

(Draft) Local Planning Strategy

Part 2 – Background Information and Analysis

November 2019

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The information contained in the *Town of East Fremantle Draft Local Planning Strategy* reflects the Town's preliminary analysis and understanding of planning matters.

A full evaluation of all planning considerations relevant to the *Town of East Fremantle Draft Local Planning Strategy* will be undertaken when the submission advertising period closes and a full report is prepared for Council's consideration. The final position of the Town in relation to the *Town of East Fremantle Draft Local Planning Strategy* may be different from the position or views expressed in this document. Individuals should not rely on the information contained in this document in any decision making and should seek their own independent advice in each case.

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1. Introduction

Background

The Town of East Fremantle's previous Local Planning Strategy (LPS) was adopted in 2003. The LPS has been the subject of a review process since 2012 and a draft was most-recently advertised for public comment between 30 April 2016 and 23 May 2016. Council's consultant prepared a report on submissions in August 2016, however, this has not been considered by Council and no further action has taken place with that version of the Draft Local Planning Scheme.

The development of a relevant LPS has been somewhat stymied by delays that have occurred during the statutory planning process, complicated further by the State Government's now defunct proposals for Local Government reform (including amalgamation), changes to the State government planning framework and guidelines as well as further studies being undertaken by the Town of East Fremantle and others over that timeframe.

The Town of East Fremantle also proposed a number of changes to *Local Planning Scheme No. 3* (through omnibus Amendment 10) to support the initial drafts of the LPS, however, these were mostly rejected by the Minister for Planning indicating a need to make further adjustments.

A number of years have passed since the inception of the initial draft LPS, and although modifications have been made over that time, the draft LPS advertised in April/May 2016 is not considered to fully represent best planning practice and desired strategic community outcomes.

Subsequently, a number of elements within the previous draft LPS require modification and this new LPS has been prepared.

It is considered appropriate to revisit the LPS with particular focus on the following:

- Identification of higher density residential development investigation areas in specific strategic locations;
- Less emphasis on dual residential coding;
- Mixed use areas to include an increased residential function; and
- Development of planning tools that emphasise consideration of design matters.

Scope of Local Planning Strategy

A LPS is a high level strategic planning document that sets a long-term (10 to 20 year) planning framework for the Town, addressing social, environmental and economic factors which affect land use and development. Desired outcomes associated with the LPS will inform and guide statutory provisions within the Local Planning Scheme which, together with Council's Local Planning Policies, will assist in its implementation.

The Planning and Development (Local Planning Schemes) Regulations (2015) (the Regulations) provide that a local planning strategy must:

- Set out the long term planning directions for the local government;
- Apply State and regional planning policy that is relevant to the strategy; and
- Provide the rationale for any zoning or classification of land under the local planning scheme.

Since development commenced in the Town of East Fremantle in the early part of the 20th Century, the area has been enjoyed as a desirable residential location. While there are small pockets of commercial activities in the municipality, the Town remains largely a residential area.

This LPS aims to maintain the attributes that make the Town a desirable residential environment, while accommodating the broader regional objectives set by the Western Australian Planning Commission (WAPC) through its various State, regional and subregional planning policies. Of particular relevance is the need to provide opportunities to achieve the State Government's long term housing targets (as detailed in *Directions 2031 and Beyond* and *Perth and Peel @ 3.5 million*) whilst upholding the local community aspirations of maintaining and preserving a high quality residential living environment, a sense of place and the heritage character of the area.

In general terms, the approach has been to identify and investigate strategic sites that may be developed for increased residential density, primarily based on activity centres and corridors/transit oriented development principles whilst being mindful of heritage, cultural, environmental and social impacts.

As an outcome of this LPS, a number of recommended strategies will inform future changes to *Local Planning Scheme No. 3* together with amendments to, or develop new, Local Planning Policies in order to implement the LPS once approved.

Structure of Local Planning Strategy

This LPS is in two parts. Part 1 forms the Local Planning Strategy as required by the Regulations, while Part 2 (this report) provides the Background Information and Analysis.

Local Planning Strategy Approval Process

In accordance with Regulation 13 of the Regulations, the draft LPS is to be advertised for not less than 21 days inviting the public and public authorities to view and to make submissions. Advertising may only commence once the WAPC is satisfied that it complies with regulation 11(2) of the Regulations and certifies the LPS to be advertised for public comment.

The Town of East Fremantle will consider and review the LPS in light of any submissions and may support it without modification, or with proposed modifications to address any issues raised. This decision is conveyed to the WAPC, who within 60 days of its receipt unless otherwise approved, may endorse the LPS without modification, endorse the LPS with some or all of the modifications if proposed by the Town of East Fremantle, require the Town of East Fremantle to make other specific modifications, or refuse to endorse the LPS.

When the LPS is endorsed by the WAPC it is to be published in a manner the WAPC considers appropriate. The Town of East Fremantle must ensure a copy of the LPS is made available for public inspection at its offices and may also publish a copy on its website.

Once it has been finalised, the LPS may later be amended by the Town of East Fremantle, however, any amendments must also be endorsed by the WAPC.





2. State and Regional Planning Context

The implications of key State and regional planning policies identified as relevant to the Town of East Fremantle with the formulation of this LPS are as follows:

State Planning Strategy

The *State Planning Strategy 2050* (WAPC, 2014) provides the basis for long term State and regional land use planning and coordinates a whole of government approach to planning.

Its vision for the Perth metropolitan area includes the following:

'Over the next three decades Perth will become one of the cleanest, most productive and liveable cities in the world. It will have all its major natural features available for all to access and enjoy, its cultural heritage protected and its coastal and inland waters and air quality maintained to the highest possible standard. Perth will be an efficient city where the less mobile are able to easily access facilities where there is a balance between walking, cycling, public transport, car and truck usage. It will be a region comprising different living communities with their own sense of community, their own recognisable centre and range of facilities.'

