to the bus stop on the western side of Great North Road near the intersection of Abbotsford Parade. Council does not agree with this as clause 2(b)(i) of the SEPP requires that there is public transport service available to the residents who will occupy the proposed development that will take those residents to a place that is located at a distance of not more than 400m from the facilities and services referred to in subclause (1). Sydney Buses have advised that services travelling north along Great North Road terminate at The Terrace and occupants as a matter of policy are required to exit the bus as this is the end of the bus route. Sydney Buses have advised that passengers are not permitted to remain on an unattended bus and that the terminus in Great North Road is used by drivers to break their journey to use amenities and for other breaks etc. Therefore the bus stop that access needs to be calculated to is that on the eastern side of Great North Road slightly north of the Walton Crescent intersection. This distance, it is agreed would be in excess of 400m.*

Applicant's response to 1(g):

The Applicant has demonstrated that there is a public transport service available to the residents who will occupy the proposed development that is located at a distance of not more than 400 metres from the site of the proposed development and the distance is accessible by means of a suitable access pathway in compliance with clause 26 of the Senior Housing SEPP.

The proposed suitable access pathway to the public transport service has been evaluated by Mark Relf from Accessibility Solutions as suitable pursuant to clause 26 of the Seniors Housing SEPP.

In addition, the proposed suitable access pathway to the nearest available public transport service has been evaluated by Mr Relf who has confirmed his support for the proposal:

Overall I consider the site is appropriately located for a residential care facility and that the residents will have appropriate access to transport services, public and private door to door, to reasonably satisfy all aspect of Clause 26 of the SEPP HS.

Please find attached at **Appendix C**, the evaluation of the proposed access pathway which demonstrates the proposed development is in compliance with Clause 26 of the Seniors Housing SEPP.

Accordingly, a SEPP 1 objection is not required as clause 26 has been met. The Council's issue as to the adequacy of the bus service is a matter of merit.

2. Matters raised by Council in relation to urban design and planning:

2(a) clause 33 of the Seniors Housing SEPP and Wombarra principles

Clause 33 - *Neighbourhood amenity and streetscape*

Subclause (c) requires development to maintain neighbourhood amenity and appropriate residential character by providing building setbacks to reduce bulk and overshadowing, using building form and sitting that relates to the site's land form, and adopting building heights at the street frontage that' are compatible in scale with adjacent development. Subclause (f) also promotes the retention of major trees wherever reasonable.

Furthermore in respect to seniors living in low density zones within which the site is located, four (4) planning principles were established in GPC No 5 (Wombarra) Pty Ltd v Wollongong City Council [20031 NSWLEC 268.

Applicant's response to 2(a):

The applicant considers that the relevant principles are met as follows:

- The **first principle** is met as it reinforces the position that theproposal does not have to be single or two-storey to be compatible with the streetscape even where most buildings are single storey.
- The **second principle** is met which relates to the visual treatment of Seniors Housing development where it is greater than the other buildings in the street. For example, the proposal is visually broken up with expressed bays and recessed entry/exit points.

  The proposed development is responsive to the 'grain' of the street and lot character. The elevation shows that a 2 storey dwelling with roof would have side setbacks roughly where these breaks occur. The roof form breaks in these locations as well.
- The proposed development is consistent with the **third principle** which relates to reducing the visual dominance of the development. The proposal has preserved the topographic characteristics of the site so as to reduce the visual dominance of the building by setting it at current ground level or close to it which is much lower than the street. Preservation of existing vegetation has been undertaken in the scheme through the street trees and tree groupings.

- With regard to the **fourth principle** which recommends that the materials and building forms reflect other buildings in the street, the building materials and forms in St Albans street are varied, for example, masonry flat buildings one side and a variety of houses with different styles on the other. There are flat roofs, brick, pitched tiled roofs, painted render etc. Another consideration is view glimpses over this site to the water and as the roof line is kept low it is sensitive to the outlook of others. The proposal has been designed to blend in as a contemporary addition to the streetscape and therefore meets this principle.

  Further, the building does not read as a 60m long form as the articulation reduces that impression within reasonable bounds. Regarding the setback and deep soil, the proposal is to be well landscaped and that this will contribute to the character.

Gabrielle Morrish from GM Urban Design supports the above position.

So as to reinforce the definition and articulation of the proposed aged care facility development along the St Albans Street frontage, the applicant has incorporated a GM Urban Design proposal for the design of the building to be adjusted over the main entry and the stairs exits so as to include a step to lower the roof line (i.e. the roof element being dropped slightly over the main entry and the stair exits). This adjustment will assist in demonstrating the proposed development is consistent with the planning principles.

This adjustment is demonstrated in the sketch in **Figure 3** below as follows:

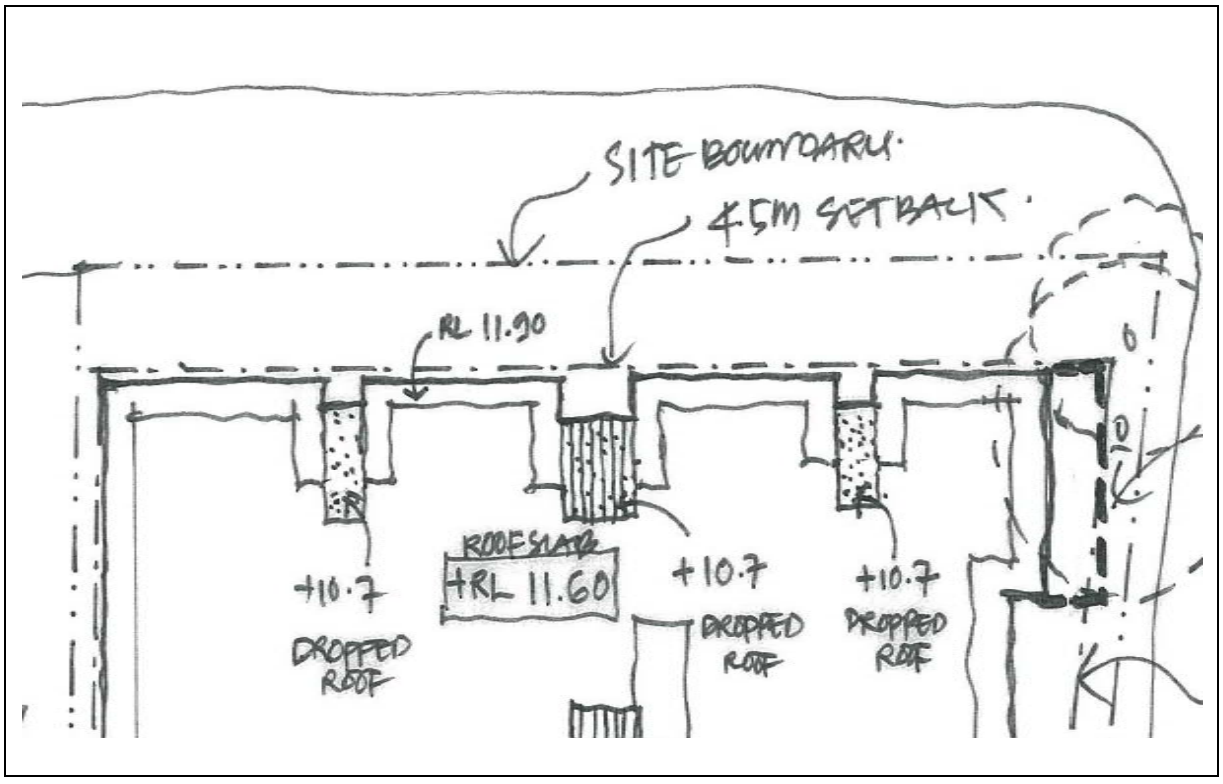

Figure 3: Roof adjustments over entrance and stair exits to St Albans Street

The streetscape presentation with the slightly lowered structure over the entrance and exit stairs along the St Albans Street frontage is demonstrated in the sketch in Figure 4 below:

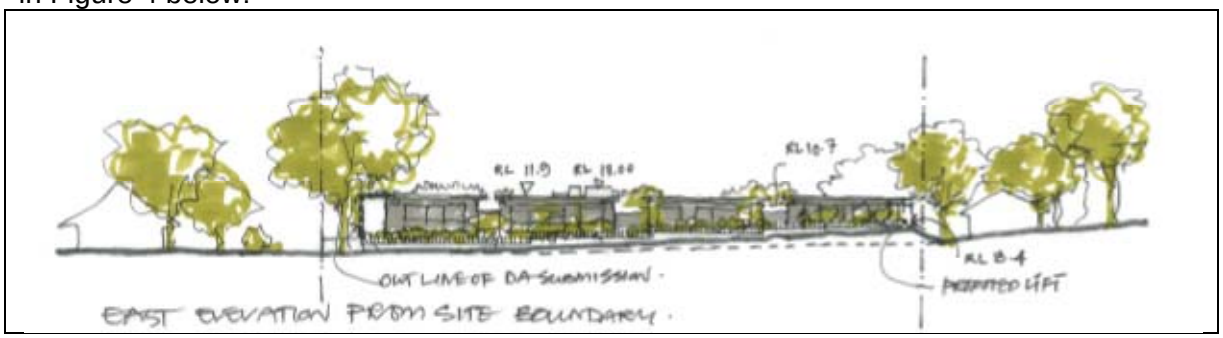

Figure 4: Sketch of roof adjustments over entrance and stair exits from St Albans Street

Please refer to **Appendix D** for sketch information which demonstrates the suggested minor adjustment to the roof.

