

Social Housing Renewal Standing Advisory Committee

FLEMINGTON ESTATE PUBLIC HOUSING RENEWAL PROGRAMME, RACECOURSE ROAD FLEMINGTON

PREPARED FOR DEPARTMENT OF HEALTH AND HUMAN SERVICES (DHHS)
INSTRUCTED BY NORTON ROSE FULBRIGHT
SITE INSPECTION 24TH AUGUST 2017

PREPARED BY

John Patrick

John Patrick Landscape Architects Pty Ltd

August 2017



LANDSCAPE ARCHITECTS
ENVIRONMENTAL HORTICULTURISTS
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1 NAME AND ADDRESS OF THE EXPERT

- 1.1 John William Patrick
324 Victoria Street
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2 QUALIFICATIONS AND EXPERIENCE

- 2.1 M.Sc. Ecology (University of Durham).
- 2.2 M.Sc. Landscape Ecology, Design and Management (Wye College, University of London).
- 2.3 Associate Member of the Australian Institute of Landscape Architects.
- 2.4 John Patrick has worked in the discipline of Landscape Design since 1976. He established his practice in Australia in 1980 becoming full-time in 1988. From 1980-1988 he was Senior Lecturer in Amenity Horticulture at VCAH-Burnley.
- 2.5 In his practice John Patrick has undertaken an extended range of Landscape Architectural projects including:
- studies of Old Parliament House and Government House, Canberra;
 - studies of Fitzroy, Flagstaff, Treasury, Alexandra and Carlton Gardens, Melbourne;
 - provision of Landscape Architectural services to hospitals, schools, residential sub-divisions, private residences and parks etc;
 - design services for the City of Sydney 'Living Colour' Committee including street design for the Olympic and Paralympic Games 2000, and;
 - heritage studies and conservation management plans for numerous sites including Government House, Melbourne, The Domain, Eureka Stockade Parklands and Central Park, Caulfield.
- 2.6 He is a past presenter of Burke's Backyard and ABC's Gardening Australia, a past Board Member of the Royal Botanic Gardens, Melbourne, the Garden State Advisory Committee and Parks Victoria Dandenong Gardens Advisory Board and has written or contributed to 11 books.

3 AREA OF EXPERTISE

- 3.1 John Patrick has experience in Landscape Architecture, Landscape Heritage and Landscape Horticulture. During his tenure at VCAH Burnley he wrote Course Programmes and contributed to Associate Diploma, Degree and Post-Graduate level courses in Arboriculture.

4 EXPERTISE TO PREPARE THIS REPORT

- 4.1 John Patrick is regularly involved with the preparation of Landscape Architectural schemes for residential and commercial developments and has provided expert evidence to the Planning Panels and VCAT's Planning Division on many occasions.

5 INSTRUCTIONS THAT DEFINE THE SCOPE OF THIS REPORT

- 5.1 This report has been prepared following verbal instruction from Norton Rose Fulbright. I have no business or private relationship with Norton Rose Fulbright other than being instructed to prepare this statement.

6 THE FACTS, MATTERS AND ASSUMPTIONS ON WHICH THE REPORT PROCEEDS

- 6.1 The report assumes that the documents provided by Norton Rose Fulbright are correct as these have been used as the basis for this report.

7 DOCUMENTS VIEWED IN PREPARING THIS REPORT

- 7.1 In the preparation of this report I have viewed and reviewed the following items:

- Exhibited Planning Scheme Amendment Documents.
- Arboricultural Assessment prepared by Tree Logic dated 6th January 2017.
- Arboricultural Assessment prepared by Tree Logic dated 1st February 2017.
- Arboricultural Assessment prepared by Tree Logic dated 22nd February 2017.
- Moonee Valley Planning Scheme – General Residential Zone, Clause 32.08 and Schedule 1.
- Moonee Valley Planning Scheme – Public Use Zone, Clause 36.01.
- Moonee Valley Planning Scheme – Public Park and Recreational Zone, Clause 36.02.
- Moonee Valley Planning Scheme – Built Environment, Clause 21.06
- State Planning Policy Framework – Built Environment and Heritage, Clause 15.
- State Planning Policy Framework – Housing, Clause 16.
- Debneys Precinct: Flemington Estate Renewal Information Sheet dated June 2017.
- Scheme prepared by Orbit Solutions, dated 16th June 2017, including;
 - Camera Locations
 - View 1,2,3,4 Original Photograph
 - View 1,2,3,4 Indicative Built Form for Consultation
- Design Framework prepared by Hayball, dated 16th June 2017, including;
 - Introduction
 - Design Principles
 - Location and Site Context
 - Planning Context
 - Opportunities and Constraints
 - Site Analysis – Existing Landscape,
 - Design Response – Indicative Built Form, Landscape, Section Interfaces
- Terms of Reference – Social Housing Renewal Standing Advisory Committee dated May 2017.

8 IDENTITY OF THE PERSON WHO PREPARED THIS REPORT

- 8.1 The author of this report, John Patrick, has visited the site and has undertaken a visual assessment of the site and reviewed the plans and reports provided to me and referenced above.

9 A SUMMARY OF THE OPINIONS OF THE EXPERT

The site

- 9.1 A thorough review of the Arboricultural Assessments completed by Treelogic for Holland Court and Flemington Estate, Racecourse Road, Flemington, revealed that in general the reports are accurate and appropriate. I have minor differences about the retention value of a few trees, for example Trees 190 and 218, Tasmanian Blue Gums (*Eucalyptus globulus*), which the Arboricultural Assessment itself identifies as having short future Useful Life Expectancy, and Tree 219, a Lombardy Poplar (*Populus nigra* 'Italica'), which appears to be in decline. In general the appraisal of vegetation has been well considered and is accurate.
- 9.2 I would question the desire within the site masterplans to retain trees identified as having "low" or "no" retention value. The sites occupied by these trees offer the Landscape Architect an opportunity to establish new, more appropriate, vegetation often able to provide trees with a high amenity value in the future. Given the almost consistent maturity of the existing tree population then new works should seek to establish the next generation of tree cover for the site to the greatest extent possible and this includes locating trees in the planting spaces taken up by trees of low or no value.
- 9.3 The re-working of a site of this type is an opportunity to establish a programme of Sustained Amenity by which the long term qualities of the site can be guaranteed. There is little justification to retain poor trees just so that the numbers of removals in a project appears low. Furthermore, once works associated with the site's re-development have been implemented it is likely to be many years before a similar reappraisal and planting regime is implemented. The opportunity should not be missed to achieve the most effective long term outcome.
- 9.4 Within the Town Planning Report prepared by Message Consultants there are minor inconsistencies between their vision and the proposal to retain trees. For example, along Racecourse Road buildings are "to be setback at least 6m. A 6m minimum building setback will provide separation from the existing row of trees to be retained". This will be an area where "weather protection at the street frontages of the non-residential uses" will be provided. Care will be required to ensure that conflict between future access paths, weather structures and bike paths shown in sections of this portion of the site will need to minimise root disturbance and canopy intrusion.
- 9.5 The DPO8 specifies "that development achieves the following interface treatments in order to integrate with the surrounding area:
 1. Victoria Street (west)-a four storey built form at the street frontage, which replicates the height of the existing walk-up buildings fronting Victoria Street and provides a transition to the established residential area adjoining to the west. Higher levels (up to 10 or 12 storeys) are to be setback a sufficient distance to limit visibility from the opposite side of the street. It is considered that this outcome will maintain the existing amenity of the residential properties on the opposite side of the street. A 3m minimum street setback will provide for landscaping and activation on the ground level e.g. dwelling courtyards".