The key principles of the State Planning Strategy are:

Environment	To protect and enhance the key natural and cultural assets of the State and deliver to all Western Australians a high quality of life which is based on sound environmentally sustainable principles.
Community	To respond to social changes and facilitate the creation of vibrant, accessible, safe and self-reliant communities.
Economy	To actively assist in the creation or regional wealth, support the development of new industries and encourage economic activity in accordance with sustainable development principles.
Infrastructure	To facilitate strategic development by making provision for efficient and equitable transport and public facilities.
Regional Development	To assist the development of regional Western Australia by taking account of the special assets and accommodating the individual requirements of each region.
Governance	Building community confidence in development processes and practices.

The *State Planning Strategy* includes a list of corresponding strategies aimed at achieving desired outcomes, many of which involve implementation by way of a local planning scheme.

Implications for the Town of East Fremantle

The Town of East Fremantle LPS recognises the principles of the State Planning Strategy as they may be applied to proposed development. Environmental features will need to continue to be protected and connected in a manner that provides the community with social benefits to these resources. Community development needs to be enhanced by improved accessibility to public transport modes to facilities that meet the evolving social and economic needs of the local population, while recognising that many of the social and community needs are met outside of the Town of East Fremantle. The advantages offered by public transport routes need to be recognised by the potential for increased density and intensity of residential development. The locations of key economic activity need to be identified and provided with the opportunity to maximise their benefits to the local community.



State Planning Framework

State Planning Policy 1 - State Planning Framework Policy (WAPC, 2017)

State Planning Policy 1 - State Planning Framework Policy (SPP 1) brings together existing State and regional plans, policies, strategies and guidelines that apply to land use and development in Western Australia and unites these into a central framework and provides a context for decision making on land use and development. The relevant elements of SPP 1 applicable to the Town of East Fremantle are summarised as follows:

State Planning Policies

State Planning Policy 2 – Environmental and Natural Resources (WAPC, 2003)

State Planning Policy 2 – Environmental and Natural Resources (SPP 2) defines the principles and considerations to integrate environmental and natural resource management with broader land use planning and decision making to protect, conserve and enhance the natural environment, while promoting and assisting with the wise and sustainable use and management of natural resources.

Implications for the Town of East Fremantle

The built environment of the Town of East Fremantle is well established and natural assets such as the Swan River and its banks are located on public land, under the care of either the Town or the Swan River Trust. The recognition and protection of the river are considered in the LPS.

State Planning Policy 2.6 – State Coastal Planning Policy (WAPC, 2013)

State Planning Policy 2.6 – State Coastal Planning Policy (SPP 2.6) applies to the coast throughout Western Australia and includes the tidal reaches of inland waters. Policy objectives include:

- Development and location of coastal facilities takes into account coastal processes, landform stability, coastal hazards, climate change and biophysical criteria;
- Identification of appropriate areas for sustainable use of the coast for housing, tourism, recreation, ocean access, maritime industry, commercial and other activities;
- Provide for public coastal foreshore reserves and access to them on the coast; and
- Protect, conserve and enhance coastal zone values, particularly in areas of landscape, biodiversity and ecosystem integrity, indigenous and cultural significance. Policy measures address development and settlement; water resources and management; building height limits; coastal hazard risk

management and adaptation planning; infill development; coastal protection works; public interest; coastal foreshore reserve; coastal strategies and management plans; and precautionary principle. SPP 2.6 also refers to the State Coastal Planning Policy Guidelines and Coastal Hazard Risk Management and Adaptation Planning Guidelines for detailed application of the policy measures.

Implications for the Town of East Fremantle

The Town of East Fremantle does not contain any direct coastline, however, SPP 2.6 also applies to the tidal reaches of inland waters, including the Swan River Estuary which is partly within, and abuts, the Town boundaries.

The Swan River shoreline is contained within MRS Parks and Recreation Reserve affording a level of protection. The Town of East Fremantle adopted the *Town of East Fremantle Foreshore Master Plan (2016)* which addresses a number of management issues including stormwater drainage into the river, public access, erosion, rising sea levels, protection of vegetation and habitats, and assets such as roads and sea walls.

Much of this area is already developed, however, SPP 2.6 will have implications for the redevelopment of the Leeuwin Barracks site which partly falls within the 1:100 year floodplain and is located approximately between 20 – 150 metres from the Swan River shoreline. Considerations include visual, amenity, social and ecological values. Building height limits to ensure overall visual permeability of the foreshore from nearby residential areas, roads and public spaces may be required.

State Planning Policy 2.9 - Water Resources (WAPC, 2006)

The key objectives of State Planning Policy 2.9 - Water Resources (SPP 2.9) include the protection, conservation and enhancement of significant water resources, to ensure that these water resources continue to be available and appropriately managed for their on-going sustainable use.

The existing built environment, long established drainage systems and ground water in excess of 12m below surface levels, provide limited opportunity for improvements to water resources in the Town.

Implications for the Town of East Fremantle

The Town will respond to any future broader water conservations initiatives developed at the State level and implemented throughout the Perth metropolitan area as and when they arise. The LPS supports measures to conserve public water sources, including groundwater.

State Planning Policy 2.10 – Swan and Canning River Systems (WAPC, 2006)

The objectives of State Planning Policy 2.10 – Swan and Canning River Systems (SPP 2.10) are to provide for a regional framework for the preparation of precinct plans, provide a context for integrating planning and decision making in relation to the river and to ensure that the health, amenity and landscape values are not adversely affected by inappropriate land use and development.

