Scheme Amendment (Rezoning) Lot 106 (No. 88) Hale Road, Forrestfield

FORM 2A

Planning and Development Act 2005

RESOLUTION TO ADOPT AMENDMENT TO LOCAL PLANNING SCHEME

Local Planning Scheme No.3
Amendment 109

Resolved that the Local Government pursuant to section 75 of the *Planning and Development Act* 2005, amend the above Local Planning Scheme by:

1) Rezoning Lot 106 (No. 88) Hale Road, Forrestfield from 'Residential', 'Mixed Use' and 'Public Purpose – Hall / Community Centre' to 'District Centre'.

The Amendment is standard under the provisions of the Planning and Development (Local Planning Schemes) Regulations 2015 for the following reason (s):

a) an amendment that is consistent with a local planning strategy for the scheme that has been endorsed by the Commission;

b) an amendment to the scheme map that is consistent with a structure plan or local development plan that has been approved under the scheme for the land to which the amendment relates if the scheme does not currently include zones of all the types that are outlined in the plan;

c) an amendment that would have minimal impact on land in the scheme area that is not the subject of the amendment; and

d) an amendment that does not result in any significant environmental, social, economic or governance impacts on land in the scheme area.

Dated this _____ day of _____ 20___

_____
Chief Executive Officer

Table of Contents

1. Introduction

1.1 Site Details

The subject site refers to Lot 106 (No. 88) Hale Road, Forrestfield which has a site area of 18,006m^2 and is located within the Forrestfield District Activity Centre ('DAC').

The site is adjacent to the Forrestfield District Shopping Centre and has frontage to Hale Road on its southern boundary and Woolworths Drive on its eastern boundary. Immediately to the north of the site exists the Woodlupine Brook Reserve, whilst to the west exists grouped dwelling residential developments (Refer to Figure 1).

The north-eastern portion of the site is used for the Woodlupine Family and Community Centre including open parking areas. The balance of the site is currently vacant of any improvements with some intermittent vegetation, particularly along the Hale Road frontage.

Figure 1: Location Plan (Source: PlanWA 2022)

1.2 Proponent

This Scheme Amendment has been prepared by Altus Planning on behalf of the City of Kalamunda ('the City').

1.3 Land Ownership

The subject site is more fully described as Lot 106 on Plan 17920 contained within Certificate of Title Volume 1906 Folio 480.

The subject site is owned in freehold by the City with a portion of the site leased to the Woodlupine Family Centre Inc.

The subject site also benefits from the following easement:

- E630272 – Right of carriageway over Lots 600 & 601 on Diagram 97829 (together 78B & 78C Hale Road) and Lots 603 & 604 on Deposited Plan 408267 (together 78 & 78A Hale Road).

A public access easement for the use and benefit of the public exists over Lot 109 on Plan 17919 (being 80 Hale Road).

Together, the abovementioned easements afford the subject site with access rights over Woolworths Drive.

A small portion of the north-eastern corner of the subject site is burdened by an easement in favour of the Water Authority of Western Australia (now the Water Corporation), as per Plan 17920.

Copies of all relevant Certificates of Title and Easement documents are contained at Appendix 1.

1.4 Overview of Proposal

This proposal is to amend the subject site's zoning under the City's *Local Planning Scheme No. 3* ('LPS3' or 'Scheme') from 'Residential', 'Mixed Use' and 'Public Purpose – Hall / Community Centre' to 'District Centre' ('the proposed amendment'). Refer to Figure 2.

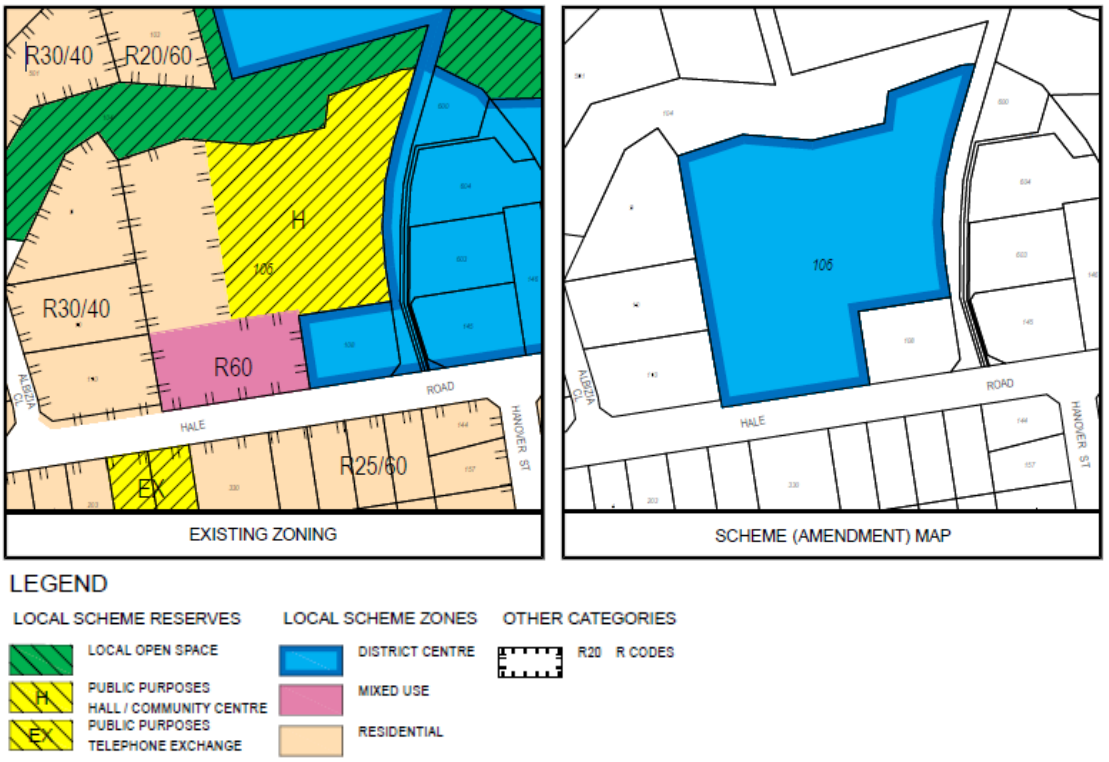


Figure 2: Existing & Proposed Zoning

Specifically, the proposed amendment consolidates the existing activity centre uses and recognises the site as being within the logical confines of the activity centre, in line with its designation as a District Centre. Furthermore, the proposed amendment allows for future redevelopment of the site with an envisaged development mix consisting of an integrated health / community hub and showroom development, representing the highest and best use of the land whilst delivering a range of community benefits and services.

The proposed amendment follows a Land Use Assessment that was prepared by Urbis and commissioned by the City (refer to Appendix 2 – Land Use Assessment).

Refer to Section 4 – Amendment Proposal for further details.

2. Site Analysis

2.1 Topographical Features

The subject site slopes from approximately 39m AHD at the southern end of the property adjoining Hale

Road, down to approximately 35m AHD at the northern end of the property adjoining the Woodlupine Brook.

2.2 Vegetation & Fauna

The subject site has been historically cleared and does not contain any defined native vegetation as broadly mapped by the Department of Primary Industries and Regional Development ('DPIRD'). However, mature native and non-native trees (mostly planted) exist throughout the subject site, within and adjacent to the existing car parking areas and Hale Road. These trees provide both amenity and fauna habitat value.

Rehabilitation works occurring along Woodlupine Brook will reintroduce native vegetation adjacent to, and within the northern portion of the site.

Given the lack of understory vegetation, fauna habitat value within the site is predominantly avian habitat, which is provided by mature trees. Although limited, a number of tree species recorded within the site (such as Tuart and Marri) provide habitat for threatened black cockatoos. These trees will be prioritised for retention wherever practicable.

Rehabilitation works along Woodlupine Brook will reintroduce suitable habitat for ground dwelling fauna, including small reptiles and mammals such as Quenda (a conservation significant species).

2.3 Environmentally Sensitive Areas

Based on a review of the Department of Water and Environment Regulation's ('DWER') 'Environmentally Sensitive Areas' spatial data, there are no environmentally sensitive areas within or adjacent to the subject site. Environmentally Sensitive Areas are gazetted under the *Environmental Protection Act 1986* and include (but are not limited to):

a) World Heritage properties;
b) Areas on the Register of National Estate;
c) Wetlands and areas adjacent to wetlands;
d) Threatened flora and areas adjacent to threatened flora;
e) Threatened ecological communities; and
f) Bush Forever sites.

2.4 Watercourses and Wetlands

The subject site adjoins the Woodlupine Brook (or creek as it is known in some locations) on its northern boundary which is a main drain and part of the Water Corporation's stormwater management system,

acting as a drainage channel for both the immediate catchment area – which is principally comprised of large, paved car parks and commercial buildings – and the upstream area.

In 2014, Essential Environmental prepared a Hydrology Study for the creek on behalf of the City. The Hydrology Study identified that the creek is currently degraded and suffering from issues of erosion and public access. The study noted that with appropriate remediation works and improved future management, Woodlupine Brook has the potential to become a significant amenity focal point for the community.

The Woodlupine Creek Landscape Management Plan was also prepared in 2014 which proposed several management recommendations to guide both the management of the Reserve, as well as future landscape and public place design detail. The Management Plan included guiding principles for new development adjacent to the creek such as ensuring adjacent development is of a high quality and seeks to retain and enhance the creek's unique contributions to the surrounding local environment and wider biological community.

Future development of the subject site will need to consider its interface with the creek, but it is otherwise not considered an impediment to this proposed rezoning or development of the subject site more generally. To that extent, the City is currently undertaking a project known as the 'Woodlupine Brook Living Stream – Ecological Corridor Project' which shows revegetation within the subject site at the northern boundary as part of Stage 2: Woolworths Drive to Dawson Avenue which is currently in the final design stage and scheduled for review by the end of October 2022.

2.5 Aboriginal and European Heritage

A desktop review of PlanWA and the State Heritage Office's 'inHerit' database confirms that the subject site is not a registered heritage site, is not identified on the City's municipal inventory and is not a registered site of Aboriginal significance. Notwithstanding this, future development of the site will consider the Department of Aboriginal Affairs' Aboriginal Heritage Due Diligence Guidelines.

2.6 Infrastructure Availability

The Water Corporation's 'Esinet' confirms that reticulated sewerage infrastructure exists along the northern and western boundaries of the subject site, with reticulated water infrastructure adjacent to the site's southern boundary.

An underground electrical supply is also available to the subject site with a ground mounted transformer located to the south of the site, adjacent to the common boundary shared with Lot 108 (No. 82) Hale Road.

3. Strategic and Statutory Planning Framework Considerations

3.1 State Planning Context

3.1.1 Metropolitan Region Scheme

The subject site is zoned 'Urban' pursuant to the *Metropolitan Region Scheme* ('MRS'), refer to Figure 3.

The proposed amendment remains consistent with the MRS zoning for the subject site.

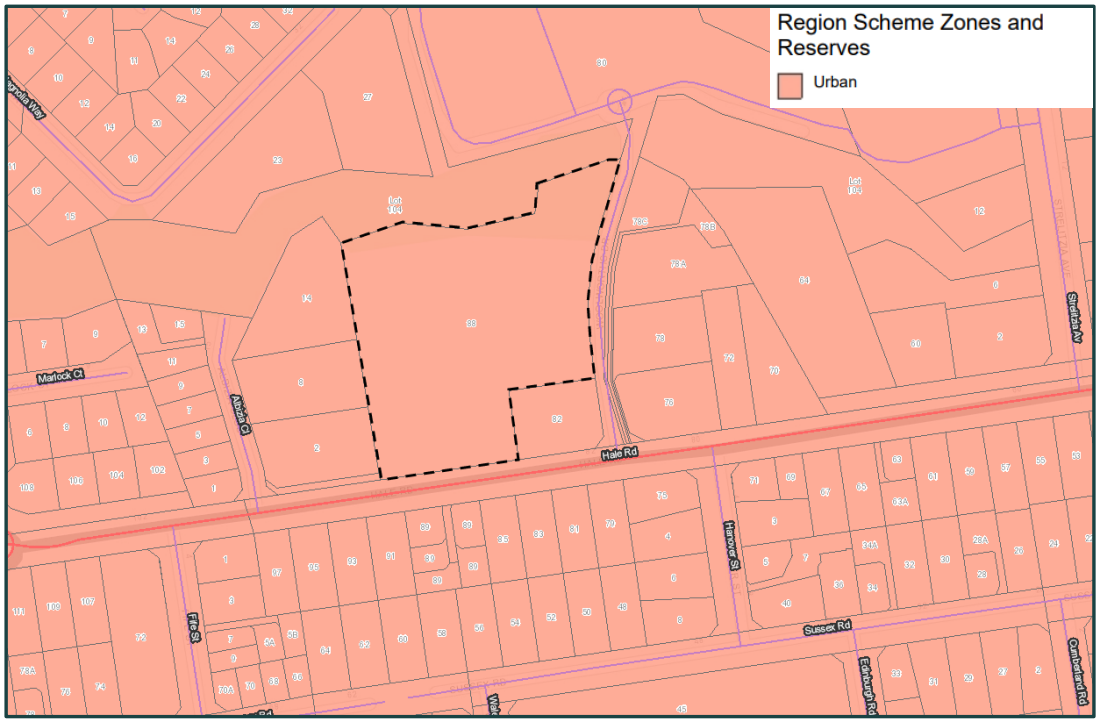


Figure 3: Metropolitan Region Scheme Zoning

3.1.2 State Planning Policies

State Planning Policy 2.9 – Water Resources

State Planning Policy 2.9 – Water Resources ('SPP2.9') was gazetted on 19 December 2006 and the objectives of the policy are to:

1. *protect, conserve and enhance water resources that are identified as having significant economic, social, cultural and/or environmental values;*

2. *assist in ensuring the availability of suitable water resources to maintain essential requirements for human and all other biological life with attention to maintaining or improving the quality and quantity of water resources; and*

3. *promote and assist in the management and sustainable use of water resources.*

Furthermore, in relation to 'Wetlands, Waterways and Estuaries', clause 5.3 of SPP2.9 outlines the following policy measures:

(i) Protect, manage, conserve and enhance the environmental functions and values of waterways and estuaries. The natural alignment of waterways should be retained except where adjustments are unavoidable and do not compromise the natural environmental values.

(ii) Protect, manage, conserve and enhance the environmental attributes, functions and values of significant wetlands, such as Ramsar wetlands, conservation category wetlands and wetlands identified in any relevant environmental protection policy.

(iii) Manage, conserve and, where possible, restore the environmental attributes, functions and values of resource enhancement wetlands.

(iv) Ensure use of best management practices in the development and use of multiple use wetlands, consistent with the principles of total water cycle management (schedule 4).

(v) *Ensure adequate and appropriate buffering of wetlands, waterways and estuaries to maintain or enhance the environmental attributes, functions and values of the water resource and minimise the impact of nearby land uses, both existing and future. (information in schedule 2 of this policy should be applied in the determination of appropriate buffering to waterways and estuaries.)*

The design phase for any future development of the site will need to be prepared cognisant of the above policy measures, particularly in relation to identifying appropriate foreshores for the waterway and urban water management.

State Planning Policy 3.7 – Planning in Bushfire Prone Areas

In accordance with the mapping prepared by the Office of Bushfire Risk Management, the majority of the subject site is designated as a 'bushfire prone area' and therefore subject to the provisions of *State Planning Policy 3.7 – Planning in Bushfire Prone Areas* ('SPP3.7'). Refer to Figure 4.

Pursuant to Policy Measure 6.3 of SPP3.7, this amendment request is accompanied by a Bushfire Management Plan ('BMP') prepared by Bushfire West which includes a Bushfire Hazard Level ('BHL') Assessment and demonstration that compliance with the bushfire protection criteria in the associated *Guidelines for Planning in Bushfire Prone Areas v1.4* ('the Guidelines') can be achieved in subsequent planning stages (refer to Appendix 3 – Bushfire Management Plan).

The BHL Assessment finds that the site is principally subject to 'Moderate' and 'Low' bushfire hazard levels, with small portions of 'Extreme' hazard levels along the northern perimeter of the site due to the classified vegetation and proposed revegetation within the adjoining Woodlupine Brook Reserve. Accordingly, hazard separation will be required between the Woodlupine Brook Reserve and any future development on the site, however the majority of the site is otherwise capable of development to an acceptable bushfire risk level.

Section 6.0 of the BMP provides an assessment of the applicable bushfire protection criteria of the Guidelines and finds that 'Acceptable Solutions' for each element can be achieved in subsequent planning stages, particularly given the extent of land with a 'Low' or 'Moderate' BHL, the availability of adequate water supply and the existing road network.

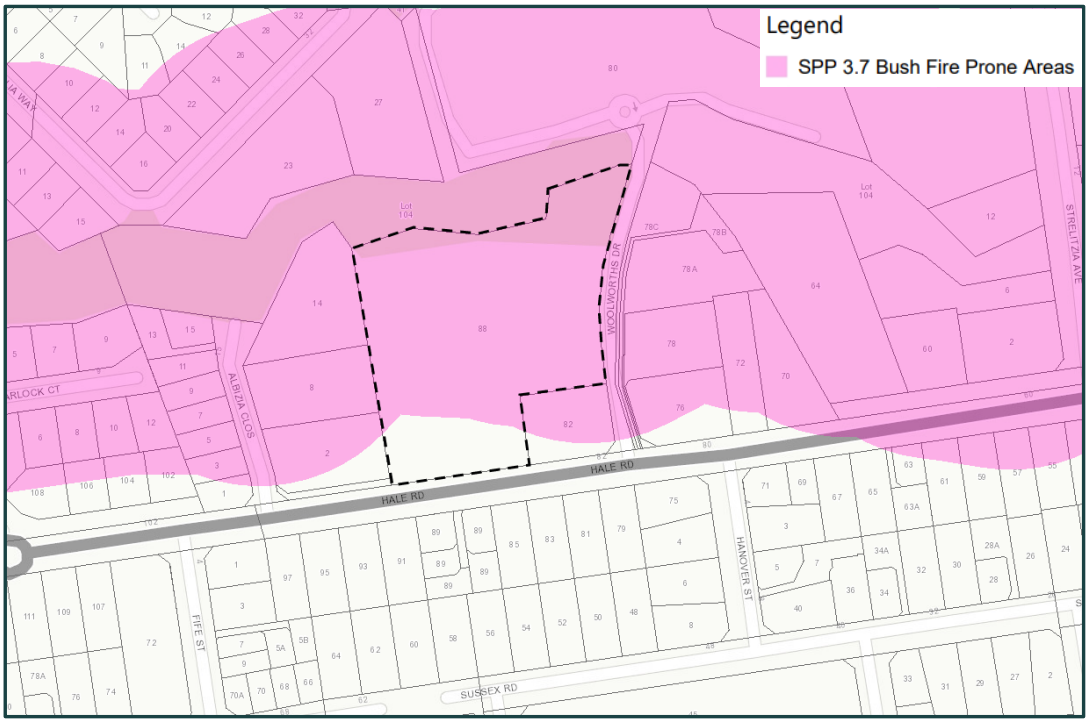


Figure 4: Bush Fire Prone Area (Source: PlanWA 2022)

State Planning Policy 4.2 – Activity Centres for Perth and Peel

State Planning Policy 4.2 – Activity Centres for Perth and Peel ('SPP4.2') was gazetted on 31 August 2010.

Table 2: Activity Centres Hierarchy of SPP4.2 identifies Forrestfield as being one of four 'District Activity Centres' within the north-east sub-region. The Forrestfield DAC is bounded by Salix Way to the north, Strelitzia Avenue to the east, Hale Road to the south and residential development to the west.

Pursuant to Table 3: Activity Centre Functions, Typical Characteristics and Performance Targets, the major role and function of district centres is as follows:

> *"District centres have a greater focus on servicing the daily and weekly needs of residents. Their relatively smaller scale catchment enables them to have a greater local community focus and provide services, facilities and job opportunities that reflect the particular needs of their catchments."*

Table 3 also identifies that the typical retail types for district centres are:
a) Discount department stores
b) Supermarkets
c) Convenience goods
d) Small scale comparison shopping
e) Personal services
f) Some specialty shops

Pursuant to clause 5.6(1) of SPP4.2, health, welfare, community services, entertainment, recreation, commercial and cultural facilities should generally be located in, or adjacent to, activity centres.

With respect to bulky goods retailing, clause 5.6.1(1) identifies that, in general, bulky goods retailing is not suitable to the walkable catchment or core of activity centres due to their size and car parking requirements amongst other considerations. However, subclause (3) notes that clusters of bulky goods retail should be promoted adjacent to, or in close proximity to activity centres.

In regard to the above, the subject site is located on the periphery of the Forrestfield DAC and will not negatively impact on the core activity of the DAC. In this respect, the evolution of the DAC over the years has led to the 'Hawaiian's Forrestfield' shopping centre (previously Forrestfield Forum) being the core of the DAC. The site's unique position and characteristics, including its frontage to Hale Road, is considered suitable for bulky goods retailing and will not generate undesirable activity in the core or elsewhere in the DAC.

Draft State Planning Policy 4.2 – Activity Centres

The Western Australian Planning Commission ('WAPC') released a new *draft State Planning Policy 4.2 –*

Activity Centres ('Draft SPP4.2') in August 2020 with the consultation period closing on 12 February 2021. Draft SPP4.2 is intended to replace SPP4.2 (2010).

Like its predecessor, Appendix 2: Activity Centre Hierarchy of Draft SPP4.2 maintains Forrestfield as a 'District Activity Centre' and it is noted that Appendix 1: Activity Centre Functions and Land Use Guidance retains SPP4.2's description of the main role and typical attributes of district centres.

Clause 7.2 of Draft SPP4.2 provides the following in relation to the requirement for precinct structure plans:

> *"A precinct structure plan is to be prepared for strategic, secondary, district and specialised activity centres.*
>
> *Precinct structure plans should be endorsed by the WAPC prior to a* ***major development*** *being approved to ensure the development of the activity centre is integrated, cohesive and accessible"* [original emphasis retained].

Within clause 9 of Draft SPP4.2, 'major development' with respect to an established 'District Centre' is an additional 5,000m^2 floorspace of 'activity centre use (or uses)'. Furthermore, clause 9 of Draft SPP4.2 provides the following definition for 'activity centre use(s)':

> *Includes (but not limited to) the following:*
> - *Retail development: Shop, Bulky Goods Showroom, Liquor Store – Small, Liquor Store – Large, Market and Restricted Premises.*
> - *Entertainment, Education and Leisure facilities: Amusement Parlour, Educational Establishment, Nightclub, Place of Worship, Recreation – Private, Restaurant / Café, Small Bar, Tavern.*
> - *Commercial uses: Office, Medical Centre, Consulting Rooms.*
> - *Services: Small scale automotive services and recycling services.*
> - *Cultural / Tourism Uses: Art Gallery, Cinema / Theatre, Hotel Tourist Development.*

In relation to the above, the concept plan prepared as part of the Land Use Assessment (refer to Appendix 2) showed the following breakdown of indicative land use mix floorspace:

a) Community: 2,950m^2
b) Health: 1,000m^2
c) Showroom: 2,450m^2
d) Shop Retail: 500m^2

Whilst the total floorspace indicated by the concept equates to 6,900m^2, it should be noted that 'community' uses are not captured under the definition of 'activity centre use(s)' within draft SPP4.2. Furthermore, the existing zoning already allows for, and the subject site already provides, community uses which will be replaced and therefore should be excluded from any calculation of additional floorspace of activity centre use(s).

That then leaves 3,950m^2 of activity centre use floorspace proposed in the concept which does not meet draft SPP4.2's threshold to constitute 'major development'. It should also be noted that a portion of the site is currently zoned for 'Mixed Use' and the proposed rezoning to 'District Centre' will not increase the potential floorspace of activity centre uses beyond what is currently achievable.

It therefore follows that as the proposed amendment does not constitute major development, a precinct structure plan ('PSP') is not required. Notwithstanding this, the City is planning to develop a PSP in the near future, subject to budget and project priorities in any event.

Clause 7.8 of Draft SPP4.2 states that a 'Needs Assessment':

> *"provides an information base to support decision-making by including an assessment of projected land use needs of communities in a local government area and its surrounds"*

Clause 7.8 goes on to state that a needs assessment may be prepared in support of a local planning scheme amendment and should be prepared where a major development for an activity centre is proposed.

Whilst the proposed amendment does not meet the threshold of 'major development' as defined by draft SPP4.2, it is reiterated that Urbis was commissioned by the City to undertake an assessment of the land use potential of the subject site, including identification of a preferred mix of land uses for the subject site (refer to Appendix 2). This included an Impact Test as required by clause 7.9 of Draft SPP4.2. Some key findings of the Land Use Assessment are as follows:

a) The trade area's population is expected to grow by 6,190 residents between 2020 and 2035.
b) Residents within the primary trade area are moderately older on average relative to the rest of Perth and with this ageing population, there is a need for appropriate services such as health.
c) The study area is undersupplied in the land use categories of:
    a. Health / Welfare / Community / Services
    b. Shop / Retail
    c. Other / Retail
d) There is a current and likely future undersupply of GPs in the study area and an undersupply of key allied health services; particularly dentists and physios. There is also considered to be a need for specialist health services such as immunisation clinics, pathology clinics, child health, mental health and pharmacy services.
e) Bulky goods floorspace is limited within the study area to minor individual out of centre retail developments (less than 2,000m^2 the across the study area) however there was an estimated demand for approximately 33,400m^2 by 2020, increasing to 48,400m^2 by 2035.

Under the current zoning combination for the subject site, not all of the abovementioned needs/shortfalls can be addressed across the entire landholding (e.g. within the 'Residential' zoned portion) and rezoning the subject site to 'District Centre' would rectify this by the following land uses becoming capable of approval:

a) Bulky Goods Showroom
b) Health/Fitness Centre
c) Medical Centre
d) Shop

It is therefore submitted that the proposed amendment would address an immediate and demonstrated local need for the proposed land uses and consolidates the existing activity centre uses, recognising the subject site as being within the logical confines of the DAC.

State Planning Policy 7.0 – Design of the Built Environment

State Planning Policy 7.0 – Design of the Built Environment ('SPP7.0') was gazetted on 24 May 2019 and is the lead policy that elevates the importance of design quality across the whole built environment and contains 10 principles of good design.

Whilst a design statement addressing all 10 of the design principles is not mandated as part of the Scheme Amendment process, the proposed amendment has been considered against and is considered to align with the design principles (where relevant at this stage in the planning process) for the following reasons:

a) The proposed amendment responds to the distinctive characteristics of the area by consolidating the existing activity centre uses and recognising the site as being within the logical confines of the activity centre, in line with its definition as a District Centre.

b) The proposed amendment will allow the activity centre to have a greater visual presence to Hale Road and if the subject site is developed for the potential uses that will result from the scheme amendment, is more likely to be visually and physically linked to the existing DAC across Woodlupine Brook.

c) The proposed amendment capitalises on the subject site's unique positioning and characteristics, particularly its exposure to Hale Road and location on the periphery of the core of the existing DAC, making the site suitable for bulky goods showroom uses.

d) The proposed amendment will cater for immediate and projected land use needs and shortfalls, as identified in the Land Use Assessment, to be provided on-site.

Further to the above, it is noted that the design principle of 'Landscape Quality' states that:

> *"Good landscape design protects existing environmental features and ecosystems, promotes biodiversity, offer a variety of habitats for flora and fauna, enhances the local environmental context and restores lost or damaged ecosystems, where possible."*

Similarly, the design principle of 'Sustainability' notes that good design minimises negative impacts on existing natural features and ecological processes.

In this regard, the concept that was prepared as part of the Land Use Assessment has duly considered the retention of as many mature trees along the subject site's frontages to Hale Road and the Woodlupine Brook. This is to be explored further in the development design stage, as well as the development's relationship to the Brook itself.

State Planning Policy 7.2 – Precinct Design

State Planning Policy 7.2 – Precinct Design ('SPP7.2') was gazetted on 19 February 2021 and intends to provide guidance on the design, planning, assessment and implementation of PSPs, local development plans, subdivision and development in areas identified as precincts.

As mentioned, the concept that has been prepared for the proposed amendment does not trigger the requirement under draft SPP4.2 for a PSP to be prepared. Furthermore, the subject site is already identified as being within an activity centre, albeit without the 'District Centre' zoning to match.

Nevertheless, the proposed amendment has been considered against the policy outcomes identified at section 6 of SPP7.2 and the following points are reiterated:

a) The proposal responds to and enhances the distinctive character of the local area by consolidating the existing activity centre uses and recognising the site as being within the logical confines of the activity centre, in line with its definition as a District Centre.

b) The proposal will allow for land uses which meet the immediate and forecasted needs of the community.

c) The proposal will allow for development which enhances the DAC's visual presence to Hale Road and improve the physical links from Hale Road, across the Woodlupine Brook, to the existing core of the activity centre.

In terms of the more specific design outcomes, such as built form height and massing, sustainable built design, Crime Prevention through Environment Design ('CPTED'), etc., these are matters that are more

appropriately considered and furnished at the design development stage, particularly for a single site that forms part of an existing precinct.

3.1.3 State Planning Strategies

Directions 2031

Directions 2031 and Beyond ('Directions 2031') was released by the WAPC in August 2010 as "*a high level spatial framework and strategic plan that establishes a vision for future growth of the metropolitan Perth and Peel region; and it provides a framework to guide the detailed planning and delivery of housing, infrastructure and services necessary to accommodate a range of growth scenarios".*

Under *Directions 2031*, the City's municipal area is identified in the outer north-east sub-region along with the Shire of Mundaring and the City of Swan. For this sub-region, the population was forecast to increase by 37 per cent to 258,000 by 2031 and that to achieve a target of 75 per cent employment self-sufficiency (up from 63 per cent), the sub-region will need to attract another 42,000 jobs by 2031.

The proposed amendment would seek to expand the existing District Centre, catering for population growth and increasing job opportunities.

Perth and Peel @ 3.5 Million

Perth and Peel @ 3.5 Million was released by the WAPC in March 2018 and builds on the vision laid down in Directions 2031 by creating four (4) planning and infrastructure frameworks that provide guidance on sustainable development of the Perth and Peel region over the next three decades, as the region approaches a population of 3.5 million by 2050.

The subject site is contained within the 'North-East Sub-Region', consistent with Directions 2031, and the region is expected to continue relatively strong population growth, influenced by affordable housing, employment opportunities and semi-rural and 'hills' lifestyles. Moreover, the sub-region's population base is expected to more than double to 450,580 by 2050. It is therefore considered important that services and employment opportunities, such as those which will be possible following the proposed rezoning, be provided.

North-East Sub-Regional Planning Framework

Further to the above, the *North-East Sub-Regional Planning Framework* ('Sub-Regional Planning Framework') is one of three frameworks prepared for the outer sub-regions of Perth and Peel and aims to provide high-level strategic guidance for the future development of the sub-region.

Plan 1 of the Sub-Regional Planning Framework illustrates key land use proposals for the sub-region, with

Forrestfield shown as a 'District Centre' (refer to Figure 5). Furthermore, it is stated that:

> *"Existing and emerging district activity centres within the sub-region, including Forrestfield, Kalamunda, Brabham and Mundaring, are expected to continue to expand in response to local population growth providing employment opportunities that will contribute to improving overall employment self-sufficiency."*

The proposed amendment is wholly consistent with the Sub-Regional Planning Framework above.

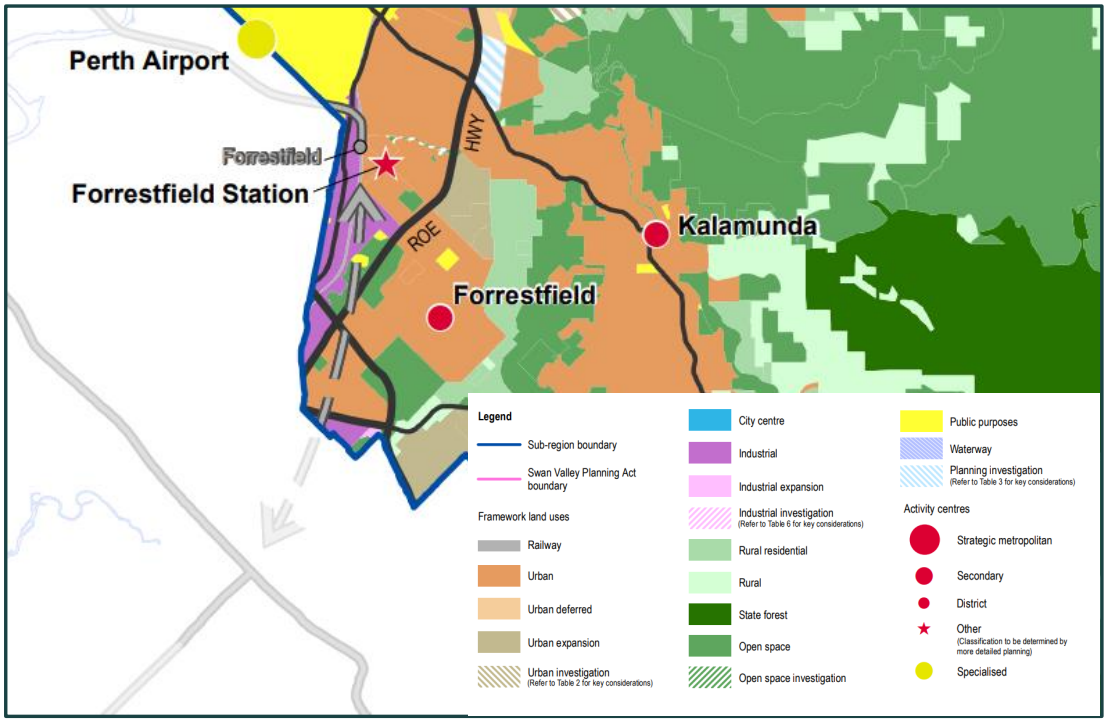


Figure 5: Sub-Regional Planning Framework

3.2 Local Planning Context

3.2.1 Local Planning Scheme

The subject site comprises of three (3) separate zonings and reservations under the City's LPS3. They are:

a) 'Residential' with a density coding of 'R60' in the north-west portion of the site (approximately 4,500m^2);
b) 'Mixed Use' in the south-west portion of the site (approximately 3,400m^2); and
c) 'Public Purpose – Hall / Community Centre' on the north-east portion of the site (approximately

9,900m^2).

For reference, the land immediately to the east and north-east is zoned 'District Centre', whilst the land to the immediate west is zoned 'Residential' with a split density coding of 'R30/40'. The Woodlupine Brook Reserve which is located immediately to the north of the subject site is reserved for 'Local Open Space'.

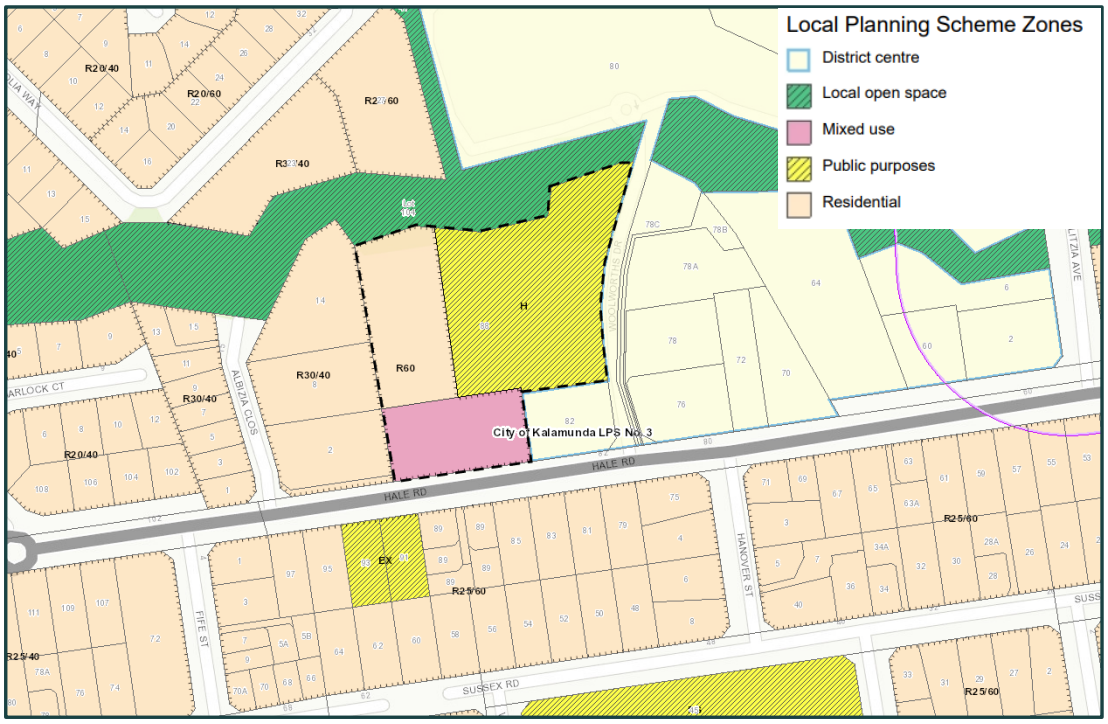


Figure 6: Local Planning Scheme Zoning

Under the current zoning/classification that is applicable to the subject site and pursuant to Table 1 – Zoning Table of LPS3, 'Bulky Goods Showroom' and 'Shop' are both 'X' or not permitted uses within both the 'Mixed Use' and 'Residential' zones, whilst 'Health/Fitness Centre' and 'Medical Centre' are 'X' uses in the 'Residential' zone.

Furthermore, a large portion of the subject site is currently contained within the 'Public Purpose' Local Reserve and therefore subject to the requirements of clause 3.4 of LPS3. These provisions require planning approval prior to any use or development of the Local Reserve, with the local government to have regard to the ultimate purpose intended for the Reserve (i.e., Hall and/or Community Centre) in making its determination. This reservation therefore makes it unlikely that land uses such as 'Bulky Goods Showroom', 'Health/Fitness Centre', 'Medical Centre' and 'Shop' would be supported as it stands.

Rezoning the land to 'District Centre' as proposed will remove the restrictions that currently apply to portions of the site through the different zones/reservations and enable 'Bulky Goods Showroom' to become a 'D' or discretionary use, whilst 'Health/Fitness Centre', 'Medical Centre' and 'Shop' become 'P' or permitted uses. The proposed rezoning would therefore allow the subject site to aid in addressing the current and future demand / shortfall of services identified in Urbis' Land Use Assessment.

It should also be noted that a 'District Centre' zoning could still cater for residential development (if deemed viable) with 'Aged/Dependant Dwellings', 'Aged Residential Care', 'Grouped Dwelling' and 'Multiple Dwelling' all being permitted or discretionary uses in accordance with the Zoning Table. Similarly, the rezoning would not extinguish the subject site's ability to be used for 'Civic Use' and/or 'Community Purpose' which are both 'P' uses of the 'District Centre' zone.

3.2.2 Local Planning Strategies & Structure Plans

City of Kalamunda Local Planning Strategy

The City's *Local Planning Strategy* ('LPS') was adopted by Council in October 2011 and endorsed by the WAPC in February 2013. The LPS sets out the vision and strategic planning direction for the municipal area for a twenty (20) year horizon, to coincide with *Directions 2031*.

The LPS identified ageing population to be one of the most significant challenges facing the City, with an estimated additional 6,311 people over the age of 55 years by 2031, culminating in a total of 18,459 people within the age group. Of this number, one in three are anticipated to be over the age of 70 years and thus creating need for appropriate aged persons accommodation and health services.

Furthermore, the LPS specifically listed the subject site as one of the best opportunities for the delivery of 'Aged Accommodation' within the municipal area. However, it is important that Amendment 104 to LPS3 was gazetted on 20 May 2022, rezoning a 3.85ha portion of Cambridge Reserve for the delivery of critical aged residential care, and new diverse housing opportunities. Cambridge Reserve is located approximately 500m to the south-east of the subject site (refer to Figure 7).

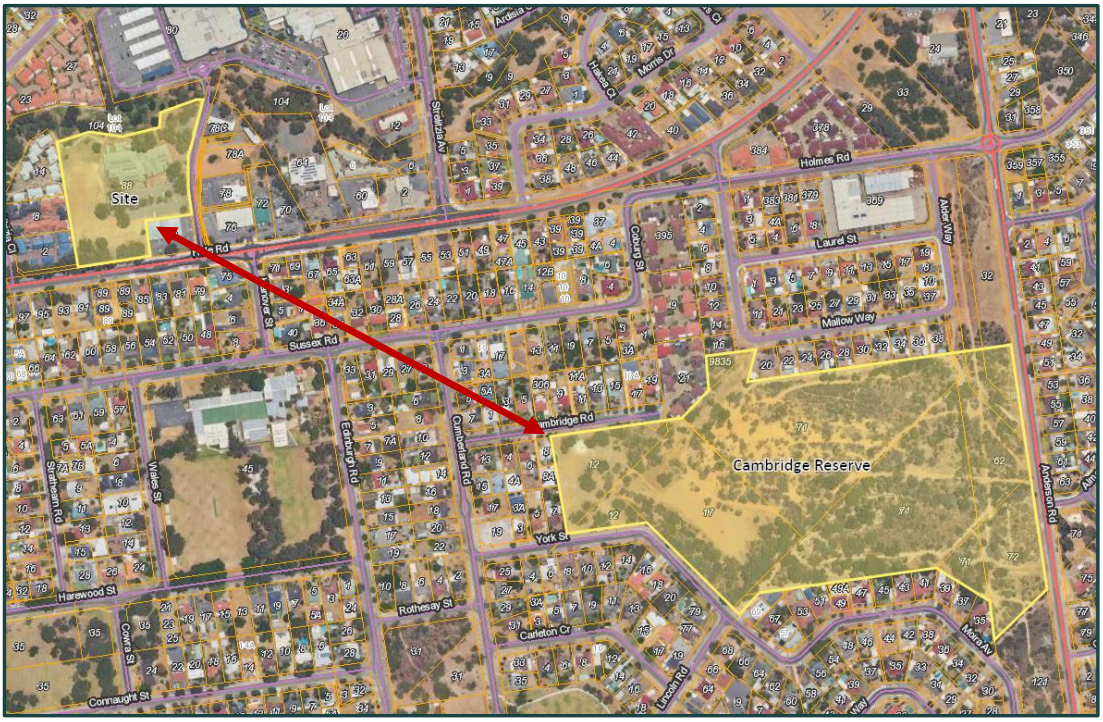


Figure 7: Proximity of subject site to Cambridge Reserve

In addition, there have been a number of private developments incorporating additional aged care beds since the LPS was adopted and endorsed, all of which have made noteworthy contributions to the projected demand for aged care/accommodation.

Whilst the Land Use Assessment prepared by Urbis identified that aged care development was not considered favourable in terms of the highest and best use of the subject site, and nor is such development considered viable on "commercially" zoned land, the proposed 'District Centre' zoning under LPS3 would permit 'Aged/Dependant Dwellings' and 'Aged Residential Care' as discretionary uses. Importantly though, the proposed amendment will provide the opportunity to expand the DAC to enable complementary uses (e.g. health care) to support aged care oriented uses.

In terms of commercial hierarchy, the LPS does not propose any new district centres and instead seeks to retain the two (2) existing centres: Kalamunda and Forrestfield. In relation to the Forrestfield DAC, the LPS acknowledges that it has expansion potential owing to the ongoing residential and population growth in Wattle Grove and Forrestfield.

The proposed amendment is therefore consistent with the vision for the Forrestfield DAC within the LPS.

City of Kalamunda Activity Centres Strategy

The City's *Activity Centres Strategy* ('ACS') was adopted by Council in March 2021 and provides guidance on the future development and enhancement of amenity for the City's activity centres.

The ACS predicts that all localities within the municipality, except Gooseberry Hill and Lesmurdie, will rise in population by over 10% in the next 20 years. Consistent with the State planning framework, the ACS finds that the population growth is heavily skewed towards increases in older age groups, particularly over 70 years of age. Specifically, the ACS projects that between 2011 and 2036 an additional 800 – 900 aged care beds, an additional 506 residential care places and an additional 243 home care places will be required in the City. The increasing average age will also drive increased demand for health care services.

As previously mentioned, whilst not currently considered viable for the subject site, the proposed 'District Centre' zoning will retain 'Aged/Dependant Dwellings' and 'Aged Residential Care' as discretionary uses that are capable of approval. The proposed zoning will also retain 'Consulting Rooms' as a permissible use, whilst also ensuring that 'Medical Centre' is permissible across the whole site.

The ACS notes that the Forrestfield DAC has an existing retail floorspace of approximately 12,956m^2 which is projected to increase to 17,000m^2 by 2036. It is noted that a retail floorspace of 20,000m^2 is consistent with the definition of a DAC under SPP4.2 and therefore, further expansion is a reasonable proposition, should it be supported by retail demand. In this regard, Action 4.4.1 of the ACS states that DAC Activity Centre Plans/PSPs are to be reviewed every five years and can monitor such demand.

The Land Use Assessment prepared by Urbis has demonstrated a need for expansion to cover the current and future demand shortfalls, particularly in relation to health (specifically allied and specialty health), shop retail, showroom retail and aged care / retirement.