Such a landscape opportunity is unlikely to carry large canopy trees that might be considered appropriate to integrate and soften proposed built forms. There is an argument for some articulation of the built form that allowed for planting spaces external to the private gardens where larger canopy trees might be planted within communal space. Such spaces may extend to 5 metres.
 2. Debneys Park (north and east)-a four storey built form at the street frontage, which will provide a human scale interface with the park and opportunities for passive surveillance of the public realm..... A 4m minimum building setback will provide for separation from trees within the park, as well as landscaping along the frontage and activation on the ground level.

A review of the Arboricultural Assessment for trees along the Debneys Park interface shows that these trees are among the most magnificent surveyed, that they are located off site within the adjacent reserve and that their TPZ's are up to 12.6 metres and frequently (generally) in the range of 8-9 metres. While some of this distance will be located within the Park the TPZ's remain such that a 4 metre construction setback is likely to cause significant damage even if damage minimisation measures are in place. With canopy widths up to 24 metres though more frequently at 12 metres, there may additionally be a need for canopy reduction.

Furthermore, even if protection measures are in place for the rootplates of trees, this is hardly likely to be an appropriate place for landscaping; planting sites will be heavily root infested and subject to significant shade.

- 9.6 The proposed DPO8 also includes a requirement for an off-road bicycle path (shared with or separate from pedestrian path) to be provided along the Racecourse Road frontage of the site. This will be within the 6 metre setback from the boundary designed to protect existing site boundary trees along Racecourse Road. This is not impossible but calls for detailed and appropriate protection measures.
- 9.7 Tree Protection is an important consideration in any redevelopment of a site of the maturity of the Flemington Estate. The site has a remarkable collection of trees, not for their rarity or diversity but for their size, health and potential to contribute effectively into the future. The protection of the existing site trees should be fundamental to any future works permits issued for the site; they provide an important part of the site character that is so much valued by existing residents.
- 9.8 Tree Protection Measures should provide protection for trees before, during and after works and require a positive response from authorities throughout works to ensure that measures are more than simply lip-service to the protection process. Too frequently plans are prepared with Tree Protection at their heart but in the field protection is largely ignored.
- 9.9 Before works are implemented the design process needs to recognise the needs for Tree Protection and understand the mechanisms that can be implemented to minimise damage. This includes not only the obvious direct damage resulting from excavation for buildings and especially basements but also collateral damage that may occur through the delivery of services, for example sewers, water, gas and the like to the site, as well as practices like scaffold construction, materials delivery, offices and sheds and materials storage. These requirements should be addressed in both the Architectural response and the site Construction Management Plan.
- 9.10 It requires too an understanding that damage to trees can be of two types. Direct Damage is the most apparent and most easily understood, there is clear evidence of the damage caused by an errant excavator, by severing roots during excavation, or by ripping away branches to allow construction of scaffolding; Indirect Damage by contrast is insidious, more covert, its impact often becomes apparent only in the medium to long term when a tree's health declines as a result in changes to drainage pattern, soil compaction with its impact on oxygen and moisture availability or spillage.
- 9.11 Tree Protection and retention begins with education, firstly of the project Architects to ensure that their design work and that of their sub-consultants conforms to the requirements of the Tree Management Plan for the site and then with the Building Contractors to ensure that their works conform to the Tree Management Plan. In the first case there is merit in having plans reviewed and signed off by an Arborist appointed to review project plans, in the second case there is merit in the Project Arborist undertaking a training programme for the site team and linking this to a Tree Protection Bond.
- 9.12 Simple biological knowledge greatly assists in protection of trees. It should be remembered that for trees growing in the typical conditions to be found in Melbourne root growth is likely to be limited to the top 600-1000mm of soil, the area of the soil profile that provides oxygen and water essential for their survival. Generally tree roots do not go deep into the ground. Woody trees depend for their stability on spreading

plates of roots that are generally viewed as being radial around the trunk though the “ideal” picture of a root plate can be modified by deflection of roots by foundations and the like that offer a barrier to root growth.

Roots are also opportunistic so that they follow lines of least resistance so long as oxygen and water are available to them. They may, therefore, proliferate in a non-compacted re-filled trench which distorts any normal root pattern.