The inclusion of a step in the roof to slightly lower the structure over the entrance and exit stairs along the St Albans Street frontage can be achieved via the imposition of a condition of approval as follows:

> ***Adjusted Roof Design to St Albans Street presentation***
>
> *The design of the proposed development is to be adjusted to include the lowering of a portion of the roof element over the main entrance to RL 10.7, and to lower a portion of the roof elements over each of the fire exit stairs to RL 10.7 as detailed in sketch 7 prepared by Architectus dated 26 September 2013, so as to provide for additional variation in the roof line presentation to St Albans Street. The amended details are to be included in the drawings which form part of the relevant Construction Certificate.*

2(b) Bulk of development:

> *The development is considered inconsistent with the principles of clause 33 of the SEPP and subsequent court principles. The development presents as 1.5 storeys to the street, though in consideration of minimal setbacks provided to the side boundaries and absence of any generous breaks in the façade, the building measures 59.65m as viewed as a singular form, the bulk will appear much larger than any other development in the vicinity. In this regard the façade needs to be broken up, most notably the upper level to reduce bulk and address the issue, which in turn may also open view corridors that would be otherwise provided by development characteristic of the existing subdivision pattern and R2 Low Density residential zone.*

Applicant's response to 2(b):

The scale of the development is in keeping with the streetscape character and the proposal presents as a low scale development that is consistent with the scale of other development along this side of the street. Gabrielle Morrish supports this position and she further states:

The SEPP does not expect Seniors Living development to be identical to single dwelling houses or to exactly emulate their frontage extent and gaps between built form. The SEPP and guidelines seek to achieve a compatible scale and form.

The proposal is compatible with the grain of the area. It is broken into bays and has recessed façade elements to emulate the rhythm seen in single dwelling houses. The proposal has been amended to further lower the roofs at these breaks to give greater emphasis to the breaks...

We consider that the proposal is sympathetic to the scale and grain of the area within the SEPP and the Design Guidelines

2(c) Built form:

The level of the site forward of the building line sits below that of the adjacent verge and, noting the extent of the basement excavation to within 2.5m of the street boundary, little interface and minimal opportunity for significant planting will be achieved. This is considered to enforce the importance of breaking up the façade and achieving an appropriate built form.

Applicant's response to 2(c):

This issue has been addressed via the landscape concept sketch which proposes tiered planting including trees to provide a strong landscape character to the front setback of the proposal. Refer to sketch information contained in **Appendix A**. Further, the basement is proposed to be moved back to allow deep soil planting to ensure strong growth which will supplement the landscape character of the street and is consistent with the extent of private plantings which in front verges in the street.

Gabrielle Morrish supports the above position and has also indicated that the existing dwellings are also lower than the level of the footpath and verge. This is characteristic of this part of the street.

As noted above, the applicant proposes to adjust the roof design over the main entrance and achieve the form Council seeks. This adjustment can be accommodated by condition of consent as follows:

Adjusted Roof Design to St Albans Street presentation

The design of the proposed development is to be adjusted to include the lowering of a portion of the roof element over the main entrance to RL 10.7, and to lower a portion of the roof elements over each of the fire exit stairs to RL 10.7 as detailed in sketch 7 prepared by Architectus dated 26 September 2013, so as to provide for additional variation in the roof line presentation to St Albans Street. The amended details are to be included in the drawings which form part of the relevant Construction Certificate.

2(d) Vegetation:

In respect to vegetation, the submitted Arborist report has been reviewed by Council's Tree Services Division and the conclusions drawn in respect to the limitation of excavation within the TPZ of trees identified as 43, 44 and 48 which are to be retained is not agreed. Furthermore the removal of trees identified as 50, 52, 55 and 56, the latter 2 of which are outlined as being 'worthy of retention', is opposed. The stated vegetation is located at the edge of the site and as such preservation is not considered unreasonable or overly restrictive. Secondly, it is considered that in conjunction with the issues raised below relating to the car park redesign these trees should be retained.

Applicant's response to 2(d):

Scott Gatenby from Apex Tree & Garden confirms the following in response to resolving Council's concerns:

Tree #43: Eucalyptus scoparia (Willow Gum)

It is proposed to retain this specimen as it provides considerable screening and amenity to this area of the site.

After extensive consultation, design changes have been made to address Council's concerns and to accommodate the AS4970 Tree Protection Zone (TPZ) for this specimen (and Trees #44 and #48). The previous design had only a minor encroachment into the TPZ of this tree however, the changes to the basement and lower ground floor mean that no part of the TPZ of this tree will be affected by the development.

The retention of this tree is a positive outcome as it will assist in maintaining the mature tree cover in the area, provide screening, shade and amenity to the immediate area.

Tree #44: Eucalyptus scoparia (Willow Gum)

It is proposed to retain this specimen as it provides considerable screening and amenity to this area of the site in conjunction with Tree #43.

After extensive consultation, design changes have also been made to address Council concerns and to accommodate the AS4970 Tree Protection Zone (TPZ) for this specimen. The previous design had a significant encroachment into the TPZ of this tree however, the changes to the basement and lower ground floor plans now mean that the basement and lower ground floor areas are no longer within the TPZ. The TPZ of this tree is larger than that stipulated by the Australian Standard and as such the tree will be able to be retained in its current healthy state provided it is protected prior to and during construction.

The retention of this tree is a positive outcome as it will also assist in maintaining the existing mature tree cover and leafy streetscape, especially when combined with the canopy of Tree #43. Its retention will add to the screening of the new building, especially from first and second storey units across the road and further up the hill towards the south and the east.

Tree #48: Eucalyptus microcorys (Tallowwood)

It is proposed to retain this medium to large sized specimen as it provides considerable screening and amenity to the Charlton Street frontage of the site.

Design changes have been made to accommodate Council's concerns and the AS4970 Tree Protection Zone (TPZ) for this specimen. Our earlier Arborist Report noted that the design had a significant encroachment into the TPZ of this tree however, the changes to the basement and lower ground floor now mean that no part of the TPZ of this tree will be affected by the development. It is likely that the root system has been partially restricted towards the proposed building by the foundations of the existing house. Root mapping adjacent to the house indicated this to be the case. The proposed removal of the driveway which is apparently adjacent to the tree will assist in opening up new root areas available to the tree.

The design changes and proposed retention of this tree is also a positive outcome as it is a larger growing tree species and the continued growth of its canopy will provide screening, continued leafy amenity and retain existing mature tree cover to the immediate area. Its canopy is somewhat distinct from that of Trees #43 and #44 but they combine to provide a large area of established mature tree canopy adjacent to the development.

As such, it is considered that to accommodate the TPZs for Trees #43, #44 and #48, a minor adjustment to the design of the buildings can be achieved The sketch below identifies the minor adjustments in the basement:

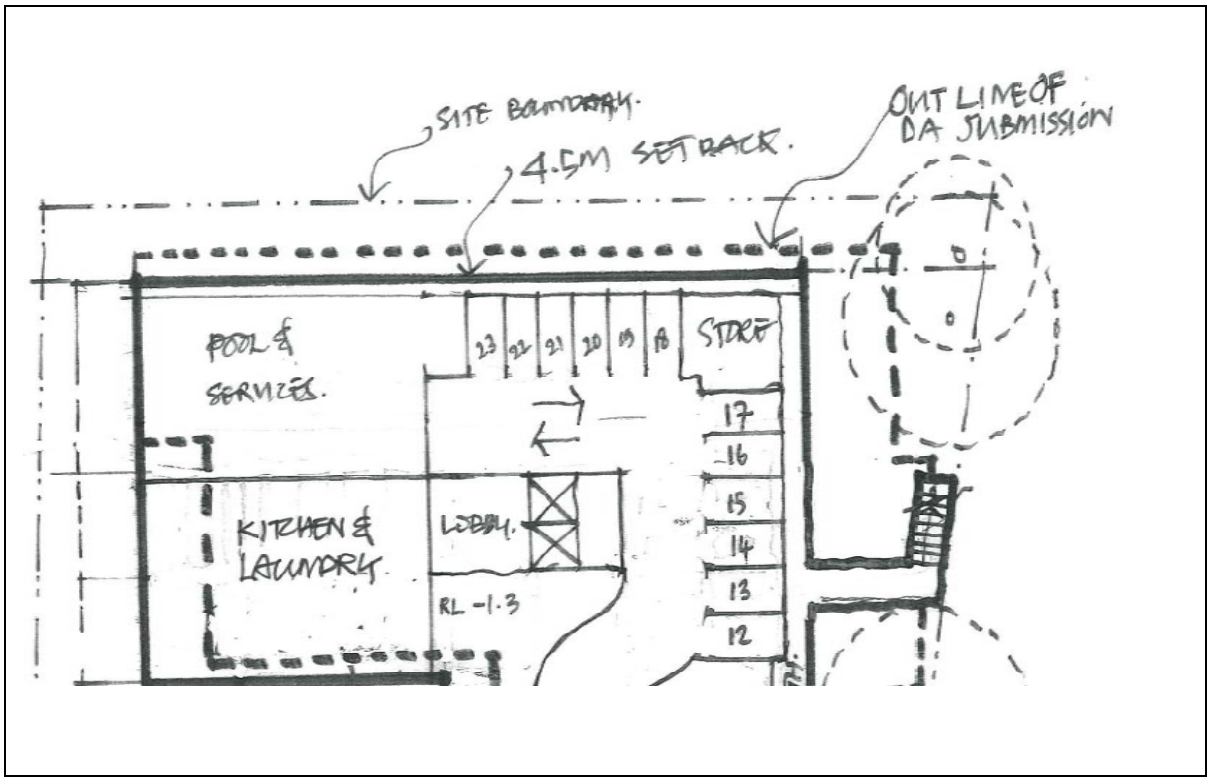

Figure 5: Adjusted basement to achieve TPZs for trees #43, #44 and #48

Similarly, minor adjustments to the lower ground level, upper ground level and first floor level are also included in the sketch information at **Appendix D**, so as to demonstrate that the TPZs can readily be accommodated.

With respect to trees #50, #52 and #55 the removal of these trees is required to accommodate the proposed development and Mr Gatenby supports their removal. See Mr Gatenby's comments at **Appendix B**.

The adjustments proposed can be accommodated via a condition of consent as follows:

> ***Retention of Tree #43 and required Tree Protection Zone***
>
> *The design of the proposed development is to be adjusted in the south-east corner so as to enable Tree #43 to be retained. The design is to be amended so as to achieve a Tree Protection Zone (TPZ) in accordance with Australian Standard 4970. The amended details are to be included in the drawings which form part of the relevant Construction Certificate.*
>
> ***Retention of Tree #44 and required Tree Protection Zone***
>
> *The design of the proposed development is to be adjusted in the south-east corner so as to enable Tree #44 to be retained. The design is to be amended so as to achieve a Tree Protection Zone (TPZ) in accordance with Australian Standard 4970. The amended details are to be included in the drawings which form part of the relevant Construction Certificate.*
>
> ***Retention of Tree #48 and required Tree Protection Zone***
>
> *The design of the proposed development is to be adjusted in the south-east corner so as to enable Tree #48 to be retained. The design is to be amended so as to achieve a Tree Protection Zone (TPZ) in accordance with Australian Standard 4970. The amended details are to be included in the drawings which form part of the relevant Construction Certificate.*

With respect to the replacement trees proposed for the removal of trees #50, #52, and #55, these can be accommodated via a condition of consent as follows:

> ***Replacement tree #50***
>
> *Tree #50 is to be replaced with a new Banksia integrifolia in the rear garden area between Trees #57 and #61. Details of which are to form part of the detailed landscape plan which form part of the relevant Construction Certificate.*
>
> ***Replacement tree #52***
>
> *Tree #52 is to be replaced with two new Elaeocarpus reticulatus citriodora integrifolia in the rear garden area. Details of which are to form part of the detailed landscape plan which form part of the relevant Construction Certificate.*
>
> ***Replacement tree #55***
>
> *Tree #55 is to be replaced with a new Eucalyptus citriodora in the rear garden area. Details of which are to form part of the detailed landscape plan which form part of the relevant Construction Certificate.*

It is now proposed to retain tree #56 and this has been achieved by the adjustment of the location of the substation.

3. Matter raised by Council in relation to building layout and amenity

3(a) Solar amenity of bedrooms

Clause 35 - *Solar access and design for climate*

> *Subclause (a) seeks to ensure adequate daylight access to main living areas of neighbours in the vicinity and residents and adequate sunlight to substantial areas of private open space.*
>
> *Given the nature of the development which has been extensively excavated within the site, the lower ground floor is situated significantly below natural ground level. In this regard, solar access to bedrooms along the northern elevation which are provided with private open space in the form of balconies is considered extremely poor as this level is provided with a minimal 1.5m setback from the boundary and sits significantly below the top of the adjacent retaining wall within.*

Applicant's response to 3(a):

Internal adjustments have been made so that the bedrooms located adjacent to the rock face of the park have been relocated away from this location. Those bedrooms now are located to ensure an outlook and improved amenity. Further, the balconies have also been removed to address Council's concerns.

See the sketches at **Figure 6** showing the adjustments lower level:

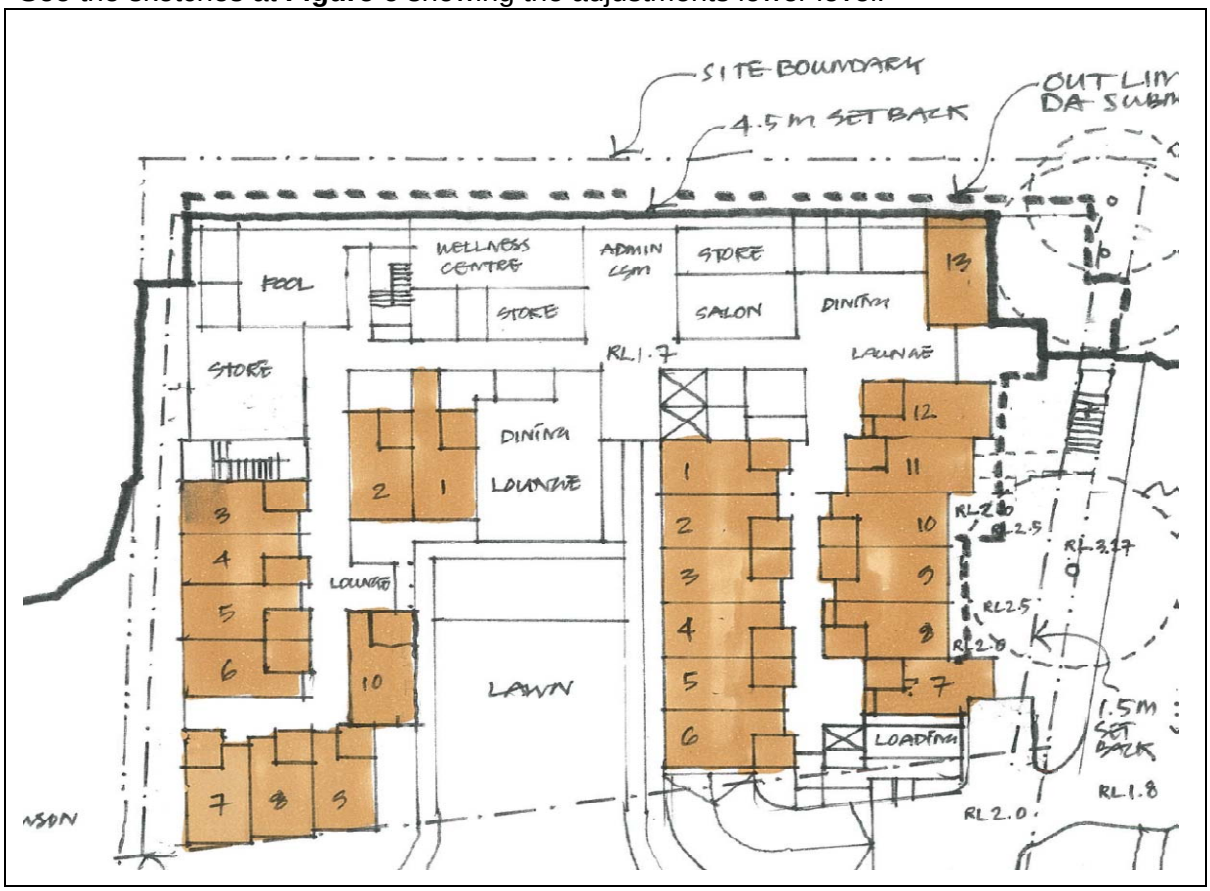

Figure 6: Adjusted lower ground level as suggested by Ms Morrish

The applicant proposes the following condition of approval to address the issue as noted above::

> ***Lower Ground Floor Level is to be adjusted***
>
> *The internal design of the proposed development is to be adjusted on the lower ground floor level so that the bedrooms in the northern wing are clear of the rock wall of the adjoining Sydney Water site as generally in accordance with sketch 2 prepared by Architectus dated 25 September 2013. The amended details are to be formalised in the drawings which form part of the relevant Construction Certificate.*

3(b) Courtyard for dementia patients:

> *A similar situation is identified to the southern component of the building to this level which is understood to provide for dementia patients and is separated to a certain degree from other components of the facility. The primary area of open space for this dementia unit, being the courtyard, sits over 3m below the Charlton Street verge (not including boundary fencing).*

Applicant's response to 3(b):

Dementia patients are located in a secure area and the walled courtyard is a perfect location for such a use. It allows the residents to still enjoy the activity of the street and the landscape. Further, residents also have access to the main open space area and therefore a choice of location for recreation. The applicant's position is supported by Gabrielle Morrish.