The preferred concept that was prepared as part of the Land Use Assessment indicatively shows a floorspace increase of approximately 6,900m^2 (subject to future investigations and detailed design) which comprises of 2,950m^2 for community use, 1,000m^2 for health, 2,450m^2 for showroom and 500m^2 for shop-retail. Community uses do not contribute to the calculation of retail floorspace and as such, the total increase that is likely to result from the proposed amendment is 3,950m^2 which would bring the total retail floorspace of the DAC to approximately 16,906m^2 and within the ACS projection of 17,000m^2.

The proposed amendment is therefore consistent with the aspirations of the ACS.

Forrestfield District Centre Structure Plan

Prepared in 2012 (and noted by the WAPC in its consideration as being in keeping with SPP4.2), the *Forrestfield District Structure Plan* ('DSP') provides a framework for coordinated development of the District

Centre over a period of 10 to 20 years. The subject site is included within the 'Forrestfield District Centre' boundary, refer to Figure 8.

The objectives of the DSP are contained in section 1.5 and include the following in relation to land uses and activities:

- *To support a wide range of retail and commercial premises and to promote a competitive retail and commercial market;*
- *To support the provision of appropriate civic and community facilities which will increase the broad appeal and multi-faceted nature of the Centre;*
- *To increase the range of employment opportunities, which will in turn contribute to the achievement of sub-regional employment self-sufficiency;*
- *To increase the density and diversity of housing in and around the Centre to improve land use efficiency, housing variety and choice, and to support Centre facilities; and*
- *To ensure the Centre provides sufficient development intensity and land use mix to support higher frequency public transport.*

The proposed amendment is considered to be consistent with the above objectives, particularly as it will provide opportunity to enhance the range of retail and commercial premises, as well as civic and community facilities, increase the range of employment opportunities and improve land use efficiency.

Figure 8: Forrestfield DSP Area

The proposed rezoning of the subject site also provides opportunity address key issues and strategic opportunities outlined in Section 3 of the DSP. This includes, but is not limited to:

a) Better frontage/presentation to Hale Road (section 3.3);
b) Still enabling residential opportunities within and surrounding the DSP area (section 3.4);
c) Providing opportunities for office development to be located in the DSP area (section 3.5);
d) Providing a broader mix of uses to offset the current imbalance in favour of retailing (section 3.7); and
e) Creating potential for the Woodlupine Brook to be a major asset/focal point in the middle of the District Centre (section 3.13).

In relation to land uses and activities, section 6.2 of the DSP states that non-retail/shop uses occupy approximately 21% of the total floor space within the District Centre. This is consistent with the diversity performance target outlined in SPP4.2 for a centre in excess of 10,000m^2 but for a centre in excess of 20,000m^2, this should be 30%. It is also noted that as per the Implementation Guidelines of draft SPP4.2, Table 1 provides a diversity ratio of shop/retail floorspace to other non-residential land uses of 2:1 as a guide for DACs.

The expansion of the DAC that would follow upon gazettal of the proposed amendment would be consistent with the increase diversification sought by SPP4.2 and draft SPP4.2, particularly as it is the City's intention for a development mix consisting of integrated health / community hub and separate showroom development fronting Hale Road, consistent with the findings of the Land Use Assessment. These are uses which would not ordinarily be considered within the retail core of the shopping centre and as such will be complementary to the existing shopping centre.

Section 3.7 of the DSP does state that bulky goods stores or warehouse-type outlets would not be appropriate, however, SPP4.2 enables the consideration of such uses outside the core of activity centres in appropriate circumstances. Furthermore, the Land Use Assessment has identified a shortfall of such uses within the City and that the subject site is an appropriate site to address this need given its location on the periphery of the DAC and its frontage and access to Hale Road. It is also noted that the zoning table of LPS3 prescribes 'Bulky Goods Showroom' as a discretionary use within the 'District Centre' zone.

As for built form and urban design, section 8.2 of the DSP identifies the subject site as an 'opportunity site' to provide an active frontage to Hale Road and to also provide new activities which overcome the existing centre's current image as a one-dimension shopping centre. The proposed amendment will provide the opportunity to address both of these issues.

Accordingly, the proposed amendment is considered largely consistent with the DSP.

4. Amendment Proposal

4.1 Amendment Specifications/Type

This request proposes to rezone the subject site from its current multiple zonings and reservations of 'Residential', 'Mixed Use' and 'Public Purpose – Hall / Community Centre' to 'District Centre' under the City's LPS3 (refer to Appendix 4 – Scheme Amendment Map).

Part 5 of the *Planning and Development (Local Planning Schemes) Regulations 2015* ('LPS Regulations') prescribes three (3) categories of amendment types: basic, standard and complex.

Specifically, regulation 34 categorises a 'standard amendment' as follows:

> ***standard amendment*** *means any of the following amendments to a local planning scheme —*
>
> *(a) an amendment relating to a zone or reserve that is consistent with the objectives identified in the scheme for that zone or reserve;*
>
> *(b) an amendment that is consistent with a local planning strategy for the scheme that has been endorsed by the Commission;*

(c) an amendment to the scheme so that it is consistent with a region planning scheme that applies to the scheme area, other than an amendment that is a basic amendment;

(d) an amendment to the scheme map that is consistent with a structure plan or local development plan that has been approved under the scheme for the land to which the amendment relates if the scheme does not currently include zones of all the types that are outlined in the plan;

(e) an amendment that would have minimal impact on land in the scheme area that is not the subject of the amendment;

(f) an amendment that does not result in any significant environmental, social, economic or governance impacts on land in the scheme area;

(g) any other amendment that is not a complex or basic amendment.

The proposed amendment is considered to fall within a 'standard amendment' as it is consistent with the local planning strategy (subclause b) and district structure plan (subclause d) for the reasons outlined within this report. It is also considered to have minimal impact on land outside of the amendment area (subclause e) and will not result in any significant environmental, social, economic or governance impacts (subclause f).

4.2 Rationale for Amendment

The subject site exists as part of the Forrestfield DAC, albeit without the 'District Centre' zoning that has otherwise been applied to the lands immediately to the north of the Woodlupine Brook Reserve and to the east of Woolworths Drive.

The subject site is currently underutilised, housing the Woodlupine Family and Community Centre and associated parking areas in the north-east portion of the site, with the balance of the site currently free of any built form development. A number of mature native and non-native trees exist throughout the subject site, within and adjacent to the existing car parking areas and Hale Road which provide habitat and amenity value.

Cognisant of the above, the City (as the owners of the land) engaged Urbis to undertake a Land Use Assessment which explored strategic land use opportunities for this site that would provide a strong return on investment, enhance community benefit and represent the highest and best use of the land.

Through the Land Use Assessment (refer to Appendix 2), it was found that due to the expected population growth in Forrestfield and surrounding areas, as well as the above average ageing demographic, there is a need for an increase in appropriate services to cater for the population. Specifically, the Land Use Assessment found that within the study area there is an estimated notional

undersupply of health, shop retail, showroom retail and aged care / retirement land uses.

Furthermore, there is a current and future undersupply of GPs in the study area and an undersupply of key allied health services; particularly dentists and physios. There is also considered to be a need for specialist health services such as immunisation clinics, pathology clinics, child health, mental health and pharmacy services.

In addition, the Land Use Assessment found that bulky goods floorspace is limited within the study area (which includes the suburb of Forrestfield and parts of Wattle Grove, Maida Vale and High Wycombe) to minor individual out of centre retail developments (less than 2,000m^2 the across the study area) however there was an estimated demand for approximately 33,400m^2 by 2020, increasing to 48,400m^2 by 2035.

Accordingly, the subject site's location within the activity centre, frontage to Hale Road and general accessibility, presents an opportunity to enhance the range of land uses / activities within the District Centre and to cater for the abovementioned needs and demands both now and into the future. Here it should be noted that it is not the City's intention to compete with the existing retail core within the adjoining shopping centre but rather to address the gaps in market demand and provide complementary uses.

The site also presents an opportunity in a built form sense for the activity centre to have a greater, more active presentation to the public realm, as opposed to being 'closed in' like it is at present, whilst also providing an opportunity to make the Woodlupine Brook Reserve a focal point with connectivity between the existing shopping centre development and the subject site.

As the preceding sections of this report have demonstrated, the proposed amendment is considered consistent with the applicable state and local planning framework, particularly from a strategic land use planning perspective, and that the resultant development will not provide a level of additional floorspace that triggers the requirement for a PSP to be prepared at this stage. It has also been demonstrated that whilst partially designated as being within a bushfire prone area, the majority of the site is of an acceptable bushfire hazard risk to warrant future development.

Finally, this scheme amendment request is also supported by a Transport Impact Assessment which has been prepared by Cardno, now Stantec, which finds that the proposed amendment is not anticipated to have a material impact on the traffic operations and safety of the surrounding road network. Refer to Appendix 5 – Transport Impact Assessment.

4.3 Future Development Proposal

As part of the Land Use Assessment and to support decision making and future planning of the site, a preferred concept layout has been developed by Urbis in consultation with the City. This concept is

provided at page 6 of Appendix 2 and proposes a development mix consisting of an integrated health / community hub and separate showroom development fronting Hale Road which was identified as the most optimal development outcome from the perspectives of market demand, tenant attraction, competition, financial return and site suitability. This development mix is also expected to deliver a range of community benefits, including:

a) Increased consumer choice and convenience;
b) Increased employment opportunities;
c) Increased quality of life; and
d) Improved centre vibrancy.

The concept outlines a potential single storey bulky goods showroom fronting Hale Road with a floor area of approximately 2,450m^2 and a two-storey mixed use development further to the north that comprises of 2,950m^2 of community centre space, 1,000m^2 of health space and 500m^2 of retail space. The two (2) buildings will be surrounded by some 239 parking bays and the concept also considers the retention of as many mature trees along the subject site's frontages to Hale Road and the Woodlupine Brook, whilst also providing for tree plantings throughout the site.

As outlined in the Land Use Assessment, it is important to note that this concept design was prepared to inform potential configuration, access, parking and streetscape treatments. It is only intended as a guiding concept, with subsequent detailed designs and planning for the site to be undertaken in due course.

The concept has also been supported by an impact test (refer to pages 47-50 of Appendix 2) to demonstrate that the impact on existing and future planned centres is expected be relatively minimal and no impacts are expected to be detrimental to the sustainability of any individual centre.

5. Conclusion

This Scheme Amendment request seeks to rezone the subject site to 'District Centre' under LPS3 which would enable the whole site to be developed with a mix of uses consisting of an integrated health / community hub and separate showroom development fronting Hale Road which addresses identified shortfalls in the local market demand both current and future.

The Scheme Amendment is considered appropriate for the following reasons:

a) The proposal remains consistent with the MRS zoning of the land.

b) Although the majority of the subject site is designated as a 'bushfire prone area', the site is principally subject to 'Moderate' and 'Low' bushfire hazard levels and 'Acceptable Solutions' for each element

within the Guidelines can be achieved in subsequent planning stages.

c) The proposal is consistent with SPP4.2 and Draft SPP4.2, including demonstrating an immediate local need for the proposed land uses and the additional floorspace of activity centre uses falling below the threshold to require a PSP.

d) The proposal is also consistent with *Directions 2031*, *Perth and Peel @ 3.5 Million* and the Sub-Regional Planning Framework as it will expand the existing District Centre, catering for population growth and increasing job opportunities.

e) The proposal is consistent with the vision set out in the LPS for the Forrestfield DAC.

f) The proposal is consistent with the analysis and recommendations for the Forrestfield DAC from the ACS.

g) Whilst not considered the most appropriate use of the land, the proposal will not prevent the site from being developed for residential care and home care places.

h) The proposal is consistent with the objectives of the DSP as it will provide opportunity to enhance the range of retail and commercial premises, as well as civic and community facilities, increase the range of employment opportunities and improve land use efficiency. It will also improve the site's public interface.

For all these reasons, it is considered that the proposed Scheme Amendment warrants support.

COUNCIL ADOPTION

This Standard Amendment was adopted by resolution of the Council of the City of Kalamunda at the Ordinary Council Meeting of the Council held on the ____ day of _____ 20 ___.

.....

MAYOR

.....

CHIEF EXECUTIVE OFFICER

COUNCIL RESOLUTION TO ADVERTISE

By resolution of the Council of the City of Kalamunda at the Ordinary Council Meeting of the Council held on the ____ day of _____ 20___, proceed to advertise this Amendment.

.....

MAYOR

.....

CHIEF EXECUTIVE OFFICER

COUNCIL RECOMMENDATION (date Council supported the amendment)

This Amendment is recommended for support by resolution of the City of Kalamunda at the Ordinary Meeting of the Council held on the ____ day of _____, 20___ and the Common Seal of the City of Kalamunda was hereunto affixed by the authority of a resolution of the Council in the presence of:

.....

MAYOR

.....

CHIEF EXECUTIVE OFFICER

WAPC ENDORSEMENT

.....

DELEGATED UNDER S.16 OF
THE P&D ACT 2005

DATE.....

APPROVAL GRANTED

.....

MINISTER FOR PLANNING

DATE.....

Appendix 1

CERTIFICATES OF TITLE & EASEMENT DOCUMENTS

WESTERN AUSTRALIA

REGISTER NUMBER	
106/P17920	
DUPLICATE EDITION	DATE DUPLICATE ISSUED
1	**7/8/2017**

VOLUME **1906** FOLIO **480**

RECORD OF CERTIFICATE OF TITLE

UNDER THE TRANSFER OF LAND ACT 1893

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.

BGRoberts
REGISTRAR OF TITLES

REGISTRAR OF TITLES WESTERN AUSTRALIA

LAND DESCRIPTION:

LOT 106 ON PLAN 17920

REGISTERED PROPRIETOR:
(FIRST SCHEDULE)

SHIRE OF KALAMUNDA OF 2 RAILWAY ROAD, KALAMUNDA

(A E630270) REGISTERED 14/6/1991

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
(SECOND SCHEDULE)

1. E630272 EASEMENT BENEFIT SEE SKETCH ON VOL 1906 FOL 480. REGISTERED 14/6/1991.
2. EASEMENT BURDEN CREATED UNDER SECTION 27A OF T. P. & D. ACT - SEE PLAN 17920.
3. N681984 LEASE TO WOODLUPINE FAMILY CENTRE INC. OF 88 HALE ROAD FORRESTFIELD WA 6058 EXPIRES: SEE LEASE. AS TO PORTION ONLY REGISTERED 27/7/2017.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.
* Any entries preceded by an asterisk may not appear on the current edition of the duplicate certificate of title.
Lot as described in the land description may be a lot or location.

----------END OF CERTIFICATE OF TITLE----------

STATEMENTS:

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: 1906-480 (106/P17920)
PREVIOUS TITLE: 1906-471
PROPERTY STREET ADDRESS: 88 HALE RD, FORRESTFIELD.
LOCAL GOVERNMENT AUTHORITY: CITY OF KALAMUNDA

NOTE 1: A000001A PENDING SURVEYS PLAN 23840 & PLAN 23841.

NOTES

1. If any of the boxed sections has insufficient space then the relevant information may be added on Annexure Form B1. Appropriate headings should be shown. The boxed sections should only contain the words "See Annexure 'A' (or as the case may be) attached". Annexure sheets should be dated, signed by the persons signing this document and be pinned to this form.
2. No alteration should be made by erasure. The words rejected should be scored through and those substituted typed or written above them, the alteration being initialled by the persons signing this document.

No.

APPLICATION

FEES (office use) $

E 630270 A

REG. $ 52.(

'91 JUN 14 15:32

Parties SHIRE OF KALAMUNDA

Vol. 1906
Fol. 480

Lodged by CORRS
Address 150 ST GEORGE'S TERRACE
PERTH WA 6000
Phone No. 321 8531

REF: KALA5310-010
pwd/yg3765

Use this space for instructions if any documents are to issue to other than lodging party.

17 21

Titles, Declarations, etc., lodged with this document.
(To be filled in by person lodging.)

1 .....
2 .....
3 .....
4 .....
5 .....
6 .....

Received items

No's .....

Rec. Clerk

BELOW THIS LINE FOR OFFICE USE ONLY.

Registered

at o'clock and

particulars entered in the Register Book.

Endorsing instruction. NT 21

Initials of Signing Officer.

Lodged on the day and time shown in and particulars entered in the Register Book.

REGISTRAR OF TITLES.

EXAMINED.

Form A6.

17

WESTERN AUSTRALIA
Transfer of Land Act 1893 as amended No.

a. Delete whichever is not applicable.

APPLICATION FOR A(a) NEW ~~BALANCE~~ TITLE.

DESCRIPTION OF LAND. State whether whole or part of land comprised in Certificate of Title. If share only, specify.

Lot 106 on Plan 17920, the whole of the land in Certificate of Title Volume 1906 Folio 471 .

Vol. 1906
Fol. 480

APPLICANT. Registered Proprietor. Full name, address and occupation.

SHIRE OF KALAMUNDA of 2 Railway Road, Kalamunda.

THE APPLICANT HEREBY APPLIES for the issue of a new Certificate of Title for the land above described.

The reason for the Application is shown below:

The issue of a new Certificate of Title to the land above described so as to include the benefit of the easement created by Transfer E630272.

Dated this 22 day of January 1991.

Signature of ~~Applicant~~ Shire Clerk
Shire of Kalamunda

FORM APPROVAL No. 037 REGISTRAR OF TITLES

If address and/or occupation of applicant do not agree with title then this form may require attestation before an adult witness or an identifying Statutory Declaration.

If insufficient space hereon annexures may be added. (Use Annexure Form B1) See Note 1 on back hereof.

STOCK FORM 300 Sands & McDougall

LT.175

ORIGINAL: Not to be removed from the Department of Land Administration.

Application H154662

Volume 1941 Folio 96

WESTERN AUSTRALIA

VOLUME 2165 FOLIO 876

IN THE REGISTER

CERTIFICATE OF TITLE

UNDER THE " TRANSFER OF LAND ACT, 1893 " AS AMENDED

The person described in the First Schedule hereto is the registered proprietor of the undermentioned estate in the undermentioned land subject to the easements, encumbrances and notices shown in the Second Schedule hereto.

Dated 30th June, 1999

REGISTRAR OF TITLES

ESTATE AND LAND REFERRED TO

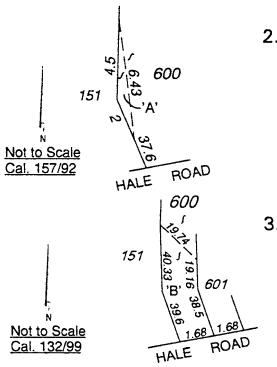
Estate in fee simple in portion of Swan Location 2599 and being Lot 600 on Diagram 97829, delineated on the map in the Third Schedule hereto, together with easements for a water supply purposes, gas supply purposes, transmission of electricity by underground cable and transmission of television signals by underground cable created on the said Diagram under Section 136C TLA.

FIRST SCHEDULE (continued overleaf)

~~Vannin Pty. Ltd. of Level 2, 1260 Hay Street, West Perth~~

SECOND SCHEDULE (continued overleaf)

1. EASEMENT as shown on Plan 17918.



2. EASEMENT as shown on Plan 17919 marked 'A' on the map in the margin.

3. TRANSFER E630271. A right of carriageway over the portion of the within land marked 'B' on the map in the margin as set out in the said Transfer is granted to the proprietor or proprietors for the time being of Lot 108 on Plan 17918. Registered 14.6.91 at 15.32 hrs.

4. TRANSFER E630272. A right of carriageway over the portion of the within land marked 'B' on the map in the margin above as set out in the said Transfer is granted to the proprietor or proprietors for the time being of Lot 106 on Plan 17920. Registered 14.6.91 at 15.32 hrs.

5. EASEMENTS as shown on Diagram 82825.

6. EASEMENT G748987. A right of carriageway over the portion of the within land marked 'B' on the map in the margin above as set out in the said Easement is granted to the proprietor or proprietors for the time being of Lot 145 on Diagram 82825. Registered 27.3.98 at 9.04 hrs.

7. ~~MORTGAGE G748990 to~~ **Westpac Banking Corporation.** ~~Registered~~ 27.3.98 at 9.04 ~~hrs.~~

Discharged H443551 12.5.00

THIRD SCHEDULE (see overleaf)

NOTE: Entries may be affected by subsequent endorsements.

ORIGINAL CERTIFICATE OF TITLE

VOLUME 2165 FOLIO 876

IN THE REGISTER

FIRST SCHEDULE (continued)

NOTE : ENTRIES MAY BE AFFECTED BY SUBSEQUENT ENDORSEMENTS

PARTICULARS	INSTRUMENT NATURE	INSTRUMENT NUMBER	REGISTERED	TIME	SEAL & INITIAL
Bowesco Pty. Ltd. of Level 2, 1260 Hay Street, West Perth.	Transfer	H443552	12.5.00	16.03	

Page 2 (of 4 pages)

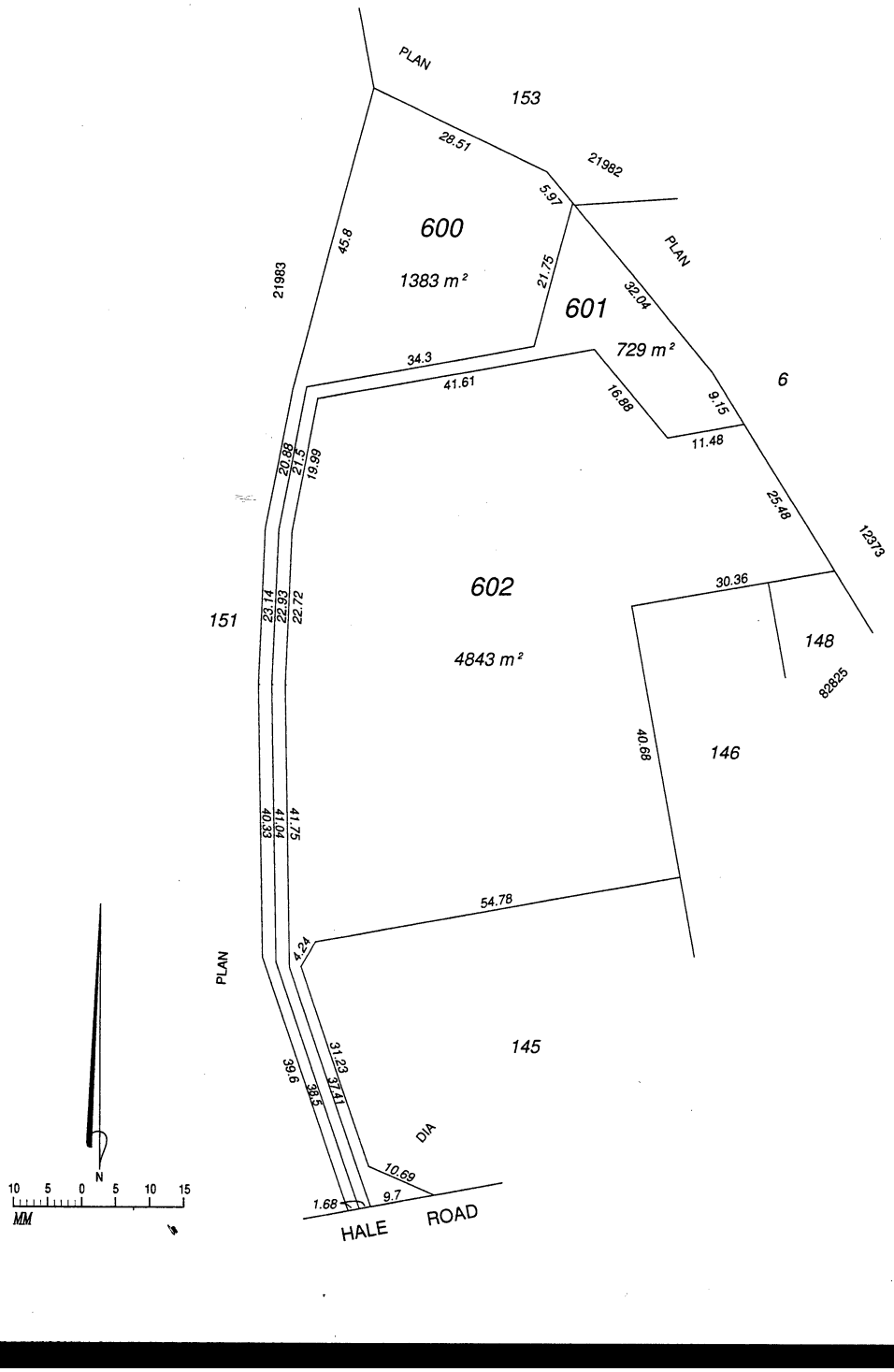
SECOND SCHEDULE (continued)	REGISTERED or LODGED	TIME	SEAL & INITIAL	CANCELLATION NATURE	CANCELLATION NUMBER	REGISTERED or LODGED	SEAL & INITIAL
EASEMENT H154661. A right of carriageway over the portion of the within land marked 'C' on the map in the margin as set out in the said Easement is granted to **Shire of Kalamunda**. 600 601 602 151 2.15 21.5 20.98 22.93 23.14 41.04 40.33 'C' 38.5 39.6 1.68 1.68 HALE ROAD N Not to Scale	30.6.99	16.21					
EASEMENTS for Water Supply purposes, Gas Supply purposes, Transmission of Electricity by underground cable, Transmission of Television signals by underground Cable, Right of Carriageway and Drainage purposes created on Diagram 97829 under Section 136C TLA.							
Lease H605715 to Woolworths Ltd of Level 5, 540 George Street, Sydney, New South Wales, commencing 12.5.2000 for a term expiring on 12.10.2017 together with an option for renewal.	24.11.00	11.13					

VOLUME 2165 FOLIO 876
IN THE REGISTER

Page 3 (of 4 pages)

VOLUME FOLIO
2165 876
IN THE REGISTER

THIRD SCHEDULE



LT.175

ORIGINAL: Not to be removed from the Department of Land Administration.

Application H154662

Volume 1941 Folio 96

WESTERN AUSTRALIA

VOLUME 2165 FOLIO 877

IN THE REGISTER

CERTIFICATE OF TITLE

UNDER THE " TRANSFER OF LAND ACT, 1893 " AS AMENDED

The person described in the First Schedule hereto is the registered proprietor of the undermentioned estate in the undermentioned land subject to the easements, encumbrances and notices shown in the Second Schedule hereto.

Dated 30th June, 1999

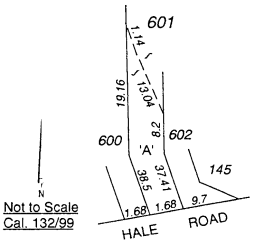
REGISTRAR OF TITLES

ESTATE AND LAND REFERRED TO

Estate in fee simple in portion of Swan Location 2599 and being Lot 601 on Diagram 97829, delineated on the map in the Third Schedule hereto together with easements for a water supply purposes, gas supply purposes, transmission of electricity by underground cable, transmission of television signals by underground cable, right of carriageway and drainage purposes created on the said Diagram under Section 136C TLA.

FIRST SCHEDULE (continued overleaf)

~~**Vannin Pty. Ltd.** of Level 2, 1260 Hay Street, West Perth~~



SECOND SCHEDULE (continued overleaf)

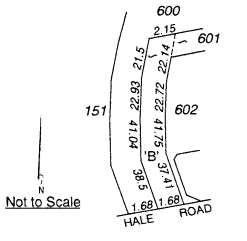
1. TRANSFER E630271. A right of carriageway over the portion of the within land marked 'A' on the map in the margin as set out in the said Transfer is granted to the proprietor or proprietors for the time being of Lot 108 on Plan 17918. Registered 14.6.91 at 15.32 hrs.

2. TRANSFER E630272. A right of carriageway over the portion of the within land marked 'A' on the map in the margin above as set out in the said Transfer is granted to the proprietor or proprietors for the time being of Lot 106 on Plan 17920. Registered 14.6.91 at 15.32 hrs.

3. EASEMENTS as shown on Diagram 82825.

4. EASEMENT G748987. A right of carriageway over the portion of the within land marked 'A' on the map in the margin above as set out in the said Easement is granted to the proprietor or proprietors for the time being of Lot 145 on Diagram 82825. Registered 27.3.98 at 9.04 hrs.

5. ~~MORTGAGE G748990 to **Westpac Banking Corporation.** Registered 27.3.98 at 9.04 hrs.~~ Discharged H154663 30.6.99.



6. EASEMENT H154661. A right of carriageway over the portion of the within land marked 'B' on the map in the margin as set out in the said Easement is granted to **Shire of Kalamunda**. Registered 30.6.99 at 16.21 hrs.

THIRD SCHEDULE (see overleaf)

Page 1 (of 4 pages)

NOTE: Entries may be affected by subsequent endorsements.

ORIGINAL CERTIFICATE OF TITLE

VOLUME FOLIO
2165 877
IN THE REGISTER

FIRST SCHEDULE (continued) NOTE : ENTRIES MAY BE AFFECTED BY SUBSEQUENT ENDORSEMENTS

PARTICULARS	INSTRUMENT NATURE	INSTRUMENT NUMBER	REGISTERED	TIME	SEAL INITIAL
John Alexander Ashton of 66 Esperance Street, East Victoria Park.	Transfer	H154664	30.6.99	16.21	

Page 2 (of 4 pages)

SECOND SCHEDULE (continued)

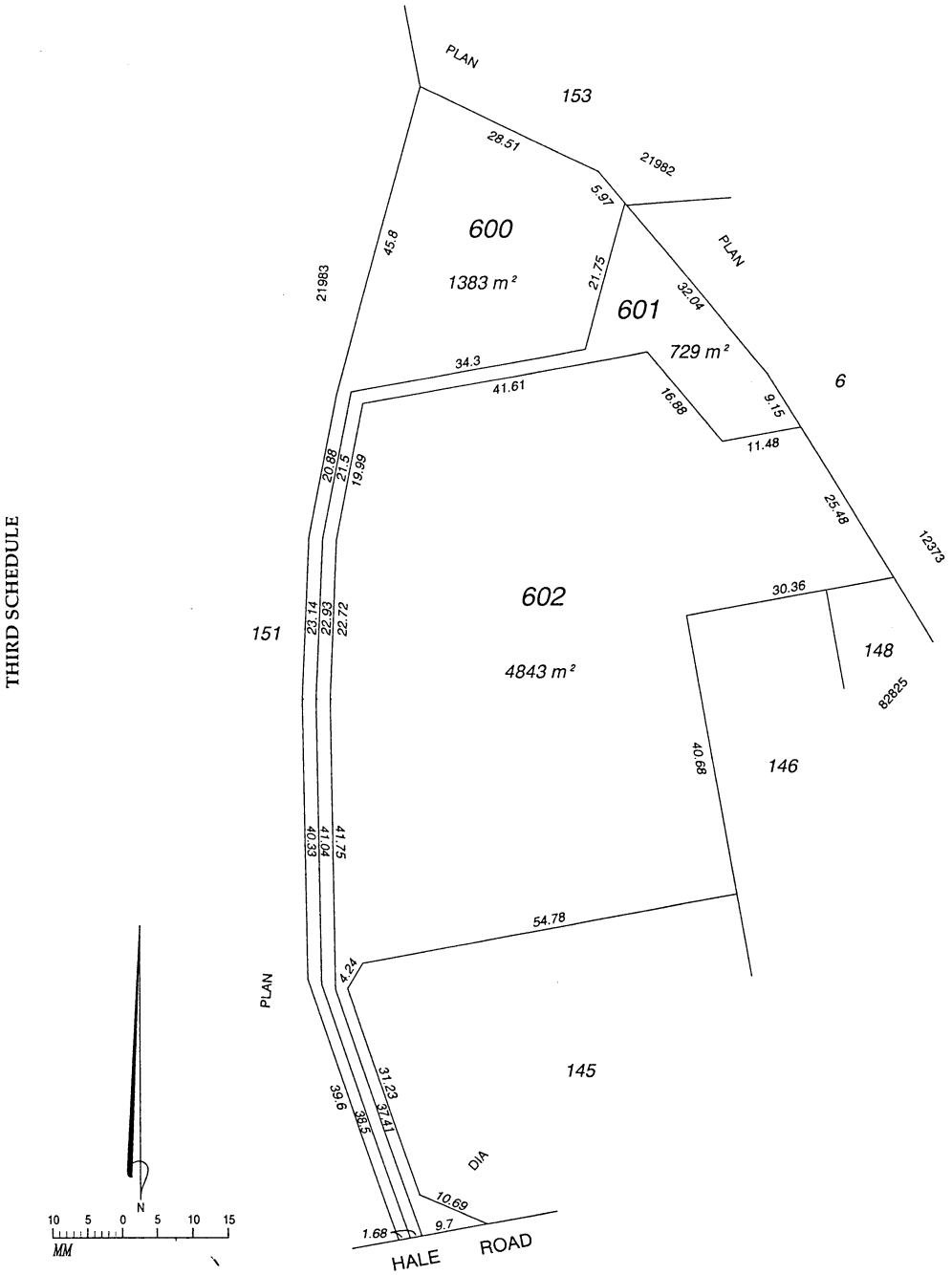
	REGISTERED or LODGED	TIME	SEAL & INITIAL	CANCELLATION NATURE	CANCELLATION NUMBER	REGISTERED or LODGED	SEAL & INITIAL
EASEMENTS for Water Supply purposes, Gas Supply purposes, Transmission of Electricity by underground cable and Transmission of Television signals by underground Cable created on Diagram 97829 under Section 136C TLA.	30.6.99	16.21					
TRANSFER H154664 contains a restrictive covenant.	30.6.99	16.21					
MORTGAGE H154665 to **Westpac Banking Corporation.** Caveat H399350 by Westpoint Constructions Pty. Ltd. Lodged 24.3.2000 at 11.08 hrs.							

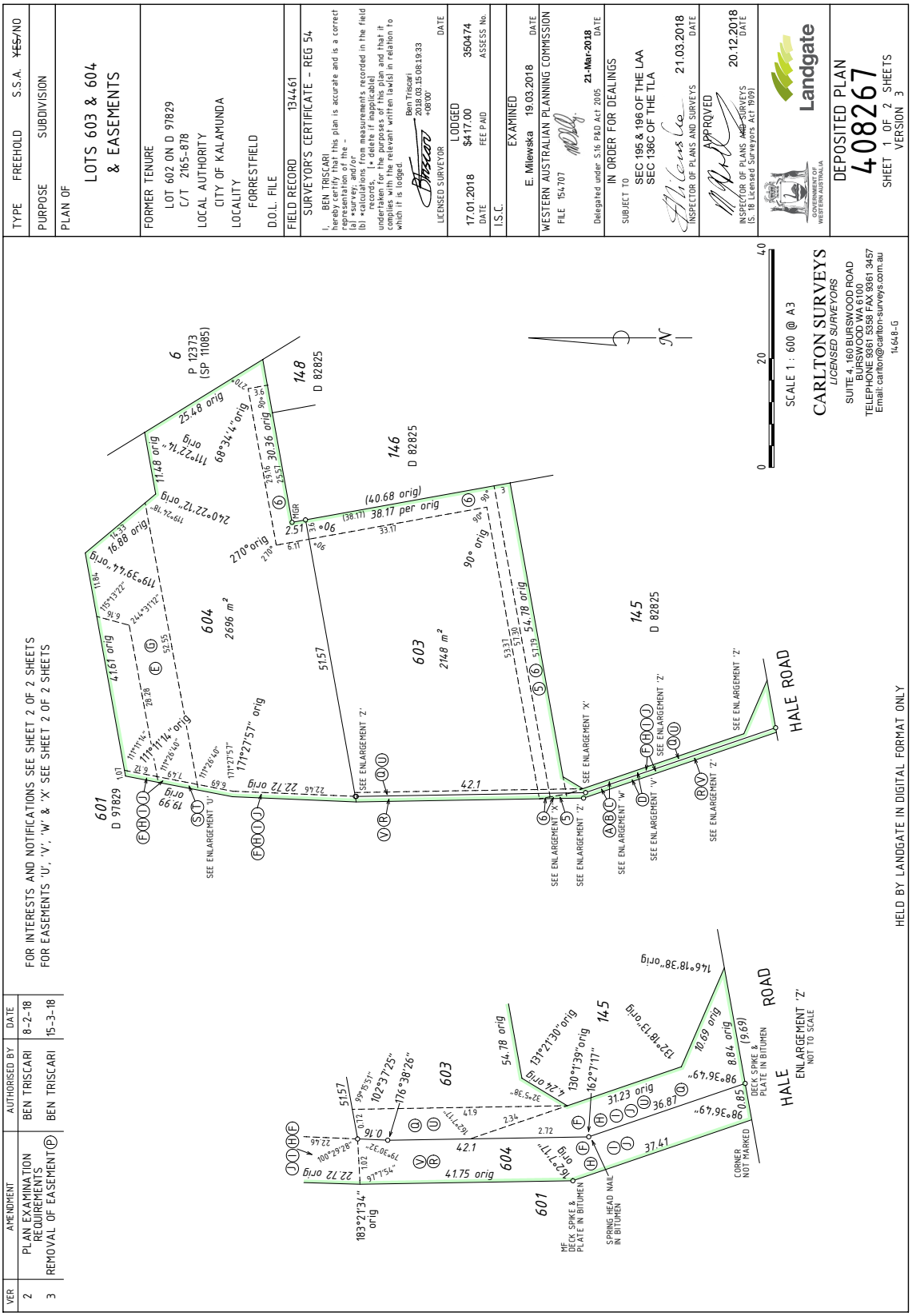
VOLUME FOLIO
2165 877
IN THE REGISTER

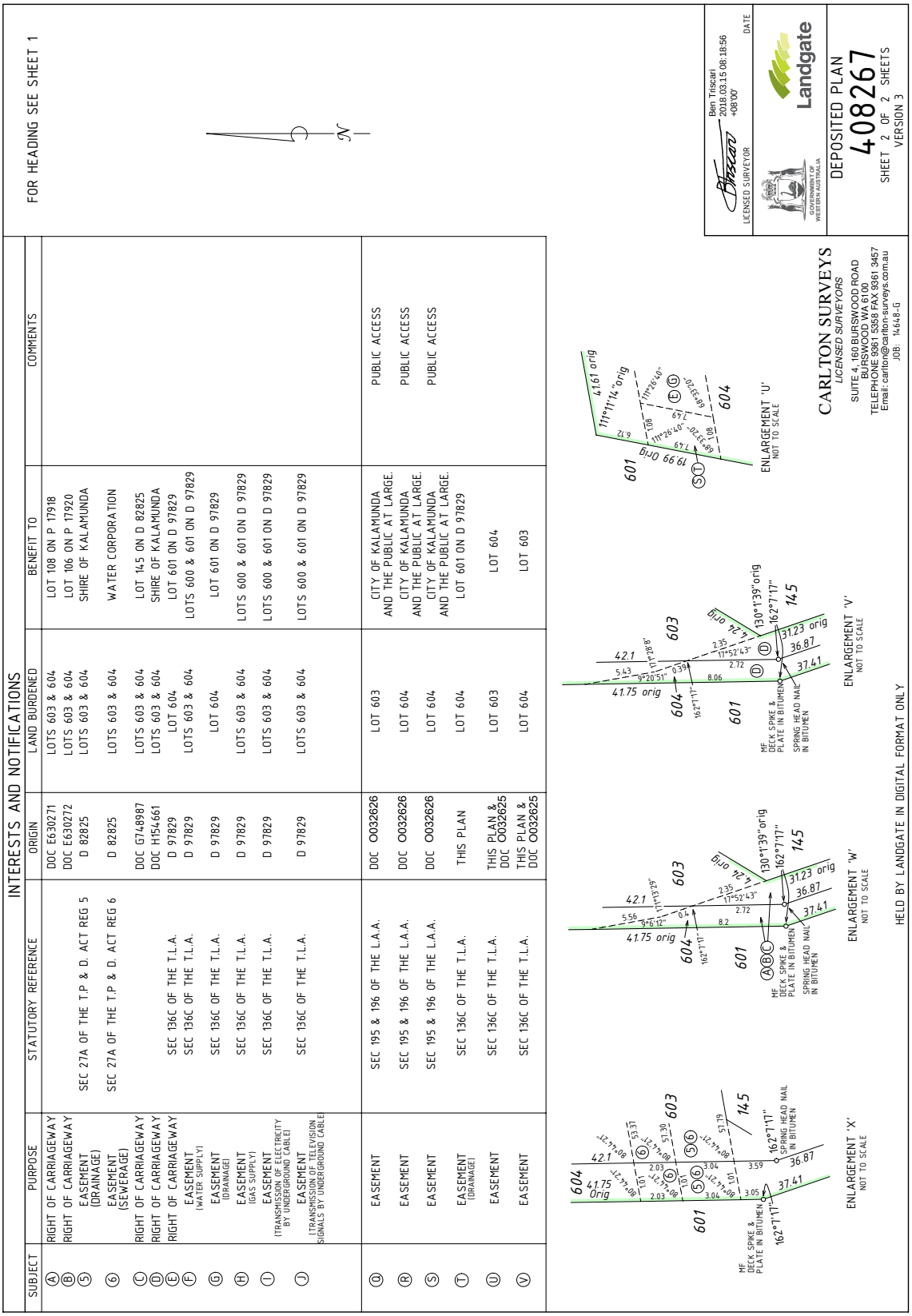
VOLUME FOLIO
2165 877
IN THE REGISTER

Page 4 (of 4 pages)

THIRD SCHEDULE







WESTERN AUSTRALIA

REGISTER NUMBER	
109/P17919	
DUPLICATE EDITION	DATE DUPLICATE ISSUED
12	17/2/2021

VOLUME 1940 FOLIO 499

RECORD OF CERTIFICATE OF TITLE

UNDER THE TRANSFER OF LAND ACT 1893

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.

BGRoberts
REGISTRAR OF TITLES

LAND DESCRIPTION:

LOT 109 ON PLAN 17919

REGISTERED PROPRIETOR:
(FIRST SCHEDULE)

HYDE PARK MANAGEMENT LTD OF GROUND FLOOR 235 ST GEORGES TERRACE PERTH WA 6000
(T M924334) REGISTERED 26/2/2015

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
(SECOND SCHEDULE)

1. THE LAND THE SUBJECT OF THIS CERTIFICATE OF TITLE EXCLUDES ALL PORTIONS OF THE LOT DESCRIBED ABOVE EXCEPT THAT PORTION SHOWN IN THE SKETCH OF THE SUPERSEDED PAPER VERSION OF THIS TITLE. VOL 1940 FOL 499.
2. EASEMENT BURDEN CREATED UNDER SECTION 27A OF T. P. & D. ACT - SEE PLAN 17919.
3. E630271 EASEMENT BURDEN SEE SKETCH ON VOL 1940 FOL 499. REGISTERED 14/6/1991.
4. E630272 EASEMENT BURDEN SEE SKETCH ON VOL 1940 FOL 499. REGISTERED 14/6/1991.
5. G444128 EASEMENT BURDEN SEE SKETCH ON VOL 1940 FOL 499. REGISTERED 10/4/1997.
6. H129193 EASEMENT TO SHIRE OF KALAMUNDA. SEE SKETCH ON VOL 1940 FOL 499. REGISTERED 4/6/1999.
7. *I960601 CAVEAT BY BENDIGO BANK LTD LODGED 21/7/2004.
8. *I966633 CAVEAT BY KALAMUNDA CORPORATION PTY LTD AS TO PORTION ONLY LODGED 27/7/2004.
9. *J605858 CAVEAT BY WOOLWORTHS LTD AS TO PORTION ONLY LODGED 31/1/2006.
10. *J605860 CAVEAT BY WOOLWORTHS LTD AS TO PORTION ONLY LODGED 31/1/2006.
11. *L846414 CAVEAT BY BANK OF WESTERN AUSTRALIA LTD AS TO PORTION ONLY LODGED 1/2/2012.
12. M924333 LEASE TO TELSTRA CORPORATION LTD OF LEVEL 41, 242 EXIBITION STREET, MELBOURNE, VICTORIA AS TO PORTION ONLY. EXPIRES: SEE LEASE. REGISTERED 26/2/2015.
    O349812 EXTENSION OF LEASE. REGISTERED 20/2/2020.
    O349812 CHANGE OF ADDRESS. THE PROPRIETORSHIP IS NOW TELSTRA CORPORATION LTD OF CARE OF JONES LANG LASALLE LEVEL 10 242 EXHIBITION STREET MELBOURNE VIC 3000 REGISTERED 20/2/2020.
13. *M952953 CAVEAT BY COMMONWEALTH OF AUSTRALIA LODGED 30/3/2015.
14. N505956 LEASE TO DOMINO'S PIZZA ENTERPRISES LIMITED OF KSD1 LEVEL 5 485 KINGSFORD SMITH DRIVE HAMILTON QLD 4007 EXPIRES: SEE LEASE. AS TO PORTION ONLY REGISTERED 9/12/2016.