- 9.13 Tree roots are not sentient so that a soil depth of 1 metre above a car park podium is no different to them than 1 metre of natural soil though being an artificial medium, the soil may be designed and manufactured to provide a better medium for growth than many natural soil profiles.
- 9.14 All proposed works on site should conform to *Australian Standard AS 4970-2009 Protection of Trees on Development Sites*. This document provides sound information about the Protection of Trees and will form the basis of any works by professional Arborists.
- 9.15 All trees to be retained should be documented and indicated accurately on plans with their Tree Protection Zones (TPZ) clearly identified. These are the areas around the base of trees that are identified as containing the bulk of the tree's roots. So far as is possible the entire Tree Protection Zone should be protected throughout the development from both direct and indirect damage. The best method of achieving this is to isolate the tree by construction of a 1.8 metre high chain mesh fence carrying a sign reading “Tree Protection Zone-No Access”.
- 9.16 Where a large tree population is involved it is possible to isolate the greater tree population from a works site by use of an enclosing fence that isolates the construction site. Individual trees within the site can be provided with specific isolation fencing. This situation may arise on the subject site given its extent and the large areas that will not be redeveloped.
- 9.17 The construction of Tree Protection Fencing ensures that trees are protected from activity within their TPZ. It should be noted that under any circumstances excavation should not occur within the TPZ together with storage, parking of vehicles and plant, storage and mixing of chemicals, dumping of waste or raising the natural soil level with fill, cleaning equipment, lighting fires or refuelling.
- 9.18 The Australian Standard accepts that there may be circumstances where an intrusion into the TPZ is unavoidable and recognises that trees are able to tolerate an extent of root severance. This should be limited to 10% of the TPZ and also limited to one side only of the root plate; it is not acceptable to have two bites of say 5%. In such a situation an Arborist should cut the roots appropriately prior to excavation to ensure that there is no tearing of the roots. Clean severance is important.
- 9.19 A TPZ has been provided for each of the trees surveyed. It represents a radial distance of 12x the trunk diameter at a height of 1400mm up the trunk. A 10% incursion, recognised as a “minor incursion” in AS 4970-2009 is represented by a distance 8.2x the trunk diameter at a height of 1400mm up the trunk applied to one side of the tree only. Calculations can be made for multiple trunk trees which effectively adds the areas of each trunk and offers a cumulative diameter for the total area of the trunks.
- 9.20 Use of protective fencing isolates trees from construction activities. There may be situations where there is a need for access within the root zone of a tree. In such situations it is important that works are undertaken under the supervision of an Arborist. Protection should be given to the trunk by utilising timber battens to create a barrier around the trunk. A protective layer should be provided above the root plate to ensure that any compaction is taken up by the surface layer not by the soil within which the roots grow. The provision of rumble boards across the root plate or large pore size coarse mulch as a 200mm layer above a geotextile membrane laid on the soil surface can provide this protection.
- 9.21 There are circumstances where greater incursion into a root plate can be compensated, for example when a structure may have deflected a root plate by providing a barrier to growth or where conditions poorly suited to root development may have existed, for example beneath some paved surfaces. In such cases root investigations can be undertaken to show the location of roots or determine their size. The presence of no or

few roots indicates that works may be able to come closer than would otherwise be permitted. It may be that a single larger root may be able to be cut on the basis that it represents only a modest incursion into the TPZ.