The Town of East Fremantle is located within the Blackwall Reach precinct of SPP 2.10, which recommends that planning decisions should:

- Protect view corridors from public vantage points, in particular from Chidley Point, Point Roe, Minim Cove Park, Rocky Bay, Blackwall Reach, Greenplace Reserve and Point Walter;
- Integrate new development with the distinctive limestone landforms and native vegetation of the area, giving particular consideration to the scale and proximity of limestone cliffs on each side of the river;
- Avoid substantial impact on the landscape qualities of the foreshore and minimise
 the removal of natural foreshore vegetation, major changes to natural ground
 levels or the erection of dominant structures protruding from cliff faces and along
 the foreshore;
- Ensure that waterlines and ridgelines are maintained as the predominant visible parameters of the river;
- Protect places of cultural significance, in particular places on the State Heritage Register and the Department of Indigenous Affairs Register of significant places; and
- Ensure that commercial uses and associated development on or adjacent to the river foreshore are confined to existing established nodes and proposed nodes identified in an adopted Swan-Canning Precinct Plan.

Implications for the Town of East Fremantle

The importance of the Swan River is recognised by the LPS to protect and improve the natural amenity and environment by ensuring consistency with the Blackwall Reach precinct policies and thereby ensuring that future development enhances public access and does not compromise landscape amenity.

State Planning Policy 3.0 – Urban Growth and Settlement (WAPC, 2006)

State Planning Policy 3.0 – Urban Growth and Settlement (SPP 3.0) is a broad sector policy that sets out the principles and considerations which apply to planning for urban growth and settlement in Western Australia.

The objectives of this policy are to:

- Promote a sustainable and well planned pattern of settlement across the State, with sufficient and suitable land to provide for a wide variety of housing, employment, recreation facilities and open space;
- Build on existing communities with established local and regional economies, concentrate investment in the improvement of services and infrastructure and enhance the quality of life in those communities;
- Manage the growth and development of urban areas in response to the social and economic needs of the community and in recognition of relevant climatic, environmental, heritage and community values and constraints;
- Promote the development of a sustainable and liveable neighbourhood form which reduces energy, water and travel demand while ensuring safe and convenient access to employment and services by all modes, provides choice and affordability of housing and creates an identifiable sense of place for each community; and
- Coordinate new development with the efficient, economic and timely provision of infrastructure and services.

Implications for the Town of East Fremantle

SPP 3.0 is an overarching policy for ensuring sustainable growth and settlement. Key elements relevant to the Town of East Fremantle include locating higher residential densities in locations accessible to transport and services and in areas of high amenity, whist respecting neighbourhood character and protecting biodiversity /environmental significance.

State Planning Policy 3.5 - Historic Heritage Conservation (WAPC, 2007)

State Planning Policy 3.5 - Historic Heritage Conservation (SPP 3.5) sets out the principles for responsible planning for the conservation and protection of the historic built form heritage of Western Australia. The policy requires local planning strategies to have regard to heritage places to minimise the extent to which land use and planning controls create conflict with, or undermine heritage conservation objectives.

Implications for the Town of East Fremantle

There are a number of sites and buildings that are of cultural significance in the Town of East Fremantle including more than 1,000 places listed on the Municipal Heritage Inventory (now referred to as the Local Heritage Survey under the *Heritage Act 2018*); approximately 670 on the Local Planning Scheme Heritage List; six places subject to Heritage Agreements with the Heritage Council of WA and seven places registered on the Register of the National Estate.

Local Planning Scheme No. 3 includes provisions to manage and protect the high quality of built form heritage buildings in the Town by the way of Part 3 of Schedule 2 of the Planning and Development (Local Planning Schemes) Regulations (2015) (i.e. Deemed Provisions relating to Heritage Protection). This LPS provides further opportunities for the on-going sustainable protection of these important buildings and places, however, this can often provide a challenge when considering density options.

State Planning Policy 3.6 – Development Contributions for Infrastructure (WAPC, 2009) and draft State Planning Policy 3.6 – Infrastructure Contributions (WAPC, 2019) State Planning Policy 3.6 – Development Contributions for Infrastructure (SPP 3.6) outlines the relevant considerations and principles for developer contributions for infrastructure, and the preparation of Development Contribution Plans.

This policy is under review (submissions close September 2019) to introduce a framework for the delivery of infrastructure to new and existing communities. It aims to ensure greater accountability, transparency and consistency in providing for infrastructure contributions. The draft SPP 3.6 provides a system for the coordination and delivery of infrastructure to provide opportunities for development of new communities in greenfield locations, infill locations, activity centres, corridors and high-frequency public transport routes, industrial nodes and station precincts. Draft SPP 3.6 also refers to a set of Infrastructure Contributions Guidelines.

Implications for the Town of East Fremantle

The Town of East Fremantle currently has no Development Contribution Areas identified within *Local Planning Scheme No. 3* and, therefore, no Development Contribution Plans. Development Contribution Plans may be a consideration for future infill development such as Leeuwin Barracks redevelopment and other higher residential density development along the high-frequency transport corridors and activity nodes.

State Planning Policy 3.7 - Planning For Bushfire Prone Areas (WAPC, 2015)

State Planning Policy 3.7 – Planning in Bushfire Prone Areas (SPP 3.7) provides the foundation for land use planning to address bushfire risk management in Western Australia. It applies to all higher order strategic planning documents, strategic planning proposals, subdivision and applications for development approval located in designated bushfire prone areas.

SPP 3.7 refers to the Guidelines for Planning in Bushfire Prone Areas which suggests that a Bushfire Hazard Level assessment should be undertaken as part of the preparation of a Local Planning Strategy for identified bushfire prone areas to inform the suitability for future development.