END OF PAGE 1 - CONTINUED OVER

RECORD OF CERTIFICATE OF TITLE

REGISTER NUMBER: 109/P17919 VOLUME/FOLIO: 1940-499 PAGE 2

15. N557577 LEASE TO KARWA HOLDINGS PTY LTD, INDI SYNERGY PTY LTD, BOTH OF 94 MELVISTA AVENUE DALKEITH WA EXPIRES: SEE LEASE. AS TO PORTION ONLY REGISTERED 17/2/2017.
O481682 TRANSFER OF LEASE N557577, LESSEE NOW KSU FORRESTFIELD PTY LTD OF CARE OF CHARLES RIDOLFO & CO 'FIRST FLOOR' UNIT 2 285 LORD STREET PERTH WA 6000 REGISTERED 27/8/2020.
O481683 EXTENSION OF LEASE. REGISTERED 27/8/2020.
16. N645849 MORTGAGE TO HSBC BANK AUSTRALIA LTD REGISTERED 13/6/2017.
17. *N718638 CAVEAT BY COMMONWEALTH OF AUSTRALIA AS TO PORTION ONLY LODGED 13/9/2017.
18. O554737 LEASE TO WOOLWORTHS LIMITED OF 1 WOOLWORTHS WAY BELLA VISTA NSW 2153 EXPIRES: SEE LEASE. AS TO PORTION ONLY REGISTERED 13/11/2020.
O554738 EXTENSION OF LEASE. REGISTERED 13/11/2020.
19. O554791 LEASE TO WOOLWORTHS GROUP LIMITED OF 1 WOOLWORTHS WAY BELLA VISTA NSW 2153 EXPIRES: SEE LEASE. AS TO PORTION ONLY REGISTERED 13/11/2020.

Warning: A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.
* Any entries preceded by an asterisk may not appear on the current edition of the duplicate certificate of title.
Lot as described in the land description may be a lot or location.

----------END OF CERTIFICATE OF TITLE----------

STATEMENTS:

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: 1940-499 (109/P17919)
PREVIOUS TITLE: 1906-474
PROPERTY STREET ADDRESS: 80 HALE RD, FORRESTFIELD.
LOCAL GOVERNMENT AUTHORITY: CITY OF KALAMUNDA

NOTE 1: A000001A PENDING SURVEYS PLAN 21982, PLAN 21983, PLAN 23840 & PLAN 23841.
NOTE 2: J441989 SECTION 138D TLA APPLIES TO CAVEAT H582260
NOTE 3: K314271 SECTION 138D TLA APPLIES TO CAVEAT J599720.
NOTE 4: M895701 SECTION 138D TLA APPLIES TO CAVEAT H910944
NOTE 5: M895703 SECTION 138D TLA APPLIES TO CAVEAT J605435
NOTE 6: M895705 SECTION 138D TLA APPLIES TO CAVEAT G555170

Copies to HL-01/080
HL-01/078

Please.

108626

FILE NO: SI-15/020

IRN NO: 90736

DATE REG: 9/6/99

SHIRE OF KALAMUNDA
• A HOME IN THE FOREST •

Inwards Mail Register

CEO	EMCS	EMRS	EMPDS	EMES	TO FILE ☑ (✓)

TIONED TO:	COMMENTS
	Noted. SB
BOD	11/6/99 F.Y.I.
	⇒ file.
Noted	14/6/99 SLPO.

Please return to records department once actioned, thankyou.

MAP REF:

WARD:

McLEOD & CO
BARRISTERS & SOLICITORS
Local Government Law
Environmental Planning Law

220-222 Stirling Highway
Claremont WA 6010
Tel: (08) 9383 3133
Fax: (08) 9385 2693

Partners
Denis McLeod
Michele Payne
Geoffrey Owen
Linda Rowley

Senior Associate
Jennifer Engelhard

Associates
Peter Wittkuhn
Craig Slarke

Our Ref: McL/N5 10340
Your Ref:

SF-15/020

- JUN 1999

FAX NO:	9293 2715
TO:	SHIRE OF KALAMUNDA
ATTENTION:	AMANDA BUTTERWORTH
DATE:	8 June 1999
RE:	EASEMENT IN GROSS - HALE ROAD, KALAMUNDA - FORRESTFIELD SHOPPING CENTRE
NO. OF PAGES: (including this page)	11

Copy of easement provided to WAPC on 4 June 1999 follows.

McLeod & Co

FILE
9 - JUN 1999
OFFICER:

FACSIMILE WARNING

This document and any following pages may contain legally privileged information, are confidential and intended solely for the named addressee. The copying, distribution or dissemination of them or any information they contain, by anyone other than the addressee, is prohibited. If you have received this document in error, please let us know by telephone, and return it by mail to the address above. We shall refund your costs of doing so.

08/06/99 17:11 MCLEOD & CO → 92932715 NO.212 D01

FORM B2

WESTERN AUSTRALIA
TRANSFER OF LAND ACT 1893 AS AMENDED.

EXEMPT from W.A. Stamp Duty
see 15
for Commissioner of State Revenue

BLANK INSTRUMENT FORM

GRANT OF EASEMENT

(Note 1)

THIS DEED is made the 4 day of May 1999.

BETWEEN:

FORESTVIEW NOMINEES PTY LTD (ACN 063 440 102) formerly of Ground Floor, 25 Richardson Street, West Perth and now of Level 2, Westcentre 1260 Hay Street, West Perth in the State of Western Australia and FIRST UNITED DEVELOPMENTS PTE LTD (ARBN 079 372 704) of c/- Corrs Chambers Westgarth 150 St George's Terrace, Perth in the said State ("the Grantor")

WESTERN AUSTRALIA STAMP DUTY
4-MAY-99 [illegible]
DUP $ [illegible]
DUTY $ [illegible]
EXEMPT 100 %

AND

SHIRE OF KALAMUNDA of 2 Railway Road, Kalamunda in the said State ("the Grantee")

RECITALS:

A. The Grantor is registered as the proprietor in fee simple in the land described in Item 1 of the Schedule hereto ("the Servient Tenement").

B. The Servient Tenement is situated within the district of the Grantee and an associated company of the Grantor applied to the Western Australian Planning Commission ("WAPC") for approval to subdivide land adjacent to the Servient Tenement.

NO.212 D02 MCLEOD & CO → 9293271S 17:11 08/06/99

C. WAPC by approvals dated 22 December 1998 under WAPC references 108626 and 107362 approved the subdivision subject to conditions including in the case of approval 108626 the following:

"1. The granting of a public access easement in gross pursuant to Sections 195 and 196 of the Land Administration Act 1997 in favour of the Shire of Kalamunda at the subdivider's cost for vehicles, pedestrians and cyclists for the "battleaxe leg" portions of Lot 109 and proposed Lots 600 and 601 as shown on the attached plan date stamped 22 December 1998 to the satisfaction of the Commission."

("Condition 1")

and in the case of approval 107362 the following:

"8 The granting of a public access easement in gross pursuant to sections 195 and 196 of the Land Administration Act 1997 in favour of the Shire of Kalamunda at the subdivider's cost for vehicles, pedestrians and cyclists for the "battleaxe leg" portions of Lots 109 and proposed Lot 600 as shown on the attached plan dated stamped 22 December 1998 to the satisfaction of the Commission."

"(Condition 8")

D. As Condition 1 encompasses Condition 8 the Grantor enters into this Deed to comply with Condition 1 and in doing so will also comply with Condition 8.

OPERATIVE PART:

1. GRANT OF EASEMENT

The Grantor being registered as the proprietor of an estate in fee simple in the land described in Item 1 of the Schedule hereto ("the Servient Tenement") subject to the encumbrances notified hereunder in Item 2 of the Schedule HEREBY TRANSFERS AND GRANTS to the Grantee a public access easement for the use and benefit of the public at large under and by virtue of the provisions of sections 195 and 196 of the Land Administration Act 1997 with full and free right, liberty, power and authority from time to time and at all times hereafter to go, pass and repass for all purposes and either with or without vehicles over, along and across that portion of the Servient Tenement as is hachured on the sketch in the Annexure hereto ("the Easement").

2. GRANTOR'S COVENANTS

The Grantor HEREBY COVENANTS AND AGREES with the Grantee that:

(a) Grantor's Power

Notwithstanding anything made, done, omitted or knowingly suffered, the Grantor has full power to make the grant set out herein and assures the Grantee such grant shall remain to and be quietly held and enjoyed by the Grantee and the benefit thereof shall be received and taken accordingly without interruption or disturbance by the Grantor or any person claiming by, through, under or in trust for or in any way against the Grantor.

(b) Indemnity to Other Interest Holders

In the event that the grant set out herein or the lawful use of the Easement impinges on the rights of prior equitable interest holders in the Servient

Tenement, the Grantor HEREBY INDEMNIFIES the Grantee against any claim that may arise out of such circumstances.

(c) Grantor to Perfect Grant Where Required

The Grantor and every other person having or rightfully claiming any estate or interest in the Servient Tenement will from time to time and at all times hereafter at the request of the Grantee do all such lawful assurances and things for more perfectly assuring the grant set out herein as the Grantee reasonably requires.

(d) No Obstruction of Easement

The Grantor will not construct erect or build or suffer to be constructed erected or built any building structure or obstruction on the Easement or any part thereof that will cause substantial interference to the public at large using the Easement or use or permit the Servient Tenement to be used in such a way as to substantially obstruct or interfere with the use of the Easement without the consent in writing of the Grantee first being obtained and nor will the Grantor from the date of execution of this document construct or cause to be constructed any fence or obstruction on the boundary of the Servient Tenement where the Easement adjoins any neighbouring lot unless agreed to in writing by the Grantee.

(e) Construction and Maintenance of Easement

If requested by the Grantee, the Grantor shall construct and/or pave the right of way comprising the Easement to a standard stipulated in any development approval or planning consent, where the Easement has not already been paved. Further, the Grantor or its successors in title as may be appropriate shall bear the responsibility and cost for repair and maintenance of the Easement and the Grantor further assures the Grantee that the Grantee shall not be liable for any costs associated with such repair or maintenance.

3. **GRANTEE'S COVENANTS AND ACKNOWLEDGMENTS**

The Grantee acknowledges that:

(a) the rights created in the Easement herein are not granted exclusively and are granted by the Grantor in common with the corresponding rights of the Grantor and other persons lawfully entitled to exercise such rights and that where the consent of the Grantee is required pursuant to the terms of this grant, such consent shall not unreasonably be withheld; and

(b) in the event of the Grantor needing to substantially obstruct a portion of the Easement temporarily for a purpose associated with the use of the Servient Tenement, the Grantee will not unreasonably withhold its consent PROVIDED THAT access through or to the Easement is not in the opinion of the Grantee unreasonably impeded.

4. **COSTS**

The Grantor shall pay the costs, including the Grantee's solicitors' costs, of and incidental to the preparation (including drafts), execution, stamping and registration of this Deed and all stamp duties and registration fees payable hereon.

5. **INTERPRETATION**

Reference to the parties includes their personal representatives, successors and lawful assigns.

Where a reference to a party includes more than one person the rights and obligation of those persons shall be joint and several.

Headings have been inserted for guidance only and shall be deemed not to form part of the context.

The Schedule forms part of this Deed.

SCHEDULE

Item 1: THE SERVIENT TENEMENT

Part of Lot 109 on Plan 17919 and being the whole of the land comprised in Certificate of Title Volume 1940 Folio 499.

Item 2: ENCUMBRANCES

Easement shown on Plan 17919;
Easement contained in Transfer E630271;
Easement contained in Transfer E630272;
Easement contained in Transfer G444128;
Caveat G555170;
Caveat G667979;
Caveat G715291;
Mortgage G983203;

EXECUTED by the parties as a Deed.

THE COMMON SEAL of FORESTVIEW)
NOMINEES PTY LTD (ACN 063 440 102))
was hereunto affixed by authority of its)
directors in the presence of:)

FORESTVIEW NOMINEES PTY LTD A.C.N. 063 440 102 COMMON SEAL

DIRECTOR

SECRETARY

EXECUTED BY FIRST UNITED)
DEVELOPMENTS PTE LTD)
(ARBN 079 372 704) BY ITS ATTORNEY)

SIGNED sealed and delivered by)
ALAN HENRY CHURLEY the duly)
constituted attorney of FIRST UNITED)
DEVELOPMENTS PTE LTD who is)
personally known to me:)

Witness:.....

Name of Witness: MELVIN YED

Address: c/- 9th Flr 150 St Georges Tce
(print) Perth WA 6000

FIRST UNITED DEVELOPMENTS PTE LTD
By its Attorney
ALAN HENRY CHURLEY
pursuant to Power of Attorney No. C 508 546 PA
registered at the Office of Land Titles Perth and
I declare that I have no notice of revocation of
such Power of Attorney

.....
Attorney

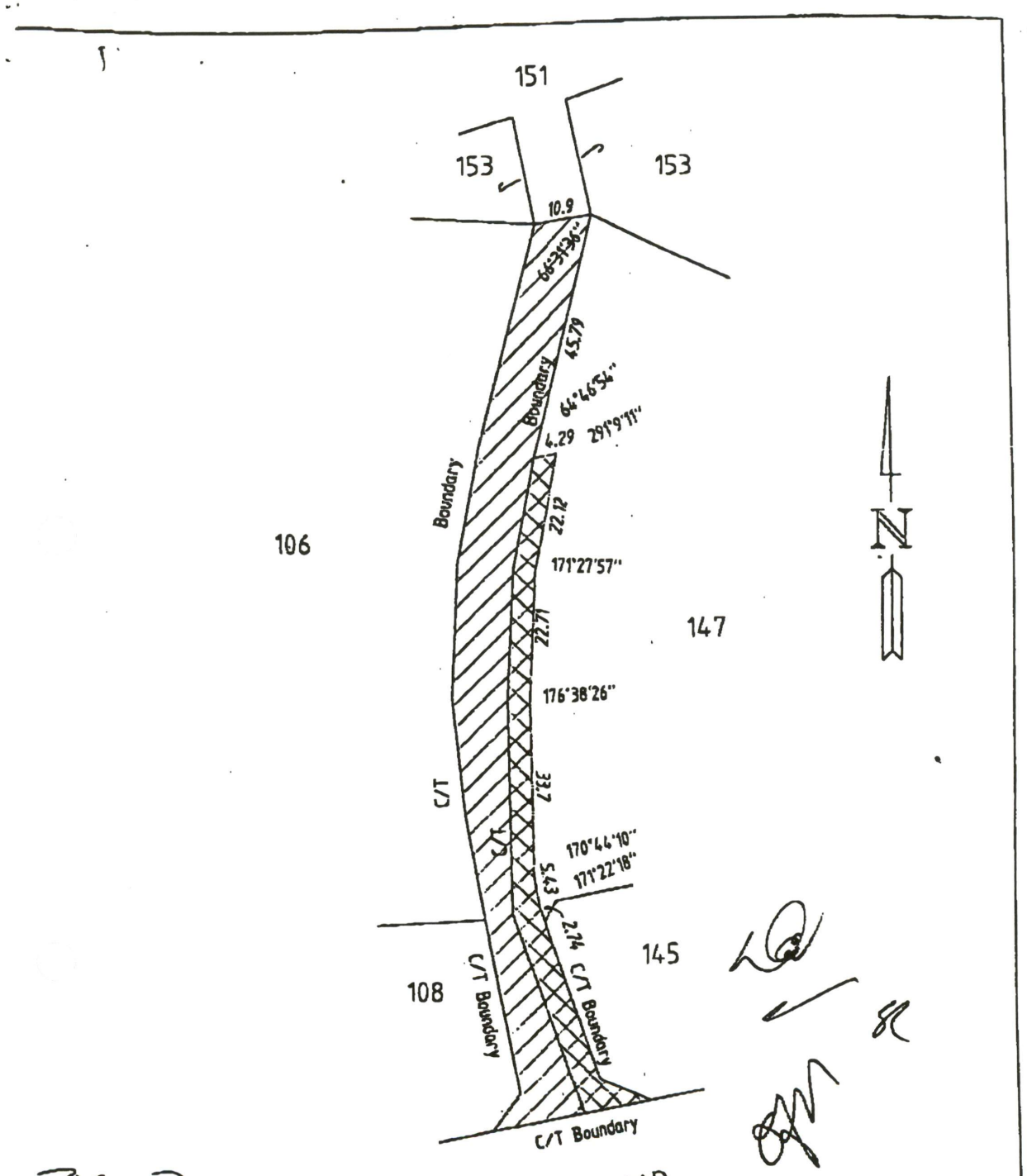
THE COMMON SEAL of the SHIRE OF)
KALAMUNDA was hereunto affixed by)
authority of a resolution of the Council in)
the presence of:)

SHIRE OF KALAMUNDA COMMON SEAL

PRESIDENT

CHIEF EXECUTIVE OFFICER

08/06/99 17:11 MCLEOD & CO → 92932715 NO.212 008



T N Finlayson
Licensed Surveyor

FINLAYSONS
LAND DEVELOPMENT CONSULTANTS

PO BOX 20
JOONDALUP WA 6027
Phone (08) 9300 1956
Fax (08) 9300 0656

PROJECT	Lot 147 & 151 Hale Rd, Forrestfield				
DRAWING TITLE	Public Access Easement Plan				
PRINCIPAL	Westpoint Corporation				
Scale	1:1000	Date	1/2/99	Our Ref No	W3-60-66
Drawn	DND	Approved	TNF	Checked	TNF

MORTGAGEE'S CONSENT

SANDHURST TRUSTEES LIMITED (ACN 004 030 737) being the mortgagee under Mortgage G983203 HEREBY CONSENTS to the Grant of Easement between the Mortgagor of the said Mortgage as Grantor and SHIRE OF KALAMUNDA as the Grantee which easement is shown in the sketch annexed hereto.

DATED the day of 1999.

The Common Seal of Sandhurst Trustees Limited A.C.N. 004 030 737 was hereunto affixed by authority of the Directors

.....
Manager, Corporate Trusts COLIN EDWARD HARRIS

.....
Trust Officer, Corporate Trusts NOELINE FRANCES WILSON

SANDHURST TRUSTEES LIMITED A.C.N. 004 030 737 COMMON SEAL

(10340EA2/1E/D)

08/06/99 17:11 MCLEOD & CO → 92932715 NO.212 D10

INSTRUCTIONS

1. This form may be used only when a "Box Type" form is not provided or is unsuitable. It may be completed in narrative style.
2. If insufficient space hereon Additional Sheet Form B1 should be used.
3. Additional Sheets shall be numbered consecutively and bound to this document by staples along the left margin prior to execution by the parties.
4. No alteration should be made by erasure. The words rejected should be scored through and those substituted typed or written above them, the alteration being initialled by the persons signing this document and their witnesses.

NOTES

1. Insert document type.
2. A separate attestation is required for every person signing this document. Each signature should be separately witnessed by an Adult Person. The address and occupation of the witness must be stated.

LODGED BY McLEOD & CO
Solicitors
ADDRESS 220-222 Stirling Highway
CLAREMONT WA 6010

PHONE No. 9383 3133

FAX No. 9385 2693

REFERENCE No. McL/N5 (10340EA2/je/d)

ISSUING BOX No. 346

PREPARED BY McLEOD & CO
SOLICITORS
ADDRESS 220-222 STIRLING HIGHWAY
CLAREMONT WA 6010
9383 3133 9385 2693
PHONE No. FAX No.

INSTRUCT IF ANY DOCUMENTS ARE TO ISSUE TO OTHER THAN LODGING PARTY

TITLES, LEASES, DECLARATIONS ETC LODGED HEREWITH

1. _____ Received Items
2. _____ Nos.
3. _____
4. _____
5. _____ Receiving Clerk
6. _____

Registered pursuant to the provisions of the TRANSFER OF LAND ACT 1893 as amended on the day and time shown above and particulars entered in the Register.

EXAMINED

08/06/99 17:11 MCLEOD & CO → 92932715 NO.212 D11

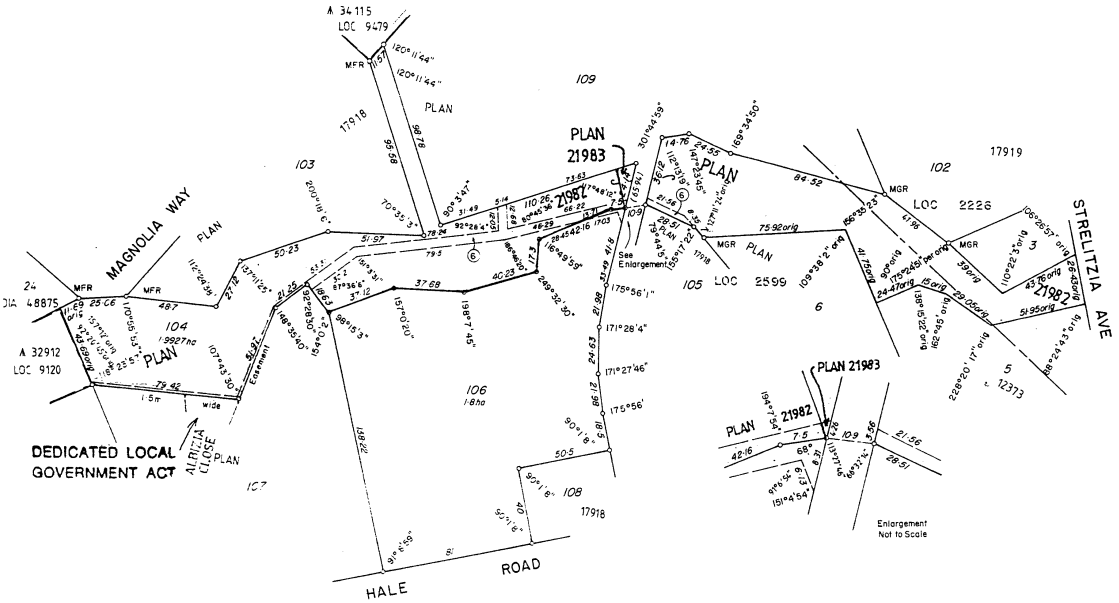
PLAN 17920

SUBDIVISION OF PT LOT 1 OF SWAN LOCS 2226 & 2599 & PT LOTS 7 & 223 OF SWAN LOC 2599

TOTAL AREA=3.7927ha
F.B. 60370
DIA's 15753, 47338
PLAN 12373
INDEX PLAN PERTH BG 34 (2) 22·21
C.Ts. 1206/566
1403/979
1574/120
NOW 1906-469

LIMITED IN DEPTH TO 60·96 METRES AS TO LOC 2226 ONLY

P 017920 F 01



I, ALEXANDER GEORGE JAMES JAH of 1 Sutherland Street, Victoria Park, a Licensed Surveyor, do hereby declare that the survey and plan of survey of which this is a copy was made by me or under my personal supervision and is correct, and described in Plan Survey Record for the purposes of the Plan of Survey.

All measurements shown in accordance with the Licensed Surveyors Guidelines of Surveying Regulations 9(d) and 17 of the Survey Regulations 33 and Survey of those Regulations, and

All the Survey and the Plan of Survey are in accordance with the requirements of the Licensed Surveyors Guidelines of Surveying Regulations 9(d) and 17 of the Survey Regulations 33 and Survey of those Regulations.

26/6/90 Licensed Surveyor

SCALE
ALL DISTANCES ARE IN METRES

Easement in favour of the Water Authority of WA under Reg 6 of Sec. 27a of the TP&D Act.

LETH DUFFY CERTIFICATE OF SURVEYOR I, ALEXANDER GEORGE JAMES JAH hereby certify that (a) This survey was performed by me personally (or under my personal supervision, inspection and field check), in strict accordance with the Licensed Surveyors (Guidance of Surveyors) Regulations, 1961; or (b) This plan is correct, was prepared under my supervision and is the result of calculations from measurements made by me (or under my own personal supervision, inspection and field check), in strict accordance with the Licensed Surveyors (Guidance of Surveyors) Regulations, 1961. Date 27th June 90 Licensed Surveyor	Approved by State Planning Commission 77400 Chairman Date 12-12-90	Examined 29/3/90 Docket Plan 17663 Certified Correct For Inspector of Plans & Survey. IN ORDER FOR DEALINGS SUBJECT TO 27th March Ast. For Inspector of Plans & Surveys	APPROVED APPROVED Inspector of Plans & Surveys 14.6.91 Date	Registered 0373 $156 4.12.91	OFFICE OF TITLES PLAN No. 17920

Appendix 2

LAND USE ASSESSMENT

URBIS

88 HALE ROAD, FORRESTFIELD, LAND USE ASSESSMENT

Final Report

Prepared for City of Kalamunda
July 2021

CONTENTS

EXECUTIVE SUMMARY

The City of Kalamunda (City) owns a parcel of freehold land in Forrestfield (88 Hale Road) which is adjacent to Hawaiian's Forrestfield Shopping Centre and within the Forrestfield District Centre.

This study explored strategic land use opportunities for this site which is currently used as the Woodlupine Family and Community Centre and the remainder is vacant land. This study considered various commercial land use opportunities that provide a strong return on investment, enhance community benefit and represent the highest and best use of the land.

Phase one explored the site and surrounding area attributes and identified the following key considerations.

- **Trade Area**: The district centre has a relatively captive local catchment with limited competition and a trade area that broadly covers Forrestfield, Lesmurdie, Wattle Grove and the future growth area of High Wycombe to the north.
- **Access and Exposure**: The subject site is currently accessible via Woolworths Drive and there is potential for new left-in, left-out access from Hale Road. It benefits from patronage to the Forrestfield Shopping Centre and traffic along Hale Road.
- **Policy Controls**: The site is zoned Residential, Public Purposes and Mixed Use though its location in activity centre would support a wide range of uses (with appropriate rezoning).
- **Population Growth**: Moderate population growth levels supported by growth in the Forrestfield North Precinct and Maida Vale to the north and Wattle Grove (South) to the south.
- **Floorspace Benchmarking**: There is an estimated notional undersupply of health, shop retail, showroom retail and aged care / retirement and specific gaps for allied and specialised health services and homewares / furniture uses.

This analysis identified four core anchor land use opportunities for further analysis: supermarket, showroom retail, health hub and aged care. These four land uses were selected based a qualitative assessment of a long list of land use types, to which consideration was given to potential impact and planning / policy alignment, market demand, current demographics, retail spending, floorspace benchmarks based on the DPLH Land Use and Employment Survey, existing and planned competition and compatibility with surrounding uses and subject site attribute alignment. Uses such as residential were not assessed given there was considered to be a lack of demand for and viability of housing typologies that would be appropriate for this activity centre site.

A development mix consisting of an integrated health / community hub and separate showroom development fronting Hale Road was identified as the most optimal development outcome from the perspectives of market demand, tenant attraction, competition, financial return and site suitability. This development mix is also expected to deliver a range of community benefits, including:

- Increased consumer choice and convenience
- Increased employment opportunities
- Increased quality of life; and
- Improved centre vibrancy.

Alternatively, consideration was given to a secondary option that would result in moderately higher levels of tree retention on site (particularly along Hale Road). This development scenario of an integrated health / community hub with a child care, gym or shopfront office tenancy would however lead to lower financial return.

Supermarket and aged care development scenarios were not considered favourable due to the relatively lower market viability expectations and potential impacts on stakeholders.

EXECUTIVE SUMMARY (CONT.)

Summary of Development Mix Considerations and Preferred Development Mix

ATTRIBUTE	OPTION A (RECOMMENDED)	OPTION B	OPTION C	OPTION D
Indicative Land Use Mix (GLA)	Community (2,950 sq.m) Health (1,000 sq.m) Showroom (2,450 sq.m) Shop Retail (500 sq.m)	Community (2,950 sq.m) Health (1,000 sq.m) Child Care / Gym / Office (1,200 sq.m) Shop Retail (500 sq.m)	Community (2,950 sq.m) Health (1,000 sq.m) Supermarket (1,500 sq.m) Shop Retail (500 sq.m) Child Care (1,000 sq.m)	Community (2,950 sq.m) Aged Care / ILUs (1ha site area) Health / Shop Retail (500 sq.m)
Market Risks / Cons	Tree retention and associated community support	Relatively lower financial return potential compared to Option A Limited ability to stage development	Tenancy risk (supermarket operators) Approval risk (impact on centres / businesses) Limited ability to integrate supermarket and community / health hub	Limited vertical aged care viability Conflict with adjacent low scale residential uses
Rating	**1St**	**2nd**	**3rd**	**4th**

Source: Urbis

Example built form outcomes (Cockburn Integrated Health, Halls Head Bulky Goods and Peel Health Campus)

EXECUTIVE SUMMARY (CONT.)

In order to support decision making and future planning for this site, a preferred concept layout was developed in collaboration with the City of Kalamunda. This concept endeavoured to retain as many trees as practical whilst supporting the viability and functionality of the proposed uses. A range of visualisations were prepared to demonstrate the impacts on tree retention (particularly along Hale Road).

It is important to recognise that this concept design was undertaken to inform a potential configuration, access, parking and streetscape treatments. It is only intended as a guiding concept, with subsequent detailed designs and planning for the site to be undertaken.

Additionally, an impact test was undertaken and demonstrated that the proposed development on existing and future planned centres is expected be relatively minimal and no impacts are expected to be detrimental to the sustainability of any individual centre.

In order to support future decision making, an assessment of development models was undertaken and concluded the following.

- **Community / Health Hub**: The most optimal development model for this facility is a City-develop and own approach. This approach requires the City to source all funding however the funding could be partly externally sourced given the community and economic benefits of the facility and internal funding could be assisted by the likely strong ongoing financial returns from the health / retail tenancies. This approach maximises control of the development outcome and integration of the community / health hub with the public realm.
- **Showroom Development**: A ground lease approach is considered the most favourable for this development site as it minimises City-funding requirements and risk, allows control of built form and provides an ongoing revenue stream for the City.

In addition to above, the following recommendations were identified in order to progress this development opportunity.

1. Undertake targeted market sounding;
2. Assess the financial return and risk outcomes of preferred development models;
3. De-risk site through local planning scheme amendment / precinct plan preparation and land subdivision processes; and
4. Seek development partner for showroom development through request for proposals process.

LEGEND:

- SUBJECT SITE
- INDICATIVE LOT BOUNDARY
- RETAINED MATURE TREES
- PROPOSED TREES

YIELD SUMMARY

PARKING:	239 BAYS
1 BULKY GOODS - 1 STOREY	
AREA:	2450m²
2 MIXED USES - 2 STOREY	
COMMUNITY CENTRE:	2950m²
HEALTH:	1000m²
RETAIL:	500m²

URBIS

FORRESTFIELD PRECINCT PLAN
CONCEPT PLAN LOTS

Disclaimer: The layout provided within this plan is indicative only for the purposes of assessing the site potential. This layout is subject to change during future investigations and detail design process.

1:1250 @ A4

0 10 20 30 40 50

DATE: 29.06.2021
JOB NO: P0032967
DWG NO: 04
REV: A

INTRODUCTION

STUDY BACKGROUND

The City of Kalamunda (City) owns a parcel of freehold land in Forrestfield. The site is located on 88 Hale Road in Forrestfield and is adjacent to Hawaiian's Forrestfield Shopping Centre and within the Forrestfield District Centre.

The City is exploring strategic land use opportunities for its land which is currently used as the Woodlupine Family and Community Centre and the remainder is vacant land.

This study considered various commercial land use opportunities that provide a strong return on investment, enhance community benefit and represent the highest and best use of the land.

Consideration was also given to policy / strategic considerations and the co-location of a new community hub on the site.

STUDY PURPOSE AND APPROACH

Urbis was engaged to undertake an assessment of the land use potential of the subject site. In particular, this study sought to identify a preferred mix of land uses for the subject site and implementation considerations to guide next steps.

To cover the broad range of issues within the scope and the broad consideration of land uses, a staged approach was undertaken.

- **Phase One**: This task assessed the site attributes, broader market conditions in the surrounding area and the market potential of shortlisted land use opportunities in order to define a preferred development mix.
- **Phase Two**: This task included the development of an initial concept design to determine the preferred layout of the recommended development mix.
- **Phase Three**: This task explored alternative development models and next steps to advance the development of this site.

01

SITE ASSESSMENT

SUBJECT SITE CONTEXT

Key Findings

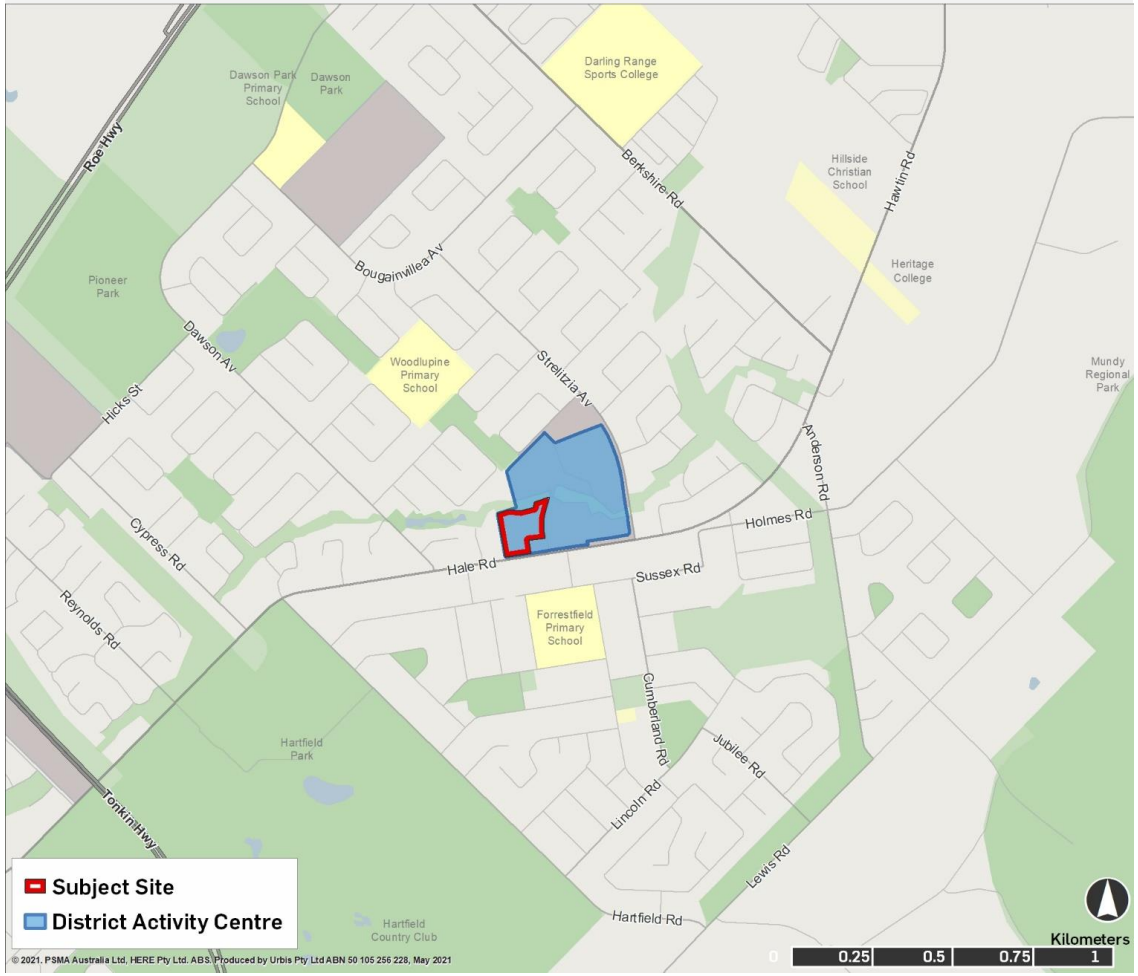
The subject site is located on 88 Hale Road in Forrestfield.

The site is located within the Forrestfield District Centre which is anchored by Hawaiian's Forrestfield Shopping Centre.

The Forrestfield District Centre is bounded by Salix Way to the north, Strelitzia Avenue to the east, Hale Road to the south and residential development to the west.

The subject site fronts Hale Road and Woolworths Drive and it currently occupies a community centre.

Subject Site Context



REGIONAL CONTEXT

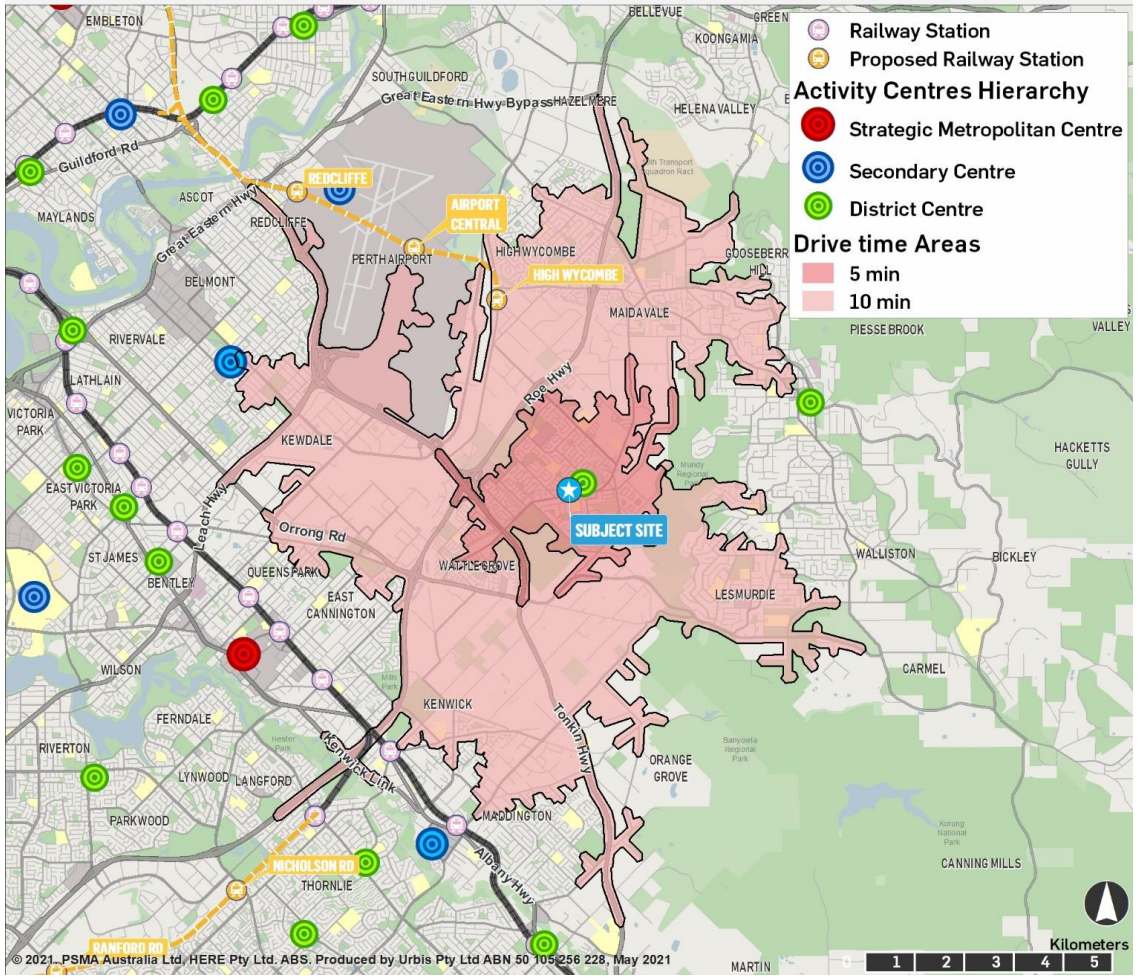
Key Findings

The district centre benefits from a relatively captive local market given the limited competition of higher order centres. Nonetheless, Kalamunda town centre will influence draw from Lesmurdie, Maida Vale, Belmont and Cannington higher order centres will influence development potential for Forrestfield District Centre.

There are a range of existing and planned local / neighbourhood centres which complement the district centre.

As part of the City of Kalamunda Activity Centre Strategy, a district level activity centre has been planned for in the Forrestfield North Precinct which is likely to impact this site's potential in the long term. The High Wycombe South District Centre is also likely to be developed as a Neighbourhood Centre. Additionally, there is a smaller neighbourhood centre allowed for in the Maida Vale South area which will most likely be comprised of single full-line supermarket and associated retail stores.

Regional Context



SITE ASSESSMENT

Key Findings

There is a strong opportunity for the subject site to help to accommodate the current and growing need for non-residential land uses. In particular, the site was demonstrated to have the following advantages.

- **High Exposure / Accessibility**: This site partly fronts Hale Road which currently experiences more than 15,700 daily vehicle movements per day. Whilst there are trees that impact direct visibility of the site from Hale Road, the dual frontages support accessibility.
- **Co-location**: The site is co-located within a well-performing district centre. The new and expanded community hub will support patronage of other complementary uses.
- **Lot Size**: The size of the lot can support most non-residential uses though consideration needs to be given to integration / conflict with community hub.

Commercial Success Factors

	SUCCESS FACTOR	DESCRIPTION
	Exposure and Access	▪ Visibility and exposure to major roads and / or main road frontage ▪ Access to main roads for vehicle transport ▪ Ease of getting in and out
	Land Use Demand and Supply	▪ Limited competition ▪ Strong unmet demand for proposed land uses
	Lot Size and Configuration	▪ Ability to accommodate appropriately sized lots and flexibility of design configuration
	Co-location	▪ Co-location to other uses that drive visitation and patronage
	Surrounding Resident and Worker Population	▪ Dense surrounding population will aid in getting exposure and be accessible to more potential customers

Source: Urbis

SITE ASSESSMENT (CONT.)

Site Assessment Findings

SUCCESS FACTOR	ALIGNMENT OF SUBJECT SITE	RATING
Exposure and Access	▪ The site fronts Woolworths Drive and Hale Road which experiences an average of approximately 15,700 vehicles per day. ▪ The is a need to balance the retention of trees located on Hale Road with the need for exposure and access from Hale Road to support a range of uses. ▪ The site is currently accessible via Woolworths Drive and it can be accessed via the private land holding adjacent to this site. ▪ There is the potential for left-in, left-out movement from Hale Road, with full-movement not considered appropriate without further traffic and transport safety analysis. ▪ A portion of the site (the north-western edge) has no direct exposure (i.e. no road frontages).	**Moderate**
Land Use Demand and Supply	▪ The main competition for shop retail uses is the Forrestfield Shopping Centre. There are also numerous tenancies along Woolworths Drive and Hale Road. ▪ There is significant future population growth planned to the north and south of Forrestfield and low to moderate growth within Forrestfield.	**Moderate**
Lot Size and Configuration	• The site is 1.8 ha which can support a range of uses such as a supermarket, medical / health uses, small offices and aged care development. There is a need however to also accommodate a new community hub.	**Strong**
Co-Location	▪ The site is located within the Forrestfield District Centre and benefits from the draw of the Forrestfield Shopping Centre. ▪ The new community hub will drive a broad catchment given this facility is expected to contain a range of community services which service the wider area.	**Strong**
Surrounding Resident and Worker Population	▪ The subject site sits within a moderate growth area in the near term and will benefit from high long term growth in the north and south (though this will be supported by new activity centre developments). ▪ Worker population is limited given lack of office-based tenancies in the district centre.	**Moderate**

Source: Urbis

POLICY AND STRATEGIC CONSIDERATIONS

Key Findings

There are several documents that inform commercial land use opportunities for the subject sites.

Of key relevance, the Activity Centres Strategy (ACS) and local planning scheme contemplates broad uses within the subject site.

The proposed land uses will need to consider potential impacts on the broader activity centre hierarchy. Whilst competitive impacts within the district centre are not a formal consideration, it is likely to be prudent to consider the potential impacts on local businesses and Hawaiian's Forrestfield Shopping Centre.

Additionally, consideration should be given to the Cambridge Reserve project and how this site can complement the plans for this proposed redevelopment (for instance, in terms of land use types).

Policy / Strategy Review Findings

DOCUMENT	KEY TAKEAWAYS
Local Planning Scheme No. 3	▪ The site is zoned Residential, Public Purposes and Mixed Use within the Local Planning Scheme and Urban within Metropolitan Region Scheme. The site sits within the Forrestfield District Centre.
Activity Centres Strategy (ACS), *March 2021*	▪ Forrestfield District Centre would be expected to cater for 12,956 sq.m – 17,000 sq.m of floorspace by 2036. Expansion beyond 20,000 sq.m may be feasible for the DAC in the long term if there is retail demand.
Forrestfield District Centre Structure Plan	▪ The Forrestfield District Centre Structure Plan (FDCSP) was prepared by the City in 2012. The existing District Centre is currently in the process of having Activity Centre Plans (ACP) prepared and will be progressed at a future date. The retail demand analysis undertaken as apart of the preparation of the ACP will help to guide the overarching framework. The boundary of the area will extend beyond commercial land uses and include surrounding residential, local reserves and civic uses.
Library Review	▪ The Library Review recommends closing the Woodlupine Family and Community Centre and the Forrestfield Library and collocating into the Forrestfield Shopping Precinct with a new library building and community hub. ▪ The City will temporarily relocate the Forrestfield Library within the shopping centre complex and in the longer term, it will be in the new community hub.
Cambridge Reserve	▪ The redevelopment of 3.85 ha of 9ha degraded local reserve to provide a high needs aged care facility and housing opportunities which would be located 500 metres south-east of the Forrestfield District Centre. ▪ The amendment to LPS 3 to rezone the 3.85ha portion to Urban Development is underway to facilitate the project.
Forrestfield North Structure Plan	▪ Based on development projects, a Neighbourhood Centre is likely to be developed in the Forrestfield North Residential Precinct, as part of the City of Kalamunda Activity Centre Strategy. The strategy projected approximately 20,800 sq.m of retail floorspace with 8,300 sq.m of supermarket floorspace would be required by 2041.
Other State Government Policies	▪ The current and draft activity centres policy and the precinct design policy will influence the land use planning framework for this subject site. In particular, consideration will be given to the impact of the site's development on the sustainability of the activity centre hierarchy.