- 9.22 Where doubt exists about the potential for tree roots to be damaged, the use of non-destructive root investigations can clarify likely impacts and outcomes. Such procedures should be undertaken by agreement with the Site Arborist to ensure that appropriate interpretation of the results takes place.
- 9.23 The possibility of a greater incursion than the 10% prescribed by the Australian Standard may be acceptable in certain circumstances. Among these are incursions where the tree taxa involved is recognised as having a high tolerance of root incursion, for example Lilly Pillies (*Syzygium* spp.), tree taxa recognised as having an exaggerated TPZ because of a thick fibrous trunk, for example Melaleucas, age and size of the tree, young trees generally having greater tolerance of disturbance than more mature trees and, when it comes to compaction, greater tolerance is shown by trees able to tolerate inundation, the result of which is a reduced Oxygen availability.
- 9.24 Should it be necessary to carry services through a root plate then the use of directional drilling offers an option. As with all on site Arboricultural work pre-implementation planning and supervision should be undertaken by an appropriately experienced and qualified Arborist. Open trenching should extend to the outer portion of the TPZ from where directional drilling can extend beneath the centre of the tree at a minimum depth of 600mm. Services can be directed through the bore line without impacting upon the root plate.

Specific Issues

- 9.25 My review of the Flemington site reveals a number of specific contexts where particular approaches to site management might be warranted. I consider that each should be briefly considered.
- 9.26 Throughout the site there are extensive areas of hard stand mostly currently used for car parking. While I recognise that many are proposed to be re-development sites there is a possibility that through the consecutive development of sites, some of these areas could be used for site huts and offices, materials storage, equipment storage and the like. The opportunity should always be taken of minimising the impact of activity upon areas of soft landscape.
- 9.27 Where areas of existing hard stand are to be lifted and replaced by areas of soft landscape, hard landscape should be left in place until the completion of construction works. Such hard stand provides an excellent mechanism to protect tree roots.
- 9.28 The Queensland Brush Box (*Lophostemon confertus*), trees 257-267, and located along the Racecourse Road boundary have TPZ's ranging from 7.9 metres (267) to 4.0 metres (263) and the base of the trees are located approximately 1 metre inside the site boundary. Proposed buildings are setback 6 metres into the site so that there will be approximately 5 metres between the building and the centre of the tree trunks. The canopy spread of trees 259 and 262 has a 5 metres radius so that there may be some minor conflicts during construction. An assessment of the TPZ of the largest trees indicates that there will be a minor encroachment into the TPZ of the largest trees but with appropriate protection measures in place this can be tolerated.
- 9.29 The proposal to construct a bike path between the trees and the building and to provide weather protective awnings to the built form may cause conflicts and will require careful management. The bike path should be constructed above natural grade without excavation into the root plate and would be better located outside the TPZ. Pedestrian entry and any courtyards associated with building access will also require similar care while there should be no services, for example fire hydrants established within the tree protection zones along Racecourse Road. Awnings may conflict with canopies though a modest level of pruning can be accommodated.
- 9.30 Tree 198, a Wallangarra White Gum (*Eucalyptus scoparia*) identified as having a medium retention value leans significantly to the west so that when construction is undertaken adjacent to it there is a high chance that 50% of its canopy will be removed. It is not of such high quality that it should be offered full protection and the tree retained. More realistically it should be removed and replaced.