The Bushfire Framework Review 2019 carried out jointly by Department of Planning, Lands and Heritage; Department of Fire and Emergency Services; and Department of Mines, Industry Regulation and Safety has now changed the *Map of Bush Fire Prone Areas* and the supporting bushfire policy framework.

Implications for the Town of East Fremantle

Until recently, there were two designated bushfire prone areas within the Town of East Fremantle which included land within and surrounding the Locke Crescent Nature Reserve (between Preston Point Road and Locke Crescent); and land within and adjacent to the Swan River foreshore at Jerrat Drive Reserve (generally between Camp Waller, the Bicton Pool/Waterpolo Club and Preston Point Road).

On 31 July 2019, a new *Map of Bush Fire Prone Areas* was gazetted which removed isolated pockets of vegetation less than four hectares within the Central Sub-region of the Perth metropolitan area from being declared as bushfire prone.

As the two previously designated bushfire prone areas are less than four hectares in area, SPP 3.7 no longer has implications for the Town of East Fremantle.

State Planning Policy 4.1 - State Industrial Buffer Policy (WAPC 1997) and draft State Planning Policy 4.1 - Industrial Interface (WAPC, 2017)

The objectives of State Planning Policy 4.1 - State Industrial Buffer Policy (SPP 4.1) are to provide a consistent State wide approach for defining and securing buffer areas around industry, infrastructure and special uses. This policy is currently under review.

Draft State Planning Policy 4.1 – Industrial Interface (Draft SPP 4.1) was released in November 2017 for public comment. This policy requires a LPS to identify: areas for Strategic, General and Light Industry; Prescribed Premises and regulated land uses with off-site risks to ensure planning decisions relating to surrounding land are referred to appropriate regulating agencies for technical advice; designated statutory buffers for Strategic Industrial Areas, infrastructure facilities and industrial sites of State significance and the compatible land uses appropriate in the buffer; and provide a framework for transitioning identified areas from sensitive land uses to industrial and vice versa.

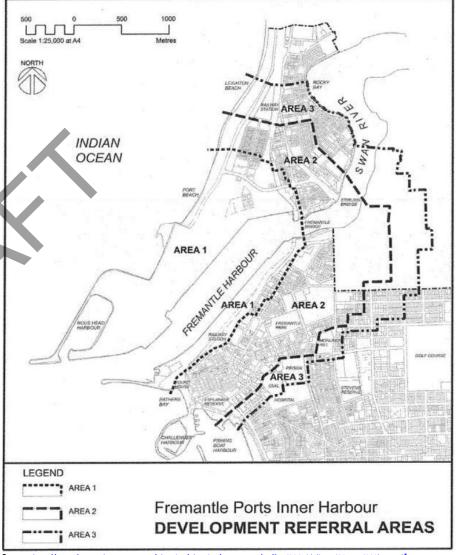
In order to apply State Planning Policy 4.1 – State Industrial Buffer Policy (1997), Fremantle Ports initiated the Fremantle Inner Harbour Buffer Definition Study, which was endorsed by the WAPC and the then Department of Environment Protection in 2004.

Buffer Guidelines established by Fremantle Ports provide guidance for land use planning around the Inner Harbour. These recognise the strategic importance of the port operations and growth, whilst promoting compatible land uses and protection of the amenity of residents living within the buffer.

The buffer comprises of three areas based on varying levels of technical criteria of risk, noise and odour and is shown in Figure 1. In summary:

- Area 1 Restricted Access Area Immediately surrounding the Inner Harbour
 excludes the establishment of additional sensitive uses other than residential uses
 and with residential uses having a high level of protective conditions relating to
 maintaining public safety and ameliorating the impacts of odour and noise.
- Area 2 Controlled Area Intermediate Buffer Zone allows the establishment of sensitive land uses with a medium level of protective conditions.
- Area 3 Discretionary Area Outer Buffer Zone allows the establishment of sensitive land uses with protective conditions implemented at the discretion of Council.

Figure 1 - Fremantle Inner Harbour Buffer Areas



Source: http://www.fremantleports.com.au/Planning/Planning/Documents/Buffer%20Guidelines%20Fact%20Sheet.pdf

Implications for the Town of East Fremantle

There are no industrial zones within the Town of East Fremantle nor are there any industrial land uses.

Buffer Areas 2 and 3 of the Fremantle Inner Harbour Buffer, however, are relevant to the Town of East Fremantle. In response to recommendations of the Fremantle Inner Harbour Buffer Definition Study, the Town of East Fremantle included provisions within *Local Planning Scheme No. 3* (Clause 10.1.3) which requires Council to:

- Forward to Fremantle Ports for comment prior to determination applications for development within Buffer Area 2 for any sensitive use (excluding residential development of less than five dwellings) or other development that will result in a concentration of people within Area 2; and
- Notify Fremantle Ports of its intention to amend the local planning scheme in a manner that would increase the development of sensitive uses within Buffer Areas 2 or 3.

'Sensitive use' is described in Clause 10.1.3 as including residential development, major recreational areas, childcare facilities, aged persons' facilities, prisons, hospitals schools and other institutional uses involving accommodation and any other use that the Council considers may be affected by proximity to the inner harbour of the Port of Fremantle.

In addition, Council adopted the Town of East Fremantle - Fremantle Port Buffer Development Guidelines as a Local Planning Policy in 2004, but later revoked this in September 2012 with matters instead being addressed as part of the Residential Design Guidelines Local Planning Policy.

For development in Buffer Area 2, the Residential Design Guidelines apply requirements for window openings, air conditioning and other construction matters such as quiet house design and roof insulation to all new dwellings and major additions to existing dwellings.

State Planning Policy 4.2 - Activity Centres for Perth and Peel (WAPC, 2010)

State Planning Policy 4.2 - Activity Centres for Perth and Peel (SPP 4.2) seeks to achieve a hierarchy of centres evenly distributed throughout the metropolitan area to meet community needs for goods services and employment. The hierarchy seeks to integrate public and private investment and services and provide the opportunity for a wide range of retail and commercial activities in a competitive market.