02

STUDY AREA ANALYSIS

STUDY AREA ANALYSIS

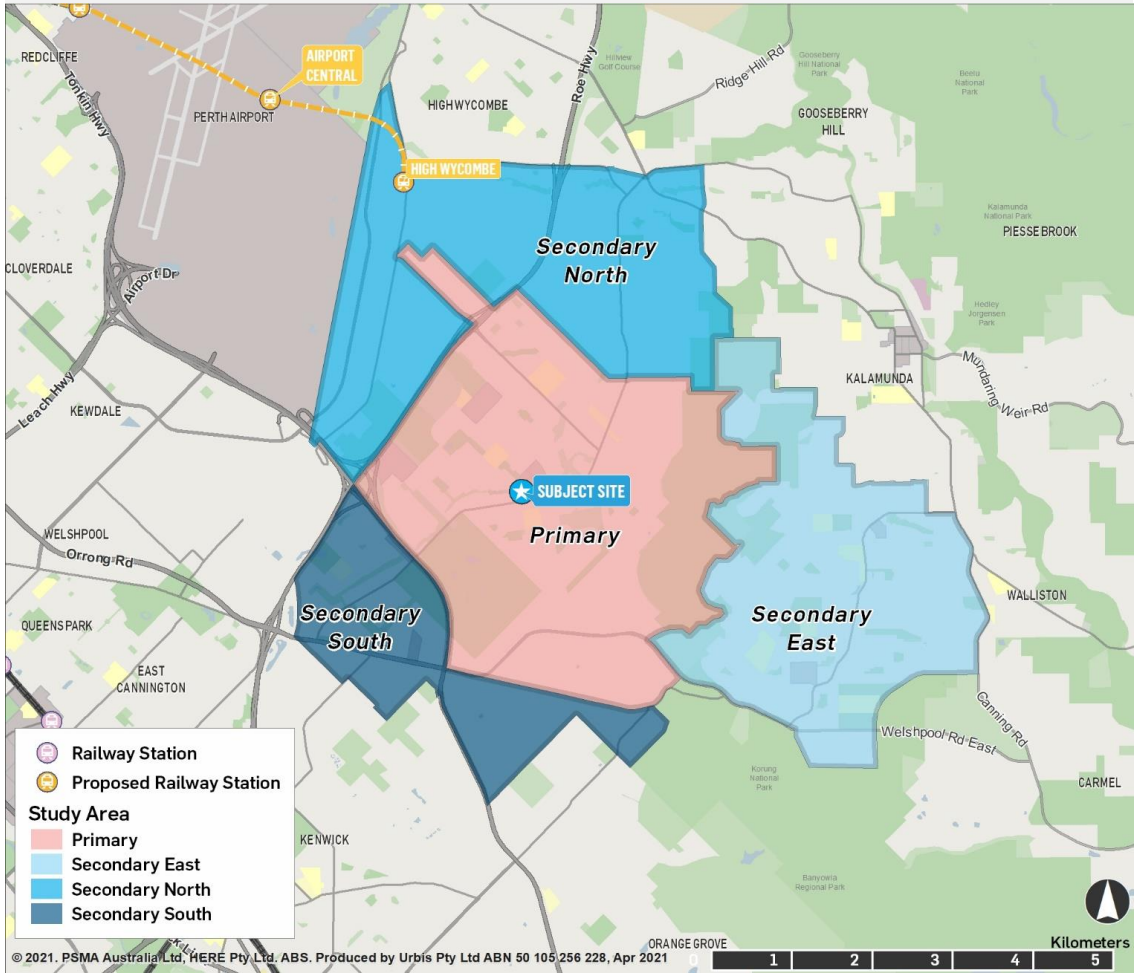
Key Findings

A study area was defined to assist with determining the highest and best use of the sites in relation to the wider area.

The **Primary** study area is defined by the suburb of Forrestfield and a portion on Wattle Grove. It includes the established Forrestfield area as well as 'The Hales' development and a part of the Forrestfield / high Wycombe Industrial Area.

The **Secondary** study area has been divided into three areas being the secondary north area which includes a part of Maida Vale and High Wycombe. It also includes the rest of the Forrestfield North DSP area not captured in the primary study area. The secondary south area includes the suburb of Wattle Grove (west of Tonkin Highway) and south of Crystal Brook Road. The secondary east trade area includes the suburb of Lesmurdie.

Defined Study Area



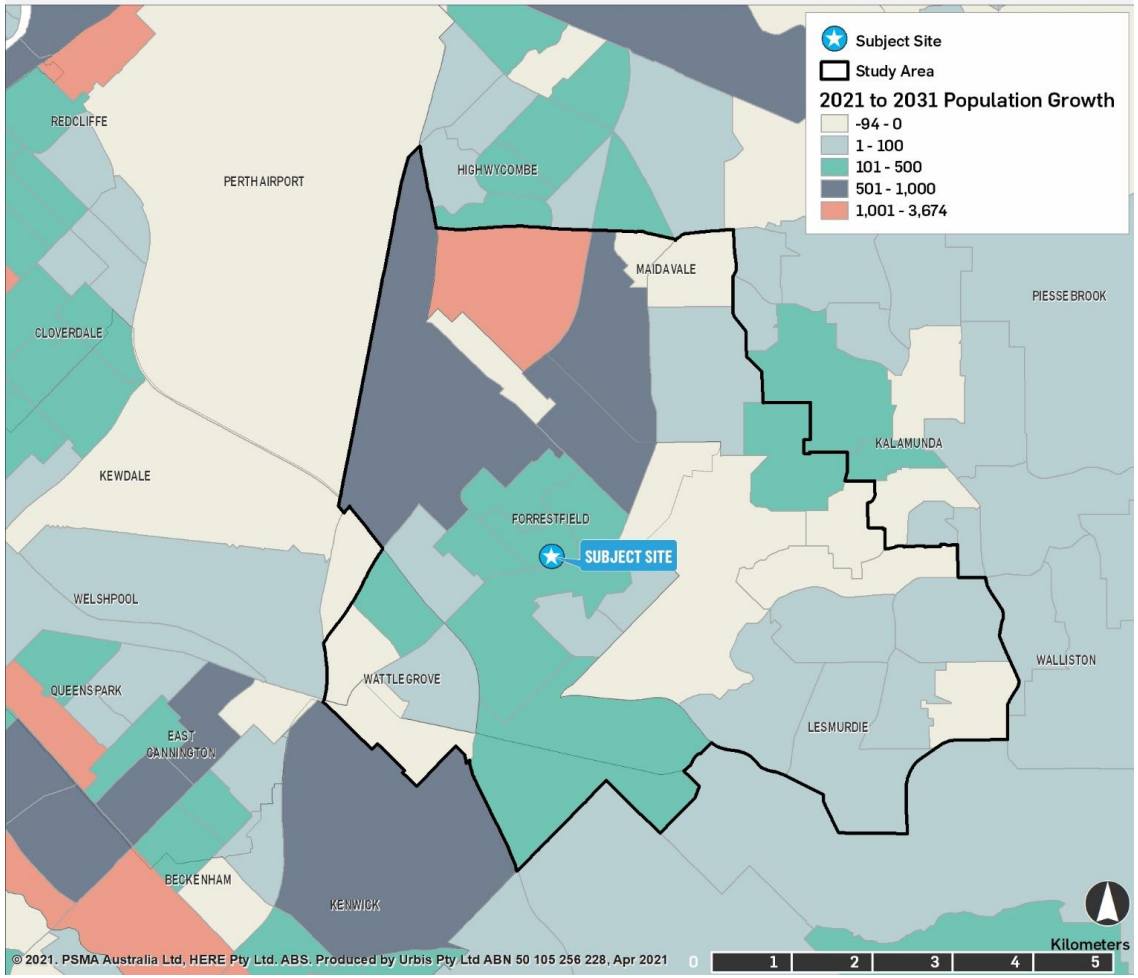
POPULATION GROWTH

Key Findings

To inform population forecasts, an assessment of .id small area forecasts (SAFi) was undertaken. This review found that there are a number of growth areas of relevance.

- The Forrestfield North District Structure Plan area will support growth in the secondary north catchment over the long term.
- Low to moderate growth expected in Forrestfield through subdivision and redevelopment activity.
- The Urban expansion and investigation areas to the south are expected to be medium term prospects (i.e. from 2024/25 onwards).

Population Growth by SA1s, Study Area



POPULATION OUTLOOK

Key Findings

Published forecasts were reviewed and adjusted to reflect the latest development, migration and economic considerations.

The population of the primary trade area is anticipated to grow from 13,700 residents in 2020 to 16,040 residents by 2035. The secondary north trade area is expected to experience high growth in the medium to longer term. The secondary south population growth is expected to be supported by subdivision activity within the Urban Expansion and Investigation areas from approximately 2024/25.

Overall, the trade area's population is expected to grow by 6,190 residents between 2020 and 2035.

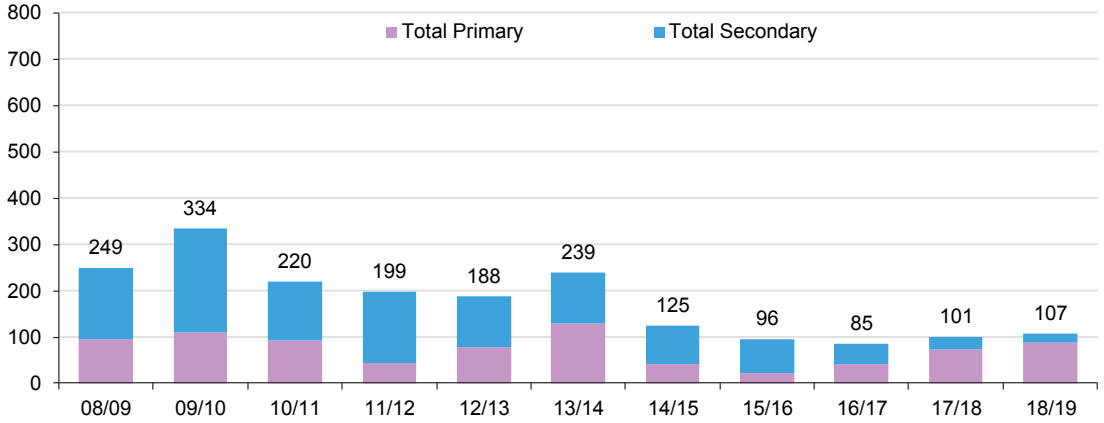
Population Forecast, Study Area, 2015-2035

	POPULATION (NO.)[1]				
	2015	2020	2025	2030	2035
Total Primary	13,890	13,700	14,780	15,470	16,040
Total Secondary	18,820	19,280	20,060	21,300	23,130
Secondary South	5,470	5,970	6,380	6,530	6,730
Secondary East	9,430	9,400	9,390	9,450	9,490
Secondary North	3,910	3,910	4,290	5,320	6,910
Total Trade Area	32,710	32,980	34,840	36,770	39,170

1. As at June

Source: ABS; Urbis

Dwelling Approvals, Study Area, 2008-2019



Source: ABS; Urbis

RESIDENT DEMOGRAPHIC PROFILE

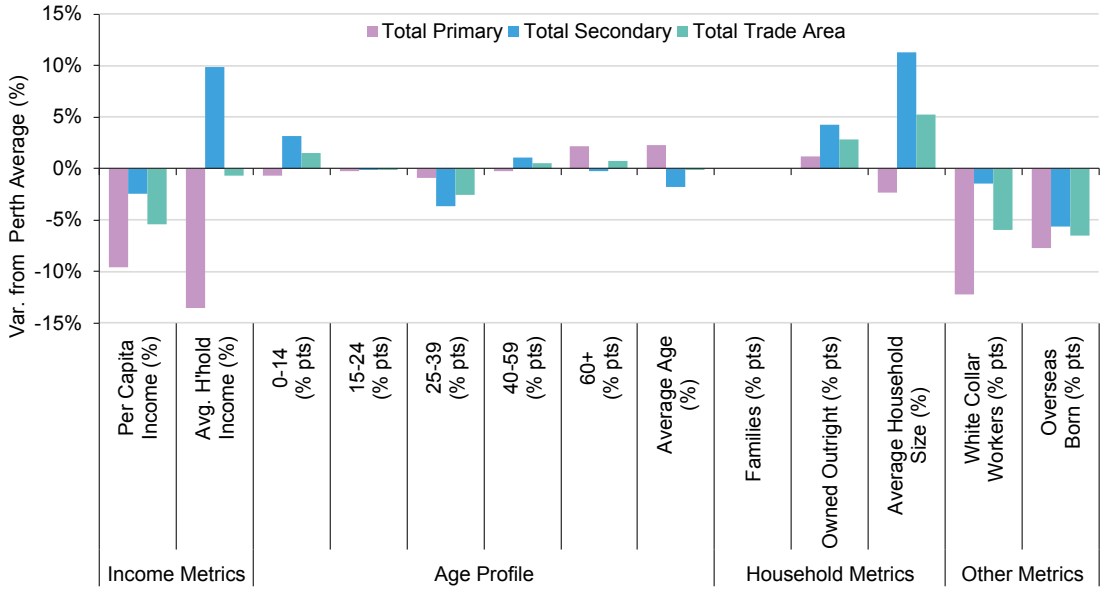
Key Findings

The level of future expenditure and retail demand in the trade area will be influenced by the socio-economic profile of current and future residents.

Based on data from the 2016 Census compared to Perth metropolitan averages, the following attributes were noted as relevant.

- **Average Incomes**: Residents have significantly lower per capita and household incomes compared with the Perth average which will influence the level of discretionary spending.
- **Age Profile:** Residents within the primary trade area are moderately older on average relative to the rest of Perth which has implications for the need for health and retail services. With this ageing population, there is a need for appropriate services such as health.

Key Socio-Economic Attributes, Study Area, 2016



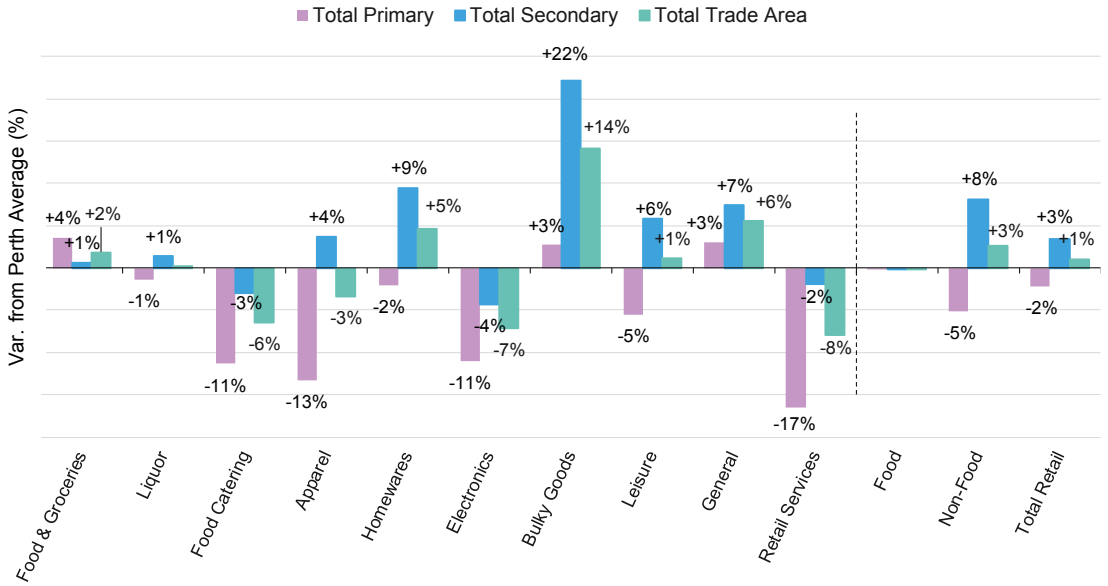
Source: ABS Census (2016); Urbis

RESIDENT RETAIL SPENDING

Key Findings

Trade area residents were estimated to have slightly higher average retail expenditure compared to the metropolitan average (1% above). There was estimated to be a particularly lower level of spending on retail services (e.g. hairdressers, nail salons), apparel and food catering (e.g. restaurants). Food and groceries and bulky goods spending is generally higher in growth areas due to increased spending on furniture and other larger retail items.

Retail Spend per Capita, Study Area, 2016



Source : ABS; MarketInfo; Urbis

Note: The retail spending market was estimated using MarketInfo – a micro-simulation model developed by MDS Market Data Systems Pty Ltd. This model is based on information from the ABS' Household Expenditure Survey (HES), the Census of Population and Housing and other information sources that provide up-to-date information on changes in spending behaviour and/or income levels (e.g. Australian National Accounts, Australian Taxation Statistics, etc.). MarketInfo is used widely by stakeholders in the retail industry and by other consultants preparing Retail Sustainability Assessments/Economic Impact Assessments.
The model uses micro-simulation techniques to combine propensity to spend on particular commodities with the socio-economic characteristics of individuals to derive spending per capita estimates on a small area basis (i.e. the Statistical Area 1 level).

TRADE AREA RETAIL EXPENDITURE

Key Findings

The total trade area was estimated to generate approximately $790 million in retail expenditure (in 2020 dollar terms) by 2035. This is derived from the population forecasts and per capita retail spending assumptions.

Discretionary items such as food catering are expected to experience a moderately faster level of spending growth than non-discretionary items (e.g. food retail).

Forecast Retail Spending, Study Area, 2020-2035[1]

	Food & Groceries	Liquor	Food Catering	Apparel	H'wares	Electronics	Bulky Goods	Leisure	General	Retail Services	**Total Retail**	Annual Growth	= Pop Growth	+ Spend Per Capita Growth
Total Primary:														
2020	84	13	21	16	4	9	22	10	17	6	**202**			
2025	98	15	29	20	5	11	27	13	20	8	**243**	3.8%	1.5%	2.2%
2030	113	17	35	22	6	12	29	15	22	9	**279**	2.7%	0.9%	1.8%
2035	129	20	41	24	6	13	32	16	24	10	**314**	2.4%	0.7%	1.7%
Total Secondary:														
2020	115	18	33	28	7	13	37	16	24	10	**301**			
2025	129	20	43	32	8	15	43	19	28	12	**350**	3.0%	0.8%	2.2%
2030	151	25	52	36	9	17	48	22	31	14	**405**	3.0%	1.2%	1.8%
2035	180	30	64	41	10	20	55	26	35	17	**477**	3.3%	1.7%	1.6%
Total Trade Area:														
2020	199	31	54	44	11	22	59	27	41	16	**503**			
2025	226	35	72	52	13	26	69	32	48	20	**593**	3.3%	1.1%	2.2%
2030	264	42	87	58	14	29	77	37	53	23	**684**	2.9%	1.1%	1.8%
2035	309	50	104	65	16	32	86	42	59	27	**790**	2.9%	1.3%	1.6%

1. Spending figures are inclusive of GST and inclusive of inflation after 2020.

Source : ABS; MarketInfo; Urbis

FLOORSPACE BENCHMARKING

Key Findings

A review of the DPLH Land Use and Employment Survey found that the primary study area is considered broadly undersupplied in population and retail services floorspace categories on a per capita basis. Of key relevance is the relatively low levels of showroom retail (i.e. other retail), aged care / retirement and health categories.

The total study area is considered broadly undersupplied in all commercial floorspace categories except storage and distribution on a per capita basis. Specific gaps were identified for: allied and specialised health services, homewares and furniture.

Floorspace Benchmarking (sq.m per capita), Study Area, 2015/17

USE	PRIMARY	SECONDARY NORTH	SECONDARY EAST	SECONDARY SOUTH	TOTAL STUDY AREA	GREATER PERTH BENCHMARK
Entertainment / Recreation / Culture	0.7	0.2	0.0	0.0	0.3	0.7
Health / Welfare / Community / Services	0.1	0.2	0.1	0.0	0.1	0.8
Manufacturing / Processing / Fabrication	3.7	0.0	0.0	0.0	1.5	2.0
Shop / Retail	1.3	0.1	0.3	0.1	0.6	1.8
Service / Industry	2.4	0.0	0.0	0.0	1.0	1.3
Office / Business	3.0	0.3	0.1	0.0	1.3	3.2
Primary / Rural	0.0	0.0	0.0	0.0	0.0	0.0
Other / Retail	0.3	0.1	0.0	0.0	0.1	0.7
Storage / Distribution	19.1	0.0	0.0	0.0	8.0	3.8
Residential	0.1	0.0	0.0	0.4	0.1	1.0
Utilities / Communications	1.2	0.0	0.0	0.0	0.5	0.7
Total Occupied	31.9	0.9	0.6	0.5	13.7	15.9

Source: DPLH Land Use and Employment Survey; Urbis
NB: Residential Use refers to commercial residential and is defined by PLUC as: "Includes all types of residential land use ranging from single housing to nursing homes for the aged, residential hotel, motels, other holiday housing, institutions and religious housing. Floorspace and employment on private Residential land uses are not included in the output of the Commercial Land Use Survey."

03

SUPERMARKET ASSESSMENT

COMPETITIVE CONTEXT

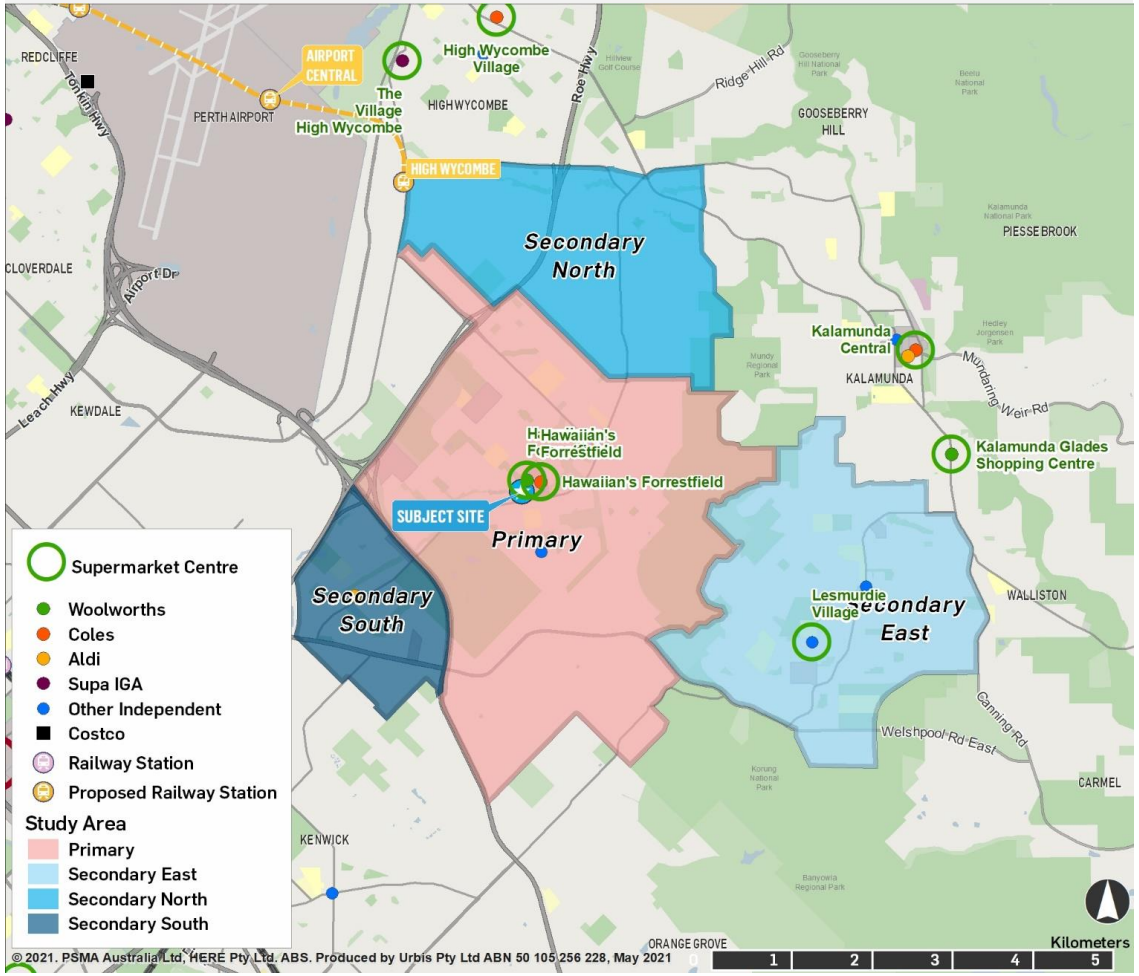
Key Findings

The Coles and Woolworths supermarkets in the Forrestfield Shopping Centre present the main competition for any future supermarket on the subject site.

Furthermore, there is a Farmer Jacks to the south of the subject site which services local needs and an ALDI at Wattle Grove. In Lesmurdie, there is an IGA and IGA Express.

Supermarket provision in the Kalamunda town centre, High Wycombe Village and higher order centres to the west also help meet study area supermarket needs.

Supermarket Supply, Study Area



COMPETITIVE CONTEXT (CONT.)

Key Findings

Based on the City of Kalamunda's Activity Centres Strategy and the timing of residential growth in the wider area, this study developed assumptions as to the timing and scale of future supermarket supply.

The most immediate near term supply is a small limited line supermarket in Maida Vale. The Forrestfield North neighbourhood centre is expected to develop over the 2025 to 2030 period and the Maida Vale South neighbourhood centre is expected to develop over the 2030 to 2035 period.

A future centre in Wattle Grove is assumed to develop post 2035.

Existing and Planned Supermarket Supply Assumptions, Study Area

SUPERMARKET NAME	SUBURB	STATUS	SUPERMARKET FLOORSPACE (GLA)
Primary Study Area			**7,266**
Forrestfield Woolworths	Forrestfield	Operational	3,420
Forrestfield Coles	Forrestfield	Operational	3,046
Forrestfield Farmer Jack's	Forrestfield	Operational	800
Secondary North Study Area			**7,800**
Maida Vale South NAC Supermarket	Maida Vale	Proposed	3,500
Forrestfield North NAC Supermarket	Forrestfield	Proposed	3,500
Maida Vale Local Centre Supermarket	Maida Vale	Proposed	800
Secondary South Study Area			**1,550**
Wattle Grove Aldi	Wattle Grove	Operational	1,550
Secondary East Study Area			**1,276**
Lesmurdie IGA (Sanderson Road)	Lesmurdie	Operational	900
Lesmurdie IGA	Lesmurdie	Operational	376
Total			**17,892**

SUPERMARKET DEMAND

Key Findings

This assessment estimated the need for supermarket floorspace within the study area and demonstrates that the study area is well-supplied in terms of current and future supermarket provision.

There is a small estimated supermarket shortage however future provision is expected to adequately address this and, over time, supermarkets in the study area will reduce expenditure leakage.

As such, a new supermarket entrant would likely need to draw trade from other supermarkets to operate sustainably.

Supermarket Capacity Assessment, Trade Area ($2020)

	UNIT	CURRENT (2020)	2025	2030	2035
Food & Grocery Spending by Residents	***$M***	**199**	**226**	**264**	**309**
Primary	*$M*	84	98	113	129
Secondary North	*$M*	34	39	44	50
Secondary South	*$M*	57	62	69	76
Secondary East	*$M*	24	28	38	55
F&G Captured by all Supermarkets	*%*	84%	84%	85%	85%
Sub-Total	***$M***	**167**	**190**	**223**	**262**
Supermarket F&G Captured by Supermarkets in Catchment	*%*	57%	58%	62%	64%
	$M	**95**	**110**	**138**	**168**
Plus F&G Turnover from Beyond Catchment	*%*	10%	12%	12%	12%
	$M	**11**	**15**	**19**	**23**
Plus Non-F&G Turnover	*%*	8%	8%	8%	8%
	$M	**9**	**11**	**14**	**17**
Total Available Supermarket Turnover	***$M***	**115**	**136**	**170**	**207**
Supportable Turnover Level	***$***	11,000	11,561	12,151	12,771
Supportable Supermarket Floorspace	***sq.m***	10,468	11,722	14,020	16,227
Floorspace for Designated Centres	***sq.m***	10,092	10,892	14,392	17,892
Gap (+ Surplus/ - Shortage)	***sq.m***	**-376**	**-830**	**372**	**1,665**

Source : Urbis

SUPERMARKET POTENTIAL

Key Findings

An assessment was undertaken to determine the potential for supermarket floorspace to operate sustainably in the subject site.

Based on the competitive nature of the area and benchmark turnover rates, supermarket floorspace of equivalent to 1,500 sq.m GLA was assessed. The following conclusions were made.

- ALDI or similar limited line offering could operate at lower end of required spending levels.
- This would require market share erosion of other supermarket offerings – particularly Wattle Grove ALDI and the two supermarkets in the Forrestfield Shopping Centre.
- Turnover impact on the Forrestfield Shopping Centre could equate to circa $10-12m (approx. 8-10%) and would limit expansion opportunities at this centre (and future centres to the north).
- Tenant risk – ALDI have approximately one store per 45,000 to 50,000 residents in Perth.

Overall, pursuing a supermarket is expected to be sub-optimal.

Supermarket Potential Assessment Findings

	UNIT	2020	2025	2030	2035
Supermarket F&G Spending	***$M***	**175**	**198**	**226**	**255**
Primary	*$M*	84	98	113	129
Secondary North	*$M*	34	39	44	50
Secondary South	*$M*	57	62	69	76
Secondary East	*$M*	24	28	38	55
Catchment Market Share	**%**	**0.0%**	**7.1%**	**5.7%**	**5.2%**
Primary	*%*	0%	9%	8%	7%
Secondary North	*%*	0%	8%	3%	3%
Secondary South	*%*	0%	3%	3%	3%
Secondary East	*%*	0%	1%	1%	1%
Sub-Total	***$M***	**0**	**14**	**13**	**13**
Estimated Demand from Beyond Catchment	*%*	0%	8%	8%	8%
Total F&G Spending	*$M*	0	15	14	14
Non-F&G Turnover	*%*	0%	8%	8%	8%
Estimated Supermarket Turnover	***$M***	**-**	**17**	**15**	**16**
per sq.m (@1500sq.m)	***$***	**-**	**11,059**	**10,073**	**10,502**

Source: Urbis

04

HEALTH HUB ASSESSMENT

COMPETITIVE CONTEXT

Key Findings

The supply of health services was assessed and identified the following considerations.

- There are an estimated seven medical centres in the trade area. These are small centres with less than five GPs.
- Allied health services are generally small scale such as individual operators.
- There are no major health care providers and multi-service health hubs operating in the study area.
- There is a medical imaging centre next door to the site.
- There are no urgent care clinics in the study area.

Health Facility Supply, Study Area

HEALTH HUB DEMAND

Key Findings

An assessment of health services supply versus benchmark rates revealed that there is a current and future undersupply of GPs in the study area and an undersupply of key allied health services; particularly dentists and physios.

There is also considered to be a need for specialist health services such as immunisation clinics, pathology clinics, child health, mental health and pharmacy services.

Forecast Demand, Study Area, 2020-2035

BENCHMARKS	UNITS	2020	2025	2030	2035
Total Study Area Population	**Persons**	**32,974**	**34,846**	**36,774**	**39,172**
GPs	Per 100,000 persons	107	108	110	110
Chiropractors	Per 100,000 persons	21	20	21	21
Dentists	Per 100,000 persons	79	78	79	79
Physiotherapist	Per 100,000 persons	55	55	55	55
Podiatrist	Per 100,000 persons	14	14	14	14

MEDICAL SERVICES DEMAND	2020 SUPPLY (ESTIMATED)	2020	2025	2030	2035
GPs	27	35	38	40	43
Chiropractors	4	7	7	8	8
Dentists	13	26	27	29	31
Physiotherapist	9	18	19	20	22
Podiatrist	7	5	5	5	5

Source: Urbis, ABS, Torrens University

Estimated Supply of Health Practitioners, Study Area, 2020

CATCHMENT	CHIROPRACTOR	DENTIST	GENERAL PRACTITIONER	PHYSIO THERAPIST	PODIATRY
Primary	2	5	16	5	3
Secondary East	-	4	3	2	3
Secondary North	1	-	5	-	-
Secondary South	1	4	3	2	1
Total	**4**	**13**	**27**	**9**	**7**

Source: Urbis, ABS

HEALTH HUB POTENTIAL

Key Findings

An assessment of the potential for a medical centre / health hub found that a moderately large multi-service centre could sustainably operate from the subject site with the appropriate operator.

Based on average market shares and floorspace requirements, a centre with approximately 8 GPs, 5 allied health services (e.g. dentistry, pathology etc.) and complementary pharmacy, medical imaging and pathology services could be supported. This mix equates to a centre of approximately 1,000 sq.m GLA.

There is a strong relationship with the community hub and benefit in incorporating this space in the facility and co-locating parking requirements.

Medical Centre Floorspace Potential

CATCHMENT METRIC (+ SURPLUS/ - SHORTAGE)	2020	2025	2030	2035
General Practitioners	**-8**	**-11**	**-13**	**-16**
Chiropractors and Osteopaths	**-3**	**-3**	**-4**	**-4**
Dentists	**-13**	**-14**	**-16**	**-18**
Physiotherapist	**-9**	**-10**	**-11**	**-13**
Podiatrist	**2**	**2**	**2**	**2**
Market Share	**0%**	**20%**	**20%**	**20%**
GP Service Demand Accommodated	**0**	**8**	**8**	**9**
Allied Health Market Share	**0%**	**8%**	**8%**	**8%**
Allied Health Demand Accommodated	**0**	**5**	**5**	**5**
Room Demand	**0**	**7**	**8**	**8**
Floorspace Requirement (@ 45sq.m per room)	0	326	348	371
Incl. Reception & Servicing (@250sq.m)	0	576	598	621
Indicative Pharmacy Size	0	270	270	270
Indicative Medical Imaging Addition	0	130	130	130
Pathology Collection Centre	0	60	60	60
Total (Incl. all additions)	0	1,036	1,058	1,081

Source: Urbis

05

BULKY GOODS ASSESSMENT

MAJOR BULKY GOODS/SHOWROOM RETAIL PRECINCTS

Key Findings

Bulky goods floorspace is limited within the study area to minor individual out of centre retail developments (less than 2,000 sq.m across the study area).

Study area residents would need to travel to large bulky goods precincts in Cannington, Belmont and Midland to access these retail categories.

Major Bulky Goods & Showroom Precincts near Study Area

LOCATION	FLOORSPACE VOLUME (2015/17)	DESCRIPTION
Cannington (Albany Highway)	26,749sq.m	The section of Albany Highway that encompasses bulky goods uses on the intersection of William Street and Albany Highway, extending west through the Canning City Centre to Leach Highway. The majority of major furniture stores, white goods retailers, and other specialty showroom retailers (e.g Barbeques Galore, Baby Bunting).
Midland (Great Eastern Highway & Cowie Street)	24,593sq.m	The section of Great Eastern Highway through the Town Centre, extending from Midland Gate to Roe Highway (including developments on Cowie Street) is comprised of largely showroom retail uses, though a large number of major furniture brands are present in the area.
Belmont (Great Eastern Highway)	17,830*sq.m	The section of Great eastern highway extending from Tonkin Highway through to Graham Farmer Freeway features a large volume of showroom uses, in recent times, a major bulky goods development has commenced.

Source: Urbis, DPLH
**This figure has been adjusted to account for a recent bulky goods development on Great Eastern Highway that commenced operations in 2021.*

BULKY GOODS DEMAND

Key Findings

This study applied sales densities to each bulky goods category to estimate how the retail spending of residents in the catchment translates into demand for large format retail floorspace need. Sales densities are the dollar sales per square metre of GLA required to sustainably operate floorspace.

As an average, bulky goods retail trades sustainably at a minimum of $3,000 per square metre. While some bulky goods formats can sustain higher or lower floorspace 'sales densities', we applied this lower rate to estimate the level of floorspace below which supply is no longer sustainable.

In addition to above, this study applied a factor to spending to recognise that centre-based stores capture a degree of spending in these categories.

Based on the above approach, there was estimated to be demand for approximately 33,400 sq.m of large format retail floorspace in the study area as of 2020, increasing to 48,400 sq.m by 2035.

Despite the large demand generated by residents, the site is constrained in its ability to support local provision of showroom retail (particularly configuration). Furthermore, a large proportion of this demand will be captured by Midland, Cannington and other large showroom precincts.

Large Format Retail Expenditure, Study Area, 2020-2035 ($M Incl. Inflation & GST)

	FURN / FLOORING	LARGE APPLIANCES	ELECT / COMMS	HOMEWARES	HARDWARE	OUTDOOR	AUTO ACCESSORIES	TOTAL BULKY GOODS
Primary Trade Area:								
2020	9	4	9	4	9	2	1	39
2025	10	5	10	5	10	3	1	44
2030	11	5	11	5	12	3	2	49
2035	12	6	12	6	13	4	2	55
Total Trade Area:								
2020	22	11	22	11	26	6	3	100
2025	24	12	24	12	29	7	3	111
2030	28	14	27	14	33	8	4	127
2035	32	16	31	16	37	9	4	145

Large Format Floorspace Demand, Study Area, 2020-2035 (sq.m GLA)

	FURN / FLOORING	LARGE APPLIANCES	ELECT / COMMS	HOMEWARES	HARDWARE	OUTDOOR	AUTO ACCESSORIES	TOTAL BULKY GOODS
Primary Trade Area:								
2020	2,868	1,423	2,889	1,394	3,034	824	403	**12,834**
2025	3,250	1,612	3,274	1,580	3,438	934	457	**14,544**
2030	3,680	1,826	3,707	1,789	3,894	1,057	517	**16,470**
2035	4,115	2,041	4,145	2,000	4,353	1,182	578	**18,414**
Total Trade Area:								
2020	7,278	3,667	7,266	3,588	8,635	2,022	991	**33,446**
2025	8,083	4,076	8,054	3,976	9,578	2,244	1,100	**37,110**
2030	9,210	4,645	9,152	4,520	10,885	2,550	1,256	**42,218**
2035	10,582	5,340	10,474	5,178	12,479	2,918	1,446	**48,417**

Source: Urbis

BULKY GOODS POTENTIAL

Key Findings

A market gap within an urban development area is common (given these uses generally agglomerate within key transit locations) and a future bulky goods precinct is unlikely to absorb the entire market gap in the short to medium term. As such, in order to determine the potential scale and mix of large format retail floorspace within the subject sites, market shares were estimated. Tertiary trade is assumed to be approximately 5%.

Overall, large format retailer potential is estimated at equivalent to 2,500 sqm GLA. This analysis suggests that relatively smaller scale large format tenants present the greatest opportunity. Example tenant types include: bike shop, pet supplies, real estate agent, homewares, Vet, gym etc. (circa 300 to 800 sq.m tenancies).

Bulky Goods Floorspace Potential

	UNIT	2025	2030	2035
Bulky Goods Demand	***sq.m***	**37,110**	**42,218**	**48,417**
Primary Demand	*sq.m*	*14,544*	*16,470*	*18,414*
Total Secondary Demand Gap	*sq.m*	*22,567*	*25,748*	*30,004*
Catchment Market Share of Total Demand	*%*	**6%**	**6%**	**6%**
Primary	***%***	*10%*	*10%*	*10%*
Total Secondary	***%***	*3%*	*3%*	*3%*
Sub-Total	*sq.m*	2,131	2,419	2,741
Demand from Beyond Catchment	*%*	**5%**	**5%**	**5%**
Floorspace Potential	***sq.m***	**2,244**	**2,547**	**2,886**

Source: Urbis

06

RESIDENTIAL AGED CARE AND RETIREMENT LIVING ASSESSMENT

COMPETITIVE CONTEXT

Key Findings

Aged care provision is limited to three developments in Lesmurdie and a development in Forrestfield. A future development in Wattle Grove is expected to significantly increase the aged care provision in the study area.

There are a range of aged care developments that offer independent living units (ILU) and several stand-alone ILU developments which service the local area.

The supply is comprised of existing facilities or those with a development application / firm commitment. Two sites have been identified as the City is planning to provide additional residential aged care supply (around 120 beds).

Aged Care and Independent Living Unit Supply

PROVIDER	ADDRESS	STATUS	RETIREMENT ILU'S	AGED CARE PROVIDERS
Amana Living - Parry Village	74 Warlingham Drive, LESMURDIE	Operational	51	40
Baptistcare - Sunshine Park Hostel	10 Brady Road, LESMURDIE	Operational	12	36
Clarege Retirement Village	5 Varley St, LESMURDIE	Operational	8	0
St Ives - Lesmurdie	17 Sanderson Road, LESMURDIE	Operational	12	0
Villa Maria Hostel	173 Lesmurdie Road, LESMURDIE	Operational	56	36
Wattle Grove Retirement Estate	32 Gavour Road, WATTLE GROVE	Planned	185	120
Jeremiah Donovan House	138 Lewis Road, FORRESTFIELD	Operational	0	65
Heidelberg Park	Cnr of Canning Road and Pomeroy Road, LESMURDIE	Early Planning	-	-
Cambridge Reserve	Cambridge Road, FORRESTFIELD	Early Planning	-	-
Total			**324**	**297**

Source: Urbis

DEMAND GAP

Key Findings

An assessment of aged care and ILU demand and supply was undertaken and concluded the following.

- There is a planned development in Wattle Grove however there is no certainty that it will progress.
- There is an estimated undersupply of aged care.

In addition to above, aged care needs could be partly met in the Cambridge Reserve redevelopment as this development is intended to cater to aged care requirements over the medium term.

Independent Living Unit (ILU) Demand, Study Area, 2016 - 2031

METRIC	2016	2021	2026	2031
Population Aged 65+	4,667	5,688	6,756	7,963
Total Population	**32,677**	**33,431**	**35,209**	**37,201**
Retirement Propensity - 65+	4.9%	5.0%	5.0%	5.1%
People in Retirement 65+	228	283	340	407
Average Household Size - People in Retirement Living	1.2	1.2	1.2	1.2
Number of Places 65+	190	235	284	339
Supply (Retirement ILU's)	139	139	324	324
Demand Gap (- Shortage/ + Surplus)	-51	-96	40	-15

Source: Urbis, ABS

Aged Care Place Demand, Study Area, 2016 - 2031

METRIC	2016	2021	2026	2031
Population Aged 75+	1,865	2,393	3,278	4,129
Total Population	**32,677**	**33,431**	**35,209**	**37,201**
Aged Care Propensity - 75+	12.0%	11.6%	11.2%	10.8%
People in Aged Care 75+	224	277	367	447
Average Household Size - People in Aged Care	1.0	1.0	1.0	1.0
Number of Places 75+	224	277	367	447
Supply (Aged Care Places)	177	177	297	297
Demand Gap (- Shortage/ + Surplus)	-86	-138	-70	-128

Source: Urbis, ABS

VIABILITY CONSIDERATIONS

Key Findings

Whilst many areas are under-supplied in aged care, there are significant challenges to viably delivering vertical aged care on this site. These challenges and considerations are noted below.

- Vertical residential aged care would need to be built on this site and could present community opposition.
- The facility generally needs to be 100+ beds to be viable.
- Often aged care is integrated with retirement living (i.e. Independent Living Units).
- Vertical retirement living cost should be below suburb median house price (approx. 80% of median) however the Forrestfield median house price is low at $410,000.

Overall, the market attributes are likely to limit the potential to viably develop and operate an aged care development on this site.

Aged Care / ILU Case Studies

CRAIGCARE ASCOT WATERS

- 164-bed residential aged care facility
- Construction cost: $30m
- 5-storeys
- Original concept was to incorporate retirement living – prevented due to community backlash (too high)

RAAAFA, BULL CREEK

- Alice Ross-King Centre: 102-bed residential aged care facility
- Construction cost: $26m
- 2 storeys
- Within large multi-development aged care / retirement living campus
- 509 retirement dwellings
- Retirement living priced at $475k - $970k
- Bull Creek median house price: $770k

07

SITE POTENTIAL AND CONCEPT DESIGNS

LAND USE ASSESSMENT FINDINGS

Key Findings

Overall, the site is considered a strong candidate for a number of land uses given its positive attributes, growing catchment and limited competitive context. In particular, a development mix consisting of an integrated health / community hub and separate showroom development fronting Hale Road was identified as the most optimal development outcome from the perspectives of market demand, tenant attraction, competition, financial return and site suitability.

Development of the site to its highest and best use in line with option A will result in some loss of trees. If there is minimal appetite for this, the type and scale of development on the site should be reconsidered. As such, consideration was also given to a secondary option that would result in greater levels of tree retention on site (particularly along Hale Road). This development scenario of an integrated health / community hub with, for instance, a child care, gym or shopfront office tenancy would however lead to lower financial return given the smaller development footprint and inability to accommodate the showroom development which is considered a strong candidate for this site. Indicatively, the impact on financial return could represent approximately 60-70% of the value of the showroom development site.

Supermarket and aged care development scenarios were not considered favourable due to the relatively lower market viability expectations and potential impacts on stakeholders.

Development Mix Options Analysis Findings

ATTRIBUTE	OPTION A	OPTION B	OPTION C	OPTION D
Indicative Land Use Mix (GLA)	Community (2,950 sq.m) Health (1,000 sq.m) Showroom (2,450 sq.m) Shop Retail (500 sq.m)	Community (2,950 sq.m) Health (1,000 sq.m) Child Care / Gym / Office (1,200 sq.m) Shop Retail (500 sq.m)	Community (2,950 sq.m) Health (1,000 sq.m) Supermarket (1,500 sq.m) Shop Retail (500 sq.m) Child Care (1,000 sq.m)	Community (2,950 sq.m) Aged Care / ILUs (1ha site area) Health / Shop Retail (500 sq.m)
Site Area Requirements (approx.)	1.8 ha	1.6 ha*	1.8 ha	1.8 ha
Market Risks / Cons	Tree retention and associated community support	Relatively lower financial return potential compared to Option A Limited ability to stage development	Tenancy risk (supermarket operators) Approval risk (impact on centres / businesses) Limiated ability to integrate supermarket and community / health hub	Limited vertical aged care viability Conflict with adjacent low scale residential uses
Rating	**1St**	**2nd**	**3rd**	**4th**

Source: Urbis

** This option enables greater tree retention however it delivers a smaller development footprint.*

CONCEPT DESIGN CONSIDERATIONS

A preferred concept layout was developed in collaboration with the City of Kalamunda.