3(c) Setbacks:

> *As outlined above, extensive excavation is proposed in an attempt to provide an additional level within the 8m height standard and in this regard it is considered reasonable to require greater setbacks to address resultant amenity impacts.*

Applicant's response to 3(c):

The design of the proposed development has been tailored to enable a presentation to the St Albans Street frontage to mirror that of the existing developments on the site, being one and a half storeys while at the same time achieving compliance with the ceiling height of 8m providing for a two-storey element at the most western portions of the building. The lowest level of the development is for basement car parking and other facilities, while the lower ground level can be designed to place back of house facilities in the excavation zone. The design seeks to demonstrate that the bulk and scale of the proposed development is suitable for the site and will not impact on adjoining properties.

The following comments have been provided by Ms Morrish:

> *The proposal has extensive façade available to the water and to the central courtyard. This provides high amenity and outlook to a central space that is pleasant and has excellent amenity. The lower level is recessed into the slope but generally has 'back of house' uses which do not require solar access or outlook.*

The need for appropriate accommodation for Seniors and particularly nursing accommodation is significant. Given the nature of this facility the provision of 3 storeys to create a viable development that is functional relative to nursing home operator requirements is necessary and achieves a high quality outcome.

Greater setbacks are not required as the building is narrow in its plan depth and the majority of the rooms and spaces have outlook to landscape courtyards or towards the water.

Given the occupation of this facility by residents generally well over 80 who are frail and have serious health issues, this is a reasonable design solution.

As such the RLs proposed in the design for each level of the building, is not proposed to be adjusted.

4. Matter raised by Council in relation to building height:

Clause 40(4) - Height of buildings in zones where residential flat buildings are not permitted

Subclause (a) prescribes a height of 8m (measured to the internal ceiling height) whilst subclause (b) limits development adjacent to a boundary to two (2) storeys. In respect to height it appears that a component of the upper level ceiling cavity has been increased as depicted on section detail to achieve compliance. This is not permitted and compliance shall be demonstrated utilising the average cavity space adopted for the remainder of the building.

Applicant's response to 4:

The ceiling height of the proposed development has been designed to comply with the 8m development standard in the Seniors SEPP. A SEPP 1 objection has been prepared and submitted with the DA to seek a variation of the storeys control. For the reasons set-out in the SEPP 1 objection, compliance with the storeys control is considered to be unreasonable and unnecessary in the circumstances..

Council:

Furthermore in respect to height details of any services / plant that will be located upon the roof level of the building shall be outlined and depicted on plans.

Applicant's Comment:

The location of the plant items and lift overrun can be subject of a condition of approval whereby further detailed roof design is to be completed and submitted to Council prior to the issue of a Construction Certificate.

Roof Plant

Detailed design of the roof plant are to be shown on the architectural drawings and generally consist of ventilation shafts is to be submitted to Council. These details are to be formalised in the drawings which form part of the relevant Construction Certificate.

The plant items are clustered generally to the south of the lift overrun and the roof elements lowered over the entrance and exit stairs to the St Albans Street frontage. Furthermore, the ventilation plant is low by comparison to the overrun, which in itself rises only 1400mm above the roof level. The roof design and the location of the plant items and lift overrun are supported by Mr Richard Lamb who has indicated that there are no resultant visual impacts.

5. Matter raised by Council in relation to landscaping

Division 2 (Clause 48) - Standards that cannot be used to refuse development consent

> *Subclause (c) relates to Landscaped Area and requires a minimum 25m2 per residential care facility bed. The SEE states that a landscaped area of 2137.79m2 is provided equating to 24.85m2 per bed. Whilst this could be viewed as a minor non compliance it is considered that there is no impediment, given the context and size of the site, to achieving compliance. A plan shall also be provided depicting the calculation of the landscaped area in accordance with the definition provided within the SEPP.*

Applicant's response to 5:

The matter can readily be resolved as the applicant is prepared to reduce the number of beds to 85, and therefore the proposal is compliant with this landscaping standard. Further, this issue can be resolved through the imposition of a condition of approval as follows:

> ***Landscaped area and total number of beds***
>
> *The total number beds in the proposed development shall be limited to 85 beds*.

6. Matters raised by Council in relation to traffic and parking

It is noted that Council commissioned Traffix to provide feedback with respect to the DA. The matters raised by Mr Pindar in the Traffix letter have now been addressed by Mr Tim Rogers from Colston Budd Hunt and Kafes in the response which can be found at **Appendix E**.

The response from Mr Rogers includes a suggestion to adjust the location to access the basement car parking and provide for a two-way movement, separate the loading dock from the ambulance bay and adjust the parking layout to accommodate 23 cars as shown in **Figure 7** as follows:

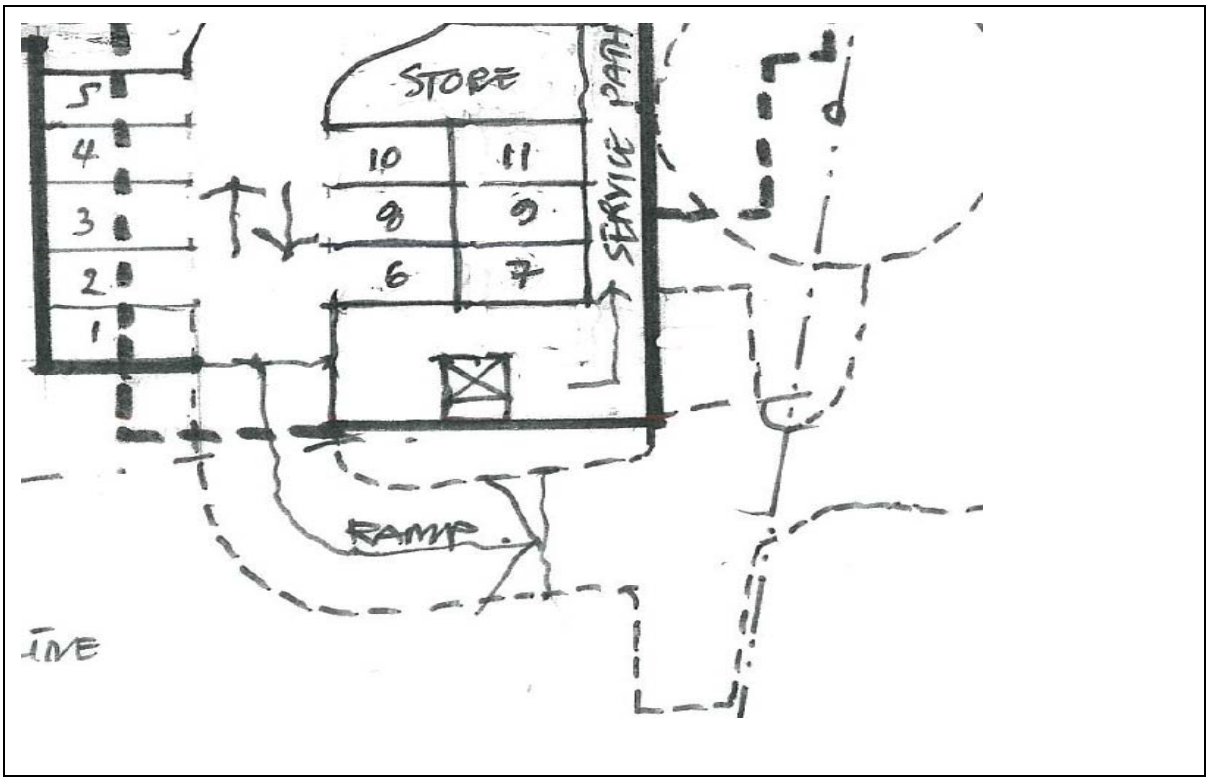

Figure 7: Adjusted basement level as suggested by Mr Rogers

Details of suggested conditions which could be included on any approval granted by the JRPP to address the matters raised by Mr Pindar are set out below:

Parking Plan for Charlton Street

No condition required as no mitigation measures required. Traffic flows and length of street comply with AMCORD guidelines.

On Street Queuing/Traffic Generation

Revised plans are to be prepared prior to the issue of a Construction Certificate showing vehicular access from Charlton Street in accordance with the sketches included in the Colston Budd Hunt and Kafes letter dated 30 September 2013, which provides for a six (6) metre wide driveway with passing opportunities to address the potential for on-street queuing.