Activity centres should provide opportunities for employment and increased housing densities to improve land efficiencies and support high frequency public transport. A reduction in the use of private motor vehicles in favour of walking, cycling and public transport, together with the aim of concentrating activities that generate high number of trips also form part of the overall objectives for this policy.

Implications for the Town of East Fremantle

The Town of East Fremantle's local commercial needs are served by the existing Town Centre, the George Street precinct and the shopping centre at the intersection of Canning Highway and Petra Street (partially located in the City of Melville). SPP 4.2 does not identify these as higher order centres, with the exception of the Petra Street centre which is known as a District Centre.

The Petra Street centre is mostly located within the boundaries of the City of Melville (Petra Street being the boundary for both local governments) and any activity centre structure planning will need to be in collaboration with the City of Melville. In accordance with SPP 4.2, the LPS considers opportunities for residential development within the Mixed Use sites, possible expansion of the Mixed Use zone and investigation of other potential residential density development within the 400m walkable catchment, particularly along Canning Highway and Petra Street.

Although the Town Centre and George Street precinct are not identified by SPP 4.2 as higher order centres, they function as 'mini activity centres' within the Town of East Fremantle and the LPS has embraced the principles of SPP 4.2 by considering opportunities for increases in densities in and around the Town Centre, as well as within the Mixed Use sites on George Street and Canning Highway.

State Planning Policy 5.4 - Road and Rail Noise (WAPC, 2019)

State Planning Policy 5.4 - Road and Rail Noise (SPP 5.4) was released in September 2019 and includes Implementation Guidelines. The policy purpose is to minimise the adverse impact of road and rail noise on land use and development within specified trigger distance of strategic freight and major transport routes and other significant freight and traffic routes. It seeks to ensure that the community is protected from unreasonable levels of noise, whilst safeguarding future operations of transport corridors.

SPP 5.4 focusses on providing clearer guidance; simplifying criteria/assessment; quiet house design to enhance deemed to comply, options and standard templates for Noise Management Plans; local planning scheme provisions; title notification wording; and identifies specialised trigger distances within major transport corridors.

The policy only applies to new developments and does not apply for single houses which are exempt under the deemed provisions of the Regulations. It calls for the planning process to apply the precautionary principle of avoidance where there is a risk of future land use conflict. Where it is unavoidable to place a proposed noise-sensitive land use and/or development to which the policy applies, it is necessary to demonstrate that it can be adequately mitigated to meet the policy's noise criteria (based on acceptable noise levels (that vary for indoors, outdoors, day and night).

Noise sensitive land use and/or development includes that which is occupied or designed for occupation or use for residential purposes (including dwellings, residential buildings, short stay and holiday accommodation) caravan park, camping ground, educational establishment, child care premises, hospital, nursing home, corrective institution or place of worship.

Implications for the Town of East Fremantle

Canning and Stirling Highways are important freight and transport routes, particularly to and from the Fremantle Port. The LPS recognises noise sensitive issues when considering future options along or near these major transport corridors (within the trigger distance of 300m for all of Stirling Highway and most of Canning Highway, and within 200m for part of Canning Highway).

Local Planning Policy 3.1.1 - Residential Design Guidelines, Local Planning Policy 3.1.3 - Town Centre Redevelopment Guidelines and Local Planning Policy 3.2.2 - Noise Attenuation deal with some aspects of noise and may require review to more fully

address the policy direction provided in SPP 5.4 and its review. Furthermore, provisions may need to be incorporated into *Local Planning Scheme No. 3*.

State Planning Policy 7.0 - Design of the Built Environment (WAPC, 2019)

The Minister for Planning determined *Design WA Stage 1* which became operational on 24 May 2019. This includes State Planning Policy 7.0 – Design of the Built Environment; State Planning Policy 7.3 – Residential Design Codes Volume 1; State Planning Policy 7.3 – Residential Design Codes Volume 2 – Apartments; and Design Review Guide.

Stage 2 of *Design WA* was launched in August 2019 and focuses on precinct design and medium density. *Draft State Planning Policy 7.2 – Precinct Design* together with associated *Draft Precinct Design Guidelines* were released for public comment until 15 October 2019.

State Planning Policy 7.0 - Design of the Built Environment (SPP 7.0) is the lead policy that establishes the requirement for design quality across the whole built environment. It sets up the requirement for expert design review as a part of the evaluation process and includes 10 principles for good design, including: Context and character; Landscape quality; Built form and scale; Functionality and build quality; Sustainability; Amenity; Legibility; Safety; Community; and Aesthetics.

SPP 7.0 addresses the design quality of the built environment across all planning and development types, in order to deliver broad economic, environmental, social and cultural benefit. It is also intended to improve the consistency and rigour of design review and assessment processes across the State.

Implications for the Town of East Fremantle

The Town of East Fremantle must have due regard to this in its deliberations of any current planning proposal.

For more complex projects, the Town may be required to establish and operate design review processes to review these applications, which may include: review by an expert panel and verification from skilled and competent designers that design objectives have been achieved.

State Planning Policy 7.2 – Precinct Design (Draft) (WAPC, 2019)

Draft State Planning Policy 7.2: Precinct Design (Draft SPP 7.2) was released for public comment until 15 October 2019. It is the lead policy to guide the preparation and evaluation of planning proposals for areas that require a high level of planning and design focus due to their complexity, such as planned infill development, activity centre designation or areas with certain values such as heritage or local character. The policy will require a tailored, performance-based approach to precinct design, supported by design review and a high level of community participation.