The concept design incorporates the following considerations:

- Preferences for retention of many trees as practical on site, particularly along Hale Road and the foreshore reserve;
- Maintaining the existing separation from the foreshore reserve.
- Inclusion of a café that sits adjacent to retained trees and vegetation on the edge of the foreshore reserve and shared paths;
- Inclusion of a nature playground linked to the community facility and café;
- Integration of a pedestrian network across the site;
- Integration and consolidation of lobby access to the community centre and health centre;
- Provision of 10m+ building setbacks on western edge to minimise impact on existing residential uses;
- Limiting new access connections to Hale Road;
- Integration with existing businesses for parking and movement;
- Maximising exposure of the site to Hale Road from a commercial perspective;
- Use of topography on the site to accommodate a parking deck;
- Centrally locating a shared parking opportunity that will accommodate different uses across varying hours of operation; and
- Flexible tenancy sizes appropriate for likely tenant types.

This concept endeavours to retain as many trees as practical whilst supporting the viability and functionality of the proposed uses. To illustrate the tree retention impacts, a range of visualisations were developed and are included in this section and appended to this report.

The concept designs additionally demonstrate the ability to subdivide the land to accommodate a separate land parcel for the showroom development mix. This would enable the staging of the development and potential to contribute to the funding of the community / health hub.

It is important to recognise that this concept design was undertaken to inform a potential configuration, access, parking and streetscape treatments. It is only intended as a guiding concept, with subsequent detailed designs and planning for the site to be undertaken.

LEGEND:

- SUBJECT SITE
- RETAINED MATURE TREES
- PROPOSED TREES

YIELD SUMMARY

PARKING:	239 BAYS
1 BULKY GOODS - 1 STOREY	
AREA:	2450m²
2 MIXED USES - 2 STOREY	
COMMUNITY CENTRE:	2950m²
HEALTH:	1000m²
RETAIL: Ground Floor Only	500m²


Community and Health Hub


Bulky Goods


Cafe & Alfresco


Nature Play

URBIS

FORRESTFIELD PRECINCT PLAN
CONCEPT PLAN

Disclaimer: The layout provided within this plan is indicative only for the purposes of assessing the site potential. This layout is subject to change during future investigations and detail design process.

1:1250 @ A4

0 10 20 30 40 50

DATE: 29.06.2021
JOB NO: P0032967
DWG NO: 02
REV: A

LEGEND:

- SUBJECT SITE
- INDICATIVE LOT BOUNDARY
- RETAINED MATURE TREES
- PROPOSED TREES

YIELD SUMMARY

PARKING:	239 BAYS
1 BULKY GOODS - 1 STOREY	
AREA:	2450m²
2 MIXED USES - 2 STOREY	
COMMUNITY CENTRE:	2950m²
HEALTH:	1000m²
RETAIL:	500m²

URBIS

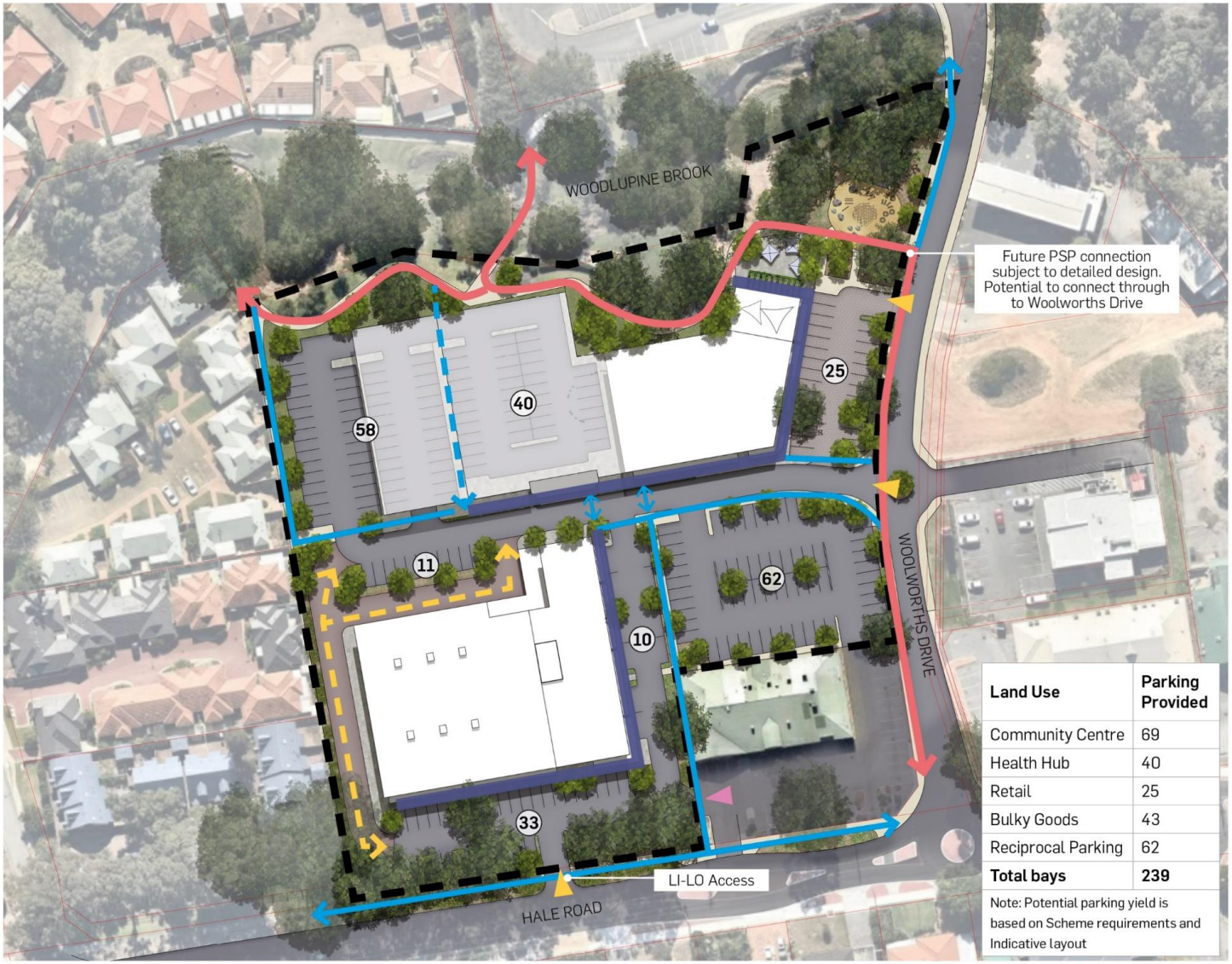
FORRESTFIELD PRECINCT PLAN
CONCEPT PLAN LOTS

Disclaimer: The layout provided within this plan is indicative only for the purposes of assessing the site potential. This layout is subject to change during future investigations and detail design process.

1:1250 @ A4

0 10 20 30 40 50

DATE: 29.06.2021
JOB NO: P0032967
DWG NO: 04
REV: A



LEGEND:

- SUBJECT SITE
- 25 PARKING BAYS
- PEDESTRIAN MOVEMENT NETWORK
- PEDESTRIAN ACCESS OPPORTUNITY
- ACTIVE PEDESTRIAN EDGE
- SHARED PATH
- SERVICE ACCESS
- VEHICLE ACCESS
- POTENTIAL VEHICLE ACCESS

Land Use	Parking Provided
Community Centre	69
Health Hub	40
Retail	25
Bulky Goods	43
Reciprocal Parking	62
Total bays	**239**

Note: Potential parking yield is based on Scheme requirements and Indicative layout

Retail / Hospitality Frontage


Shared Path


Path and Brook Riparian Zone

URBIS

FORRESTFIELD PRECINCT PLAN
MOVEMENT & PARKING

Disclaimer: The layout provided within this plan is indicative only for the purposes of assessing the site potential. This layout is subject to change during future investigations and detail design process.

1:1250 @ A4

0 10 20 30 40 50

DATE: 29.06.2021
JOB NO: P0032967
DWG NO: 03
REV: A

LEGEND:

- SUBJECT SITE
- EXISTING TREES IN POOR CONDITION TO BE REMOVED
- EXISTING TREES IN FAIR-GOOD CONDITION TO BE REMOVED
- RETAINED TREES
- BROOK PRIMARY CHANNEL
- 15m BROOK OFFSET

URBIS

FORRESTFIELD PRECINCT PLAN
HALE ROAD TREE RETENTION & BROOK INTERFACE

Disclaimer: The layout provided within this plan is indicative only for the purposes of assessing the site potential. This layout is subject to change during future investigations and detail design process.

1:1250 @ A4

0 10 20 30 40 50

DATE: 29.06.2021
JOB NO: P0032967
DWG NO: 05
REV: A

08

IMPACT TEST

IMPACT ASSESSMENT METHODOLOGY

An impact assessment is expected to provide an indication of the trading environment and average trading conditions within which retailers operate, and implications for likely turnover declines or gains on average for the retailers involved.

Because an impact assessment forecasts how groups of people are likely to alter their shopping behaviour in response to a given change in the competitive environment, it is not possible to estimate individual retailer impacts or each group of retailers in each location.

Therefore in any impact assessment of this type it is not possible to estimate impacts on any specific individual retailer. The impact on any one individual retailer or any small group of retailers in a given location would depend on many factors (e.g. retailer profitability), some of which are within their control. The actions which each of these retailers take will determine the eventual impact on each, and furthermore the actions which they each take will also determine the eventual impact on the other retailers involved.

All of these factors need to be kept in mind when considering the likely impact of any relocation and expansion of a retailer within the existing retail network. Existing retailers are not passive participants but rather will play a major role in the eventual impact which they will experience.

Shopper behaviour is related to the satisfaction of particular requirements. Decisions made regarding where to shop are based on a number of judgements, including relative accessibility, availability of particular retailers, convenience, variety, carparking and others. As a result, residents like to spread their purchases across a wide variety of shopping centres and areas, and use the full range of facilities available to satisfy particular needs.

The method of analysis used to assess the impacts on individual centres from a retail development is based on a 'competitive usage' model. This model is based on the principle that if shoppers choose to direct some of their retail expenditure to the subject development proposal, then they will reduce their expenditure at other centres in a similar proportion to their usage of each centre or location (reflected by each centre's market share from the various trade area sectors). In assessing the potential impacts on other centres in the hierarchy we have adopted a 'turnover allocation approach'.

The assessment of impacts on specific retail centres relies upon an understanding of the existing turnover and level of usage of centres in the trade area and beyond. The model estimates the degree to which various shopping locations within and beyond the trade area are used for retail shopping, by allocating a proportion of turnover to each trade area sector (i.e. source of sales). These estimates result in market share calculations for each competitive centre, and thereby form the basis of which the impact of the proposed retail development is distributed to all other centres used by residents of the trade area for retail shopping. This is commonly referred to as the 'one-off' impact.

It is also relevant to consider the dollar impacts in relation to the turnover that would potentially be generated by these and other shopping centres over the intervening period. The impact analysis therefore details the turnover change, or net impact, which is expected for each centre/location, expressed as a reduction in turnover and as a percentage of the turnover level for each centre.

IMPACT TEST ASSUMPTIONS

Key Assumptions

To determine what impacts the proposed development could have on existing and proposed centres, assumptions need to be made about the trading levels of these existing and proposed centres, and the mix and quality of retailers present in these stores.

Broadly, different retailer types will require different rates of turnover per square metre to remain viable, depending on the profitability of products and the volume of transactions. Different retailers will also pay different rents.

For example, supermarkets typically see elevated levels of turnover per square metre, while homewares and apparel will see lower rates of turnover per square metre. Based on reported turnover details and assumptions of turnover levels using benchmark rates, this study assessed the total turnover of trade area centres.

The proposed development is likely to see a relatively low rate of turnover per square metre, largely because the development is predominantly showroom retail floorspace which will see lower levels of turnover per square metre compared to standard shop retailers in dedicated shopping centres.

Retail Turnover Assumptions

	sq.m GLA	Turnover / sq.m	Comments
Proposed Development	2,950	$3,936	Proposed development scheduled to commence as of 2023
Existing Centres:			
Forrestfield District Centre (incl. surrounding retail)	13,271	$8,576	This centre includes Hawaiian's Forrestfield and also the surrounding retail floorspace along Hale Road
Farmer Jack's Based Neighbourhood Centre	1,350	$6,074	This smaller local centre includes a Farmer Jacks supermarket, and some specialty stores
Wattle Grove Shopping Centre	3,050	$8,541	The Wattle Grove centre includes an Aldi Supermarket, a number of specialties, and an estimate of the external showroom floorspace that would be classified as shop retail located adjacent to the centre.
Lesmurdie IGA Sanderson Road	1,700	$5,676	This local centre in Lesmurdie is anchored by an IGA supermarket, and some specialty stores.
Proposed Centres:			
Maida Vale IGA Centre	1,250	$8,560	Approved development scheduled to be operational in 2023.

TURNOVER IMPACT ASSESSMENT

Key Findings

Overall, impacts from the proposed development on existing and future planned centres are expected be relatively minimal and no impacts are expected to be detrimental to the sustainability of any individual centre.

The majority of impacts will be on other centres outside of the trade area. This is due to the fact that the floorspace expansion is mostly showroom floorspace that will have tenants that are not present in the majority of existing centres.

The key findings and considerations are noted below.

- The one-off impacts in 2023 on individual centres range from -0.8% to -2.8%, which are within acceptable levels that would not impact the sustainability of any one centre. There are no impacts close to 10%, a notional benchmark for when impacts need to be more closely considered.
- The positive effect of market growth will, to varying degrees, help to offset the one-off trading impacts over the short-term following the completion of the proposed development.
- The impact on retailers within the trade area will be mixed and dependent on the tenancy mix accommodated within the centres.

Retail Turnover Impact Estimates, 2023 ($2020)

	Retail Turnover ($2020M)			Impact	
	Current (2020)	'Before Impact' (2023)	'Post Impact' (2023)	($M)	(%)
Proposed Development	0.0	0.0	11.7	+11.7	-
Existing Centres:					
Forrestfield District Centre (incl. surrounding retail)	103.7	108.6	106.3	-2.3	-2.1%
Farmer Jack's Based Neighbourhood Centre	7.8	8.2	7.9	-0.2	-2.8%
Wattle Grove Shopping Centre	22.2	23.8	23.4	-0.4	-1.6%
Lesmurdie IGA Sanderson Road	7.7	7.9	7.8	-0.1	-0.9%
Proposed Centres:					
Maida Vale IGA Centre		4.27	4.23	-0.03	-0.8%
Other Centres				*-8.7*	
Total Impact				**-11.7**	

NET COMMUNITY BENEFIT

Key Findings

Overall, the estimated minimal turnover impacts are not considered sufficient enough to warrant refusal of the development given the positive impacts likely to eventuate due to the development. These positive impacts include:

- ***Increased consumer choice and convenience*** associated with the local provision of additional retail, commercial, health and community amenities;
- ***Increased employment opportunities*** in the short term through the construction phase and considerable ongoing employment;
- ***Increased quality of life*** through increased provision of local health and community services; and
- ***Improved centre vibrancy*** through high quality development which activates this strategic site and drives a greater level and diversity of usage across the activity centre.

The successful commercial development proposed will additionally support alternative revenue generation and help to alleviate the need for rates increases and / or support additional community services / facility investment.

Net Community Benefit Assessment Findings

IMPACT	ASSESSMENT FINDINGS
Increased Consumer Choice and Convenience	▪ The proposed development will provide for brand new retail outlets and formats which align closely to retail spending trends and needs. ▪ The development will provide increased choice and price competition to the local community. ▪ The development will offer convenient access to required amenity and reduce the need to travel to other centres outside the locality.
Increased Employment Opportunities	▪ The construction of the development and the ongoing operation will generate additional employment opportunities for the local community. ▪ Activity centre businesses are also important providers of employment for young workers and workers re-entering the workforce which is highly relevant for this trade area. Moreover, there is considerable research to suggest that the propensity for some people to engage in criminal activity is directly linked to employment outcomes. Therefore a reduction in crime, social dislocation and government dependency is expected to be a positive outcome from the project.
Minimal Trading Impacts	▪ The analysis of trading impacts indicates that the level of trade diversion from existing and planned activity centres would be well with the bounds of a normal and healthy competitive environment and the viability and role of individual centres would not be threatened.
Increased Community / Social Development Outcomes	▪ Increased health services have been found to support improved health outcomes (such as reduced mortality / disease, increased patient knowledge, reduced preventable hospitalisations etc.) which have flow-on benefits to improved quality of life and increased economic participation and productivity. ▪ The proposed development supports a substantial redevelopment and expansion of community services which will support community development and personal development outcomes across the locality.
Improved Centre Vibrancy	▪ A high quality, integrated development with appropriate landscaping and public spaces is expected to increase the visual appeal of the area and set a new standard for future developments in the activity centre. ▪ The proposed development will drive a greater level and diversity of usage across the activity centre and support the viability of existing and future businesses.

09

DEVELOPMENT MODEL CONSIDERATIONS AND NEXT STEPS

DEVELOPMENT MODEL CONSIDERATIONS

Key Findings

In order to advance the proposed development, there are six key development model approaches that were considered for this site. These are summarised on the table to the right and the merits and cons are identified at a high level on the following page.

Whilst there are permutations to the above options, each has advantages and disadvantages in terms of financial return, risk, control over project outcomes, funding obligations, market appetite and strategic alignment.

Given the ability to subdivide the land to accommodate a separate land parcel for the showroom development mix (and the benefits of this approach on potentially helping to contribute to funding of the community / health hub),

However, as noted in the recommendations, a financial analysis and risk workshop, combined with market sounding, will provide a more informed view as to the preferred options for this site.

Development Model Option Summaries

OPTION	DESCRIPTION
Joint Venture (SPV Structure)	The City and a developer establish a special purpose vehicle (SPV) which is responsible for delivering the project. City's capital contribution is the land and returns comprise of dividends paid out of SPV (based on capital contribution split).
Ground Lease	A ground lease (or land lease) is an agreement whereby the head lessee is permitted to develop a property during the lease period and at the end of the lease period the land and all improvements are turned over to the City. The ground lease term would likely need to be approximately 49 years in order to provide confidence and sufficient returns on capital for the head lessee.
Master Land Developer (MLD)	The City deliver site works to create lots that are sold to developers.
Development Management Agreement (DMA)	A contractual arrangement between the City and a developer to deliver the project. The City could receive payments linked to the gross realisation from sale of built form upon completion, fixed payments or lease revenue if the asset is not sold.
Outright Sale	The sale of the site in one-line.
City-Developed and Owned	The City would (with the assistance of external development / project management) develop the project. It would need to fund the construction through internal and / or external sources. Upon completion, the City could utilise external management for the non-community hub tenancies.

Source: Urbis

DEVELOPMENT MODEL CONSIDERATIONS (CONT.)

Development Model Option Considerations

ATTRIBUTE	DESCRIPTION
Control	▪ A City-developed approach, followed closely by a joint venture, affords the City the greatest control over the built form and land use mix. ▪ Ground lease has the ability to control built form and use through contract conditions. ▪ Under the MLD and DMA options, the City has limited control. The MLD approach allows for control of public realm, infrastructure delivery and timing of lots to the market but not the lot development outcomes (except through policy controls). The aforementioned is under the control of the developer through a DMA however contractual conditions can be applied. ▪ Under the outright sale approach the City cedes all control over project outcomes and timing except that available through the planning system.
Risk	▪ Outright sale is the lowest risk as all project risks are effectively passed onto the buyer of the site. ▪ Under the MLD approach, the City retains the risks associated with delivering the infrastructure and public realm works, but is alleviated of risk exposure once individual lots are sold to developers. ▪ The DMA option exposes the City to credit risk and developer default risk , thus has a moderately higher risk rating than the MLD model. Ground lease additionally carries lessee credit risk. ▪ The City is exposed to cost and sales risk for the City-developed and joint venture approach. Whilst this risk is shared with the development partner for the joint venture, this option brings with it a high degree of developer default risk, a reduced degree of security over financial return, increased credit risk and potentially a higher degree of liability.
Financial Return	▪ The City-developed and joint venture options are expected to generate the highest level of financial return on capital as the City is participating in built form development so will receive development profit in addition to land value. ▪ Financial returns are expected to be lower under the DMA option than the MLD option as under a DMA approach the developer is likely to factor in risk and development management costs relating to the delivery of infrastructure and public realm works and there will be limited scope for the City to benefit from rising values across the development lifespan. ▪ Any land value received for outright sale will likely be discounted to reflect development risk and holding costs.
Funding	▪ Outright sale places little or no funding requirements on the City. ▪ The DMA approach places limited responsibility for funding project costs for the City as the developer is responsible for delivering and funding all infrastructure, public realm and built form works. ▪ Under the MLD option, the City bears full responsibility for funding infrastructure and public realm works. Whilst under the joint venture option, these are shared with the development partner. ▪ The City-developed approach requires the City to acquire all funding for the construction.
Market Appetite	▪ There is a small but strong pool of developers capable of delivering the project under the DMA, ground lease and joint venture models. This however is subject to market sounding. ▪ The MLD approach with subsequent DMA, ground lease and joint venture models may expand the market but is subject to competitive risks regarding the timing and development outcomes of other users.

Source: Urbis

DEVELOPMENT MODEL RECOMMENDATIONS

Key Findings

Given the ability to subdivide the land to accommodate a separate land parcel for the showroom development mix and integrated community / health hub (and the benefits of this approach to helping to contribute to funding of the community / health hub), this study identified preferred development models for these two components.

The key findings are summarised below.

- **Community / Health Hub**: The most optimal development model for this facility is a City-develop and own approach. This approach requires the City to source all funding however the funding could be partly externally sourced given the community and economic benefits of the facility and internal funding could be assisted by the likely strong ongoing financial returns from the health / retail tenancies. This approach maximises control of the development outcome and integration of the community / health hub with the public realm.
- **Showroom Development**: A ground lease approach is considered the most favourable for this development site as it minimises City-funding requirements and risk, allows control of built form and provides an ongoing revenue stream for the City.

Development Model Recommendations

DEVELOPMENT COMPONENT	ASSESSMENT CONSIDERATIONS	RECOMMENDED APPROACH
Community / Health Hub	▪ The community facilities are anticipated to represent approximately 2,950 sq.m of floorspace within the 4,450 sq.m community / health hub. As the largest and anchor use, control of the built form will be very important. ▪ An outright sale, partnership or ground lease approach would likely require the City to lease the space for the community facilities at a market rate which would add to ongoing costs. ▪ The integration of the play and public spaces with the development and foreshore reserve would be difficult to achieve if the asset is not owned outright by the City. ▪ External grant funding would likely require the City to continue to own the community / health hub asset. ▪ A partnership approach would enable sharing of tenancy risk associated with the health uses however returns would be shared across the joint venture arrangement.	**City-Developed and Owned**
Showroom Development	▪ The proposed 2,450 sq.m floorspace within the showroom development site will likely accommodate approximately 3-8 tenancies. Tailoring the development to the market will require expert advice which can be captured within a joint venture or ground lease approach. ▪ Ground lease has the ability to control built form and use through contract conditions. This will help ensure an appropriate interface with the community / health hub and optimisation of tree retention. ▪ A ground lease will minimise funding requirements from the City compared to a joint venture or City-developed approach. It will also provide ongoing revenue for the City compared to an outright sale (a joint venture may also likely require sale of asset at development). ▪ There is limited ability to control tenancies compared to City-developed and owned.	**Ground Lease**

Source: Urbis

NEXT STEPS

Recommendations

Recommendations to progress this development opportunity are noted below.

1. Market Sounding

A targeted market sounding exercise would help inform perceptions of the site and strategies to successfully maximise value to the City. This market sounding exercise (undertaken by the City or externally) would truth-test the assessment findings and help to better tailor the development opportunity, policy environment and design (for both the showroom development and community / health hub). Engagement with 4-8 key development partners and tenants would suffice.

2. Financial Analysis and Multi-Criteria Risk Workshop

Despite aforementioned development model recommendations, it is important to recognise that a financial analysis and risk workshop (combined with market sounding) will provide a more informed view as to the preferred options for this site. This assessment of the financial feasibility outcomes for alternative delivery models will help better understand the potential differences between financial returns of different development approaches.

Subsequently, a multi-criteria risk workshop will help to identify and interrogate the likely risks of each approach, the weighting that should be applied to each risk and mitigation measures.

Taken together, the preferred development model/s can be confirmed.

3. Policy Controls

There is a need to de-risk site through local scheme amendment process and / or precinct plan preparation (with appropriate community consultation). Consideration should also be given to commencing subdivision process if aligned with preferred development model/s. This will reduce the perceived risk of the development.

4. Request for Proposals

Following the previous steps, the City should develop and advertise a request for proposal process which articulates the preferred land uses and development objectives (i.e. the opportunity). Proponents should be assessed in terms of their financial capacity / experience, development capacity / experience, joint venture / partnering experience, proposed innovation / design outcomes and other required criteria. A development model does not need to be locked in at this point, with this process enabling respondents to detail alternative and preferred partnering arrangements.

It is intended that this RFP process will lead to the City shortlisting two proponents to submit formal offers from which one preferred offer is selected. The City will then engage in direct negotiations with the proponent, leading to a formal ground lease development agreement between the City and the successful proponent subject to Council approval.

APPENDIX

ADDITIONAL VISUALISATIONS / CONCEPTS

EXISTING CONTEXT

INDICATIVE FUTURE ARRANGEMENT

URBIS

FORRESTFIELD PRECINCT PLAN
HALE ROAD TREE RETENTION

Disclaimer: The layout provided within this visualisation is indicative only for the purposes of assessing the site potential. This layout is subject to change during future investigations and detail design process which will impact tree retention and revegetation.

DATE: 30.06.2021
JOB NO: P0032967
DWG NO: 08
REV:

LEGEND:

- SUBJECT SITE
- RETAINED MATURE TREES
- PROPOSED TREES

YIELD SUMMARY:

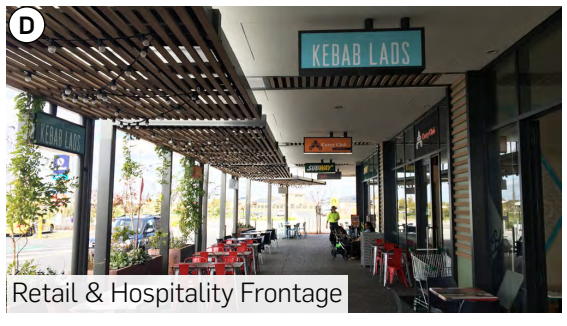
PARKING: 239 BAYS

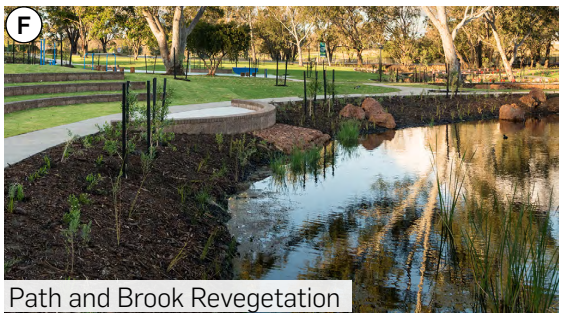
1 BULKY GOODS - 1 STOREY

TOTAL AREA: 2450m²

2 MIXED USES - 2 STOREY

COMMUNITY CENTRE: 2950m²
HEALTH: 1000m²
RETAIL: 500m²





URBIS

FORRESTFIELD PRECINCT PLAN
CONCEPT PLAN

Disclaimer: The layout provided within this plan is indicative only for the purposes of assessing the site potential. This layout is subject to change during future investigations and detail design process.

1:1000 @ A3
0 10 20 30 40 50

DATE: 29.06.2021
JOB NO: P0032967
DWG NO: 01
REV: A

COVID-19 AND THE POTENTIAL IMPACT ON DATA INFORMATION

The data and information that informs and supports our opinions, estimates, surveys, forecasts, projections, conclusion, judgments, assumptions and recommendations contained in this report (Report Content) are predominantly generated over long periods, and is reflective of the circumstances applying in the past. Significant economic, health and other local and world events can, however, take a period of time for the market to absorb and to be reflected in such data and information. In many instances a change in market thinking and actual market conditions as at the date of this report may not be reflected in the data and information used to support the Report Content.

The recent international outbreak of the Novel Coronavirus (COIVID-19), which the World Health Organisation declared a global health emergency in January 2020 and pandemic on 11 March 2020, is causing a material impact on the Australian and world economies and increased uncertainty in both local and global market conditions.

The effects (both directly and indirectly) of the COVID-19 Outbreak on the Australian real estate market and business operations is currently unknown and it is difficult to predict the quantum of the impact it will have more broadly on the Australian economy and how long that impact will last. As at March 2020, the COVID-19 Outbreak is materially impacting global travel, trade and near-term economic growth expectations. Some business sectors, such as the retail, hotel and tourism sectors, are already reporting material impacts on trading performance now and potentially into the future. For example, Shopping Centre operators are reporting material reductions in foot traffic numbers, particularly in centres that ordinarily experience a high proportion of international visitors.

The Report Content and the data and information that informs and supports it is current as at the date of this report and (unless otherwise specifically stated in the Report) necessarily assumes that, as at the date of this report, the COVID-19 Outbreak has not materially impacted the Australian economy, the asset(s) and any associated business operations to which the report relates and the Report Content. However, it is not possible to ascertain with certainty at this time how the market and the Australian economy more broadly will respond to this unprecedented event. It is possible that the market conditions applying to the asset(s) and any associated business operations to which the report relates and the business sector to which they belong could be (or has been) materially impacted by the COVID-19 Outbreak within a short space of time and that it will have a lasting impact. Clearly, the COVID-19 Outbreak is an important risk factor you must carefully consider when relying on the report and the Report Content.

Any Report Content addressing the impact of the COVID-19 Outbreak on the asset(s) and any associated business operations to which the report relates or the Australian economy more broadly is (unless otherwise specifically stated in the Report) unsupported by specific and reliable data and information and must not be relied on.

To the maximum extent permitted by law, Urbis (its officers, employees and agents) expressly disclaim all liability and responsibility, whether direct or indirect, to any person (including the Instructing Party) in respect of any loss suffered or incurred as a result of the COVID-19 Outbreak materially impacting the Report Content, but only to the extent that such impact is not reflected in the data and information used to support the Report Content.

This report is dated July 2020 and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Pty Ltd's (Urbis) opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of City of Kalamunda (Instructing Party) for the purpose of a Land Use Assessment (Purpose) and not for any other purpose or use. Urbis expressly disclaims any liability to the Instructing Party who relies or purports to rely on this report for any purpose other than the Purpose and to any party other than the Instructing Party who relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

In preparing this report, Urbis was required to make judgements which may be affected by unforeseen future events including wars, civil unrest, economic disruption, financial market disruption, business cycles, industrial disputes, labour difficulties, political action and changes of government or law, the likelihood and effects of which are not capable of precise assessment.

All surveys, forecasts, projections and recommendations contained in or made in relation to or associated with this report are made in good faith and on the basis of information supplied to Urbis at the date of this report. Achievement of the projections and budgets set out in this report will depend, among other things, on the actions of others over which Urbis has no control.

Urbis has made all reasonable inquiries that it believes is necessary in preparing this report but it cannot be certain that all information material to the preparation of this report has been provided to it as there may be information that is not publicly available at the time of its inquiry.

In preparing this report, Urbis may rely on or refer to documents in a language other than English which Urbis will procure the translation of into English. Urbis is not responsible for the accuracy or completeness of such translations and to the extent that the inaccurate or incomplete translation of any document results in any statement or opinion made in this report being inaccurate or incomplete, Urbis expressly disclaims any liability for that inaccuracy or incompleteness.

This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the belief on reasonable grounds that such statements and opinions are correct and not misleading bearing in mind the necessary limitations noted in the previous paragraphs. Further, no responsibility is accepted by Urbis or any of its officers or employees for any errors, including errors in data which is either supplied by the Instructing Party, supplied by a third party to Urbis, or which Urbis is required to estimate, or omissions howsoever arising in the preparation of this report, provided that this will not absolve Urbis from liability arising from an opinion expressed recklessly or in bad faith.

Urbis staff responsible for this report were:

Director	Tim Connolly
Associate Director	Tim Greenhill
Senior Consultant	Suzie Turner
Consultant	Yashwini Halai

Project code	P0032967
Report number	Final

URBIS

URBIS.COM.AU

Appendix 3

BUSHFIRE MANAGEMENT PLAN

Fire Protection Association Australia
Life. Property. Environment.

BPAD Bushfire Planning & Design

Bushfire Management Plan Coversheet

This Coversheet and accompanying Bushfire Management Plan has been prepared and issued by a person accredited by Fire Protection Association Australia under the Bushfire Planning and Design (BPAD) Accreditation Scheme.

Bushfire Management Plan and Site Details

Site Address / Plan Reference:	Lot 106 P017920, No.88 Hale Road		
Suburb:	Forrestfield	**State:** WA	**P/code:** 6058
Local government area:	Kalamunda		
Description of the planning proposal:	Scheme amendment - single Lot		
BMP Plan / Reference Number:	220406	**Version:** A	**Date of Issue:** 18/05/2022
Client / Business Name:	City of Kalamunda		

Reason for referral to DFES	Yes	No
Has the BAL been calculated by a method other than method 1 as outlined in AS3959 (tick no if AS3959 method 1 has been used to calculate the BAL)?	☐	☒
Have any of the bushfire protection criteria elements been addressed through the use of a performance principle (tick no if only acceptable solutions have been used to address all of the BPC elements)?	☐	☒
Is the proposal any of the following special development types (see SPP 3.7 for definitions)?		
Unavoidable development (in BAL-40 or BAL-FZ)	☐	☒
Strategic planning proposal (including rezoning applications)	☒	☐
Minor development (in BAL-40 or BAL-FZ)	☐	☒
High risk land-use	☐	☒
Vulnerable land-use	☐	☒

If the development is a special development type as listed above, explain why the proposal is considered to be one of the above listed classifications (E.g. considered vulnerable land-use as the development is for accommodation of the elderly, etc.)?

Note: The decision maker (e.g. local government or the WAPC) should only refer the proposal to DFES for comment if one (or more) of the above answers are ticked "Yes".

BPAD Accredited Practitioner Details and Declaration

Name	Accreditation Level	Accreditation No.	Accreditation Expiry
Jeremy Durston	Level 3	BPAD-36525	31/05/2023
Company		**Contact No.**	
Bushfire West Pty Ltd		0403328835	

I declare that the information provided within this bushfire management plan is to the best of my knowledge true and correct

Signature of Practitioner **Date** 18/05/2022

BushfireWest

Bushfire Management Plan

Lot 106 Hale Road, Forrestfield

Scheme Amendment

FPA AUSTRALIA BRONZE MEMBER Fire Protection Association Australia

Ref: 220406
Version: A
May 2022

REPORT DETAILS

Subject Land

Lot No	Plan	Development Site
106	P017920	88 Hale Road
Locality		Forrestdale (6058)
LPS Zone		Urban Development
Land area		1.8006 ha
Local Government		Kalamunda
Proposal description		Scheme amendment
Site assessment date		21 Apr 2022

Document Reference

Project ref.220406	Date	Purpose
DRAFT	16 May 2022	Consultation.
A	18 May 2022	Scheme amendment

Author

Practitioner	Accreditation Level	Accreditation No.
Jeremy Durston	Level 3	BPAD-36525

Report Limitations

Bushfire and weather conditions can be extremely dangerous and unpredictable. The management of bushfire risk will depend on, among other things, the actions of property owners and/or occupiers over which the author has no control.

All surveys, forecasts, projections and recommendations made in this report are made in good faith on the basis of information available at the time. All maps included herein are indicative in nature and are not to be used for accurate calculations.

Notwithstanding anything contained therein, the author will not, except as the law may require, be liable for any loss or other consequences arising out of the services provided.

Jeremy Durston
jeremy@Bushfire West.com.au
Bushfire West Pty Ltd

BPAD Bushfire Planning & Design Accredited Practitioner Level 3

Contents

1.0 Proposal Details

1.1 Background & Purpose of Report

This Bushfire Management Plan (BMP) is for the proposed scheme amendment for Lot 106 Hale Road to rezone the land to 'District Centre'. The primary purpose of this report is to provide the required bushfire planning information to inform the assessment process for the proposal with respect to *State Planning Policy 3.7 Planning in Bushfire Prone Areas* (SPP 3.7) and the associated *Guidelines for Planning in Bushfire Prone Areas v1.4* (the Guidelines). Guidance is also provided for the bushfire protection measures that may be required at relevant planning stages in accordance with the Guidelines.

1.2 Subject Site & Existing Conditions

The subject land is broadly bounded by existing District Centre land and Woolworths Drive to the east, by Hale Road and residential land to the south, by residential land adjacent to the west and by the Woodlupine Brook Reserve adjacent to the north (Figure A). The subject land is within a bushfire prone area designated by the *Western Australia State Map of Bush Fire Prone Areas*.

Development of the subject land currently comprises the Woodlupine Family and Community Centre with associated vehicle access and parking. The site incorporates substantial areas of landscaped gardens, lawns and pockets of native and cultivated trees. The site is currently accessed via the Woolworths Dive cul-de-sac with Hale Road providing primary access and egress. The site is serviced by an existing reticulated water supply with installed hydrants.

1.3 Proposal Description

The amendment proposes to rezone the land to 'District Centre' from the current zoning comprising 'Residential', 'Mixed Use' and 'Public Purpose – Hall / Community Centre'. Figure B depicts the scheme amendment map.

2.0 Environmental Considerations

2.1 Existing Vegetation

The bushfire assessment within this report identifies that no existing, onsite vegetation is required to be cleared for the scheme amendment. Any clearing that may be proposed for future subdivision or development will require assessment at future planning stages.

2.2 Re-vegetation & Landscaping

The creek line and associated vegetation within the adjacent public open space is subject to the Woodlupine Brook Living Stream and Ecological Corridor project, as depicted in Figure C. The revegetation plan encroaches marginally into the subject land and this report considers the potential hazard that may result in future.

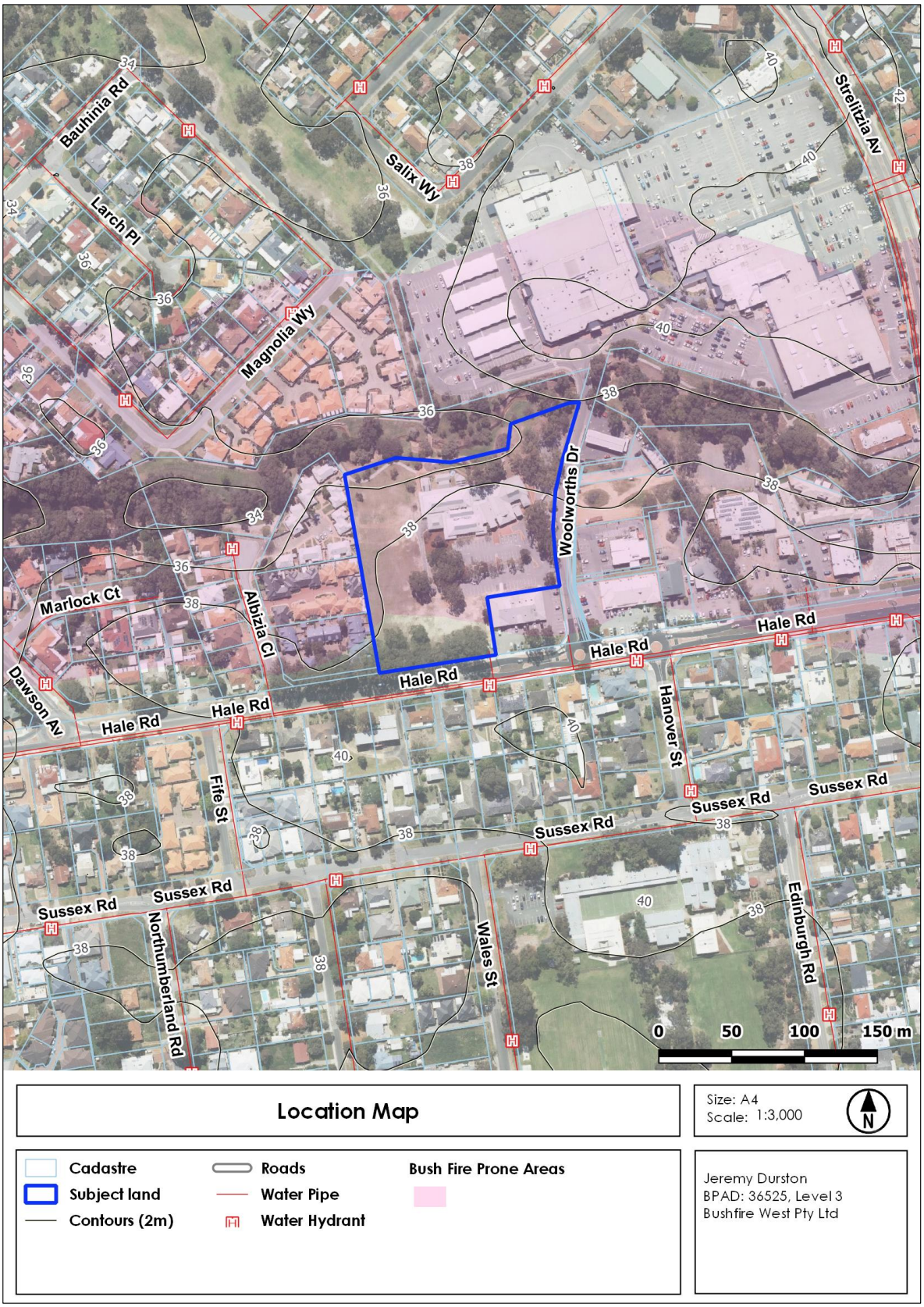


Figure A: *Location Map*

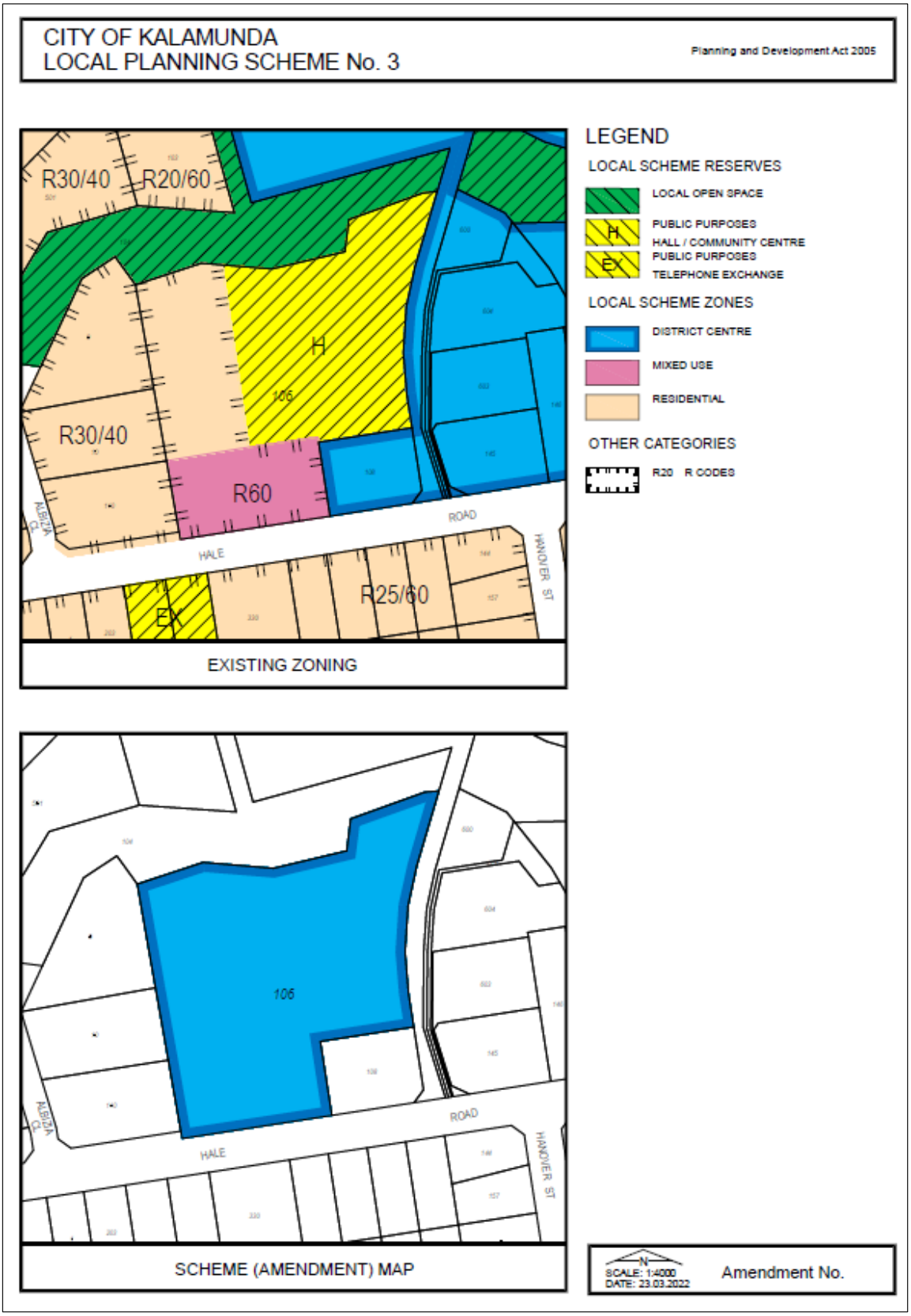


Figure B: *Scheme (Amendment) Map*

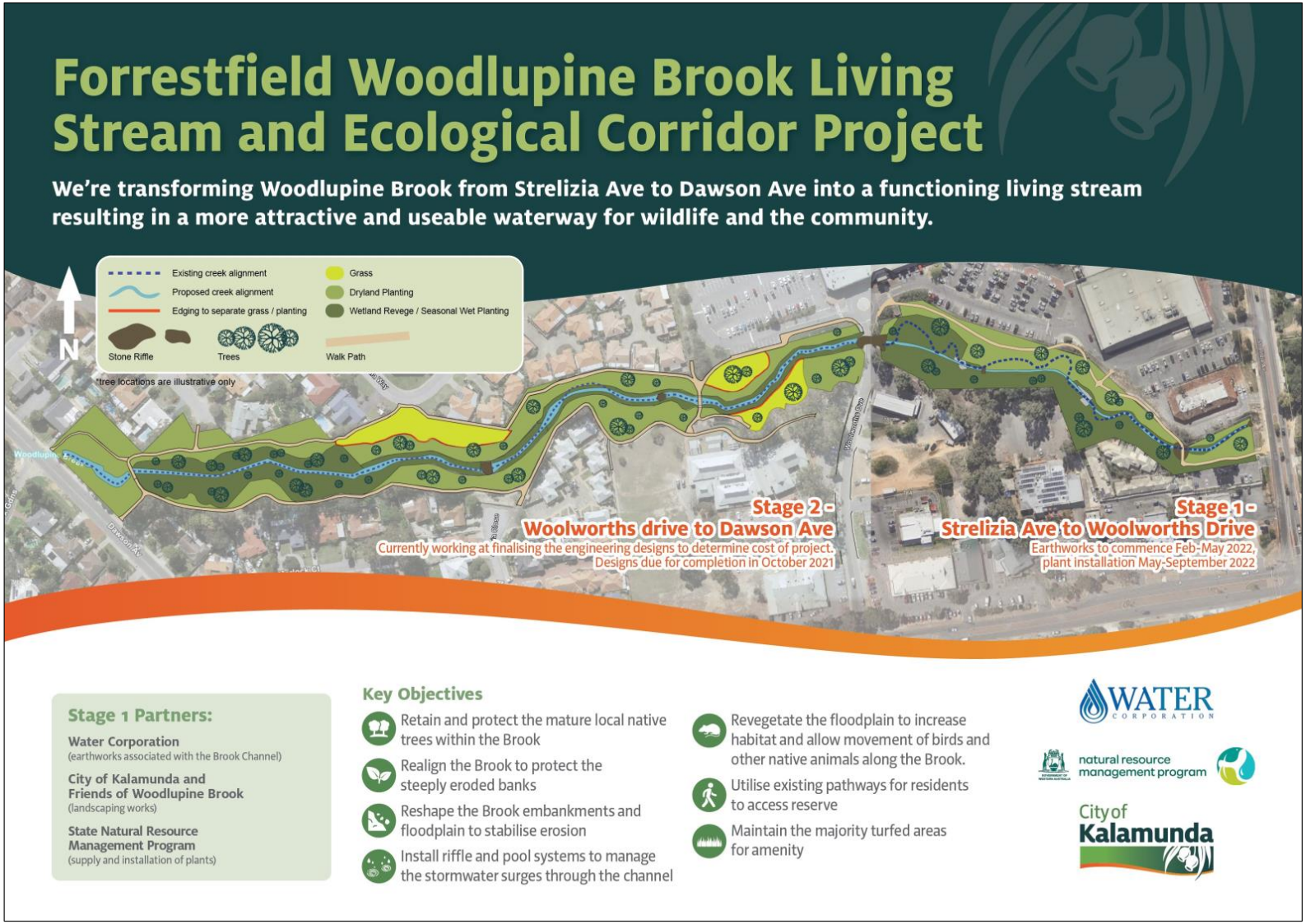


Figure C: *Woodlupine Brook Living Stream & Ecological Corridor project*

3.0 Bushfire Assessment Inputs

3.1 Vegetation Classifications & Slopes

The location and extent of AS 3959-2018 vegetation structures, effective slopes and low threat exclusions within 150 metres of the site have been determined within the Bushfire Hazard Level assessment included in Appendix 1. All bushfire structures and fuel loads were assessed in their mature states, including revegetation areas expected to regenerate. The classified vegetation and excluded areas are summarised in Table 1.