Separate Loading Facility

Revised plans be prepared prior to the issue of a Construction Certificate showing loading arrangements in accordance with the sketches included in the Colston Budd Hunt and Kafes letter dated 30 September 2013. The revised plans are to include details of proposed mitigation measures to address traffic management during deliveries, including (but not limited to) location of warning lights and mirrors.

Deletion of the Turntable

Revised plans are to be prepared prior to the issue of a Construction Certificate showing loading arrangements in accordance with the sketches included in the Colston Budd Hunt and Kafes letter dated 30 September 2013 showing the deletion of the turntable.

Provision of Ambulance Bay

Revised plans are to be prepared prior to the issue of a Construction Certificate showing an ambulance bay in accordance with the sketches included in the Colston Budd Hunt and Kafes letter dated 30 September 2013.

Design Deficiencies

The car park and loading dock shall be designed to comply with the requirements of AS2890.1-2004, AS2890.2-2002 and AS2890.6-2009. Any stack parking spaces shall be allocated to staff.

Concluding Comments

The applicant has carefully considered each of the matters raised by Council and in an effort to address those concerns has undertaken significant consultation with its consultant team. As established in the preceding paragraphs, each of the matters raised by Council can be suitably addressed and relevant conditions of approval imposed on any consent issued by the JRPP. Please refer to **Appendix F**. Further, the positive improvements resulting from the design of the building in relation to streetscape, public access and disability access near the site can be achieved at the applicant's cost and provide a benefit not only to the residents but a public benefit to the community.

Should you have any queries or require clarification on any matters please do not hesitate to contact the undersigned on 0488 221 082.

Yours sincerely

THE PLANNING GROUP NSW PTY LTD

Marian Higgins

(Director)

APPENDIX A – UMBACO SKETCHES DATED 9 OCTOBER 2013

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3 NEW STREET TREES (Bauhinia sp.)
THEIR LOCATION PROPOSED IN THE ALIGNMENT CONSISTENT WITH EXISTING TREES ON ST ALBANS STREET

EXISTING STREET TREES No.1 (Jacaranda) and No. 2 (Box Elder) TO BE REMOVED

ST ALBANS STREET

CURRENT ALIGNMENT OF STREET TREES

T1
T1 TO BE REMOVED

T2
T2 TO BE REMOVED

T3
EXISTING BAUHINIA TO BE RETAINED

FOOT PATH TO CONTINUE AS SHOWN IN THE SURVEY PLAN

2.4 m
1 in 10.0

4.4 m
1 in 62.8

4.3 m
1 in 18.7

1.0 m
1 in 8

4.5 m
1 in 15

9.0 m
1 in 14

1.8 m
1 in 25.

1 in 14

+ RL 10.12
+ RL 9.98
+ RL 9.94
+ RL 9.88
+ RL 9.95
+ RL 9.75
+ RL 9.53
+ RL 9.32
+ RL 9.87
+ RL 9.67
+ RL 9.51
+ RL 9.68
+ RL 9.52
+ RL 9.0
+ RL 8.5
+ RL 8.92
+ RL 8.46
+ RL 7.00
+ RL 6.50
+ RL 6.44
+ RL 5.1
+ RL 5.0

HYDRANT BOOSTER
WATER METER AND BACKFLOW
PUBLIC PATH
BOUNDARY
SETBACK
LIFT
ACCESS PATH
ENTRY
1500
BED
ADMIN OFFICE
RECEPTION
ENS
MECH
SITTING

NTS

Cranbrook Care 65 - 71 St Albans Street, Abbotsford NSW

25/09/2013 8:32:04 PM | Prepared for **Cranbrook Care** | Draw | stop

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LANDSCAPE MARK-UP-SKETCH

9/10/13

ROOF GARDEN

TURF

T16

TRANSPLANTED FRANGIPANI

RL 2.00

MIXTURE OF FEATURE AND NATIVE SHRUBS WITH TRANSPLANTED FRANGIPANI

LEMON SCENTED GUMS

RL 1.35

T17

TURF

BLUEBERRY ASH

SHELTERED FAMILY SEATING AREA

RL 1.22

TURF

GLASS FENCE

RL 1.32

BEACH

ENTRY

RL 1.30

PUBLIC PATH 1.5 m wide

ADDITIONAL 2 LEMON SCENTED GUMS

SLIPWAY

TURF

EXISTING FORESHORE WALL TO BE REPAIRED AND CLADDED WITH HARDWOOD

NTS

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LANDSCAPE MARK-UP-SKETCH

9/10/13

STREET TREE

BAUHINIA VARIEGATA (ORCHID TREE)

MEDIUM SIZED ORCHID TREE (BAUHINIA sp.) IS A STREET TREE FREQUENTLY USED IN THE LOCAL ABBOTSFORD AREA. IT IS A SEMI-DECIDUOUS FLOWERING RELIABLE TREE SPECIES.

TIERED RETAINING WALLS WILL BE PLANTED WITH LARGE SHRUBS PROVIDING SCREENING AND ADDITIONAL PRIVACY.

SMALL DECIDUOUS TREES SUCH AS MAGNOLIA OR CREPE MYRTLE WILL ENABLE MORNING SUN ACCESS IN WINTER MONTHS. THEIR IMPRESSIVE FLOWERS WILL INCREASE AMENITY OF THE FRONTAGE AND PROVIDE ADDITIONAL TEXTURAL AND SEASONAL INTEREST.

SCREENING SHRUBS ALONG SITE BOUNDARY

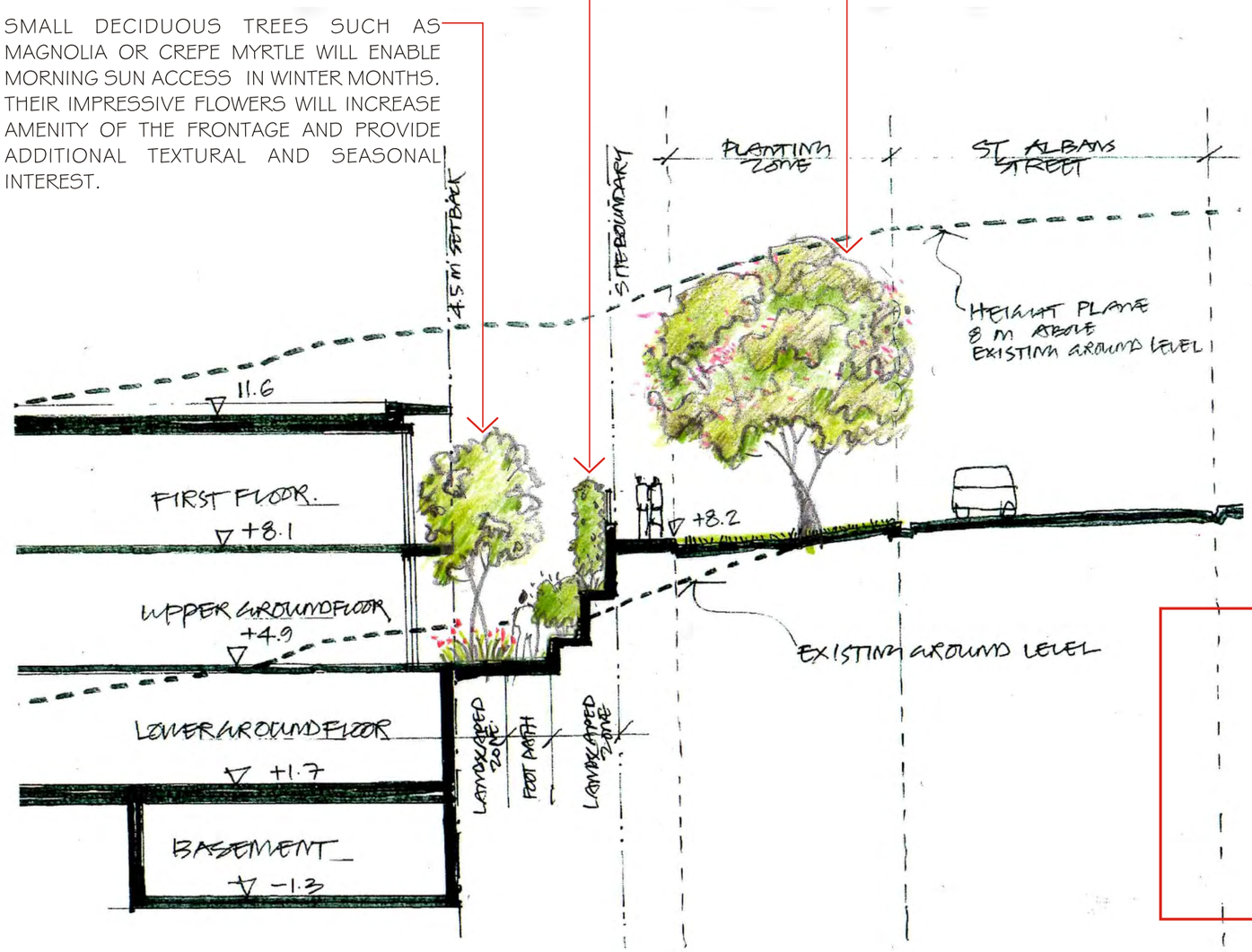
SWEET VIBURNUM

METROSIDEROS 'FIGI FIRE'

FEATURE TREES AT FRONTAGE

MAGNOLIA SOULANGEANA

LAGERSTROEMIA INDICA
CREPE MYRTLE



SECTION ACROSS RAISED FOOT PATH

NOT TO SCALE

CRANBROOK CARE ST ALBANS ST.