- 9.31 Perhaps the finest trees that impact upon the site are those located outside the site boundary to the north in Debneys Park. Five of these trees are identified as having high retention value, the others are of medium retention value and collectively they form an impressive interface between the residential development and the adjacent park. A section within the report suggests a 6 metre separation between the proposed built form and the park. Additionally, a review of the Design Proposal indicates a road extending parallel with and adjacent to the park to the western portion of the boundary with a minimum setback.
- 9.32 The species composition of this tree row is dominated by Spotted Gum (*Corymbia maculata*), 88, 91, 93-99 with a single Victorian Blue Gum (*Eucalyptus globulus* subsp. *bicostata*), 100. These trees have TPZ's extending up to 12.6 metres with the majority around 9 metres. Even allowing for the 10% incursion permitted as a minor incursion these protection zones are in the order of 6 metres. Spotted Gum is generally tolerant of activity within its root zone and the proposed 6 metre setback for construction works is acceptable providing appropriate protection measures are in place.
- 9.33 However, the proposal to construct a road at the park boundary is of greater concern. By constructing it at a level above the natural soil level roots can be protected but it will establish an environment not particularly conducive to root growth. The greater threat lies in the construction of associated services, for example drainage to the car park, which may well result in excavation within the root plates of these fine trees inevitably resulting in root damage and likely canopy decline. While I recognise that the park provides compensatory areas for future root growth I believe the decision to establish a road link in this location should be reviewed especially since the opportunity to provide a direct ground level link between the subject site and the park is an attractive one.
- 9.34 To the western end of this boundary trees 77 and 79-85 provide the boundary planting. This is more diverse in character than the planting to the east and includes Lemon Scented Gum (*Corymbia citriodora*), 77, London Plane (*Platanus x acerifolia*), 79-83, Silky Oak (*Grevillea robusta*), 84, and Spotted Gum (*Corymbia maculata*). These generally have somewhat smaller TPZ's than the eastern trees and their extent will be modified by the presence of the northern section of the Holland Court buildings. While they will tolerate the likely intrusions from proposed construction care must be taken about protecting root plates from associated works and the construction of a road along this boundary alignment will be challenging if trees are to be retained in current health.
- 9.35 It would be my recommendation that no road is constructed to this northern site alignment and that a substantial Tree Protection Fence should be established 5 metres into the subject site for the extent of the northern boundary interface (though existing pedestrian linkage should be maintained) to offer maximum protection to the trees.
- 9.36 A review of plans shows areas where proposed development is located immediately adjacent to existing trees. It appears that retention on occasion is ambitious and either a greater setback will be required or recognition that more trees might be lost from the site during the development than is currently predicted. I would add that these situations are few in number and that modification to plans during detailed design could allow for tree protection and retention especially since it is currently difficult to determine exact setbacks from such broad plans.
- 9.37 However, as an example of likely conflicts it is worth considering the interface to the west of the Communal Gardens where trees 156, a Desert Ash (*Fraxinus angustifolia* subsp. *angustifolia*) and trees 159, 163 (and possibly TL1, though it is omitted from plans, being absent from the survey), all Queensland Brush Box (*Lophostemon confertus*), are proposed to be retained. The presence of the existing concrete car park adjacent to these trees has no doubt modified their root plates and with appropriate care it may be possible to construct as close to these trees as the plans suggest. However, the protection of roots is only part of the consideration; canopy spread also needs to be protected and since these trees, especially the Brush Box, are shown directly adjacent to the proposed built form it is likely that much of their canopy (they have approximately a 4 metre radial spread) will be removed to accommodate construction.

- 9.38 In addition, the trees will be located immediately adjacent to a construction zone where there will almost inevitably be some limb breakage no matter how closely supervised. In such situations it is my opinion that it is more realistic to accept tree removal and replacement rather than suggesting such trees can be retained simply to bolster statistics about tree retention. I would add that such situations are limited in this design proposal.
- 9.39 It is important to review changes in microclimate as a result of proposed works. Clearly there will be a change in the shadow patterns on site as a result of the addition of new built form through the site. The extent of direct light access to the site is best appreciated by a review of the aerial photograph in the Site Context (Design Framework p.9). While the existing 21 storey buildings cast shadows over the site, their relatively slim form and north/south alignment has resulted in extremely good solar access throughout the development. Reference to the Shadow Study reveals the increase in shadow that will be experienced though in general this is acceptable and many areas retain effective solar access.
- 9.40 The impact of this change on existing vegetation is important. Much of the existing canopy cover derives from London Plane (*Platanus x acerifolia*), a tree taxon used extensively in city environments throughout the world. A sense of its ability to tolerate changing light levels and encroaching shade may be gained by recognising its ability to tolerate the increasing shade now experienced by established trees in Collins Street. There may have been some thinning of canopy in extreme locations but generally trees have tolerated the changes well. The changes to light exposure on the subject site will be more modest than that displayed in much of Collins Street.
- 9.41 There may be a greater negative impact upon established Eucalypts though these make up a more modest proportion of the existing scheme. Broadly speaking these trees prefer high levels of incident light. In forthcoming planting schemes selections of more shade tolerant native tree taxa would be advisable including but not limited to native Rainforest species.
- 9.42 Some consideration should be given to the proposed planters shown in typical sections, pages 27 and 28 of the Design Framework where trees are indicated in raised planters. While it is impossible to scale accurately from these drawings it would appear that these planters have an internal width less than 2 metres and a depth of 500mm. Such planters are inadequate for meaningful tree growth. Research suggests planters for trees should have a minimum depth of 800mm, 1 metre is preferable, and should be a minimum of 5 metres across. In general research suggests that 0.6 cubic metres of appropriately irrigated planter volume will support a square metre of tree canopy. Climbing plants in raised planters will produce approximately 10 square metres of foliage cover from 1 cubic metre of irrigated growing medium.
- 9.43 In any proposed design works for roof top gardens these standards should be applied to ensure that sustainable tree growth can be achieved on the site.