Table 1 *Areas of classified vegetation and exclusions:*

Area	Vegetation Classification	Effective Slope
Area 1	Class A Forest	0°
Area 2	Class A Forest	0°
Area 3	Class A Forest	0°
Area 4	Exclusions 2.2.3.2 (f)	n/a
Area 5	Exclusions 2.2.3.2 (f)	n/a
Area 6	Exclusions 2.2.3.2 (e)&(f)	n/a
Area 7	Exclusions 2.2.3.2 (f)	n/a
Area 8	Exclusions 2.2.3.2 (f)	n/a
Area 9	Exclusions 2.2.3.2 (f)	n/a
Area 10	Exclusions 2.2.3.2 (e)&(f)	n/a
Area 11	Exclusions 2.2.3.2 (e)&(f)	n/a
Area 12	Exclusions 2.2.3.2 (e)&(f)	n/a
Area 13	Exclusions 2.2.3.2 (e)&(f)	n/a
Area 14	Exclusions 2.2.3.2 (e)&(f)	n/a
Area 15	Exclusions 2.2.3.2 (e)&(f)	n/a

4.0 Bushfire Assessment Outputs

4.1 Hazard Level Mapping

From the bushfire assessment inputs detailed in Appendix 1 a Bushfire Hazard Level (BHL) Map was prepared in accordance with the *Guidelines for Planning in Bushfire Prone Areas v1.4* to depict the hazard levels across the assessment area (Figure D), including the potential effects of revegetation, summarised as follows:

Table 2: *Bushfire Hazard Levels:*

Vegetation Area	Classification	Effective Slope	Bushfire Hazard Level
Area 1	Class A Forest	0°	Extreme
Area 2	Class A Forest	0°	Extreme
Area 3	Class A Forest	0°	Extreme
Area 4	Exclusions 2.2.3.2 (f)	n/a	Low #
Area 5	Exclusions 2.2.3.2 (f)	n/a	Low #
Area 6	Exclusions 2.2.3.2 (e)&(f)	n/a	Low #
Area 7	Exclusions 2.2.3.2 (f)	n/a	Low #
Area 8	Exclusions 2.2.3.2 (f)	n/a	Low #
Area 9	Exclusions 2.2.3.2 (f)	n/a	Low #
Area 10	Exclusions 2.2.3.2 (e)&(f)	n/a	Low #
Area 11	Exclusions 2.2.3.2 (e)&(f)	n/a	Low #
Area 12	Exclusions 2.2.3.2 (e)&(f)	n/a	Low #
Area 13	Exclusions 2.2.3.2 (e)&(f)	n/a	Low #
Area 14	Exclusions 2.2.3.2 (e)&(f)	n/a	Low #
Area 15	Exclusions 2.2.3.2 (e)&(f)	n/a	Low #

Areas that contain only Low bushfire hazards but are located within 100m of any Extreme hazard have been mapped as Moderate BHL for the assessment outputs.

Figure D depicts the determined Bushfire Hazard Levels across the assessment area.

4.2 Hazard Level Summary

The subject land is determined to display the following Bushfire Hazard Level characteristics:

Table 3 *Summary of BHLs within the Site:*

Bushfire Hazard Level	Area of Site	
Low	0.302 ha	16.77%
Moderate	1.432 ha	79.51%
Extreme	0.067 ha	3.72%

5.0 Bushfire Hazard Issues

The bushfire hazard analysis has identified the following hazard issues:

- The principal hazard is from the Woodlupine Brook Reserve adjacent to the north, which is subject to revegetation and regeneration.
- Hazard separation will be required between future development and Woodlupine Brook Reserve through appropriate siting. The subject land is substantially developable to an acceptable bushfire risk.
- Internal areas of the subject land, excluding the minor areas subject to the Woodlupine Brook Living Stream and Ecological Corridor project, will require ongoing management to maintain the low threat condition that currently exists.
- Hale Road and Woolworths Drive provide the necessary vehicle access alternatives.
- The subject land is serviced by an existing reticulated water supply with hydrants installed to supply firefighting water.

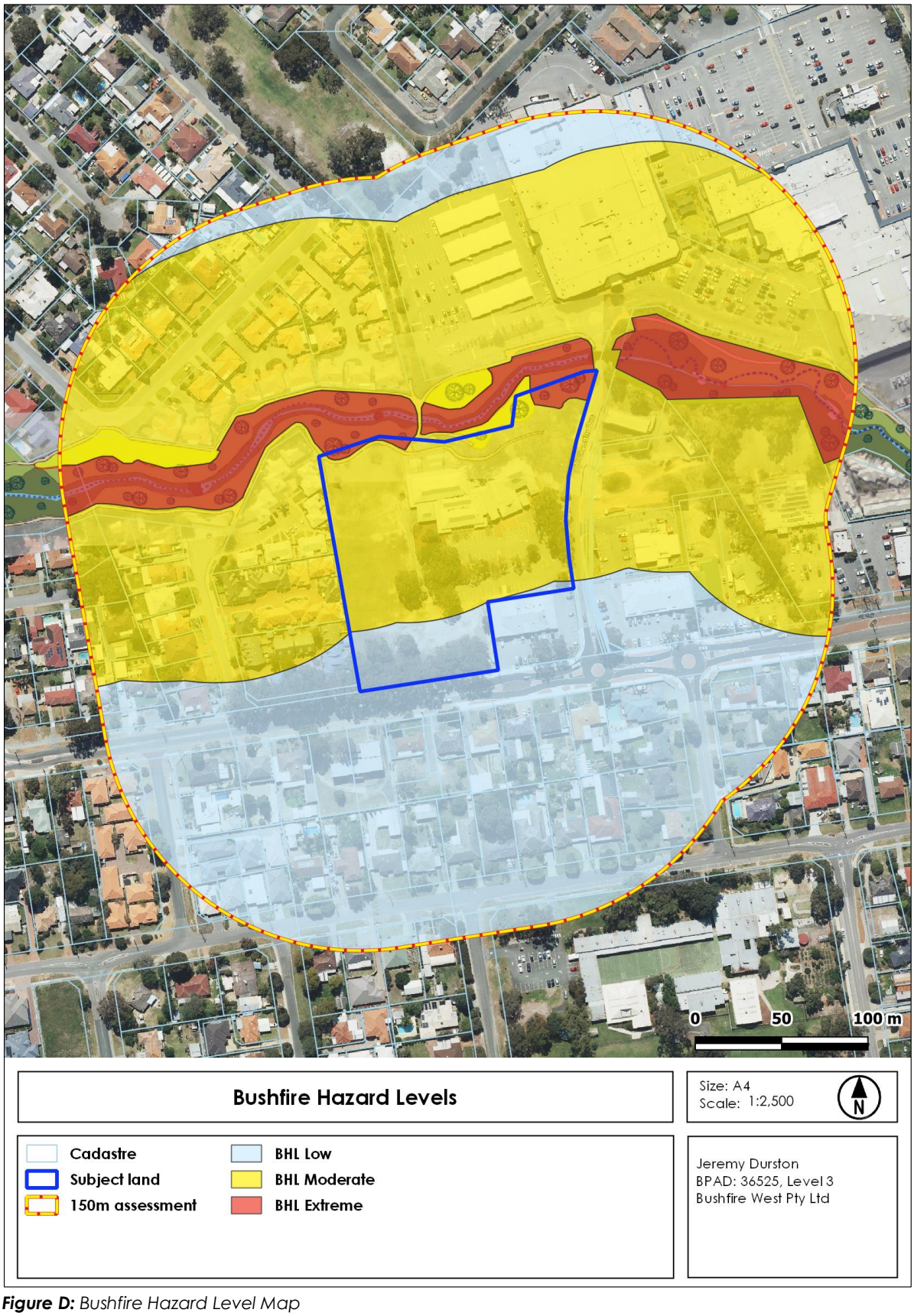


Figure D: *Bushfire Hazard Level Map*

6.0 Assessment against the Bushfire Protection Criteria

Following is an assessment against the bushfire protection criteria detailed in Appendix 4 of the Guidelines, including the applicable Acceptable Solutions for each element. Figure E depicts the relevant bushfire protection measures.

Table 4: *Assessment against the Bushfire Protection Criteria of the Guidelines*

Element	Acceptable Solution (A)	Compliance	Notes
1. Location	A1.1 Development location	**Yes**	The substantial majority of the subject land is subject to either a Moderate or Low bushfire hazard level that enables acceptable future development.
2. Siting of Development	A2.1 Asset Protection Zone	**Yes**	At future stages of planning, development is to achieve a rating no higher than BAL-29 through hazard separation and, where appropriate, an Asset Protection Zone in accordance with Schedule 1 from the Guidelines. The subject land, excluding the onsite areas subject to the Woodlupine Brook Living Stream and Ecological Corridor project, are to be maintained for low threat in accordance with AS3959 cl. 2.2.3.2 (e)&(f).
3. Vehicular Access	A3.1 Public roads	**Yes**	Existing public roads are compliant. Any future roads will require assessment at future stages of planning.
	A3.2a Multiple access routes	**Yes**	Hale Road provides connections to multiple access routes. Existing access is provided by the Woolworths Drive cul-de-sac, which has an acceptable length of less than 200m.
	A3.2b Emergency access way	n/a	A3.2a is satisfied instead.
	A3.3 Through-roads	**Yes**	Hale Road is a through-road. Woolworths Drive is a compliant no-through road.
	A3.4a Perimeter roads	n/a	Not required for a single lot.
	A3.4b Fire service access route	n/a	Alternative firefighting access is available.
	A3.5 Battle-axe	n/a	Not applicable at this stage of planning.
	A3.6 Private driveways	n/a	Not applicable at this stage of planning.
4. Water	A4.1 Identification of future water supply	**Yes**	An existing reticulated water supply is available.
	A4.2 Provision of water for firefighting purposes	n/a	A4.2 applies instead.

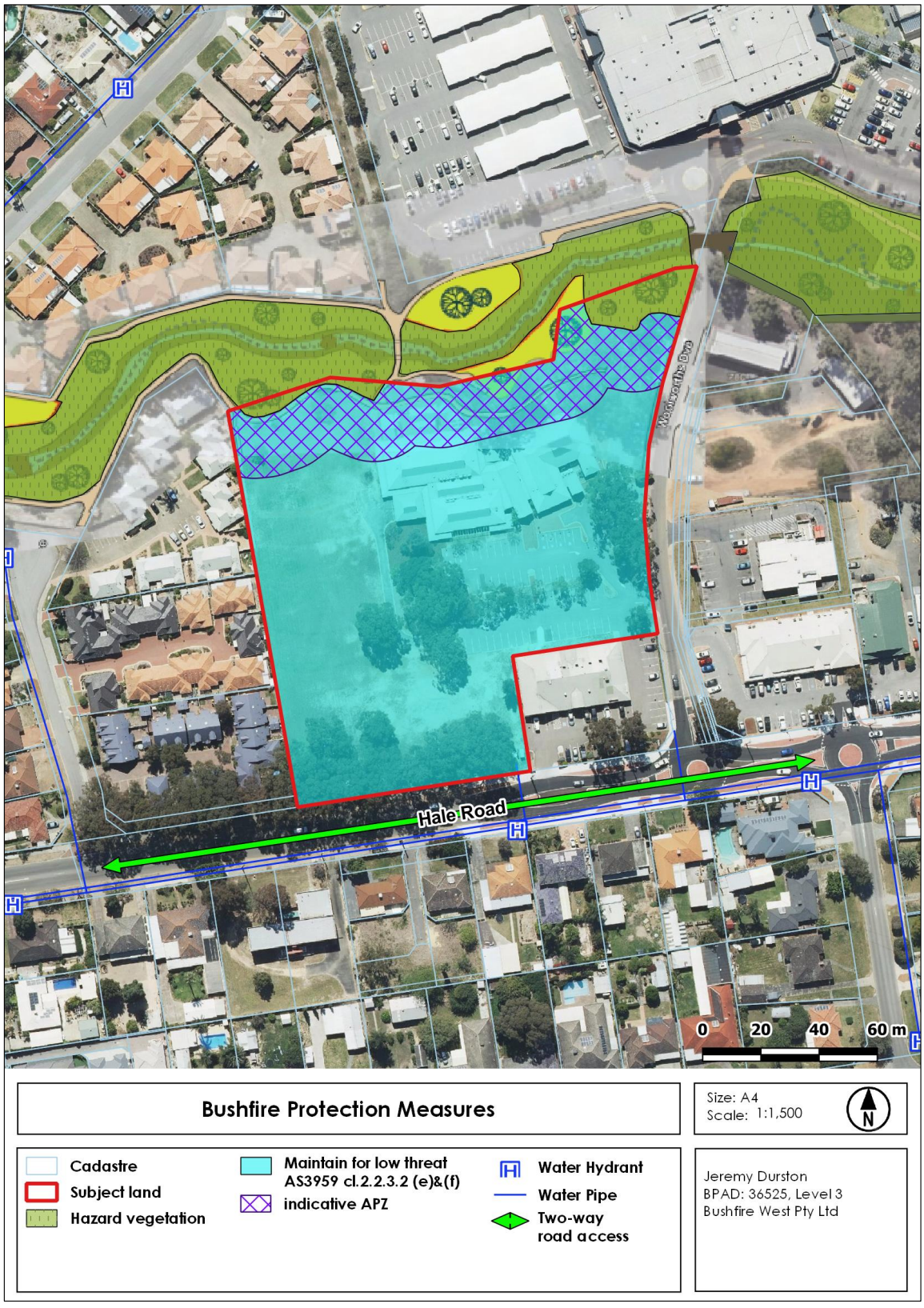


Figure E: *Bushfire Protection Measures Map*

7.0 Implementation and Management

The required measures summarised in Table 5 are to be implemented and maintained on an ongoing basis.

Table 5: *Implementation & Management Schedules*

Local Government
Ensure the subject land, excluding the areas subject to the Woodlupine Brook Living Stream and Ecological Corridor project, are maintained on an ongoing basis for low bushfire threat in accordance with AS3959 cl. 2.2.3.2 (e)&(f).
Ensure future planning stages comply with the Bushfire Protection Criteria from the *Guidelines for Planning in bushfire Prone Areas*.

8.0 Conclusion

In the author's professional opinion, the proposed scheme amendment is acceptable under the risk-based land use parameters of State Planning Policy 3.7 for bushfire prone areas. The extent of land with Low or Moderate BHL, in conjunction with the existing road network and water supply, allow for compliance with the *Guidelines for Planning in bushfire Prone Areas* to be achieved in subsequent planning stages.

Appendix 1 – Bushfire Hazard Level Assessment

BushfireWest

Bushfire Hazard Level Assessment

Scheme Amendment

Lot 106 (No. 88) Hale Road, Forrestfield

FPA AUSTRALIA BRONZE MEMBER Fire Protection Association Australia

Ref: 220406
Version: B
May 2022

Report Details

Subject Land

Street No.	Lot No.	Plan	Street Name
88	106	P017920	Hale Road
Locality		Forrestfield (6058)	
Local Government		Kalamunda	
Proposal description		Scheme amendment	

Document Reference

Version	Date	Purpose
Ref:220402		
A	29 Apr 2022	Pre-application consultation.
B	13 May 2022	Updated to include POS revegetation plan.

Author

Practitioner	Accreditation Level	Accreditation No.
Jeremy Durston	Level 3	BPAD 36525

Report Limitations

Bushfire and weather conditions can be extremely dangerous and unpredictable. The management of bushfire risk will depend on, among other things, the actions of property owners and/or occupiers over which the author has no control.

All surveys, forecasts, projections and recommendations made in this report are made in good faith on the basis of information available at the time. All maps included herein are indicative in nature and are not to be used for accurate calculations.

Notwithstanding anything contained therein, the author will not, except as the law may require, be liable for any loss or other consequences arising out of the services provided.

This report is valid for a period of 12 months only from the date of issue.

Jeremy Durston
0403 328 835
jeremy@bushfirewest.com.au
Bushfire West Pty Ltd

BPAD Bushfire Planning & Design Accredited Practitioner Level 3

Contents

1.0 Report Details & Summary

1.1 Purpose of Report

This report provides an assessment of the bushfire hazards to Lot 106 Hale Road, Forrestfield located in the City of Kalamunda for the purpose of an amendment to the planning scheme.

1.2 Site Details

The site is 1.8 ha in area and current zoning comprises 'Residential R60', 'Mixed Use R60' and 'Public Purpose – Hall / Community Centre'. The site is broadly bounded by existing District Centre land to the east, by Hale Road to the south, Residential land to the west and by Public Open Space to the north [i.e. the Woodlupine Brook Reserve]. The site is identified as being Bushfire Prone on the Map of Bush Fire Prone Areas. Figure A depicts the site within its immediate surrounds.

1.3 Planning Proposal

The zoning of the site is proposed to be amended to 'District Centre', as depicted in Figure B.

1.4 Bushfire Hazards & Revegetation

The vegetation within the Woodlupine Brook Reserve is identified as the primary bushfire hazard within this report. The reserve is undergoing revegetation as a Living Stream and Ecological Corridor, as depicted in Figure C. The hazard assessment within this report adopts the potential worst-case scenario with respect to the revegetation plans.

1.5 Bushfire Hazard Level Summary

Following the bushfire assessment detailed within this report, Bushfire Hazard Level mapping has been prepared in accordance with the *Guidelines for Planning in Bushfire Prone Areas v1.4*. The site is subject to a minor area of potential Extreme hazard with the majority of the site displaying either Low or Moderate hazard levels. Figure D depicts the assessed Bushfire Hazard Levels for the subject land.

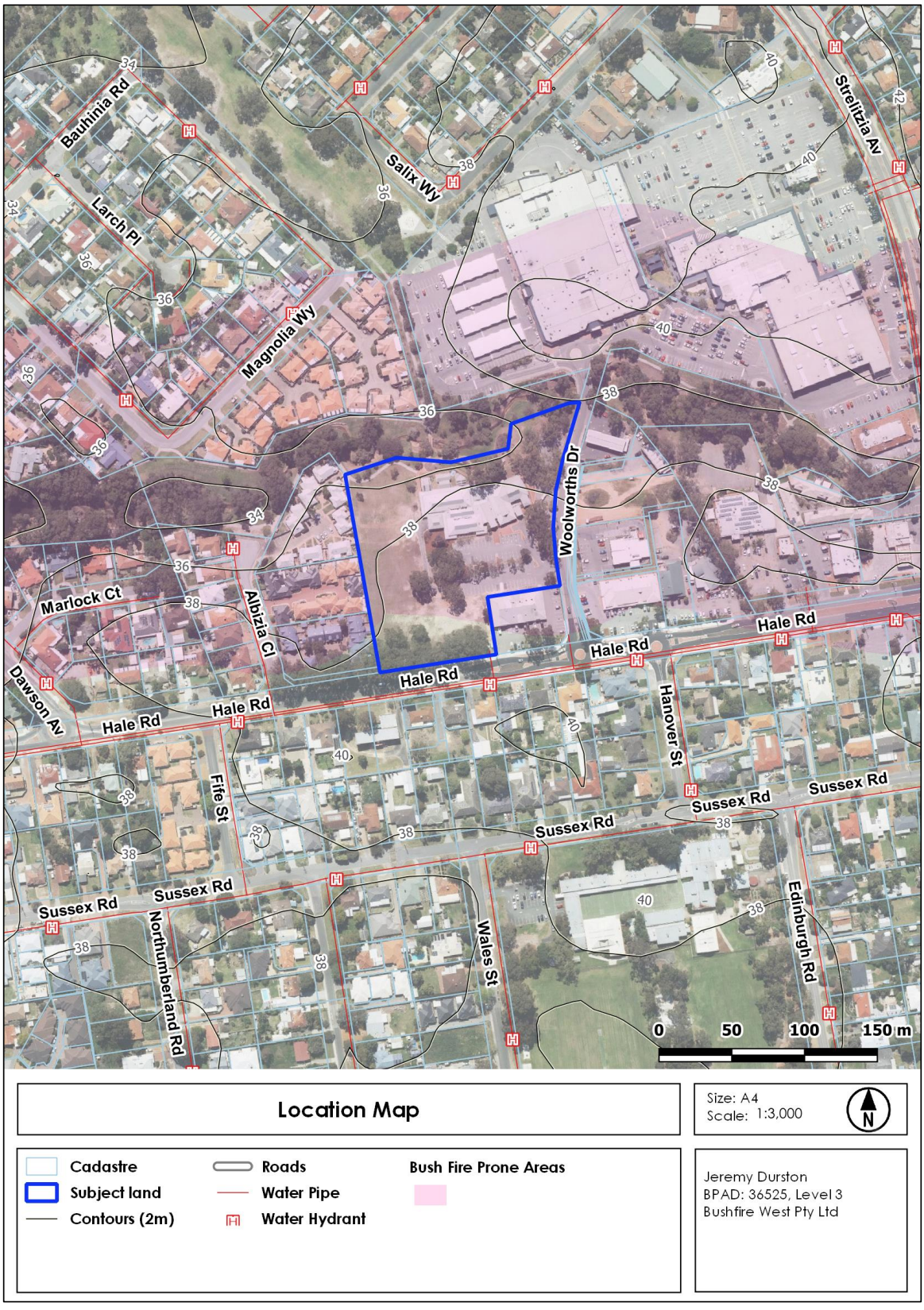


Figure A: *Location Map*

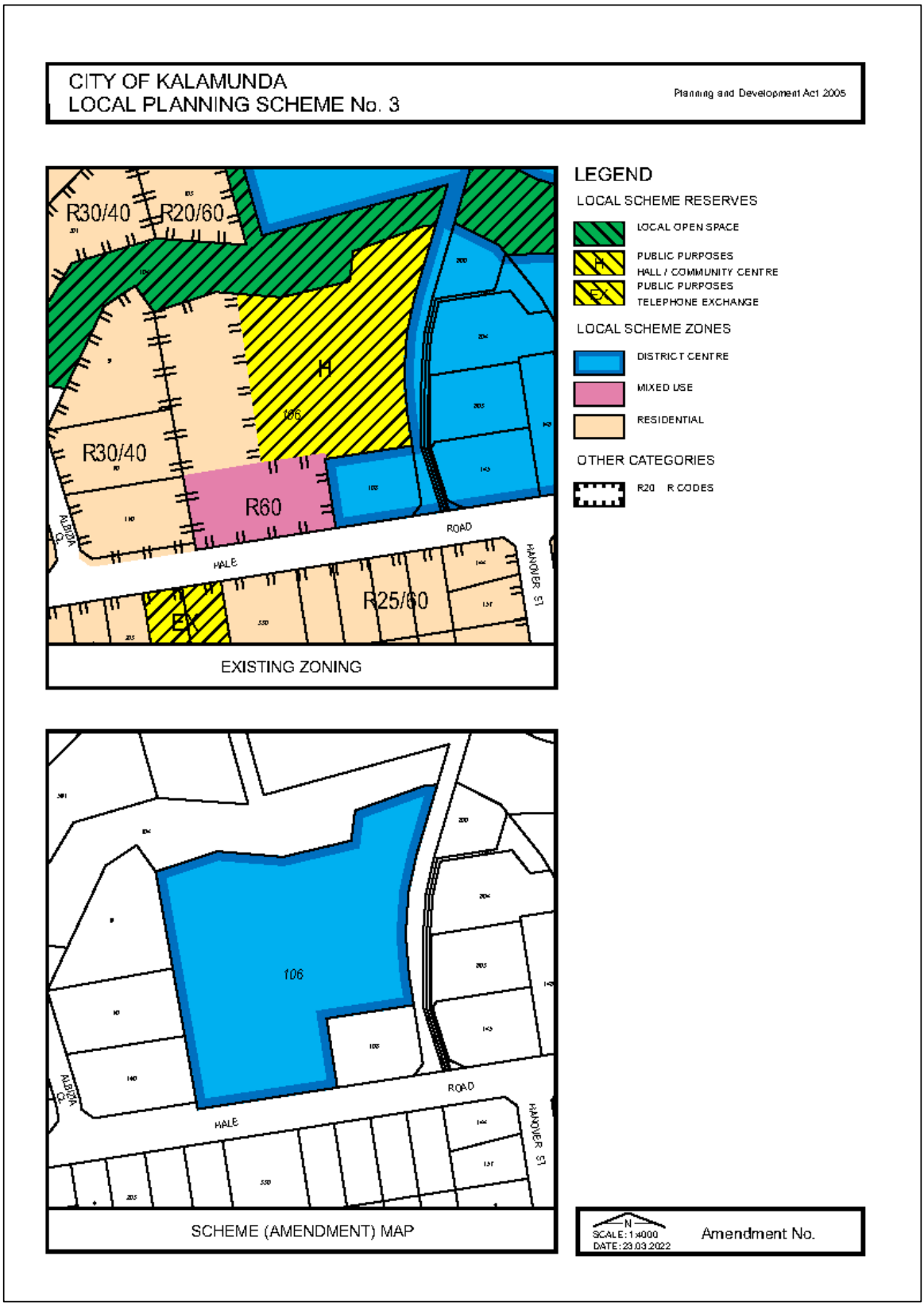


Figure B: *Scheme (Amendment) Map*

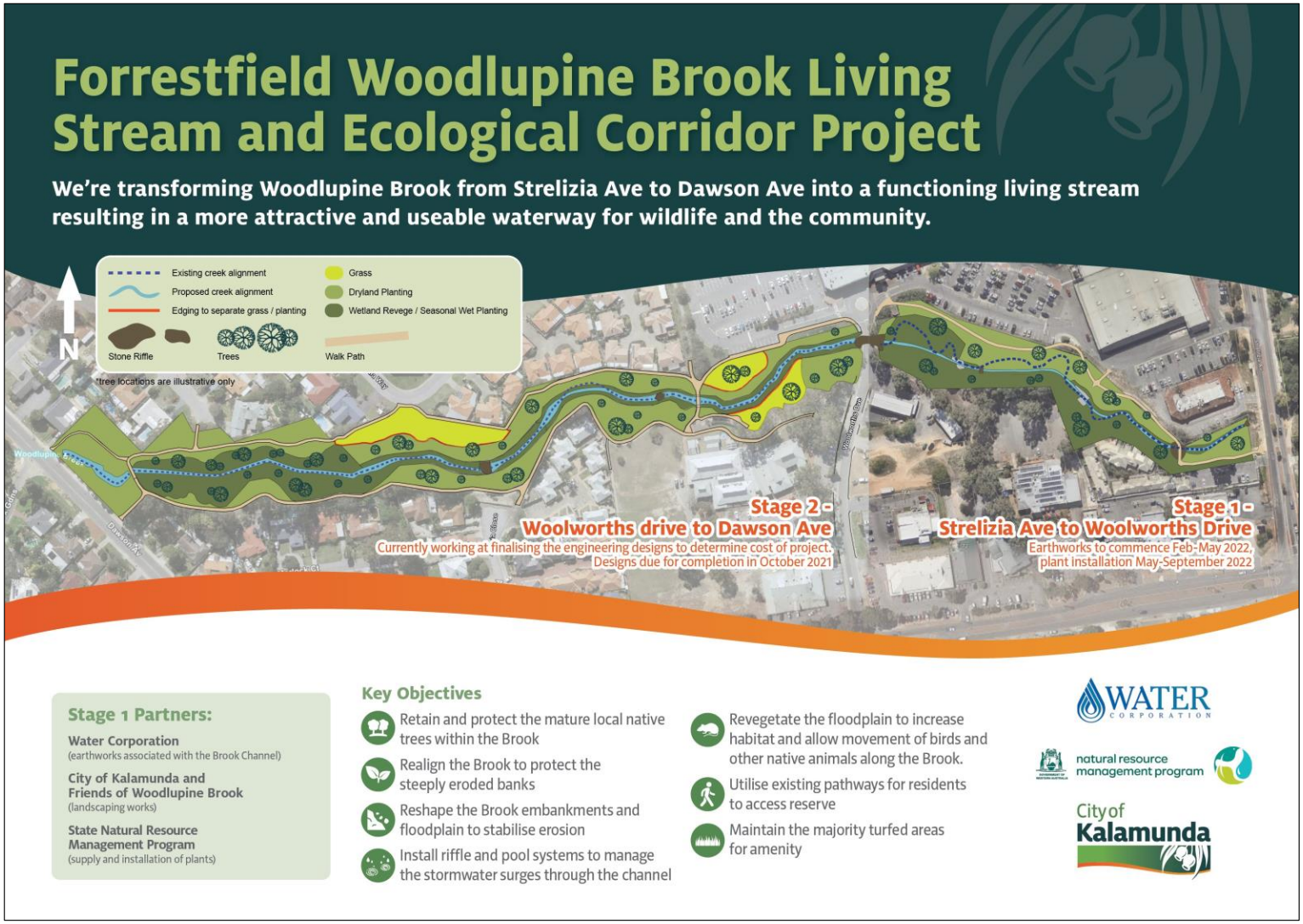


Figure C: *Woodlupine Brook revegetation plan*

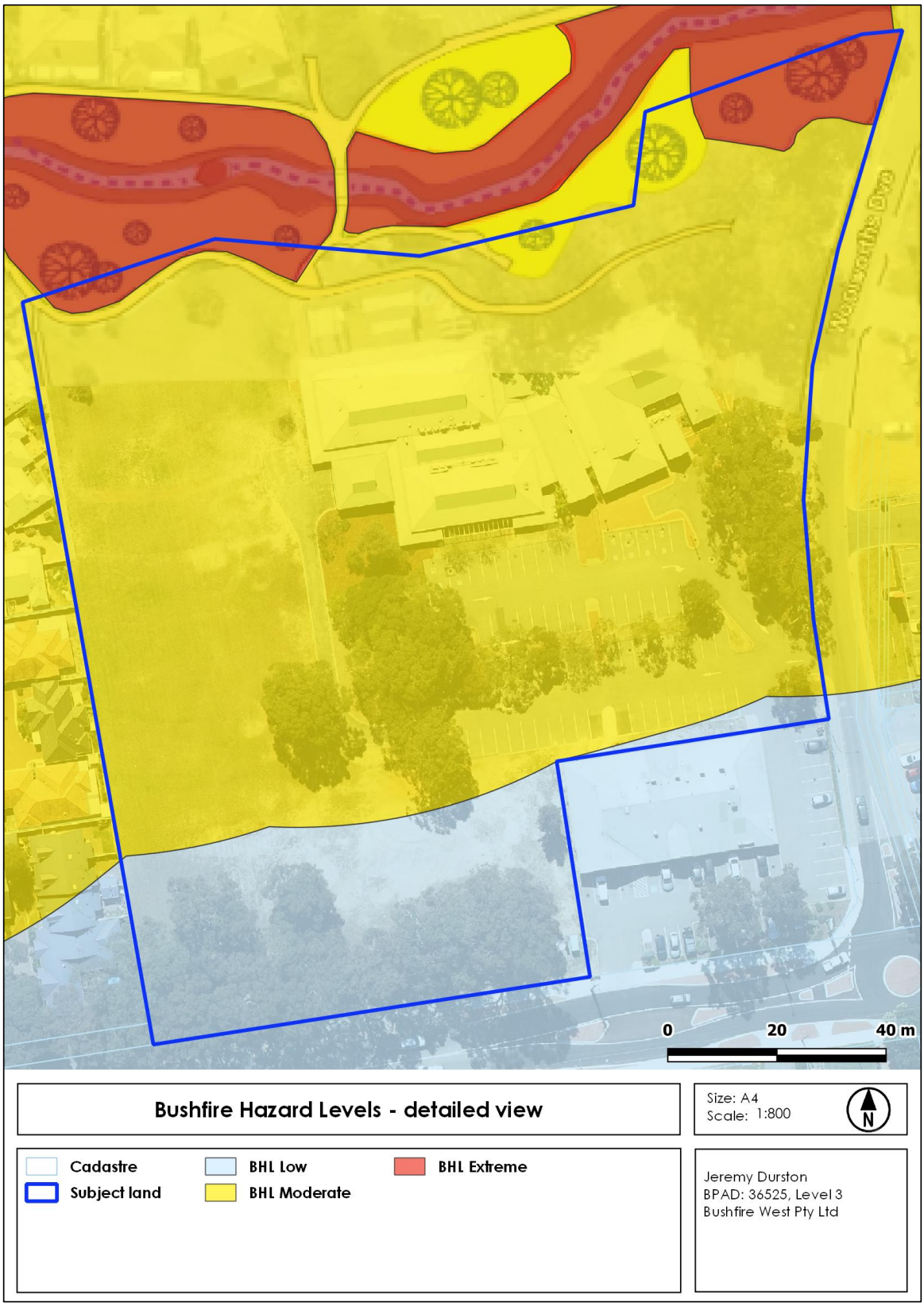


Figure D: *BHL Map – detailed view*

2.0 Bushfire Assessment Inputs

2.1 Effective Slope

Effective slopes were assessed in accordance with *AS3959-2018 Construction of buildings in bushfire prone areas* (AS3959). Slope data was measured on site and cross referenced with Landgate elevation data. The effective slopes beneath applicable vegetation areas are recorded in the following section.

2.2 Bushfire Fuels

The location and extent of classified vegetation structures, including low-threat exclusions, within 150 metres of the site were assessed in accordance with AS3959 and mapped in Figure E. All bushfire structures and fuel loads are assessed in their mature states unless otherwise identified. The areas of classified vegetation and low-threat exclusions are depicted below and summarised in Table 2.

Area 1	
Classification	Class A Forest
Effective Slope	0°
Section of Woodlupine Brook reserve potentially comprising trees having foliage cover greater than 30% and understorey vegetation. This area is subject to revegetation.	

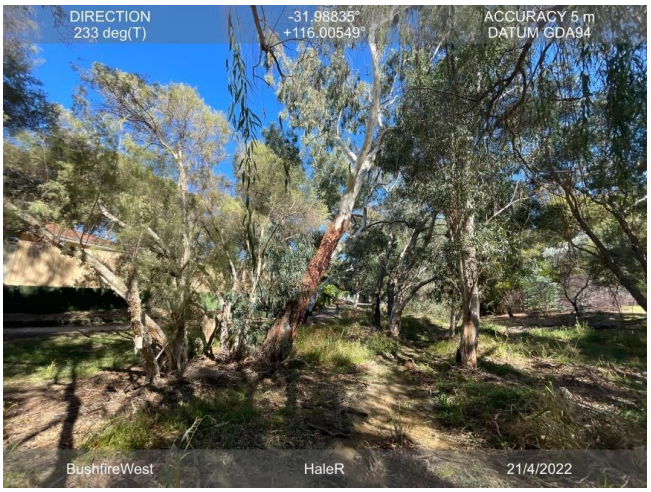


Photo ID: 1a

Area 1

Photo ID: 1b

Area 2	
AS3959-2018 Classification	Class A Forest
Effective Slope	0°
Section of Woodlupine Brook reserve with trees having potential foliage cover greater than 30% and understorey vegetation. This area is subject to revegetation.	
	
Photo ID: 2a	

Area 2
 **Photo ID:** 2b

Area 3	
AS3959-2018 Classification	Class A Forest
Effective Slope	0°
Section of Woodlupine Brook reserve undergoing landscaping and revegetation, with the potential for trees having foliage cover greater than 30% and future understorey vegetation.	
 **Photo ID:** 3a	

Area 3
 **Photo ID:** 3b

Area 4	
AS3959-2018 Classification	Excluded 2.2.3.2(f)
Effective Slope	n/a
Sections of Woodlupine Brook reserve proposed to be maintained with maintained turf, trimmed trees and shrubs.	
 **Photo ID:** 4a	

Area 4

Photo ID: 4b

Area 5	
AS3959-2018 Classification	Excluded 2.2.3.2(f)
Effective Slope	n/a
Section of Woodlupine Brook reserve proposed to be maintained with maintained turf, trimmed trees and shrubs.	
	
Photo ID: 5a	

Area 6	
AS3959-2018 Classification	Excluded 2.2.3.2 (e)&(f)
Effective Slope	n/a
Existing landscaped public open space and public access way.	

Photo ID: 6a

Area 7	
AS3959-2018 Classification	Excluded 2.2.3.2(f)
Effective Slope	n/a
Low-threat pocket of trimmed trees with grass maintained below 10cm.	

Photo ID: 7a

Area 8	
AS3959-2018 Classification	Exclusions 2.2.3.2 (f)
Effective Slope	n/a
Low-threat pocket of trimmed trees within subject land with grass maintained below 10cm.	

Photo ID: 8a

Photo ID: 8b

Area 9	
AS3959-2018 Classification	Exclusions 2.2.3.2 (f)
Effective Slope	n/a
Low-threat grass within subject land maintained below 10cm.	

Photo ID: 9a

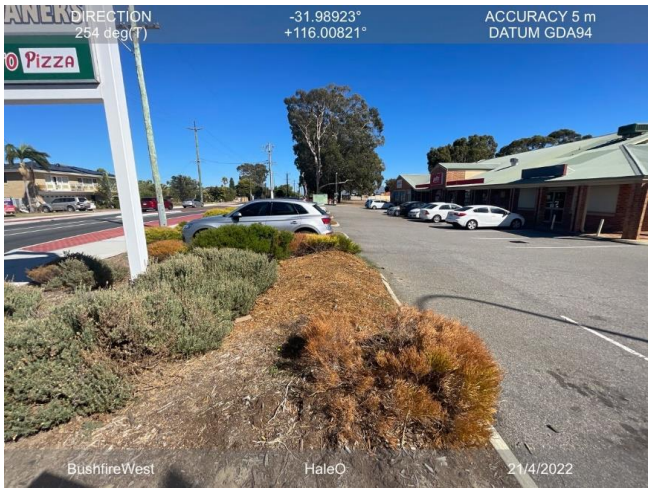
Photo ID: 9b

Area 10	
AS3959-2018 Classification	Exclusions 2.2.3.2 (e)&(f)
Effective Slope	n/a
Low-threat, developed and landscaped areas within subject land.	

Photo ID: 10a

Photo ID: 10b

Area 10
 **Photo ID:** 10c

Area 11	
AS3959-2018 Classification	Exclusions 2.2.3.2 (e)&(f)
Effective Slope	n/a
Low-threat, developed and landscaped areas within existing district centre to the east.	
 **Photo ID:** 11a	

Area 11
 **Photo ID:** 11b
 **Photo ID:** 11c

Area 12	
AS3959-2018 Classification	Exclusions 2.2.3.2 (e)&(f)
Effective Slope	n/a
Low-threat, developed residential area and Hale Road reserve.	

Photo ID: 12a

Photo ID: 12b

Area 13	
AS3959-2018 Classification	Exclusions 2.2.3.2 (e)&(f)
Effective Slope	n/a
Low-threat, developed residential area.	

Photo ID: 13a

Photo ID: 13b

Area 14	
AS3959-2018 Classification	Exclusions 2.2.3.2 (e)&(f)
Effective Slope	n/a
Low-threat, developed residential area.	

Photo ID: 14a

Area 15	
AS3959-2018 Classification	Exclusions 2.2.3.2 (e)&(f)
Effective Slope	n/a
Low-threat, developed and landscaped areas within existing district centre to the north.	