SK 5 130925

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APPENDIX B – ABORIST INFORMATION

Apex
Tree & Garden Experts
A.B.N 80 076 296 903

60c Cardinal Avenue, West Pennant Hills 2125 **Telephone: (02) 9980-7999**
email: apex_tree_experts@bigpond.com **Fax: (02) 9980-7900**
www.treesbyapex.com

10 October 2013

Meldrum Property Group
Cranbrook Care
Suite 3, Level 1, 8 West St,
North Sydney NSW 2060

Ref:cranbrook7(e).rpt

CONSULTATION at 65-71 ST ALBANS ST ABBOTSFORD

We confirm that we have inspected the above site in April 2013 and now report as follows;

This report has been commissioned by Cranbrook Care to update the previous Apex Tree & Garden Experts report dated 30 May 2013 in relation to items raised by Council with regard to Trees #1, #2, #43, #44, #48, #50, #52, #55 and #56 in their correspondence dated 22 August 2013 re DA:197/2013.

The trees have been inspected by ground based observations using Visual Tree Assessment Techniques. VTA undertaken by tree professionals is a recognised systematic method of identifying tree characteristics and hazard potential.

TREE REPORT:

Tree #1: **Jacaranda mimosifolia** (Jacaranda)

The tree attains a height of approximately (~) 8 metres, has a canopy spread of ~ 14 metres and a diameter at breast height (dbh) of ~ 500 mm. The tree is in good health and is of fair form. The fair form rating has been given to the tree as it has been regularly pruned for power line clearance.

The tree is located outside # 71 St Albans Road and has a growth habit towards the north. It has been planted ~ 1 metre from the concrete footpath strip. It is proposed to remove this tree and replace it with two other new tree specimens. The tree is required to be removed to allow for an Australian Standards compliant footpath to the proposed Aged Care Facility.

The existing footpath ends in a relatively steep unpaved rubble surface leading up to the driveway to the Sydney Water facility. In order raise the level of the footpath in this area, it is proposed to remove the tree and replace it with two new *Bauhinia* spp. planted in alignment with the other Bauhinias in the street, please refer to the Umbaco Landscape Mark up Sketches on Architectus plans SK-218 and SK-5. There is ample opportunity for replanting two replacement trees on the footpath to augment the existing street tree rhythm to the south of Trees #1 and #2 by installing the new trees in line with the existing Bauhinia trees.

The tree is a healthy and attractive specimen however it is also a common species and is easily replaced. Its removal would result in a short term reduction in the greenery and tree cover of this part of the site however, landscape plans provide for ample replacement trees to be installed and so have the potential of improving the medium to long term greenery, amenity and tree cover at and near this location both on the footpath and within the front garden area.

It is also proposed to install terraced gardens at the front of the proposed building to allow small to medium sized trees to be planted within the site along the St Albans St frontage. This will help to further enhance the street scape, visual amenity, screening and the number of trees presented along the St Albans St frontage. This will have the effect of increasing the amount of greenery in the medium to long term when looking towards the proposed development from St Albans St. Please see Architectus sketch Section Across Raised Footpath Dwg No.SK-5 attached and the Landscape Plan. The proposed changes would also allow for the replacement of what is obviously an unsatisfactory footpath adjacent to this tree.

Tree #2: **Acer negundo** (Box Elder)

The tree attains a height of approximately (~) 6 metres, has a canopy spread of ~ 9 metres and is multi trunked. The tree is in good health and is of poor to fair form. The poor to fair form rating has been given to the tree as it has been regularly pruned for power line clearance and has been lopped at ~1 metre height in the past where upon it has re-sprouted with multiple trunks.

This is not a significant tree and it is proposed to replace this specimen with a new Bauhinia near to this location in the footpath reserve. At present, it is proposed to replace it with another specimen in line with the existing Bauhinias to the south of this tree to augment to existing street tree rhythm. This Box Elder has a short useful life expectancy because of the poor pruning practices carried out on the tree in the past and so its replacement with a much longer living street tree species will ultimately benefit the streetscape.

It is proposed to replace Trees #1 and #2 with an additional Bauhinia tree on the footpath in order to more quickly attain the greenery and screening that is desired by the developer, neighbouring residents and council. Therefore, the two trees will be replaced by three new trees.

Tree #43: **Eucalyptus scoparia** (Willow Gum)

The tree attains a height of approximately (~) 18 metres, has a canopy spread of ~ 12 metres and a diameter at breast height (dbh) of ~ 350 mm. The tree is in good health and is of good form.

It is proposed to retain this specimen as it provides considerable screening and amenity to this area of the site.

After extensive consultation, design changes have been made to address Council's concerns and to accommodate the AS4970 Tree Protection Zone (TPZ) for this specimen (and Trees #44 and #48). The previous design had only a minor encroachment into the TPZ of this tree however, the changes to the basement and lower ground floor mean that no part of the TPZ of this tree will be affected by the development. Cranbrook Care has indicated that soil improvement and remedial treatment of the tree will start to occur well prior to any demolition or construction activities to start to improve the health of this tree.

Existing soil levels will be retained well past the TPZ for this tree and the soil area improved by soil decompaction, mulching, fertilising and watering of the tree. Some of this has already been undertaken. Standard tree protection measures will need to be implemented as per AS4970.

The retention of this tree will assist in maintaining the existing mature tree cover and leafy street scape as well as providing a modicum of screening to the new building especially from first and second storey units across the road and further up the hill.

The retention of this tree is a positive outcome as it will assist in maintaining the mature tree cover in the area, provide screening, shade and amenity to the immediate area.

Tree #44: **Eucalyptus scoparia** (Willow Gum)

The tree attains a height of approximately (~) 18 metres, has a canopy spread of ~ 12 metres and a diameter at breast height (dbh) of ~ 600 mm. The tree is in good health and is of good form.

It is proposed to retain this specimen as it provides considerable screening and amenity to this area of the site in conjunction with Tree #43.

After extensive consultation, design changes have also been made to address Council concerns and to accommodate the AS4970 Tree Protection Zone (TPZ) for this specimen. The previous design had a significant encroachment into the TPZ of this tree however, the changes to the basement and lower ground floor plans now mean that the basement and lower ground floor areas are no longer within the TPZ. The TPZ of this tree is larger than that stipulated by the Australian Standard and as such the tree will be able to be retained in its current healthy state provided it is protected prior to and during construction.

Cranbrook Care has indicated that soil improvement and remedial treatment of the tree will also start to occur well prior to any demolition or construction activities to start to improve the health of this tree.

Existing soil levels will be retained within the TPZ of this tree and the soil area improved by soil decompaction, mulching, fertilising and watering of the tree. Some of these recommendations have already been undertaken. Minor pruning of the lower canopy adjacent to the building will need to be undertaken to give clearance between the tree and the southern wall of the new building. Standard tree protection measures will need to be implemented as per AS4970.

The retention of this tree is a positive outcome as it will also assist in maintaining the existing mature tree cover and leafy street scape, especially when combined with the canopy of Tree #43. Its retention will add to the screening of the new building, especially from first and second storey units across the road and further up the hill towards the south and the east.

Tree #48: **Eucalyptus microcorys** (Tallowwood)

The tree attains a height of approximately (~) 16 metres, has a canopy spread of ~ 15 metres and a diameter at breast height (dbh) of ~ 600 mm. The tree is in good health and is of good form.

It is proposed to retain this medium to large sized specimen as it provides considerable screening and amenity to the Charlton Street frontage of the site.

Design changes have been made to accommodate Council's concerns and the AS4970 Tree Protection Zone (TPZ) for this specimen. Our earlier Arborist Report noted that the design had a significant encroachment into the TPZ of this tree however, the changes to the basement and lower ground floor now mean that no part of the TPZ of this tree will be affected by the development. It is likely that the root system has been partially restricted towards the proposed building by the foundations of the existing house. Root mapping adjacent to the house indicated this to be the case. The proposed removal of the driveway which is apparently adjacent to the tree will assist in opening up new root areas available to the tree.

Cranbrook Care has indicated that soil improvement and remedial treatment of the tree will also start to occur well prior to any demolition or construction activities to start to improve the health of this tree.

Existing soil levels will be retained within the TPZ of this tree and the soil area improved by soil decompaction, mulching, fertilising and watering of the tree. Minor pruning of the lower canopy adjacent to the building will need to be undertaken to give clearance between the tree and the southern wall of the new building. I recommend that the secondary trunk which is forming on the northern side of the tree be removed or reduction pruned down to a suitable lateral branch so that the central leader and its lateral branches can be promoted.