Analysis of Planning Scheme Amendment

- 9.44 The scheme proposed conforms to the expectations of Mixed Use Zone, Schedule 3-Clause 32.04 Moonee Valley Planning Scheme since the proposal broadly respects the neighbourhood character of the area. The assessment of existing vegetation and a general approach to protect the most significant trees suggests an appropriate response. In doing this the scheme also responds positively to Clause 11.02-3 Planning for growth areas within the State Planning Policy Framework which seeks to “retain unique characteristics of established areas incorporated into new communities to protect and manage natural resources and areas of heritage, cultural and environmental significance”.

- 9.45 The provision of open space areas including children's playgrounds on the site addresses the expectations of Clause 11.04-1 Open Space Planning and allows for the development of integrated walking and cycling trails both within the site and linked to external trails, provides links to adjacent areas of open space, notably to Debney's Park and, depending upon the ultimate Landscape Architectural design response, has the potential "to ensure that urban open space provides for nature conservation, recreation and play, formal and informal sport, social interaction and peace and solitude" and additionally can be designed to "ensure open space is designed to accommodate people of all abilities, ages and cultures".
- 9.46 Clause 15 of the State Planning Policy is relevant to the subject site. It focuses strongly upon the need to retain vegetation as part of development and subdivision proposals. Landscape architecture is required to recognise "the setting in which buildings are designed and the integrating role of landscape architecture" and this can be achieved by implementation of a strategy that creates "a strong sense of place because neighbourhood development emphasises existing cultural heritage values, well designed and attractive built form, and landscape character". Clause 15.01-5 Cultural identity and neighbourhood character reinforces the need to develop strategies that protect and enhance existing landscape Character by ensuring "development responds and contributes to existing sense of place and cultural identity....recognises distinctive urban forms and layout and their relationship to landscape and vegetation".
- 9.47 Policies driven at State level are underlined within the Moonee Valley Planning Scheme for example at Clause 21.06-1 Neighbourhood Character which reinforces resident's concerns where changes bear no relationship to existing neighbourhood character. Strategies to overcome this are provided noting that new development should "ensure that the distinct neighbourhood character attributes within identified significant neighbourhood character areas within the municipality are retained and enhanced".
- 9.48 Schedule 8 to the Development Plan Overlay has been prepared to address the redevelopment of the site at Racecourse Road, Flemington. My review of this document suggests some amendments might be considered.
- 9.49 There are several requirements that need to be fulfilled before a permit is granted for works not in accordance with a development plan including "Earthworks and site preparation works that are carried out in accordance with a Construction Management strategy and Arboricultural Assessment Report prepared in accordance with this schedule". Consideration should be given to reinforcing this requirement by seeking completion of the next step in the Arboricultural process namely the preparation of a Tree Management Plan TMP). This might include the implementation of Tree Protection Fencing and the like to protect trees during earthworks and the appointment of a Site Arborist to ensure works are completed in accordance with the TMP.
- 9.50 Within 3.0 Requirements for development plan there is a need, "To provide landscaping and communal open space that is resilient and enhances the sense of place, sustainability and liveability of the site and local area". It would be sensible if the resilient landscape was supported by the sense that it should also be "sustainable".
- 9.51 In my opinion the setbacks provided in the Interface Treatments on pages 3 and 4 of the Schedule 8 are inadequate. The 3 metre set back to Victoria Street is identified as a minimum but there is nothing that encourages the provision of greater setbacks where larger canopy trees can be provided. In the graphic section the canopy tree that can be accommodated is 3 metres which in many Planning Schemes, for example City Of Stonnington, does not qualify to be considered a canopy tree.
- 9.52 The interface setback proposed to Debneys Park is identified as 4 metres. Within the Design Framework Document the boundary set off from Debneys Park is identified as 6 metres. This should be the minimum. The road proposed at the site boundary should be reviewed and the opportunity for direct axis between the two adjacent sites should be maximised.
- 9.53 The section diagram for Interface Treatment C, Racecourse Road shows a 6 metre separation between the site frontage and the façade of any proposed building. The written statement says "Setbacks from