Photo ID: 15a

Table 2 *Summary of classified vegetation, exclusions and bushfire hazard levels:*

Vegetation Area	Vegetation Classification	Effective Slope	Bushfire Hazard Level
1	Class A Forest	0°	Extreme
2	Class A Forest	0°	Extreme
3	Class A Forest	0°	Extreme
4	Exclusions 2.2.3.2 (f)	n/a	LOW (or Moderate where located within 100m of any hazard)
5	Exclusions 2.2.3.2 (f)	n/a	LOW (or Moderate where located within 100m of any hazard)
6	Exclusions 2.2.3.2 (e)&(f)	n/a	LOW (or Moderate where located within 100m of any hazard)
7	Exclusions 2.2.3.2 (f)	n/a	LOW (or Moderate where located within 100m of any hazard)
8	Exclusions 2.2.3.2 (f)	n/a	LOW (or Moderate where located within 100m of any hazard)
9	Exclusions 2.2.3.2 (f)	n/a	LOW (or Moderate where located within 100m of any hazard)
10	Exclusions 2.2.3.2 (e)&(f)	n/a	LOW (or Moderate where located within 100m of any hazard)
11	Exclusions 2.2.3.2 (e)&(f)	n/a	LOW (or Moderate where located within 100m of any hazard)
12	Exclusions 2.2.3.2 (e)&(f)	n/a	LOW (or Moderate where located within 100m of any hazard)
13	Exclusions 2.2.3.2 (e)&(f)	n/a	LOW (or Moderate where located within 100m of any hazard)
14	Exclusions 2.2.3.2 (e)&(f)	n/a	LOW (or Moderate where located within 100m of any hazard)
15	Exclusions 2.2.3.2 (e)&(f)	n/a	LOW (or Moderate where located within 100m of any hazard)

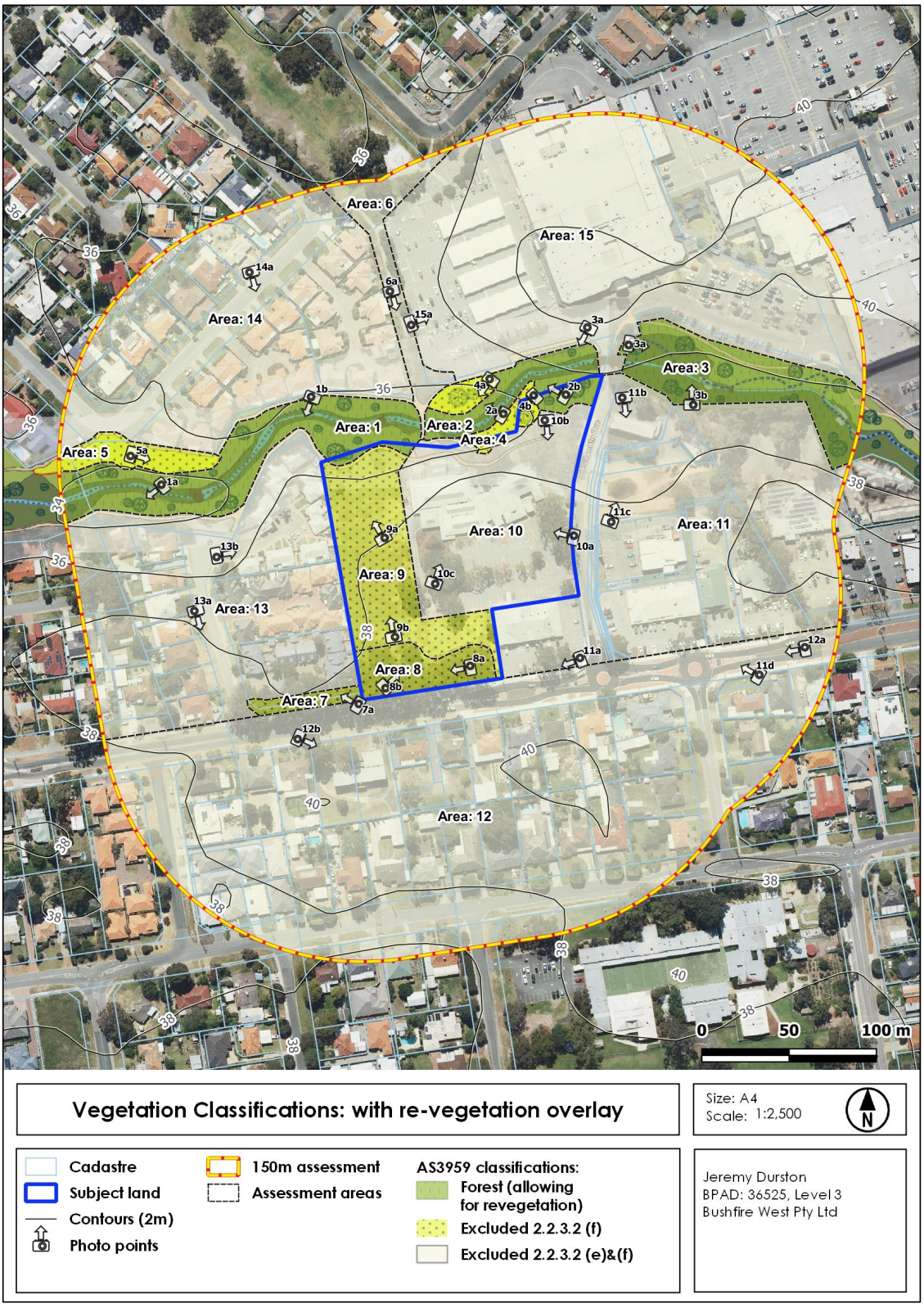


Figure E: *Vegetation Classification Map*

3.0 Bushfire Assessment Outputs

3.1 Bushfire Hazard Level Assessment

Following the bushfire assessment, a Bushfire Hazard Level (BHL) Map (see Figure E) has been prepared in accordance with the *Guidelines for Planning in Bushfire Prone Areas v1.4* to depict the hazards levels across the assessment area including the potential effects of revegetation, summarised as follows:

Table 3 *Summary of BHLs within the Site:*

BHL	Area of Site	
Low	0.302 ha	16.77%
Moderate	1.432 ha	79.51%
Extreme	0.067 ha	3.72%

Figure E depicts the assessed Bushfire Hazard Levels across the assessment area.

4.0 Conclusion

The site is designated to be almost wholly within a Bushfire Prone Area due to the potential bushfire impact from the neighbouring Woodlupine Brook Reserve, which is subject to a current revegetation plan. The result is that the site is subject to a minor area of potential Extreme hazard with the majority of the site displaying either Low or Moderate hazard levels. The proposed scheme amendment is thus located in an area considered to have an acceptable bushfire risk with the land substantially suitable for future development.

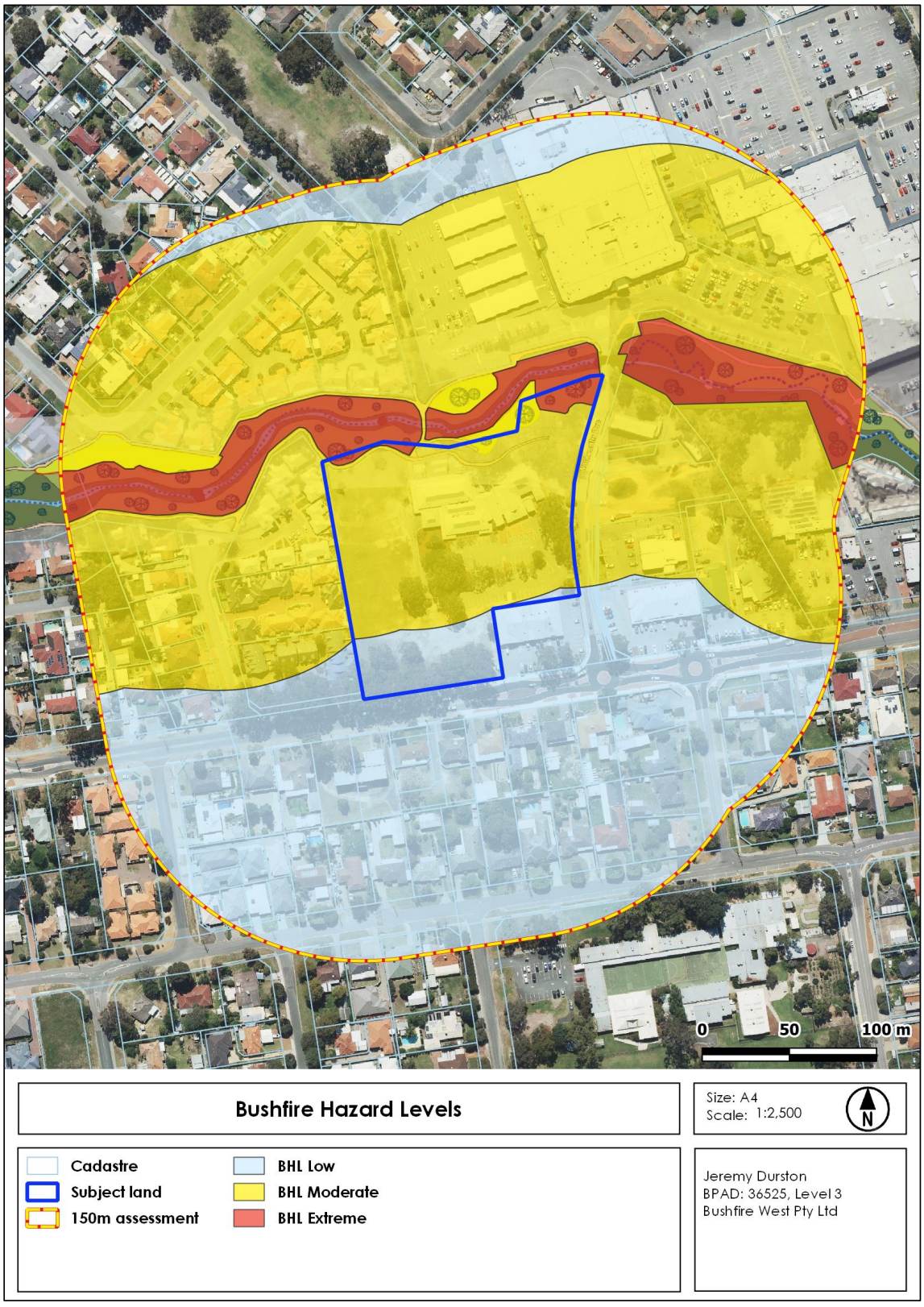


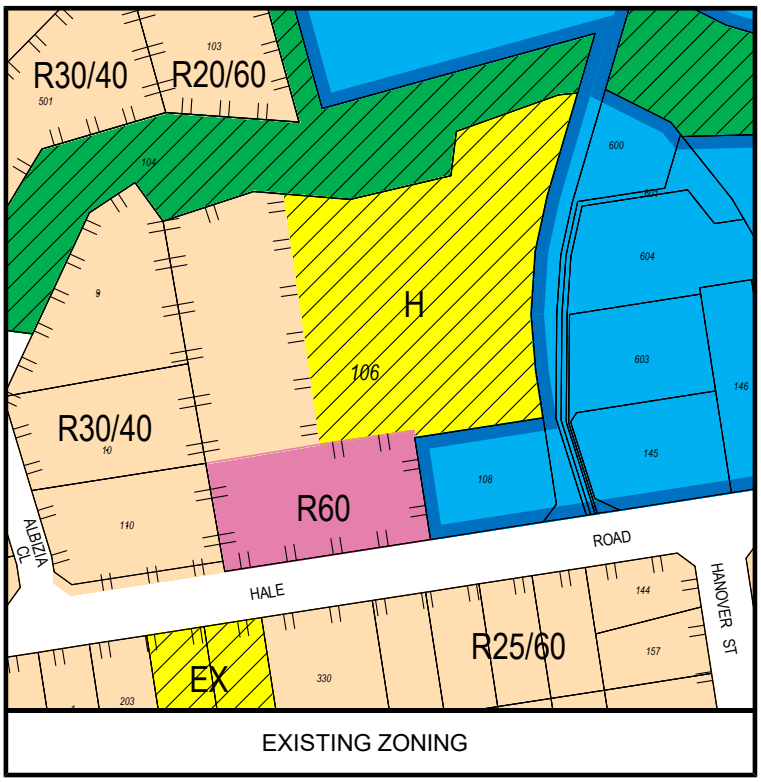
Figure E: *Bushfire Hazard Level Map*

Appendix 4

SCHEME AMENDMENT MAP

CITY OF KALAMUNDA
LOCAL PLANNING SCHEME No. 3

Planning and Development Act 2005



EXISTING ZONING

LEGEND

LOCAL SCHEME RESERVES

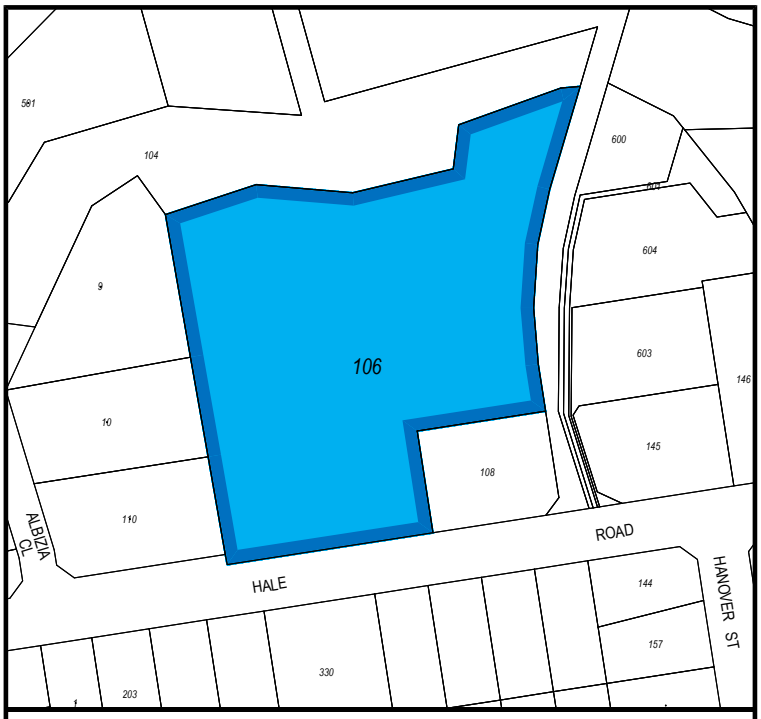
- LOCAL OPEN SPACE
- H — PUBLIC PURPOSES HALL / COMMUNITY CENTRE
- EX — PUBLIC PURPOSES TELEPHONE EXCHANGE

LOCAL SCHEME ZONES

- DISTRICT CENTRE
- MIXED USE
- RESIDENTIAL

OTHER CATEGORIES

- R20 R CODES



SCHEME (AMENDMENT) MAP

N
SCALE: 1:4000
DATE: 23.03.2022

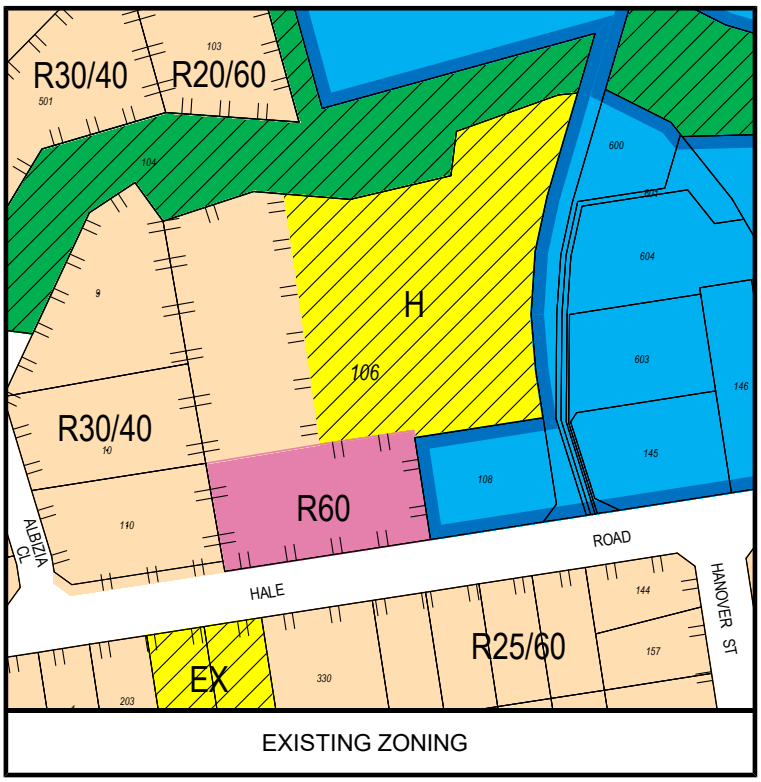
Amendment No.

Appendix 4

SCHEME AMENDMENT MAP

CITY OF KALAMUNDA
LOCAL PLANNING SCHEME No. 3

Planning and Development Act 2005



EXISTING ZONING

LEGEND

LOCAL SCHEME RESERVES

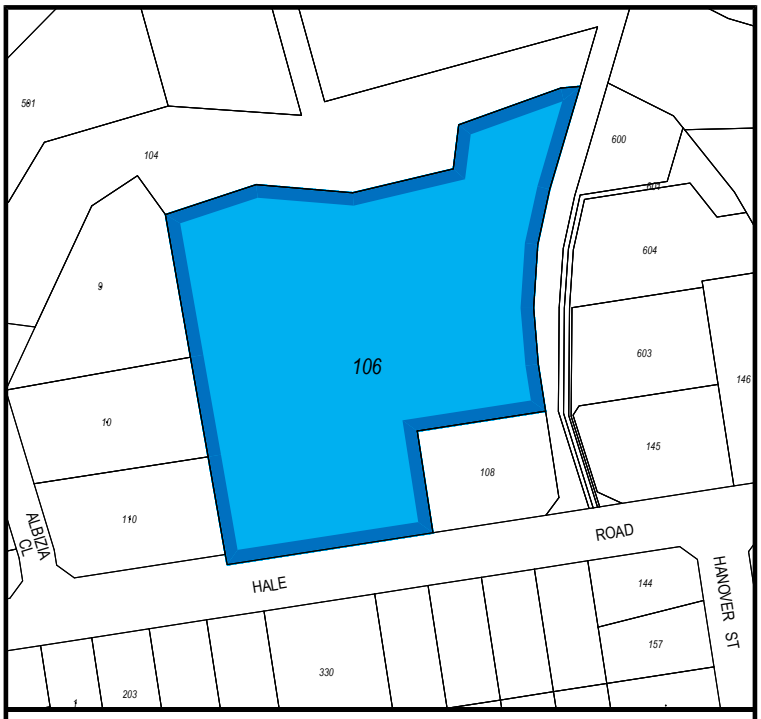
- LOCAL OPEN SPACE
- H — PUBLIC PURPOSES HALL / COMMUNITY CENTRE
- EX — PUBLIC PURPOSES TELEPHONE EXCHANGE

LOCAL SCHEME ZONES

- DISTRICT CENTRE
- MIXED USE
- RESIDENTIAL

OTHER CATEGORIES

- R20 R CODES



SCHEME (AMENDMENT) MAP

N
SCALE: 1:4000
DATE: 23.03.2022

Amendment No.

Appendix 5

TRANSPORT IMPACT ASSESSMENT

Transport Impact Assessment

Scheme Amendment - 88 Hale Road, Kalamunda

CW1200276/304900656

Prepared for
Altus Planning

24 June 2022

Cardno
now
Stantec

Contact Information

Stantec Australia Pty Ltd
ABN 17 007 820 322

11 Harvest Terrace
West Perth WA 6005
PO Box 447

www.cardno.com
Phone +61 8 9273 3888
Fax +61 8 9486 8664

Document Information

Prepared for	Altus Planning
Project Name	Scheme Amendment - 88 Hale Road, Kalamunda
File Reference	CW1200276 – TR – 001-B-Scheme Amendment TIA
Job Reference	CW1200276/304900656
Date	24 June 2022
Version Number	B

Author(s):

Lovely Lal
Traffic Engineer

Effective Date 24/06/2022

Approved By:

Desmond Ho
Senior Traffic Engineer

Date Approved 24/06/2022

Document History

Version	Effective Date	Description of Revision	Prepared by	Reviewed by
A	16-05-2022	For Issue	LL	DH/RJC
B	24-06-2022	Minor Updates	LL	DH

Table of Contents

Appendices

Tables

Figures

1 Introduction

Cardno now Stantec has been commissioned by Altus Planning to conduct a Transport Impact Assessment for the proposed scheme amendment at 88 Hale Road, Forrestfield (the "Site"), located within the City of Kalamunda.

This report aims to assess the impacts of the proposed development upon the adjacent road network, focusing on traffic operations, circulation and car parking requirements.

This TIA has been prepared in accordance with the Western Australian Planning Commission (WAPC) *Transport Impact Assessment Guidelines Volume 2 – Planning Schemes, Structure Plans and Activity Centre Zones* (2016) and the checklist is included in **Appendix A.**

1.1 Site Context

The Site is located at 88 Hale Road, Forrestfield. **Figure 1-1** shows an aerial image of the Site. The Site is currently occupied by the Woodlupine Family and Community Centre.

Figure 1-1 Aerial Image of Site

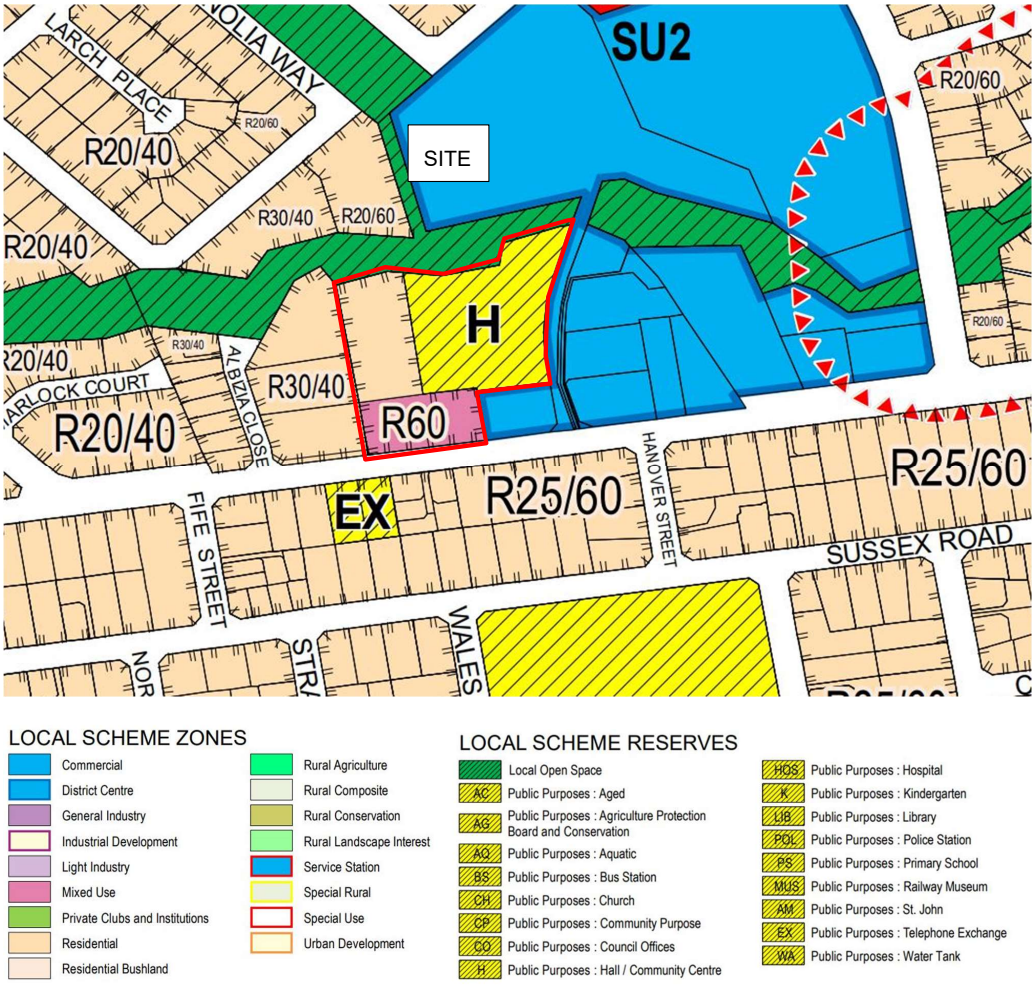
Source: Metromap (2022)

2 Existing Situation

2.1 Surrounding Land Uses

Pursuant to the *City of Kalamunda Local Planning Scheme No. 3* (LPS3), the Site is currently zoned 'Public Purpose', Residential and 'Mixed *use.* The Site is surrounded by other residential, commercial and Local open space. **Figure 2-1** shows the existing zoning.

Figure 2-1 City of Kalamunda Zoning



Source: City of Kalamunda Local Planning Scheme No:3

2.2 Existing Road Network

Road classifications are defined in the Main Roads Functional Hierarchy as follows:

- **Primary Distributors (light blue):** Form the regional and inter-regional grid of Main Roads WA traffic routes and carry large volumes of fast-moving traffic. Some are strategic freight routes and all are National or State Roads WA.
- **Regional Distributors (red):** Roads that are not Primary Distributors, but which link significant destinations and are designed for efficient movement of people and goods within and beyond regional areas. They are managed by Local Government.
- **District Distributor A (green):** These carry traffic between industrial, commercial and residential areas and connect to Primary Distributors. These are likely to be truck routes and provide only limited access to adjoining properties. They are managed by Local Government.
- **Distributor B (dark blue):** Perform a similar function to District Distributor A but with reduced capacity due to flow restrictions from access to and roadside parking alongside adjoining property. These are often older roads with traffic demand in excess of that originally intended. District Distributor A and B roads run between land-use cells and not through them, forming a grid that would ideally be around 1.5 kilometres apart. They are managed by Local Government.
- **Local Distributors (orange):** Carry traffic within a cell and link District Distributors at the boundary to access roads. The route of the Local Distributor discourages through traffic so that the cell formed by the grid of District Distributors only carries traffic belonging to or serving the area. These roads should accommodate buses but discourage trucks. They are managed by Local Government.
- **Access Roads (grey):** Provide access to abutting properties with amenity, safety and aesthetic aspects having priority over the vehicle movement function. These roads are bicycle and pedestrian friendly. They are managed by Local Government.

The Site is bounded by Hale Road to the South and Woolworths Drive to East. The surrounding road network is further described in **Table 2-1** and shows the hierarchy as per the Main Roads WA Road Information Mapping System, whilst **Figure 2-2** shows the road hierarchy.

Table 2-1 Road Network Classification

Street Names	Road Hierarchy		Road Network			
	Road Hierarchy	Jurisdiction	No. of Lanes	No. of Footpaths	Width (m)	Posted Speed
Hale Road	District Distributor A	Local Government	2	2	9.5	60
Woolworths Drive	Access Road	Local Government	2	2	5.95	50
Strelitzia Avenue	Local Distributor	Local Government	2	2	9.5m (3m median)	50

Figure 2-2 Road Hierarchy Map

Source: MRWA Road Information Mapping System

2.3 Existing Traffic Volumes

Existing weekday traffic volumes were obtained from Main Roads WA Traffic Map and tube count data provided by the City of Kalamunda for key road sections in the vicinity of the Site and are summarised in **Table 2-2.**

Table 2-2 Existing Traffic Volume

Road Name	Source	Year	Average Daily Traffic Volume	AM Peak Hour (vph)	PM Peak Hour (vph)	Heavy Vehicle %
Hale Road (Wattle Grove) North of Stringybark Dr	MRWA	2019/20	10,884	956	1,053	7.2%
Hale Road (Wattle Grove) East of Tonkin Hwy	MRWA	2020/21	15,666	1,040	1,421	9.7%
Hale Road & Strelitzia Avenue	SCATS	2021	-	1,016	1,284	-
Hanover Street (North of Sussex Road)	City of Kalamunda	2020	1,986	-	-	5.9%
Hale Road (East of Albizia Close)	City of Kalamunda	2019	12,850	-	-	4.3%

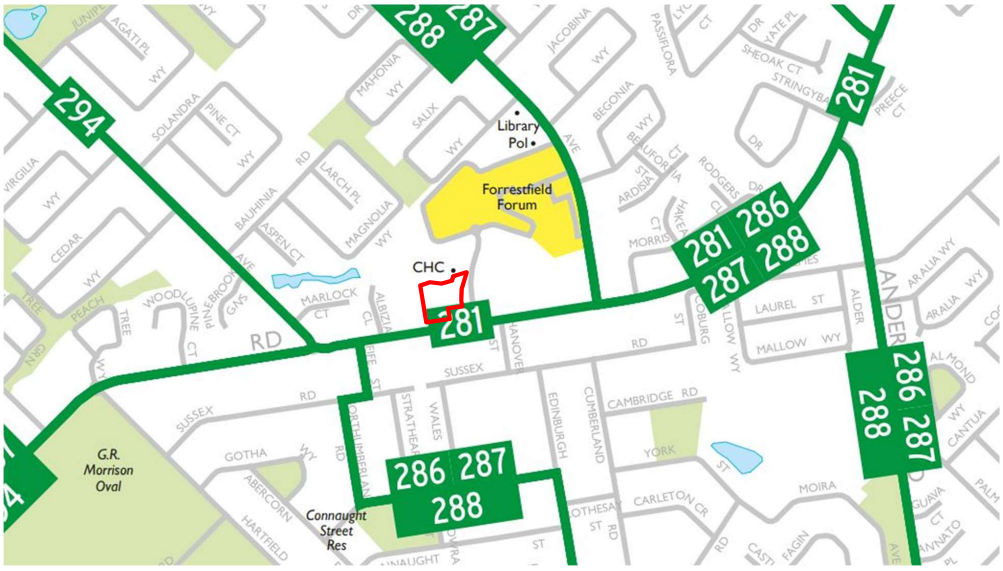
2.4 Existing Public Transport Services

The nearest bus stops to the Site are located to the east of the site on both directions along Hale Road as shown in **Figure 2-3**. These stops are serviced by route 281 as shown in **Figure 2-4. Table 2-3** shows the local bus routes and their frequencies.

Figure 2-3 Existing Bus Stop Location near Site

Source: Metro Maps

Figure 2-4 Existing Bus Routes



Source: Transperth Network Maps (2021)

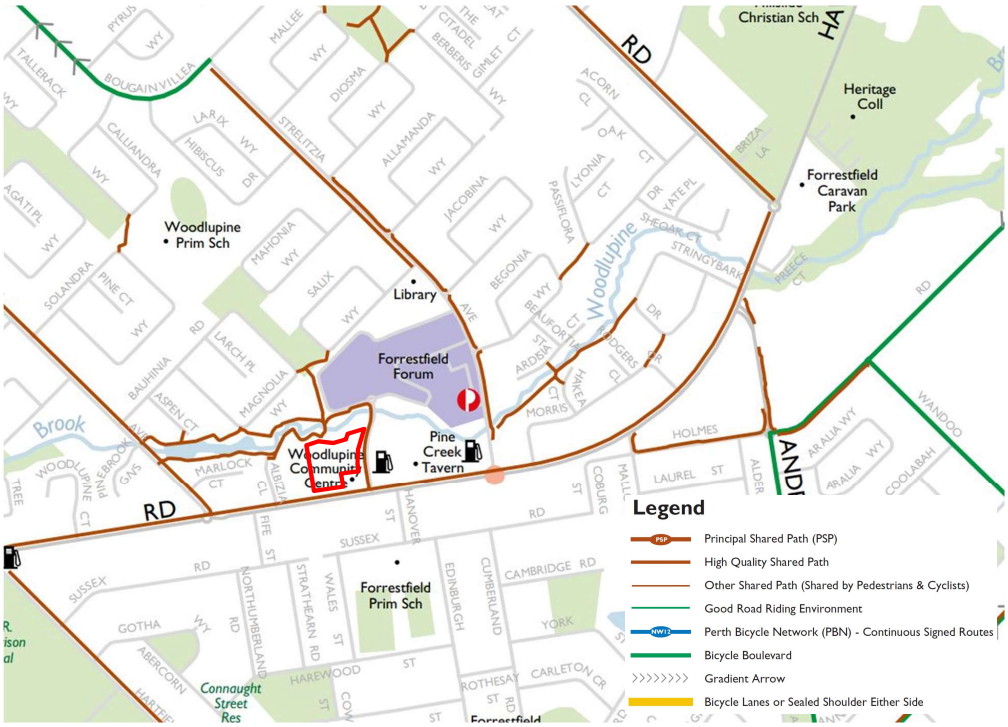
Table 2-3 Bus Routes and Frequency

Route No.	Route Description	Service Frequency (at nearest bus stop)	
		Weekdays	**Saturday**
281	Forrestfield – Lesmurdie via Wattle Grove (school service)	2 Services in the AM peak and 1 service during PM peak	-
282	Perth – Kalamunda Bus Stn via Grove Road	25 minutes during peak hour	120 minutes
283	Perth – Kalamunda Bus Stn via Lesmurdie Road	25 minutes during peak hours	120 minutes

2.5 Existing Pedestrian/Cycle Networks

High quality shared paths run along Hale Road, Woolworths Drive and Strelitzia Road as illustrated in **Figure 2-5.**

Figure 2-5 Existing Pedestrian and Cycling Network



Source: Department of Transport Cycling Network Maps

2.6 Crash Analysis

A crash assessment for the surrounding road network of the site has been completed using the Main Roads WA Reporting centre. The assessment covers all the recorded accidents for the 5-year period between 1 January 2016 to 31 December 2021. **Table 2-4, Table 2-5** and **Table 2-6** summarise the results and **Figure 2-6** shows the location and severity of the crashes.

Table 2-4 Total Crashes

TOTAL CRASHES						
Type of Crash (RUM Code)	Fatal	Hospital	Medical	Major Property Damage	Minor Property Damage	Total Crashes
Rear End	-	-	-	3	1	**4**
Right Angle	-	1	1	11	1	**14**
Hit Object	-	-	1	-	-	**1**
Hit Pedestrian	-	-	1	-	-	**1**
Right Turn Thru	-	-	1	1	1	**3**
Unspecified	-	-	-	-	1	**1**
Total	**-**	**1**	**4**	**15**	**4**	**24**

Table 2-5 Intersection Crashes

INTERSECTION CRASHES						
Type of Crash (RUM Code)	Fatal	Hospital	Medical	Major Property Damage	Minor Property Damage	Total Crashes
Right Angle	-	1	-	5	1	**7**
Right Turn Thru	-	-	1	1	1	**3**
Rear End	-	-	-	2	1	**3**
Unspecified	-	-	-	-	1	**1**
Total	**-**	**1**	**1**	**8**	**4**	**14**

Table 2-6 Mid-Block Crashes

MIDBLOCK CRASHES						
Type of Crash (RUM Code)	Fatal	Hospital	Medical	Major Property Damage	Minor Property Damage	Total Crashes
Rear End	-	-	-	1	-	**1**
Right Angle	-	-	1	6	-	**7**
Hit Object	-	-	1	-	-	**1**
Hit Pedestrian	-	-	1	-	-	**1**
Total	**-**	**-**	**3**	**7**	**-**	**10**

Figure 2-6 Crash Locations

Source: Maps.co

Crashes recorded are summarised below:

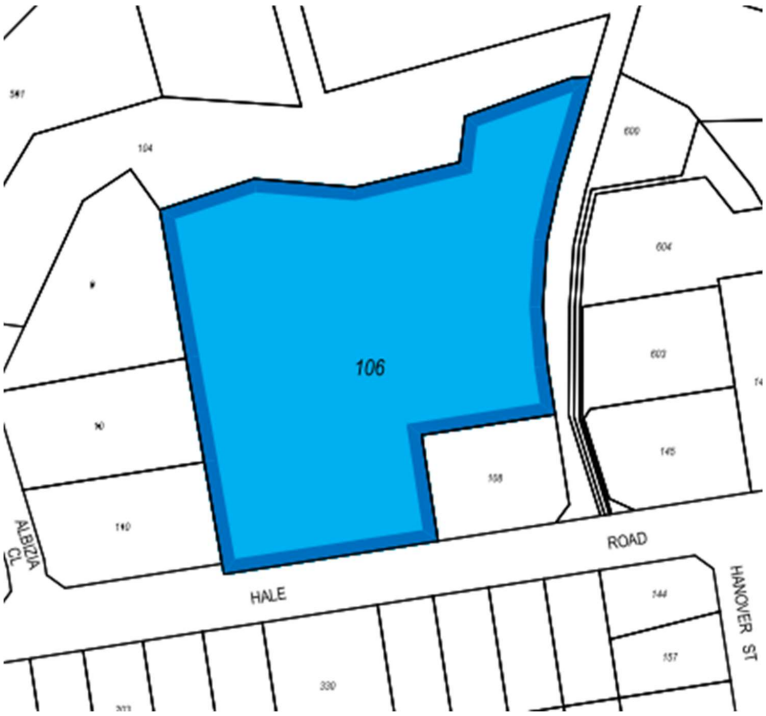
- A total of 24 crashes was recorded on the surrounding road network;
- One recorded crash resulted in hospitalisation and another 4 required medical attention;
- Ten midblock crashes were recorded in the surrounding network.

It is very unlikely that this development would have any material impact on road safety in the area due to its small scale.

3 Proposed Rezoning Area

The Site is currently zoned Public Purpose, Residential and Mixed Use as per the City of Kalamunda LPS, however an amendment to the Western Australian Planning Commission seeks to change the zoning to a predominantly commercial use. **Figure 3-1** shows the proposed scheme amendment map.

Figure 3-1 Proposed Scheme Amendment



Source: City of Kalamunda

4 Development Proposal

4.1 Proposed Land Uses

A concept comprising of the following land uses which may emanate from the proposed rezoning is indicated in the '*URBIS 88 Hale Road, Forrestfield Land use Assessment Report'* with the following specific components:

- Community Centre – 2950 m^2;
- Bulky Goods Showroom – 2450 m^2;
- Health – 1000m^2;
- Retail – 500m^2
- 239 parking bays

Under Policy and Strategic review findings of the abovementioned Urbis report it is recommended to close the existing Woodlupine Family and Community centre facility and collocate it with the new community hub.

Figure 4-1shows a draft concept plan prepared for the proposed site and a high-resolution layout in **Appendix B.**

Figure 4-1 Concept Plan

Source: URBIS Forrestfield Precinct Plan Report

4.2 Access Arrangements

4.2.1 Site Access

A concept layout showing vehicle access for the overall site is anticipated to be primarily via Woolworths Drive which will limit access connections to Hale Road as indicated in **Figure 4-2.** A summary of the vehicle access arrangements are as follows:

- Access 1 – Provides Left-in-Left-out at Hale Road;
- Access 2 –Provides full movement access to the proposed development; and
- Access 3 –Provides full movement access to the proposed development.

Figure 4-2 Access Arrangements – (Concept Plan)

Source: URBIS Forrestfield Precinct Plan Report

5 Integration with Surrounding Area

5.1 Surrounding Attractors and Generators

Major trip generators and attractors in the vicinity the Site includes:

- Maddington-Kenwick Strategic Employment Area (MKSEA), a developing industrial area on the west side of Tonkin Highway.
- Existing residential suburbs of Wattle Grove and Forrestfield.
- Existing local shopping centres in Forrestfield and Wattle Grove.
- Secondary schools in Kalamunda and Lesmurdie.

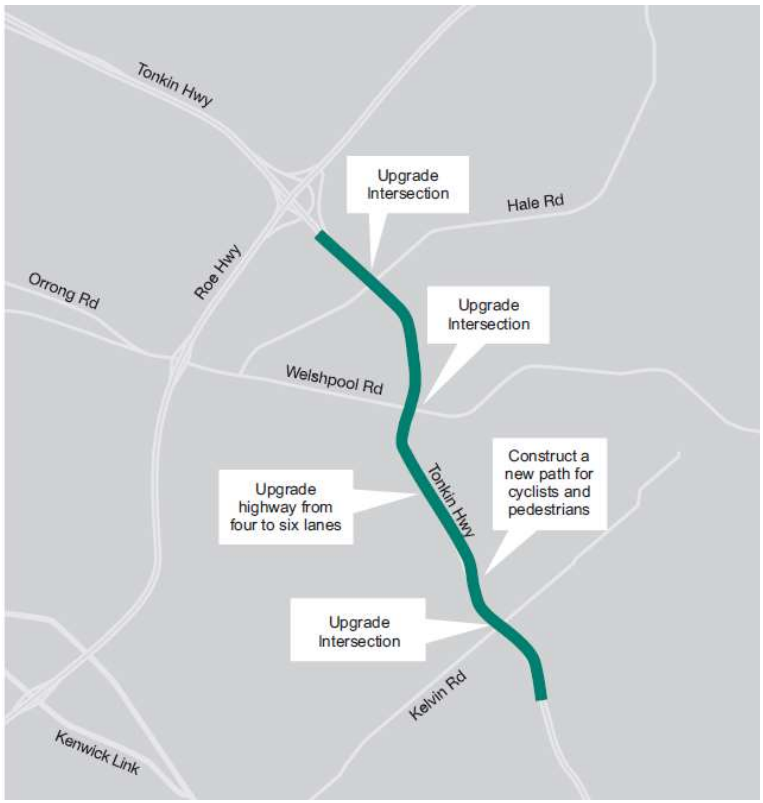
5.2 Proposed Changes to Transport Network

5.2.1 External Road Network

5.2.1.1 Tonkin Highway Upgrade

As part of the Tonkin Highway Corridor Project, Tonkin Highway will be upgraded from four lanes to six lanes and includes the intersection at Hale Road as shown in **Figure 5-1.** The proposed changes are funded and is expected to be completed by 2031.

Figure 5-1 Tonkin Highway Corridor Project



Source: Main Roads WA(2021)

5.3 Future Public Transport Facilities

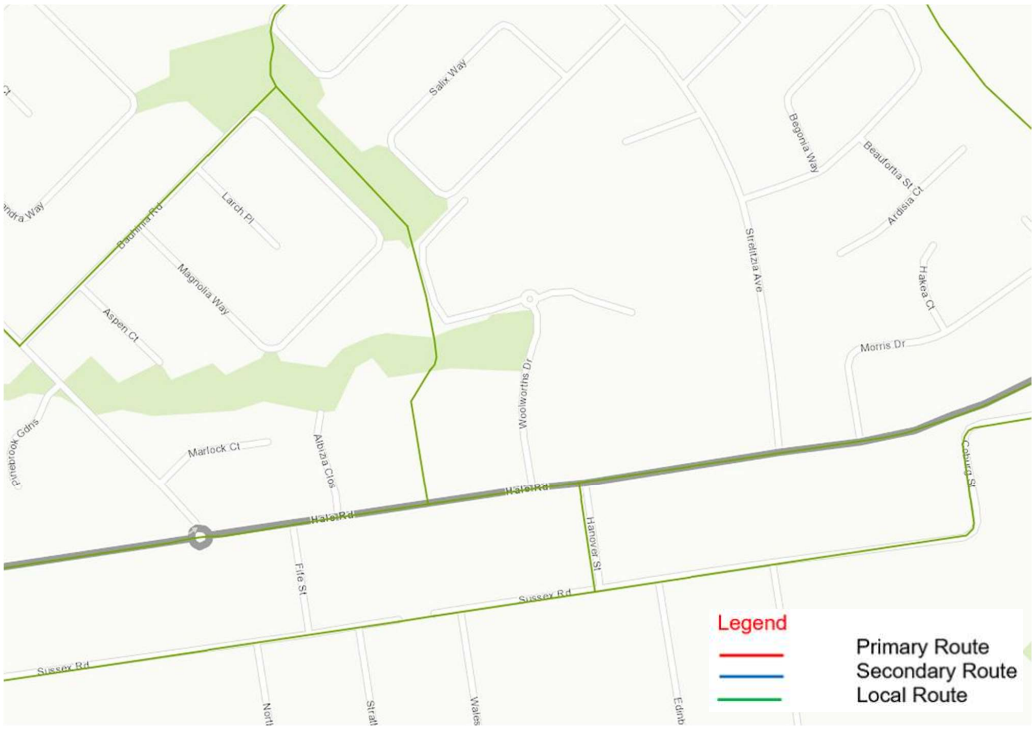
Cardno now Stantec contacted the Public Transport Authority and were advised there are proposed changes to the public transport network within the surrounding areas.

It was advised that services will change when the Airport Line is commissioned and there will be services from the proposed development location to High Wycombe Station, Westfield Carousel / Cannington Station as well as Perth City via Belmont Forum. People travelling to Midland will need to transfer at High Wycombe Station. The frequency of service will be higher than currently provided and operating hours will also be longer. The exact commencement date has not been confirmed although it is anticipated to be near the end of June 2022.

5.4 Future Pedestrian/Cycle Network Facilities

The Long-Term Cycling Network (LTCN) is an aspirational blueprint to provide a continuous cycling network throughout Perth and identifies the function of a route – primary, secondary or local. The LTCN shows Hale Road as Local route connecting to the wider network. **Figure 5-2** shows the Long-Term Cycle Network on the surrounding network to the site.

Figure 5-2 Long Term Cycle Network



Source: Department of Transport

6 Analysis of Transport Network

6.1 Assessment Overview

6.1.1 Assessment Years and Time Period

Three assessment years as indicated below have been analysed:

- Scenario 1 – Existing Condition – 2022 base year;
- Scenario 2 – 2024 background traffic with proposed development (opening year of the development); and
- Scenario 3 – 2034 background traffic with proposed development (10-year horizon assessment as per WAPC guidelines)

Based on examination of SCATS data for the Hale Road/Strelitzia Avenue Intersection, the following peak hours were identified for analysis:

> Weekday AM Peak: 8:15 to 9:15 AM

> Weekday PM Peak: 3:00 to 4:00 PM

6.1.2 Analysis Overview

To identify the impact of the proposed development on the surrounding road network, the intersection performance of the following intersection has been analysed using SIDRA analysis software:

- Hale Road / Woolworths Drive Intersection; and
- Hale Road / Hanover Street Intersection.