Standard tree protection measures will need to be implemented as per AS4970.

The design changes and proposed retention of this tree is also a positive outcome as it is a larger growing tree species and the continued growth of its canopy will provide screening, continued leafy amenity and retain existing mature tree cover to the immediate area. Its canopy is somewhat distinct from that of Trees #43 and #44 but they combine to provide a large area of established mature tree canopy adjacent to the development.

General Notes Regarding Trees #43, #44 and #48

All of these trees will need to be protected as per Australian Standard 4970 Protection of Trees on Development Sites and per the Protection of Trees on Construction Sites as attached. Of particular note is that the trees need to be fenced off prior to any demolition works, the soil within the TPZ improved, an irrigation system with a permanent water point be installed within the TPZ and this area deeply mulched. The purpose of the permanent water point is to allow a dedicated automatic irrigation system to be installed for each tree that will not be disconnected during building activities for other purposes.

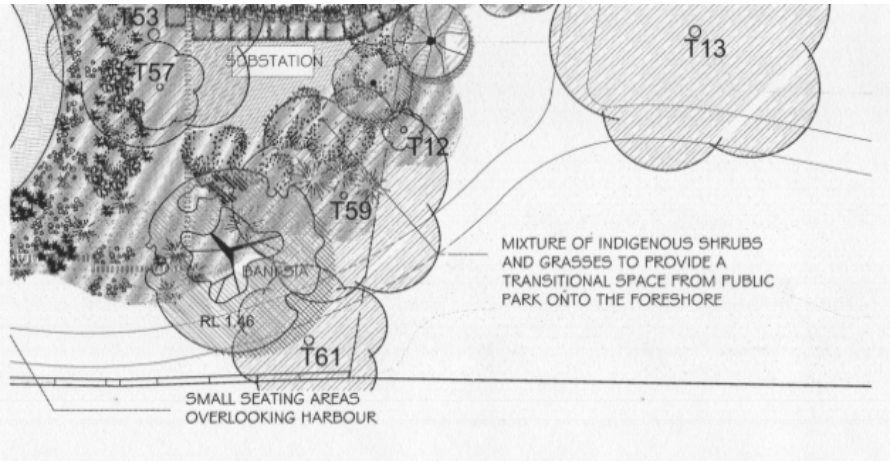
All of the above trees require minor pruning to remove major accessible deadwood, stubs, incorrect lopping and crossed and rubbing branches. Tree #44 requires tree surgery to treat an area affected by bracket fungus. It is recommended for Trees #43 and #44 that the soil area be treated with an insecticide to reduce the prevalence of sap sucking and leaf eating insects.

Tree #50: **Banksia integrifolia** (Banksia)

The tree attains a height of approximately (~) 13 metres, has a canopy spread of ~ 6 metres and a diameter at breast height (dbh) of ~ 400 mm. The tree is in good health and is of good form. This tree would have a Medium safe useful life expectancy.

This tree is proposed to be removed as it is within the building envelope. It is a commonly occurring, fast growing and easily replaced species. It is also located well within the boundary of the site. It is ~ 9 metres in from the southern side boundary on Charlton Street. It should be noted that if this common and fast growing tree was to be retained, it would mean a setback from the side boundary on Charlton Street, including the TPZ required by it would extend into the site by ~ 11 metres. This would effectively sterilise a large proportion of the site required for the building. The site is already somewhat restricted by the Foreshore Setback and as such, significant design changes are not warranted for the retention of this tree.

It is proposed to be replaced with a new and vigorous *Banksia integrifolia* in the rear garden area between Trees #57 and #61 during landscaping. Please refer to the excerpt from the Landscape Plan Plan SK DA01-Issue B below. A new specimen will be likely to provide vigorous growth and tree cover into the long term. It is also proposed to install several large growing tree specimens (*Eucalyptus citriodora)*, in the rear gardens as detailed below. The replacement species are trees with a Long useful life expectancy.



Excerpt from Landscape Plan SK DA01-Issue B
indicating location of replacement *Banksia integrifolia* (Coast Banksia).

Tree #52: **Eucalyptus scoparia** (Willow Gum)

The tree attains a height of approximately (~) 14 metres, has a canopy spread of ~ 12 metres and a diameter at breast height (dbh) of ~ 500 mm. The tree is in good health and is of good form.

This tree is proposed to be removed as it is immediately adjacent to the building envelope. It is a commonly occurring, fast growing and easily replaced tree species. It is also located well within the boundary of the site. It is also ~9 metres in from the southern side boundary on Charlton Street. Its retention and the provision of an adequate TPZ would effectively sterilise a large proportion of the Charlton Street frontage from development.

In order to help to maintain the long term tree cover and to replace this specimen it is proposed to be replace it with numerous other trees such as *Eucalyptus citriodora, Elaeocarpus reticulatus and Tristaniopsis laurina* elsewhere on site during landscaping. It is proposed to install two trees to replace this single specimen in the garden area at the rear of the development.

The provision of a range of small to large sized trees is a positive outcome as it will create a park-like appearance at the rear of the development which will be able to be viewed by pedestrian traffic as the new walkway will be linked to the park along the foreshore through the development.

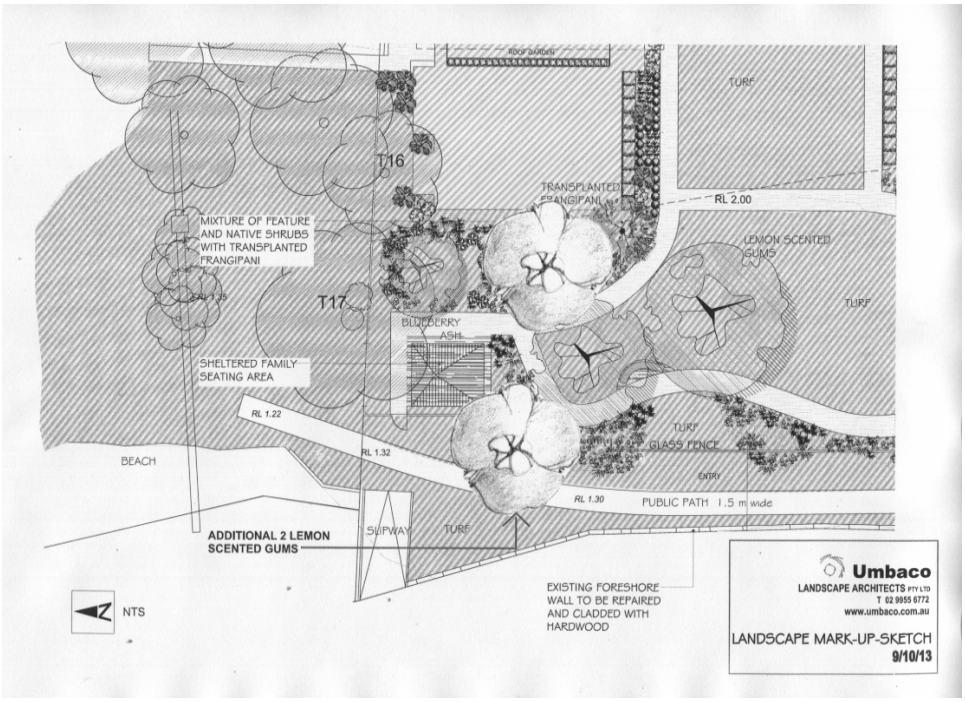
Tree #55: **Eucalyptus citriodora** (Lemon Scented Gum)

The tree attains a height of approximately (~) 16 metres, has a canopy spread of ~ 10 metres and a diameter at breast height (dbh) of ~ 400 mm. The tree is in good health and is of good form. It is a commonly occurring, fast growing and easily replaced species.

This tree is proposed to be removed as it is adjacent to the building envelope and within the only area available to install the driveway.

Its retention and provision of an adequate TPZ would also effectively sterilise a large proportion of the Charlton Street frontage from development. An access point to the car park and service areas is required in the Charlton St frontage and given the site constraints it is proposed to remove this tree.

It is proposed to be replaced during landscaping with another two *Eucalyptus citriodora* which are also to be located in the rear garden near the foreshore as indicated in the Landscape Plan below showing a total of four replacement trees. The tree will be replaced with the identical species to maintain the canopy cover from the medium term onwards.



Landscape Plan Mark Up Sketch
indicating location of replacement four *Eucalyptus citriodora* (Lemon Scented Gum).

Tree #56: **Clochian ferdinandii** (Cheese Tree)

The tree attains a height of approximately (~) 7 metres, has a canopy spread of ~ 8 metres and a diameter at breast height (dbh) of ~ 350 mm. The tree is in good health and is of good form.

This tree was previously proposed to be removed to allow for the installation of the substation. Design changes have been made in order to address Council concerns. The substation has been able to be moved away from the location of this tree and it is now proposed that this specimen be retained. The tree will need to be protected as per AS4970 prior to and during construction.