Draft SPP 7.2 introduces the precinct plan (complex and standard) as a new planning tool which replaces activity centre plans and higher level structure plans in infill areas.

Draft SPP 7.2 is supported by *Precinct Design Guidelines* built upon the 10 Design Principles contained in *State Planning Policy 7.0 - Design of the Built Environment* by introducing the concept of design review into precinct planning through seven performance-based design elements (i.e. urban ecology; urban structure; movement; built form; land use; public realm; and services and utilities).

Implications for the Town of East Fremantle

Draft SPP 7.2 aims to address issues and provide support for development and change within existing urban areas. The Town of East Fremantle is within a well-developed urban area and any changes to the local planning framework to implement State policy direction, such as development within activity centres, urban corridors and generally higher density code residential development are likely to require the development of a precinct plan.

More specifically, the District Centre at the corner of Canning Highway and Petra Street will require a precinct plan (replaces an activity centre plan) together with any proposed heritage areas and scheme amendments such as the Leeuwin Barracks site.

State Planning Policy 7.3 – Residential Design Guidelines Volume 1 (WAPC, 2019)

Previously known as *State Planning Policy 3.1 - Residential Design Codes*, this policy was effectively amended on 24 May 2019 by the removal of Part 6 to become what is now known as *State Planning Policy 7.3 – Residential Design Codes Volume 1* (SPP 7.3 – R-Codes 1).

SPP 7.3 – R-Codes 1 provides a comprehensive tool for the control of residential built form and density in Western Australia for single houses, grouped dwellings and multiple dwellings in areas with a coding less than R40. These R-Codes aim to address

emerging design trends, promote sustainability, improve clarity and highlight assessment pathways to facilitate better outcomes for residents. They are also used for the assessment of residential subdivision proposals and should be read with Development Control Policy 2.2 Residential Subdivision for this purpose.

SPP 7.3 – R-Codes 1 differentiates between 'deemed to comply' standards (which represent one way that development may obtain planning approval) and 'design principles' (which represent an alternative way of assessing development according to merit).

Certain provisions of the R Codes may be varied by a Local Government through specific provisions in a local planning scheme, local planning policies and/or local development plans.

Implications for the Town of East Fremantle

The Residential Design Codes do not form part of the *Town of East Fremantle Local Planning Scheme No. 3*, however, the provisions of the R-Codes are to be conformed with for residential development, unless otherwise stated (Clause 5.2.2). The standards of the R-Codes are referred to and are required in many instances throughout the Scheme.

Local Planning Scheme No. 3 allows for special application and variation of the R-Codes in certain areas under specific circumstances. Local Planning Policy 3.1.1 - Residential Design Guidelines also allows for variations to a number of R-Codes standards for residential development within the Residential zone.

For any possible future density changes (less than R40) and/or future designated heritage areas proposed within the LPS, variations may be necessary to suit the local situation and may be further considered through scheme provisions, local planning policy and/or local development plans.

State Planning Policy 7.3 – Residential Design Guidelines Volume 2 – Apartments (WAPC, 2019)

State Planning Policy 7.3 – Residential Design Guidelines Volume 2 – Apartments (SPP 7.3 – R-Codes 2) came into effect on 24 May 2019. It replaced Part 6 of the previously known SPP 3.1 – Residential Design Codes and provides a comprehensive basis for the control of residential development throughout Western Australia. It is a performance based policy that provides planning and design standards for apartments (multiple dwellings) in areas coded R40 and above, within mixed use development and activity centres.

Policy objectives for multiple dwellings are summarised as:

- Appropriate design for the intended residential purpose, land tenure, density, place context and scheme objectives;
- Design consideration of the social, environmental and economic opportunities possible from new housing and appropriate response to local context;
- Design that considers and respects local heritage and culture; and
- Facilitate opportunities for better living choices and affordability, as well as
 operational costs and security of investment in the long term.

Policy objectives for planning, governance and the development process include:

- Encourage design that is responsive to site, size and geometry of the development site;
- Allow variety and diversity of housing choices where it better reflects context or scheme objectives;
- Ensure clear scope for scheme objectives to influence the assessment of proposals; and
- Ensure certainty in timely assessment and determination of proposals, applied consistently across State and Local Government.

SPP 7.3 – R-Codes 2 encourages Local Governments to maximise consistency of local planning frameworks with this policy, review pre-existing local planning framework instruments where inconsistent with this policy and consider the need for settings that respond to a specific need related to a locality or region where inconsistent with the Element Objectives of the policy.

Certain 'Acceptable Outcomes' of sections of LPP 7.3 – R-Codes 2 may be amended or replaced by Local Government (some requiring approval from WAPC) through the

preparation of local planning policies, local development plans, structure plans and activity centre plans.

Inconsistent pre-existing local planning policies in effect prior to gazettal of the SPP 7.3 – R-Codes 2 remain valid for some policy provisions under certain circumstances.

Implications for the Town of East Fremantle

As previously discussed, the Residential Design Codes do not form part of the *Town of East Fremantle Local Planning Scheme No. 3*, however, the provisions of the R-Codes are to be conformed with for residential development, unless otherwise stated (Clause 5.2.2).

A range of densities are provided in the Residential zone from R12.5 to R80, including some areas with dual coding of R12.5/40 and R20/40. Density requirements are also specified in the Scheme for residential development within non-Residential zones, including the Town Centre zone.