6.2 Analysis Assumptions

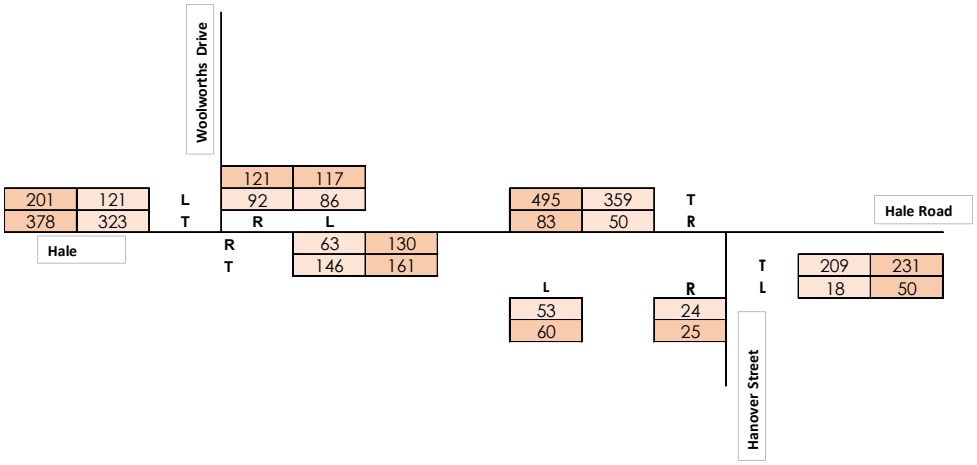
- 2021 SCATS data at the intersection of Hale Road/Strelitzia Avenue Intersection were used for this analysis. The percentage of turning movements was obtained from sample traffic counts surveyed at the intersections of Hale Road/Woolworths Drive and Hale Road / Hanover Street during peak hours on 04/05/2022;
- The opening year of the development is assumed to be 2024;
- Main Roads traffic map historical counts showed little or no traffic growth on Hale Road during peak periods. However, a future growth rate of 1% per annum has been applied to the opening year and 10-year horizon for a robust assessment;
- Traffic distributions to the road network for the proposed on-site land uses has been based on existing traffic flow proportions; and
- The heavy vehicle volumes are based on Main Roads WA Traffic Map.

6.3 Background Traffic

Existing traffic flows for the Hale Road/Strelitzia Avenue Intersection was sourced from Main Roads WA Traffic Map Scats data recorded in 2021. Refer to **Figure 6-1** for existing background traffic volumes for the intersections to be analysed.

Future background traffic was estimated by applying a linear growth rate of 1% per annum to the 2021 traffic volumes.

Figure 6-1 Existing Traffic Volumes



6.4 Development Trip Generation

Trip generation has been calculated for the proposed development utilising trip generation rates from the *Institute of Transportation Engineers (ITE) "Trip Generation" 10th Ed*. The following tables detail the directional distribution and estimated trips to be generated by the proposed development.

Table 6-1 provides the trip generation rate during the AM and PM peak hours, **Table 6-2** outlines the directional distribution for the proposed development and **Table 6-3** summarises the total trips expected to be generated by the proposed development.

Table 6-1 Trip Generation Rate

Land Use	Code/Source	AM Peak	PM Peak
Bulky Goods Showroom	RTA	-	2.7 (per 100m^2)
Retail	ITE 820	3.23 (per 100m^2)	4.53 (per 100m^2)
Health	ITE 630	5.61 (per 100m^2)	4.99 (per 100m^2)
Community Centre	ITE 495	1.86 (per 100m^2)	2.47 (per 100m^2)

Table 6-2 Trip Directional Distribution

Land Use	AM Peak		PM Peak	
	In	Out	In	Out
Bulky Goods Showroom	-	-	51%	49%
Retail	50%	50%	54%	46%
Health	58%	42%	52%	48%
Community Centre	63%	37%	46%	54%

Table 6-3 Estimated Trip Generation

Land Use	AM Peak		PM Peak	
	In	Out	In	Out
Bulky Goods Showroom	-	-	34	32
Retail	8	8	12	10
Health	33	24	26	24
Community Centre	35	20	34	39
Total	**127**		**212**	

The proposed development is expected to generate approximately 127 vehicles during the AM peak hour and 212 vehicles during the PM peak hour periods. The existing Woodlupine Family and Community centre is expected to be closed and intended to be collocated into the newly built community hub. For a robust assessment the existing Woodlupine community centre trips have also been included in traffic analysis.

6.5 Trip Distribution and Assignment

The development trip distribution is based on the existing traffic distribution within the surrounding road network. **Figure 6-2** shows the trip distribution details.

Figure 6-2 Trip Distribution for the Proposed Development

Source: Metro map

6.6 Total Background and Development Traffic

Figure 6-3 and **Figure 6-4** shows the traffic volumes for Scenario 2 and Scenario 3 respectively.

Figure 6-3 2024+ Proposed Development Volumes

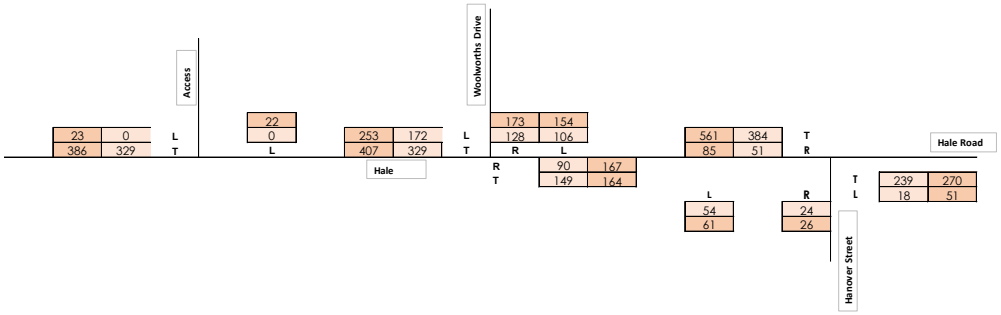
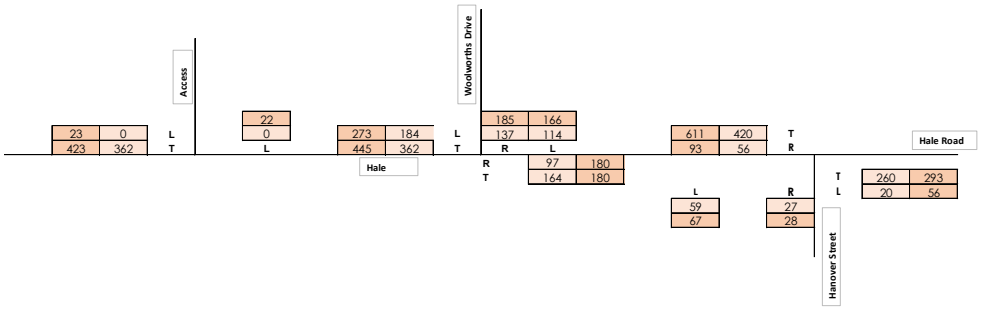


Figure 6-4 2034 + Proposed Development Volumes



6.7 Intersection Performance

Analysis of the traffic impacts of the proposed development has been carried out for the intersection of Hale Road/Woolworths Drive and Hale Road/ Hanover Street.

The identified intersections have been analysed using the SIDRA analysis program. This program calculates the performance of intersections based on input parameters, including geometry and traffic volumes. As an output SIDRA provides values for the Degree of Saturation (DOS), queue lengths, delays, level of service, and 95th Percentile Queue. These parameters are defined as follows:

- Degree of Saturation (DOS): is the ratio of the arrival traffic flow to the capacity of the approach during the same period. The theoretical intersection capacity is exceeded for an un-signalized intersection where DOS > 0.80;
- 95% Queue: is the statistical estimate of the queue length up to or below which 95% of all observed queues would be expected;
- Average Delay: is the average of all travel time delays for vehicles through the intersection. An unsignalized intersection can be considered to be operating at capacity where the average delay exceeds 40 seconds for any movement; and
- Level of Service (LOS): is the qualitative measure describing operational conditions within a traffic stream and the perception by motorists and/or passengers. The different levels of service can generally be described as shown in **Table 6-4**.

Table 6-4 Level of Service (LOS) Performance Criteria

LOS	Description	Signalised Intersection	Unsignalized Intersection
A	Free-flow operations (best condition)	≤10 sec	≤10 sec
B	Reasonable free-flow operations	10-20 sec	10-15 sec
C	At or near free-flow operations	20-35 sec	15-25 sec
D	Decreasing free-flow levels	35-55 sec	25-35 sec
E	Operations at capacity	55-80 sec	35-50 sec
F	A breakdown in vehicular flow (worst condition)	≥80 sec	≥50 sec

A LOS exceeding these values indicates that the road section is exceeding its practical capacity. Above these values, users of the intersection are likely to experience unsatisfactory queueing and delays during the peak hour periods.

6.8 Traffic Analysis

The analysis has been undertaken using the SIDRA traffic analysis software. Details of the results are presented in **Appendix C.**

5.6.1 Hale Road/Woolworths Drive and Hale Road / Hanover Street Intersections

The SIDRA layout for Hale Road/Woolworths Drive and Hale Road/Hanover Street intersections were modelled as a network as shown in **Figure 6-5**. The results show that these intersections would operate at satisfactory level of service and capacity and would be able to accommodate the expected traffic to be generated by the proposed development which is summarised in **Table 6-5** to **Table 6-10.**

Figure 6-5 Sidra Network Layout

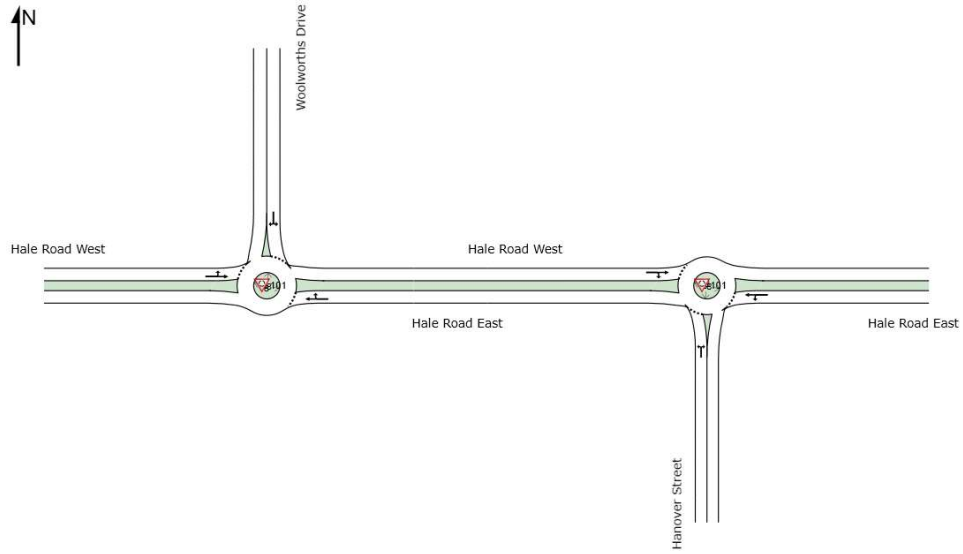


Table 6-5 Hale Road/ Woolworths Drive Intersection - Existing

Intersection Approach		AM Peak				PM Peak			
		DOS	Delay	LOS	95% back of Queue (m)	DOS	Delay	LOS	95% back of Queue (m)
Hale Road East (E)	T	0.236	3.8	A	11.8	0.276	3.7	A	14.5
	R	0.236	6.3	A	11.8	0.276	6.3	A	14.5
Woolworths Drive (N)	L	0.267	7.5	A	11.2	0.300	7.1	A	14.0
	R	0.267	10.0	B	11.2	0.300	9.6	A	14.0
Hale Road West (W)	L	0.445	5.8	A	28.0	0.530	6.3	A	35.9
	T	0.445	5.7	A	28.0	0.530	6.3	A	35.9
		0.445	6.1	A	28.0	0.530	6.3	A	35.9

Table 6-6 Hale Road/ Hanover Street Intersection – Existing

Intersection Approach		AM Peak				PM Peak			
		DOS	Delay	LOS	95% back of Queue (m)	DOS	Delay	LOS	95% back of Queue (m)
Hale Road East (E)	L	0.231	5.5	A	10.9	0.248	5.6	A	11.8
	T	0.231	5.4	A	10.9	0.248	5.5	A	11.8
Hanover Street (S)	L	0.104	6.3	A	4.2	0.093	6.6	A	3.7
	R	0.104	8.8	A	4.2	0.093	9.4	A	3.7
Hale Road West (W)	T	0.368	3.0	A	22.5	0.424	3.0	A	28.1
	R	0.368	5.6	A	22.5	0.424	5.5	A	28.1
		0.368	4.4	A	22.5	0.424	4.3	A	28.1

Table 6-7 Hale Road/ Woolworths Drive Intersection – 2024 + With Development

Intersection Approach		AM Peak				PM Peak			
		DOS	Delay	LOS	95% back of Queue (m)	DOS	Delay	LOS	95% back of Queue (m)
Hale Road East (E)	T	0.232	3.7	A	11.6	0.340	4.3	A	18.8
	R	0.232	6.3	A	11.6	0.340	6.8	A	18.8
Woolworths Drive (N)	L	0.277	6.6	A	12.4	0.440	7.7	A	22.9
	R	0.277	9.2	A	12.4	0.440	10.3	B	22.9
Hale Road West (W)	L	0.431	5.8	A	26.6	0.647	6.9	A	49.1
	T	0.431	5.7	A	26.6	0.647	6.9	A	49.1
		0.431	6.0	A	26.6	0.647	7.1	A	49.1

Table 6-8 Hale Road/ Hanover Street Intersection – 2024 + With Development

Intersection Approach		AM Peak				PM Peak			
		DOS	Delay	LOS	95% back of Queue (m)	DOS	Delay	LOS	95% back of Queue (m)
Hale Road East (E)	L	0.215	5.3	A	10.0	0.283	7.0	A	14.1
	T	0.215	5.2	A	10.0	0.283	9.7	A	14.1
Hanover Street (S)	L	0.086	5.8	A	3.5	0.100	5.6	A	4.0
	R	0.086	8.4	A	3.5	0.100	5.5	A	4.0
Hale Road West (W)	T	0.324	2.9	A	18.9	0.473	3.0	A	34.3
	R	0.324	5.5	A	18.9	0.473	5.6	A	34.3
		0.324	4.2	A	18.9	0.473	4.4	A	34.3

Table 6-9 Hale Road/ Woolworths Drive Intersection – 2034 + With Development

Intersection Approach		AM Peak				PM Peak			
		DOS	Delay	LOS	95% back of Queue (m)	DOS	Delay	LOS	95% back of Queue (m)
Hale Road East (E)	T	0.257	3.8	A	13.2	0.375	4.4	A	21.6
	R	0.257	6.4	A	13.2	0.375	6.9	A	21.6
Woolworths Drive (N)	L	0.309	7.0	A	14.2	0.511	9.1	A	29.8
	R	0.309	9.5	A	14.2	0.511	11.6	B	29.8
Hale Road West (W)	L	0.475	5.9	A	30.9	0.738	8.3	A	68.2
	T	0.475	5.8	A	30.9	0.738	8.3	A	68.2
		0.475	6.2	A	30.9	0.738	8.2	A	68.2

Table 6-10 Hale Road/ Hanover Street Intersection – 2034 + With Development

Intersection Approach		AM Peak				PM Peak			
		DOS	Delay	LOS	95% back of Queue (m)	DOS	Delay	LOS	95% back of Queue (m)
Hale Road East (E)	L	0.235	5.4	A	11.2	0.311	5.7	A	16.0
	T	0.235	5.3	A	11.2	0.311	5.6	A	16.0
Hanover Street (S)	L	0.097	6.0	A	4.0	0.112	6.3	A	4.5
	R	0.097	8.6	A	4.0	0.112	8.9	A	4.5
Hale Road West (W)	T	0.356	3.0	A	21.8	0.516	3.0	A	40.3
	R	0.356	5.5	A	21.8	0.516	5.6	A	40.3
		0.356	4.3	A	21.8	0.516	4.4	A	40.3

7 Summary

This assessment has been prepared in accordance with the *WAPC Transport Assessment Guidelines for Developments: Volume 2 – Planning Schemes, Structure Plans and Activity Centre Plans* (2016).

The following is concluded with regards to the proposed scheme amendment:

- An LPS Amendment is proposed for a Site in Forrestfield bounded by Hale Road and Woolworths Drive. The Site is currently zoned Public Purpose, Residential and Mixed Use as per the City of Kalamunda LPS, however an amendment to the Western Australian Planning Commission seeks to change the zoning to include the site in the 'District Centre' Zone.
- For the purpose of the traffic analysis, it is assumed that the area will be developed predominantly as a Community and Health centre, Bulky goods showroom and Retail space as per the recommendations in the Urbis report entitled "*88 Hale Road, Forrestfield, Land Use Assessment Report*".
- The proposed development is expected to generate approximately 127 vehicles in the AM peak hour and 212 vehicles during the PM peak hour.
- External to the site there is good connectivity to public transport and walking/cycling networks.
- Based on the SIDRA assessment, it is anticipated that the Hale Road / Woolworths Drive and Hale Road/Hanover Street Intersections would operate at adequate levels of service and capacity for the 2024 opening year and future 2034 design year.

Overall, the proposed scheme amendment is not anticipated to have a material impact on the traffic operations and safety of the surrounding road network.

APPENDIX A

WAPC CHECKLIST

Cardno now Stantec

ITEM	PROVIDED	COMMENTS
Summary		
Introduction/Background	Section 1	
Scheme Amendment proposal		
regional context	Section 4	
proposed land uses	Section 4	
table of land uses and quantities	Section 4	
major attractors/generators	Section 5	
specific issues	N/A	
Existing situation		
existing land uses within Scheme Amendment area	Section 2	
existing land uses within 800 metres of Scheme Amendment area	Section 2	
existing road network within Scheme Amendment area	Section 2	
existing pedestrian/cycle networks within Scheme Amendment area	Section 2	
existing public transport services within Scheme Amendment area	Section 2	
existing road network within 2 (or 5) km of Scheme Amendment area	Section 2	
traffic flows on roads within Scheme Amendment area (PM and/or AM peak hours)	Section 2	
traffic flows on roads within 2 (or 5) km of within Scheme Amendment area (AM and/ or PM peak hours)	Section 2	
existing pedestrian/cycle networks within 800m of Scheme Amendment area	Section 2	
existing public transport services within 800m of Scheme Amendment area	Section 2	
Proposed internal transport networks		
changes/additions to existing road network or proposed new road network	N/A	
road reservation widths	N/A	
road cross-sections & speed limits	N/A	
intersection controls	N/A	
pedestrian/cycle networks and crossing facilities	N/A	
public transport routes	N/A	
Changes to external transport networks		
road network	Section 5	
intersection controls	N/A	
pedestrian/cycle networks and crossing facilities	Section 5	
public transport services	Section 5	
Integration with surrounding area		
trip attractors/generators within 800 metres	Section 5	
proposed changes to land uses within 800 metres	N/A	

ITEM	PROVIDED	COMMENTS
travel desire lines from structure plan to these attractors/generators	N/A	
adequacy of external transport networks	N/A	
deficiencies in external transport networks	N/A	
remedial measures to address deficiencies	N/A	
Analysis of internal transport networks		
assessment year(s) and time period(s)	Section 6	
Scheme Amendment generated traffic	Section 6	
extraneous (through) traffic	Section 6	
design traffic flows (that is, total traffic)	Section 6	
road cross-sections	N/A	
intersection sight distances	N/A	
intersection operation and method of control	N/A	
frontage access strategy	N/A	
pedestrian/cycle networks	N/A	
safe walk/cycle to school assessment (residential subdivisions only)	N/A	
pedestrian permeability & efficiency	N/A	
access to public transport	N/A	
Analysis of external transport networks		
base flows for assessment year(s)	Section 6	
total traffic flows	Section 6	
road cross-sections	N/A	
intersection layouts & controls	Section 6	
pedestrian/cycle networks	N/A	
Safety issues		
Identify issues	N/A	
Remedial measures	N/A	
Conclusions	Section 7	

APPENDIX B

CONCEPT PLAN

Cardno now Stantec

Land Use	Parking Provided
Community Centre	69
Health Hub	40
Retail	25
Bulky Goods	43
Reciprocal Parking	62
Total bays	**239**

Note: Potential parking yield is based on Scheme requirements and Indicative layout

URBIS

FORRESTFIELD PRECINCT PLAN
MOVEMENT & PARKING

Disclaimer: The layout provided within this plan is indicative only for the purposes of assessing the site potential. This layout is subject to change during future investigations and detail design process.

1:1250 @ A4

DATE: 29.06.2021
JOB NO: P0032967
DWG NO: 03
REV: A

LEGEND:

- SUBJECT SITE
- INDICATIVE LOT BOUNDARY
- RETAINED MATURE TREES
- PROPOSED TREES

YIELD SUMMARY

PARKING: 739 BAYS

1 BULKY GOODS - 1 STOREY

AREA: 2450m²

2 MIXED USES - 2 STOREY

COMMUNITY CENTRE: 2950m²

HEALTH: 1000m²

RETAIL: 500m²

URBIS

FORRESTFIELD PRECINCT PLAN

CONCEPT PLAN LOTS

Disclaimer: The layout provided within this plan is indicative only for the purposes of assessing the site potential. This layout is subject to change during future investigations and detail design process.

1:1250 @ A4

0 10 20 30 40 50

DATE: 29.06.2021

JOB NO: P0032967

DWG NO: 04

REV: A

APPENDIX C

SIDRA RESULTS

Cardno now Stantec

MOVEMENT SUMMARY

Site: 101 [Hale Road/Woolworths Drive - AM (Site Folder: Existing)]

Network: N101 [Hale Road/ Woolworths Drive/Hanover St - AM (Network Folder: Existing)]

Hale Road/Woolworths Drive - 2022 AM
Site Category: (None)
Roundabout
Sensitivity Analysis (Critical Gap & Follow-up Headway): Results for Parameter Scale = 120.0 %

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Hale Road East														
5	T1	154	9.0	154	9.0	0.236	3.8	LOS A	1.5	11.8	0.36	0.55	0.36	47.0
6	R2	66	2.0	66	2.0	0.236	6.3	LOS A	1.5	11.8	0.36	0.55	0.36	39.4
Approach		220	6.9	220	6.9	0.236	4.5	LOS A	1.5	11.8	0.36	0.55	0.36	45.5
North: Woolworths Drive														
7	L2	91	2.0	91	2.0	0.267	7.5	LOS A	1.5	11.2	0.60	0.74	0.60	32.0
9	R2	97	2.0	97	2.0	0.267	10.0	LOS B	1.5	11.2	0.60	0.74	0.60	45.4
Approach		187	2.0	187	2.0	0.267	8.8	LOS A	1.5	11.2	0.60	0.74	0.60	41.5
West: Hale Road West														
10	L2	127	2.0	127	2.0	0.445	5.8	LOS A	3.5	28.0	0.36	0.52	0.36	48.4
11	T1	340	9.0	340	9.0	0.445	5.7	LOS A	3.5	28.0	0.36	0.52	0.36	49.7
Approach		467	7.1	467	7.1	0.445	5.7	LOS A	3.5	28.0	0.36	0.52	0.36	49.3
All Vehicles		875	6.0	875	6.0	0.445	6.1	LOS A	3.5	28.0	0.41	0.57	0.41	46.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Organisation: CARDNO PTY LTD | Licence: NETWORK / Enterprise | Processed: Monday, 9 May 2022 10:04:45 AM
Project: K:\Projects\CW1200276_Altus Planning_TIA_Hale Road, Forrestfield\5_Technical\Traffic\Modelling\Project1.sip9

MOVEMENT SUMMARY

Site: 101 [Hale Road/ Hanover Street- AM (Site Folder: Existing)]

Network: N101 [Hale Road/ Woolworths Drive/Hanover St - AM (Network Folder: Existing)]

Hale Road/Hanover Street - 2022 AM
Site Category: (None)
Roundabout
Sensitivity Analysis (Critical Gap & Follow-up Headway): Results for Parameter Scale = 120.0 %

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Hanover Street														
1	L2	56	2.0	56	2.0	0.104	6.3	LOS A	0.6	4.2	0.48	0.62	0.48	26.9
3	R2	25	2.0	25	2.0	0.104	8.8	LOS A	0.6	4.2	0.48	0.62	0.48	38.6
Approach		81	2.0	81	2.0	0.104	7.1	LOS A	0.6	4.2	0.48	0.62	0.48	32.4
East: Hale Road East														
4	L2	19	2.0	19	2.0	0.231	5.5	LOS A	1.4	10.9	0.24	0.50	0.24	42.0
5	T1	220	9.0	220	9.0	0.231	5.4	LOS A	1.4	10.9	0.24	0.50	0.24	41.3
Approach		239	8.4	239	8.4	0.231	5.4	LOS A	1.4	10.9	0.24	0.50	0.24	41.4
West: Hale Road West														
11	T1	378	9.0	378	9.0	0.368	3.0	LOS A	2.8	22.5	0.19	0.47	0.19	42.7
12	R2	53	2.0	53	2.0	0.368	5.6	LOS A	2.8	22.5	0.19	0.47	0.19	34.4
Approach		431	8.1	431	8.1	0.368	3.3	LOS A	2.8	22.5	0.19	0.47	0.19	41.9
All Vehicles		751	7.6	751	7.6	0.368	4.4	LOS A	2.8	22.5	0.24	0.49	0.24	40.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Organisation: CARDNO PTY LTD | Licence: NETWORK / Enterprise | Processed: Monday, 9 May 2022 10:04:45 AM
Project: K:\Projects\CW1200276_Altus Planning_TIA_Hale Road, Forrestfield\5_Technical\Traffic\Modelling\Project1.sip9

MOVEMENT SUMMARY

Site: 101 [Hale Road/Woolworths Drive - PM (Site Folder: Existing)]

Network: N101 [Hale Road/ Woolworths Drive/Hanover St - PM (Network Folder: Existing)]

Hale Road/Woolworths Drive - 2022 PM
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Hale Road East														
5	T1	169	9.0	169	9.0	0.276	3.7	LOS A	1.9	14.5	0.40	0.58	0.40	46.5
6	R2	137	2.0	137	2.0	0.276	6.3	LOS A	1.9	14.5	0.40	0.58	0.40	38.8
Approach		306	5.9	306	5.9	0.276	4.9	LOS A	1.9	14.5	0.40	0.58	0.40	44.1
North: Woolworths Drive														
7	L2	123	2.0	123	2.0	0.300	7.1	LOS A	1.9	14.0	0.64	0.75	0.64	32.6
9	R2	127	2.0	127	2.0	0.300	9.6	LOS A	1.9	14.0	0.64	0.75	0.64	45.7
Approach		251	2.0	251	2.0	0.300	8.4	LOS A	1.9	14.0	0.64	0.75	0.64	41.9
West: Hale Road West														
10	L2	212	2.0	212	2.0	0.530	6.3	LOS A	4.6	35.9	0.52	0.57	0.52	47.7
11	T1	398	9.0	398	9.0	0.530	6.3	LOS A	4.6	35.9	0.52	0.57	0.52	48.8
Approach		609	6.6	609	6.6	0.530	6.3	LOS A	4.6	35.9	0.52	0.57	0.52	48.4
All Vehicles		1166	5.4	1166	5.4	0.530	6.3	LOS A	4.6	35.9	0.52	0.61	0.52	46.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Organisation: CARDNO PTY LTD | Licence: NETWORK / Enterprise | Processed: Monday, 9 May 2022 10:04:58 AM
Project: K:\Projects\CW1200276_Altus Planning_TIA_Hale Road, Forrestfield\5_Technical\Traffic\Modelling\Project1.sip9

MOVEMENT SUMMARY

Site: 101 [Hale Road/ Hanover Street- PM (Site Folder: Existing)]

Network: N101 [Hale Road/ Woolworths Drive/Hanover St - PM (Network Folder: Existing)]

Hale Road/Hanover Street - 2022 PM
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Hanover Street														
1	L2	63	2.0	63	2.0	0.093	6.6	LOS A	0.5	3.7	0.47	0.63	0.47	28.7
3	R2	26	2.0	26	2.0	0.093	9.4	LOS A	0.5	3.7	0.47	0.63	0.47	39.9
Approach		89	2.0	89	2.0	0.093	7.4	LOS A	0.5	3.7	0.47	0.63	0.47	33.8
East: Hale Road East														
4	L2	53	2.0	53	2.0	0.248	5.6	LOS A	1.5	11.8	0.29	0.51	0.29	41.7
5	T1	243	9.0	243	9.0	0.248	5.5	LOS A	1.5	11.8	0.29	0.51	0.29	40.8
Approach		296	7.8	296	7.8	0.248	5.5	LOS A	1.5	11.8	0.29	0.51	0.29	41.0
West: Hale Road West														
11	T1	521	9.0	521	9.0	0.424	3.0	LOS A	3.6	28.1	0.19	0.47	0.19	42.6
12	R2	87	2.0	87	2.0	0.424	5.5	LOS A	3.6	28.1	0.19	0.47	0.19	34.4
Approach		608	8.0	608	8.0	0.424	3.3	LOS A	3.6	28.1	0.19	0.47	0.19	41.7
All Vehicles		994	7.4	994	7.4	0.424	4.3	LOS A	3.6	28.1	0.25	0.50	0.25	40.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Organisation: CARDNO PTY LTD | Licence: NETWORK / Enterprise | Processed: Monday, 9 May 2022 10:04:58 AM
Project: K:\Projects\CW1200276_Altus Planning_TIA_Hale Road, Forrestfield\5_Technical\Traffic\Modelling\Project1.sip9

MOVEMENT SUMMARY

Site: 101 [Hale Road/Woolworths Drive - 2024 +DEV - AM (Site Folder: 2024+DEV)]

Network: N101 [Hale Road/ Woolworths Drive/Hanover St - AM (Network Folder: 2024 +DEV)]

Hale Road/Woolworths Drive
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Hale Road East														
5	T1	157	9.0	157	9.0	0.232	3.7	LOS A	1.5	11.6	0.40	0.57	0.40	46.7
6	R2	95	2.0	95	2.0	0.232	6.3	LOS A	1.5	11.6	0.40	0.57	0.40	39.0
Approach		252	6.4	252	6.4	0.232	4.7	LOS A	1.5	11.6	0.40	0.57	0.40	44.8
North: Woolworths Drive														
7	L2	112	2.0	112	2.0	0.277	6.6	LOS A	1.7	12.4	0.59	0.71	0.59	33.1
9	R2	135	2.0	135	2.0	0.277	9.2	LOS A	1.7	12.4	0.59	0.71	0.59	46.0
Approach		246	2.0	246	2.0	0.277	8.0	LOS A	1.7	12.4	0.59	0.71	0.59	42.7
West: Hale Road West														
10	L2	181	2.0	181	2.0	0.431	5.8	LOS A	3.4	26.6	0.39	0.53	0.39	48.3
11	T1	346	9.0	346	9.0	0.431	5.7	LOS A	3.4	26.6	0.39	0.53	0.39	49.6
Approach		527	6.6	527	6.6	0.431	5.7	LOS A	3.4	26.6	0.39	0.53	0.39	49.0
All Vehicles		1025	5.4	1025	5.4	0.431	6.0	LOS A	3.4	26.6	0.44	0.58	0.44	46.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Organisation: CARDNO PTY LTD | Licence: NETWORK / Enterprise | Processed: Monday, 9 May 2022 10:05:14 AM
Project: K:\Projects\CW1200276_Altus Planning_TIA_Hale Road, Forrestfield\5_Technical\Traffic\Modelling\Project1.sip9

MOVEMENT SUMMARY

Site: 101 [Hale Road/ Hanover Street- 2024+DEV AM (Site Folder: 2024+DEV)]

Network: N101 [Hale Road/ Woolworths Drive/Hanover St - AM (Network Folder: 2024 +DEV)]

Hale Road/Hanover Street
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Hanover Street														
1	L2	57	2.0	57	2.0	0.086	5.8	LOS A	0.5	3.5	0.47	0.60	0.47	27.8
3	R2	25	2.0	25	2.0	0.086	8.4	LOS A	0.5	3.5	0.47	0.60	0.47	39.2
Approach		82	2.0	82	2.0	0.086	6.6	LOS A	0.5	3.5	0.47	0.60	0.47	33.1
East: Hale Road East														
4	L2	19	2.0	19	2.0	0.215	5.3	LOS A	1.3	10.0	0.21	0.49	0.21	41.8
5	T1	252	9.0	252	9.0	0.215	5.2	LOS A	1.3	10.0	0.21	0.49	0.21	41.6
Approach		271	8.5	271	8.5	0.215	5.2	LOS A	1.3	10.0	0.21	0.49	0.21	41.6
West: Hale Road West														
11	T1	404	9.0	404	9.0	0.324	2.9	LOS A	2.4	18.9	0.16	0.47	0.16	42.9
12	R2	54	2.0	54	2.0	0.324	5.5	LOS A	2.4	18.9	0.16	0.47	0.16	37.6
Approach		458	8.2	458	8.2	0.324	3.2	LOS A	2.4	18.9	0.16	0.47	0.16	42.4
All Vehicles		811	7.7	811	7.7	0.324	4.2	LOS A	2.4	18.9	0.21	0.49	0.21	41.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Organisation: CARDNO PTY LTD | Licence: NETWORK / Enterprise | Processed: Monday, 9 May 2022 10:05:14 AM
Project: K:\Projects\CW1200276_Altus Planning_TIA_Hale Road, Forrestfield\5_Technical\Traffic\Modelling\Project1.sip9

MOVEMENT SUMMARY

Site: 101 [Hale Road/Woolworths Drive -2024+DEV- PM (Site Folder: 2024+DEV)]

Network: N101 [Hale Road/ Woolworths Drive/Hanover St - PM (Network Folder: 2024 +DEV)]

Hale Road/Woolworths Drive
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Hale Road East														
5	T1	173	9.0	173	9.0	0.340	4.3	LOS A	2.4	18.8	0.51	0.63	0.51	46.0
6	R2	176	2.0	176	2.0	0.340	6.8	LOS A	2.4	18.8	0.51	0.63	0.51	37.9
Approach		348	5.5	348	5.5	0.340	5.5	LOS A	2.4	18.8	0.51	0.63	0.51	43.0
North: Woolworths Drive														
7	L2	162	2.0	162	2.0	0.440	7.7	LOS A	3.0	22.9	0.74	0.81	0.75	31.7
9	R2	182	2.0	182	2.0	0.440	10.3	LOS B	3.0	22.9	0.74	0.81	0.75	45.1
Approach		344	2.0	344	2.0	0.440	9.1	LOS A	3.0	22.9	0.74	0.81	0.75	41.4
West: Hale Road West														
10	L2	266	2.0	266	2.0	0.647	6.9	LOS A	6.3	49.1	0.67	0.63	0.67	47.2
11	T1	428	9.0	428	9.0	0.647	6.9	LOS A	6.3	49.1	0.67	0.63	0.67	48.0
Approach		695	6.3	695	6.3	0.647	6.9	LOS A	6.3	49.1	0.67	0.63	0.67	47.6
All Vehicles		1387	5.0	1387	5.0	0.647	7.1	LOS A	6.3	49.1	0.65	0.68	0.65	45.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Organisation: CARDNO PTY LTD | Licence: NETWORK / Enterprise | Processed: Monday, 9 May 2022 10:05:33 AM
Project: K:\Projects\CW1200276_Altus Planning_TIA_Hale Road, Forrestfield\5_Technical\Traffic\Modelling\Project1.sip9

MOVEMENT SUMMARY

Site: 101 [Hale Road/ Hanover Street- 2024+DEV - PM (Site Folder: 2024+DEV)]

Network: N101 [Hale Road/ Woolworths Drive/Hanover St - PM (Network Folder: 2024 +DEV)]

Hale Road/Hanover Street
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Hanover Street														
1	L2	64	2.0	64	2.0	0.100	7.0	LOS A	0.6	4.0	0.51	0.65	0.51	28.1
3	R2	27	2.0	27	2.0	0.100	9.7	LOS A	0.6	4.0	0.51	0.65	0.51	39.5
Approach		92	2.0	92	2.0	0.100	7.8	LOS A	0.6	4.0	0.51	0.65	0.51	33.3
East: Hale Road East														
4	L2	54	2.0	54	2.0	0.283	5.6	LOS A	1.8	14.1	0.31	0.51	0.31	41.6
5	T1	284	9.0	284	9.0	0.283	5.5	LOS A	1.8	14.1	0.31	0.51	0.31	40.6
Approach		338	7.9	338	7.9	0.283	5.5	LOS A	1.8	14.1	0.31	0.51	0.31	40.8
West: Hale Road West														
11	T1	591	9.0	591	9.0	0.473	3.0	LOS A	4.3	34.3	0.21	0.47	0.21	42.5
12	R2	89	2.0	89	2.0	0.473	5.6	LOS A	4.3	34.3	0.21	0.47	0.21	34.3
Approach		680	8.1	680	8.1	0.473	3.3	LOS A	4.3	34.3	0.21	0.47	0.21	41.7
All Vehicles		1109	7.5	1109	7.5	0.473	4.4	LOS A	4.3	34.3	0.27	0.50	0.27	40.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Organisation: CARDNO PTY LTD | Licence: NETWORK / Enterprise | Processed: Monday, 9 May 2022 10:05:33 AM
Project: K:\Projects\CW1200276_Altus Planning_TIA_Hale Road, Forrestfield\5_Technical\Traffic\Modelling\Project1.sip9

MOVEMENT SUMMARY

Site: 101 [Hale Road/Woolworths Drive - 2034 +DEV - AM (Site Folder: 2034+DEV)]

Network: N101 [Hale Road/ Woolworths Drive/Hanover St - AM (Network Folder: 2034 +DEV)]

Hale Road/Woolworths Drive
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Hale Road East														
5	T1	173	9.0	173	9.0	0.257	3.8	LOS A	1.7	13.2	0.42	0.58	0.42	46.6
6	R2	102	2.0	102	2.0	0.257	6.4	LOS A	1.7	13.2	0.42	0.58	0.42	38.9
Approach		275	6.4	275	6.4	0.257	4.8	LOS A	1.7	13.2	0.42	0.58	0.42	44.7
North: Woolworths Drive														
7	L2	120	2.0	120	2.0	0.309	7.0	LOS A	1.9	14.2	0.63	0.74	0.63	32.6
9	R2	144	2.0	144	2.0	0.309	9.5	LOS A	1.9	14.2	0.63	0.74	0.63	45.7
Approach		264	2.0	264	2.0	0.309	8.4	LOS A	1.9	14.2	0.63	0.74	0.63	42.3
West: Hale Road West														
10	L2	194	2.0	194	2.0	0.475	5.9	LOS A	3.9	30.9	0.43	0.54	0.43	48.1
11	T1	381	9.0	381	9.0	0.475	5.8	LOS A	3.9	30.9	0.43	0.54	0.43	49.4
Approach		575	6.6	575	6.6	0.475	5.8	LOS A	3.9	30.9	0.43	0.54	0.43	48.8
All Vehicles		1114	5.5	1114	5.5	0.475	6.2	LOS A	3.9	30.9	0.47	0.60	0.47	46.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Organisation: CARDNO PTY LTD | Licence: NETWORK / Enterprise | Processed: Monday, 9 May 2022 10:05:46 AM
Project: K:\Projects\CW1200276_Altus Planning_TIA_Hale Road, Forrestfield\5_Technical\Traffic\Modelling\Project1.sip9

MOVEMENT SUMMARY

Site: 101 [Hale Road/ Hanover Street- 2034+DEV AM (Site Folder: 2034+DEV)]

Network: N101 [Hale Road/ Woolworths Drive/Hanover St - AM (Network Folder: 2034 +DEV)]

Hale Road/Hanover Street
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Hanover Street														
1	L2	62	2.0	62	2.0	0.097	6.0	LOS A	0.5	4.0	0.49	0.62	0.49	27.4
3	R2	28	2.0	28	2.0	0.097	8.6	LOS A	0.5	4.0	0.49	0.62	0.49	39.0
Approach		91	2.0	91	2.0	0.097	6.8	LOS A	0.5	4.0	0.49	0.62	0.49	32.8
East: Hale Road East														
4	L2	21	2.0	21	2.0	0.235	5.4	LOS A	1.4	11.2	0.23	0.49	0.23	41.6
5	T1	274	9.0	274	9.0	0.235	5.3	LOS A	1.4	11.2	0.23	0.49	0.23	41.4
Approach		295	8.5	295	8.5	0.235	5.3	LOS A	1.4	11.2	0.23	0.49	0.23	41.4
West: Hale Road West														
11	T1	442	9.0	442	9.0	0.356	3.0	LOS A	2.7	21.8	0.18	0.47	0.18	42.8
12	R2	59	2.0	59	2.0	0.356	5.5	LOS A	2.7	21.8	0.18	0.47	0.18	37.4
Approach		501	8.2	501	8.2	0.356	3.3	LOS A	2.7	21.8	0.18	0.47	0.18	42.3
All Vehicles		886	7.7	886	7.7	0.356	4.3	LOS A	2.7	21.8	0.23	0.49	0.23	41.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Organisation: CARDNO PTY LTD | Licence: NETWORK / Enterprise | Processed: Monday, 9 May 2022 10:05:46 AM
Project: K:\Projects\CW1200276_Altus Planning_TIA_Hale Road, Forrestfield\5_Technical\Traffic\Modelling\Project1.sip9

MOVEMENT SUMMARY

Site: 101 [Hale Road/Woolworths Drive -2034+DEV- PM (Site Folder: 2034+DEV)]

Network: N101 [Hale Road/ Woolworths Drive/Hanover St - PM (Network Folder: 2034 +DEV)]

Hale Road/Woolworths Drive
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Hale Road East														
5	T1	189	9.0	189	9.0	0.375	4.4	LOS A	2.8	21.6	0.55	0.64	0.55	45.8
6	R2	189	2.0	189	2.0	0.375	6.9	LOS A	2.8	21.6	0.55	0.64	0.55	37.7
Approach		379	5.5	379	5.5	0.375	5.7	LOS A	2.8	21.6	0.55	0.64	0.55	42.9
North: Woolworths Drive														
7	L2	175	2.0	175	2.0	0.511	9.1	LOS A	4.0	29.8	0.81	0.89	0.89	30.0
9	R2	195	2.0	195	2.0	0.511	11.6	LOS B	4.0	29.8	0.81	0.89	0.89	44.1
Approach		369	2.0	369	2.0	0.511	10.4	LOS B	4.0	29.8	0.81	0.89	0.89	40.1
West: Hale Road West														
10	L2	287	2.0	287	2.0	0.738	8.3	LOS A	8.7	68.2	0.76	0.69	0.82	46.7
11	T1	468	9.0	468	9.0	0.738	8.3	LOS A	8.7	68.2	0.76	0.69	0.82	47.3
Approach		756	6.3	756	6.3	0.738	8.3	LOS A	8.7	68.2	0.76	0.69	0.82	47.0
All Vehicles		1504	5.1	1504	5.1	0.738	8.2	LOS A	8.7	68.2	0.72	0.73	0.77	44.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Organisation: CARDNO PTY LTD | Licence: NETWORK / Enterprise | Processed: Monday, 9 May 2022 10:06:14 AM
Project: K:\Projects\CW1200276_Altus Planning_TIA_Hale Road, Forrestfield\5_Technical\Traffic\Modelling\Project1.sip9

MOVEMENT SUMMARY

Site: 101 [Hale Road/ Hanover Street- 2034+DEV - PM (Site Folder: 2034+DEV)]

Network: N101 [Hale Road/ Woolworths Drive/Hanover St - PM (Network Folder: 2034 +DEV)]

Hale Road/Hanover Street
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Hanover Street														
1	L2	71	2.0	71	2.0	0.112	6.3	LOS A	0.6	4.5	0.53	0.64	0.53	27.0
3	R2	29	2.0	29	2.0	0.112	8.9	LOS A	0.6	4.5	0.53	0.64	0.53	38.6
Approach		100	2.0	100	2.0	0.112	7.0	LOS A	0.6	4.5	0.53	0.64	0.53	32.2
East: Hale Road East														
4	L2	59	2.0	59	2.0	0.311	5.7	LOS A	2.0	16.0	0.33	0.52	0.33	40.9
5	T1	308	9.0	308	9.0	0.311	5.6	LOS A	2.0	16.0	0.33	0.52	0.33	40.4
Approach		367	7.9	367	7.9	0.311	5.6	LOS A	2.0	16.0	0.33	0.52	0.33	40.5
West: Hale Road West														
11	T1	643	9.0	643	9.0	0.516	3.0	LOS A	5.1	40.3	0.24	0.46	0.24	42.4
12	R2	98	2.0	98	2.0	0.516	5.6	LOS A	5.1	40.3	0.24	0.46	0.24	37.0
Approach		741	8.1	741	8.1	0.516	3.4	LOS A	5.1	40.3	0.24	0.46	0.24	41.9
All Vehicles		1208	7.5	1208	7.5	0.516	4.4	LOS A	5.1	40.3	0.29	0.50	0.29	40.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Organisation: CARDNO PTY LTD | Licence: NETWORK / Enterprise | Processed: Monday, 9 May 2022 10:06:14 AM
Project: K:\Projects\CW1200276_Altus Planning_TIA_Hale Road, Forrestfield\5_Technical\Traffic\Modelling\Project1.sip9

About Cardno

Cardno is a professional infrastructure and environmental services company, with expertise in the development and improvement of physical and social infrastructure for communities around the world. Cardno's team includes leading professionals who plan, design, manage and deliver sustainable projects and community programs. Cardno is an international company listed on the Australian Securities Exchange [ASX:CDD].

Contact

11 Harvest Terrace
West Perth WA 6005
PO Box 447

Phone +61 8 9273 3888
Fax +61 8 9486 8664

Web Address
www.cardno.com

Cardno

now

Stantec