The retention of Tree #56 is a positive outcome as it will help to provide a larger combined canopy as Tree #57, the other nearby Cheese Tree, continues to be proposed to be retained. This will provide a visually appealing coppice of trees native to the area.

Notes for Trees #50, #52 and #55 in relation to their removal :

The design changes have been made to accommodate the retention of the most prominent trees on the site (Trees #43, #44 and #48). The set backs required for both these trees and for the Foreshore set back mean that trees well within the site and within those areas required for access are not able to be retained as it would sterilise large areas of the buildable area of the site.

In order to assist in maintaining the long term tree cover, greenery and amenity to the area a larger number of trees are proposed to be planted than are being removed. The long term result will be a greater density of trees than is currently present on the site which assists in justifying the removal these three trees.

♣ ♣ ♣ ♣

We are grateful for the opportunity to assess your trees. Our professional business thrives on recommendations and would be pleased if you could assist us in this way. If you have any further questions please do not hesitate to contact our office.

Yours faithfully,

SCOTT GATENBY
Managing Director

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GRADUATE DIP. EDUCATION
U.P.C.A TREE CARE CERTIFICATE
PEST CONTROL CERTIFICATE
MEMBER OF INTERNATIONAL SOCIETY OF ARBORICULTURE
MEMBER OF ARBORICULTURE AUSTRALIA
MEMBER OF LOCAL GOVT. TREE RESOURCES ASSOCIATION
LEVEL 5 REGISTERED ARBORIST No. 1371

WAIVER/LIMITATIONS

The findings of this report are based upon and limited to visual examination of the subject tree from ground level without any climbing, internal testing or exploratory excavation. Whilst the author provides comments on likely future hazards, this report does not claim to be exhaustive in its assessment of any potential hazards, or of any factors contributing to such hazards. If further practical investigation is required for any reason, including in response to any perceived or unresolved issue, then additional investigations or inspections can be undertaken if requested.

This report reflects the health and structure of the tree at the time of inspection. Apex Tree & Garden Experts cannot guarantee that a tree will be healthy and safe under all circumstances or for a specified period of time. There is no guarantee that problems or defects with the assessed tree, will not arise in the future. Liability will not be accepted for damage to person or property as a result of failure of the assessed tree.

This report has been prepared for the exclusive use of the client. Apex Tree & Garden Experts does not accept any responsibility for its use by any other party.

This report must be read in its entirety. No part of this report may be referred to, verbally or in writing, unless taken in full context of the whole report.

General Guidelines for the Protection of Trees on Development Sites

(From AS4970-2009 Section 4)

- The Australian Standard AS4970 Protection of Trees on Development Sites allows for a Tree Protection Zone (TPZ) calculated as 12 x the diameter of the trunk at breast height. There can be mitigating factors which would allow development closer than this which must be determined by a Level 5 Consulting Arborist.

- The area around the base of the tree should be fenced off to at least the original drip line as a Tree Protection Zone (TPZ) or as specified by a suitably qualified arborist. The fence should not be able to be easily moved and should represent a significant barrier to prevent construction works being carried out within the fenced area.

- Signage should be attached to the tree protection fencing denoting that this is a Tree Protection Zone which must not be encroached upon. The sign should contain the name and contact number of the Site Arborist and the relevant council authority to be contacted should damage to the trees occur. The signage is to remain in place for the duration of the construction period.

- Site personnel must be made aware of tree requirements and protection measures.

- The location of stockpiles, construction work areas and vehicle parking should be designed to be remote from trees and must not occur within the TPZ.

- The TPZ must not be used for pedestrian or vehicular activity, as soil compaction and trunk damage can often result.

- Building and excavation materials must not be stored within the fenced TPZ as this can exclude water and oxygen and compact the soil.

- Cement washes, fuel and other chemicals must not be washed into the root area of trees. Waste must not be dumped in the TPZ and fires must not be lit within the TPZ.

- Underground services should be designed to use common trenches as far away from tree roots as possible. No trenches should be dug within the Tree Protection Zone (TPZ) of the tree including the excavation for silt fencing.

- It is strongly recommended the TPZ within the dripline of any tree affected by construction have the soil decompacted via pressure injection. This process allows the trees to more extensively use the smaller remaining root area. By decompacting, aerating and improving the nutrient status of the soil around the tree, many of the negative effects of building activities can be countered.

- Regular supervision of tree protection measures should be carried out on at least a monthly basis.

- The area underneath the tree within the TPZ must be mulched with quality leaf/brush mulch to a depth of approximately 100 mm - 150 mm before any works begin.

- We recommend that these trees be lightly fertilized with complete plant fertilizer.

- The site arborist is to supervise and treat any exposed tree root/s during excavation. Roots over approximately 40 mm should be cleanly cut prior to excavation machinery digging up any roots. Do not allow excavation vehicles or equipment to rip at or remove roots along the face of the excavation adjacent to trees. In the event the vehicles 'grab' at roots during works, the machinery operator must stop work immediately and allow the roots to be cut before continuing.

- Hand excavation is required when excavation is to be done within the Critical Root Zone.

- Original soil levels should be maintained and cuts and fills should not be allowed near trees except under supervision by a suitably qualified site arborist. This includes activities during the installation of new landscaping.

- If the tree/s are to be pruned the removal of foliage should be limited to approximately 20% of full canopy, as the tree needs its foliage to produce food for itself. Over thinning will stress the tree and render it less able to grow into its new environment.

- The tree should be trimmed according to the guidelines set down by the Australian Standard AS4373-2007. No topping of trees should ever take place.

- Any pruning work should include the removal of major deadwood and rubbing branches from the tree as a matter of course.

- During the construction period the tree should be watered during dry spells e.g. 2-3 weeks without adequate rainfall. The root zone should be thoroughly watered and then left to drain. If it is seen to be a problem in allocating time for site staff to water trees, an automatically timed dripline watering system should be installed.

- In the event of any tree becoming damaged for any reason during the construction period a consulting arborist shall be engaged to inspect and provide advice on any remedial action to minimise any adverse impact. Such remedial action shall be implemented as soon as practicable and certified by the site arborist.

STREET TREE

BAUHINIA VARIEGATA (ORCHID TREE)

MEDIUM SIZED ORCHID TREE (BAUHINIA sp.) IS A STREET TREE FREQUENTLY USED IN THE LOCAL ABBOTSFORD AREA. IT IS A SEMI-DECIDUOUS FLOWERING RELIABLE TREE SPECIES.

TIERED RETAINING WALLS WILL BE PLANTED WITH LARGE SHRUBS PROVIDING SCREENING AND ADDITIONAL PRIVACY.

SMALL DECIDUOUS TREES SUCH AS MAGNOLIA OR CREPE MYRTLE WILL ENABLE MORNING SUN ACCESS IN WINTER MONTHS. THEIR IMPRESSIVE FLOWERS WILL INCREASE AMENITY OF THE FRONTAGE AND PROVIDE ADDITIONAL TEXTURAL AND SEASONAL INTEREST.

SCREENING SHRUBS ALONG SITE BOUNDARY

SWEET VIBURNUM

METROSIDEROS 'FIGI FIRE'

FEATURE TREES AT FRONTAGE

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LAGERSTROEMIA INDICA
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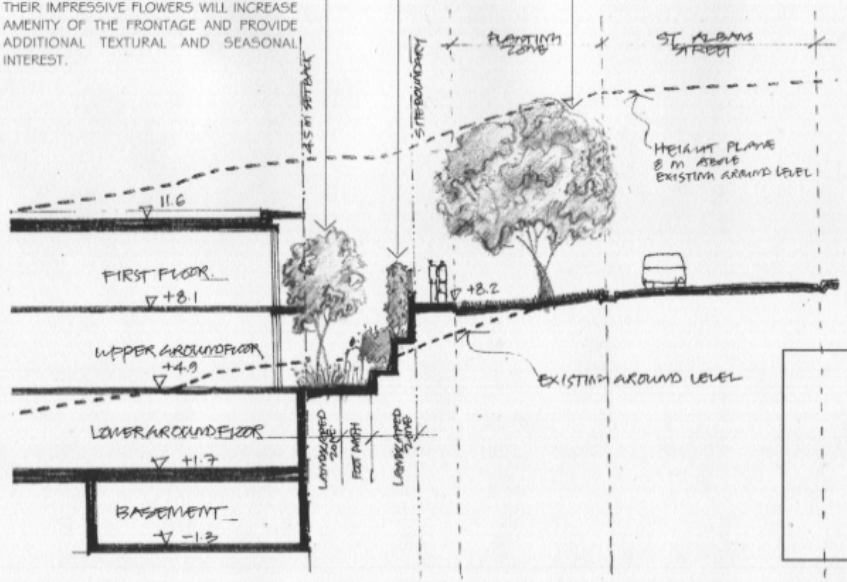

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