The Scheme allows for special application and variation of the R-Codes as follows:

- In areas with a density coding of R12.5, allows for development up to a density of R20 on corner lots where the dwellings are designed to face each of the two street frontages and improves the overall amenity of the streets as a result of the development (Clause 5.3.1); and
- Properties with dual coding may be developed at the higher density subject to a number of requirements being met including access, noise attenuation, frontage and heritage requirements (Clause 5.3.2)

R-Code standards (not density) are also referred to in Local Planning Policy 3.1.3 - Town Centre Redevelopment Guidelines in relation to the Town Centre Core Precinct (R-AC 2), the Canning Highway Precinct (R160) and the Frame Precinct (R100). These, however, were based on the requirements of Part 6 of the previous *State Planning Policy 3.1 - Residential Design Codes* which have now changed. This local planning policy will need to be reviewed to alleviate any confusion.

The LPS considers possible changes to residential densities in appropriate investigation areas. In determining densities, consideration must be given to the impacts on the amenity and heritage character of residential areas, the number of new dwellings that could be introduced and the type of dwellings that could be anticipated.

Regional and Sub-regional Strategies

Directions 2031 and Beyond (WAPC, 2010)

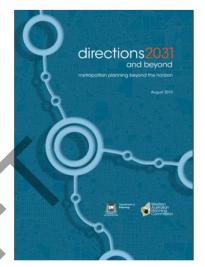
Directions 2031 and Beyond provides the spatial framework for the Perth and Peel Regions and is characterised as a "connected city" model that aims to:

- Promote a better balance between greenfield and infill development;
- Protect and enhance the natural environment, agricultural land, open spaces and heritage and community well-being;
- Reduce energy dependency and greenhouse gas emissions;
- Develop and revitalise activity centres as attractive places in which to invest, live and work;
- Ensure that economic development and accessibility to employment inform urban expansion;
- Planning for an adequate supply of housing and land in response to population growth and changing community needs;
- Facilitating increased housing diversity, adaptability, affordability and choice;
- Plan and develop key public transport corridors, urban centres, urban corridors and transit orientated developments to accommodate increased housing needs and discourage vehicle use;
- Create and enhance transport and freight movement networks between activity centres and industrial centres; and
- Maximise essential service infrastructure efficiency and equality and identify and
 prioritise the coordination of projects to support future growth. Importantly, this
 policy established a target to achieve: "47% or 154,000 of the required 328,000
 dwellings as infill development".

Based on the WAPC forecasts that the population of the Perth metropolitan area will grow from 1.65 million people in 2010 to more than 2.2 million people by 2031, it was anticipated that a further 328,000 new dwellings and 353,000 new jobs will be required.

Perth and Peel @3.5 million land use planning and infrastructure framework (WAPC, 2018)

Building on the framework provided by *Directions 2031 and Beyond*, the WAPC released for public discussion the draft *Perth and Peel@3.5 million* suite of documents in 2015 to address where future homes and jobs should be located to support a population of 3.5 million by 2050; protection of important environmental assets; utilisation of existing and proposed infrastructure; and appropriate areas for greater infill development and residential density. The framework was finalised in March 2018.







The suite includes four sub-regional planning frameworks for Central, North-West, North-East and South Metropolitan Peel which serve as sub-regional structure plans to be used by State agencies and local governments to guide residential and industrial development, and supporting infrastructure.

The frameworks identify where growth is to occur in the medium to long term. Infill in urban consolidation precincts is a key means to achieve the preferred connected city growth pattern and is guided by ten urban consolidation principles:

Urban Consolidation Precincts

Activity Centres

Hubs that attract people for a variety of activities including shopping, working, studying and living **Urban Corridors**

Provide connections between activity centres and maximise use of high frequency and priority public transport. Opportunity to accommodate increase medium-rise higher density residential development.

Green network

Public and private green spaces to support population growth and higher density.

Station Precincts

Potential to attract transit-oriented development around bus and train stations.

Industrial Centres

Maintains employment diversity.

-	
	Urban Consolidation Principles
Housing	Provide well-designed higher-density housing that considers local context, siting,
	form, amenity and the natural environment, with diverse dwelling types to meet the
	needs of the changing demographics.
Character	Ensure the attractive character and heritage values within suburbs are retained and
and heritage	minimise changes to the existing urban fabric, where appropriate.
Activity	Support urban and economic development of the activity centres network as places
Centres	that attract people to live and work by optimising land use and transport linkages
	between centres; protecting identified employment land from residential
	encroachment, where appropriate; and avoiding contiguous linear or ribbon
	development of commercial activities beyond activity centres.
Urban	The focus is for higher-density residential development; where appropriate, located
corridors	along transit corridors and promoted as attractive places to live by optimising their
	proximity to public transport while ensuring minimal impact on the surrounding
	urban fabric and the operational efficiency of the regional transport network.
Station	Where appropriate, focus development in and around station precincts (train
precincts	stations or major bus interchanges as set out under the METRONET initiative) and
	promote these precincts as attractive places to live and work by optimising their
	proximity to public transport while ensuring minimal impact on the operational
	efficiency of the regional transport network.

Urban Consolidation Principles	
Industrial	Promote the current and proposed supply and/or development of industrial centres
centres	as key employment nodes and prevent incompatible residential encroachment on these areas.
Public	Ensure that most transit corridors are supported by quality higher-density residential
transport	land uses and identify where new or improved public transport services will be needed to meet long-term growth, especially current and future train station precincts.
Infrastructure	Ensure more efficient use of and add value to existing and planned service and social infrastructure to achieve a more sustainable urban environment. Protect existing and proposed infrastructure from incompatible urban encroachment to promote a system where land use developments and infrastructure are mutually compatible.
Green	Preserve, enhance and consolidate the green network of parks, rivers, sport/
network	recreation areas, facilities for active open space, conservation and biodiversity areas, and areas with a high level of tree canopy coverage, considered important for the health and wellbeing of the community.
Protection	Avoid, protect and mitigate environmental attributes and promote development that contributes to maintaining air quality and minimises the risk of inundation from sea-level rise, flooding, storm surge events and bushfire damage.