Racecourse Road greater than 6m as required to protect existing trees to be retained". My view is that 6 metres is the minimum, a greater setback would allow for some further growth and that the section drawing should be amended to allow for "greater than 6m as required".

- 9.54 I see no reason why replacement of trees that are to be removed should be limited to trees assessed in the Arboricultural assessment Report as having moderate or high retention value with trees that provide equivalent amenity value to residents and the public realm". It is my opinion that this approach should equally apply to trees that are removed because they have low amenity value. Only by implementation of such a policy will there be an improvement in the landscape qualities of the site. Every low quality tree that is removed represents an opportunity to establish a new high quality tree.
- 9.55 On that basis, as important as the "retention of trees assessed in the required Arboricultural Assessment Report as having moderate or high retention value unless it is demonstrated that their retention significantly affects the feasibility of development of the relevant precinct" so too there should be a balancing clause requiring the removal and replacement of trees rated as low or no amenity value in the required Arboricultural Assessment Report.
- 9.56 Within Clause 5 relating to the Landscape and Open Space Plan it should suggest not only that a planting theme "which complements existing trees to be retained and the surrounding neighbourhood character, and demonstrates water sensitive urban design outcomes" but also an awareness of the site's ecology and most specifically the challenges of the increase in shade that will be experienced on site.
- 9.57 Maintenance responsibilities should envisage the recognition of sustained amenity as a philosophy behind tree management and should demand an on-going replacement of trees that are removed from the site and an objective of having a mixed age tree population resulting from pro-active tree removal and replacement.

Conclusion

- 9.58 A review has been undertaken of the Arboricultural Assessment, the Town Planning Report and associated Town planning Clauses relating to the proposed Design Framework for the Public Housing Renewal Project at Flemington estate.
- 9.59 Comments have been made with respect to a number of changes that might be made in relation to the design Framework including improved protection for existing trees, tree replacement, the volumes of soil required for podium top planting and other relevant site issues.
- 9.60 A number of modifications are suggested to the Design and Development Overlay that are intended to secure greater certainty in Tree Protection, Tree Replacement and on-going management of tree populations on the site.
- 9.61 With these changes in place and the additional protection requirements I have identified it is my belief that appropriate landscape and Arboricultural outcomes can be achieved on this site.

10 PROVISIONAL OPINIONS.

- 10.1 None.

11 INACCURACIES AND ADDITIONAL MATTERS.

- 11.1 To my knowledge, there are no inaccuracies in this report or matters related to landscape assessment and design which fall outside my expertise.
- 11.2 I have made all the enquiries that I believe are desirable and appropriate and no matters of significance, which I regard as relevant, have to my knowledge been withheld from the Tribunal.

A handwritten signature in black ink, appearing to read 'John Patrick', written in a cursive style.

John Patrick
John Patrick Landscape Architects Pty Ltd