It is envisaged that some 800,000 additional dwellings will be required to accommodate the projected population growth of 3.5 million by 2050. These are to be delivered through a mix of infill and greenfield development with targets of 47 per cent and 53 per cent, respectively.

Employment self-sufficiency is a key strategic focus of the frameworks to be supported through better integration of land use planning and the movement networks, particularly around activity centres and station precincts. Public transport infrastructure has been prioritised through METRONET to optimise improved infill opportunities.

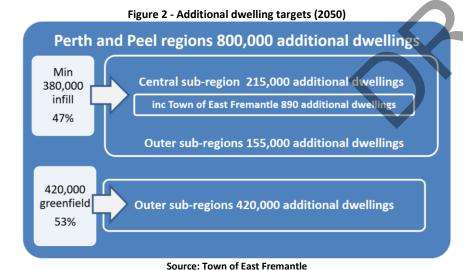
Central Sub-Regional Planning Framework (WAPC, 2018)

The Town of East Fremantle is located within the Central Sub-regional Planning Framework, which guides the 19 central metropolitan local governments in the implementation of *Directions 2031 and Beyond*. It is a key instrument for achieving a more consolidated urban form that will reduce the dependence on new greenfield developments to accommodate anticipated population growth, by increasing residential density and urban infill development targets.

It addresses issues that extend beyond local government boundaries that require a regional response on shared issues such as housing choice and affordability. The subregional strategy links State and local government strategic planning to:

- Achieve a more consolidated urban form and development within the subregion;
- Meet long term housing requirements;
- Strengthen key employment centres;
- Provide transport linkages to connect people with key centres of activity and employment and access areas beyond Perth and Peel regions;
- Facilitate and support a future regional infrastructure network;
- Encourage and guide increased connectivity between areas of open space or conservation and protect regional conservation and landscape value areas through a green network.

The framework sets a high-level target for the spatial distribution of the infill housing target across the Central Sub-region. Approximately 215,000 additional dwellings are expected to be delivered in the Central Sub-region to accommodate a population of 3.5 million by 2050, with 890 of these expected to be provided within the Town of East-Fremantle (refer to Figure 2).



The Central Sub-regional Planning Framework aims for the majority of all new infill development and employment occurring within identified urban consolidation precincts of activity centres, urban corridors, industrial centres and station precincts. Draft activity centre boundaries have been identified based on analysis of existing activity centre structure plans, zoning in local planning schemes, the extent of existing commercial areas, major infrastructure elements, walkable catchment to public transit stops and geographical constraints.

The Central Sub-regional Planning Framework identifies the urban corridors that should be the focus for investigating increased densities and a greater mix of suitable land uses. Figure 3 illustrates a cross section or interface of a corridor as it transitions into the existing neighbourhood. The presence of high quality public transport is an important consideration in determining whether a corridor is suitable for a more-compact and diverse urban form, including: high levels of service frequency; access to a reasonable variety of destinations (including through multi-modal links); and operates with a high level of priority over private vehicles wherever possible.

R40-R60
Medium density
residential

EXISTING
NEIGHBOURHOOD

READ

Local
NEIGHBOURHOOD

Street

TRANSITION AREA

Local
Street

Local
Street

Local
Street

Purking balance and under buildings

FIGURE 6: Cross section illustrating proposed interface from corridors to adjacent
neighbourhood areas

Figure 3 - Corridor/Neighbourhood Interface

Source: Central Sub-regional Planning Framework - Perth and Peel @3.5million, WAPC, 2018

Implications for the Town of East Fremantle

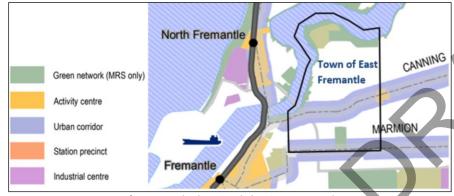
The additional housing target for the Town of East Fremantle is 890 to accommodate population growth at 3.5 million for Perth and Peel.

The Central Sub-regional Planning Framework states that Local Government has an important role in its implementation. In preparing, reviewing or amending local planning strategies and schemes, Local Governments are expected to align with the sub-regional planning framework. This will require a refinement of local strategies to

explicitly address the urban consolidation precincts set out for each local government area. In addition, to enable urban consolidation local government is to employ such measures as local planning policies, scheme provisions, incentives, density bonuses, up-coding, split-coding, special control or development areas and minimum densities.

The Spatial Plan for Central Sub-regional Planning Framework shows no station precincts or industrial centres within the Town of East Fremantle, however, it does include part of a district level activity centre and two urban corridors. Figure 4 shows an activity centre at Petra Street (one side Town of East Fremantle, one side City of Melville) and urban corridors along Canning Highway and Marmion Street (one side Town of East Fremantle, one side City of Fremantle) which may provide for urban consolidation.

Figure 4 – Central Sub-regional Planning Framework Spatial Plan (Town of East Fremantle)



Source: Extract from Central Sub-regional Planning Framework, WAPC, 2018

Additional dwellings (890) are required within the Town to assist in accommodating anticipated population growth within the Perth metropolitan area and this is progressing. This LPS addresses the urban consolidation areas set out in the framework, taking into consideration the nature and significance of local East Fremantle suburb characteristics. Initiatives include active promotion of ancillary dwellings on larger lots without changing residential density codes or subdividing land; and increased densities and greater diversity of housing choice in strategic locations with a strong focus on maximising the use of existing public transport routes.

As the Town is an established area, there is little option than to accommodate these additional dwellings through the renewal and intensification of existing dwellings and on sites where mixed use is permitted. Potential development sites are also to be further investigated. This LPS seeks to balance protection of existing residential amenity and character and achieving a greater level of infill development to provide for additional dwellings and residents.

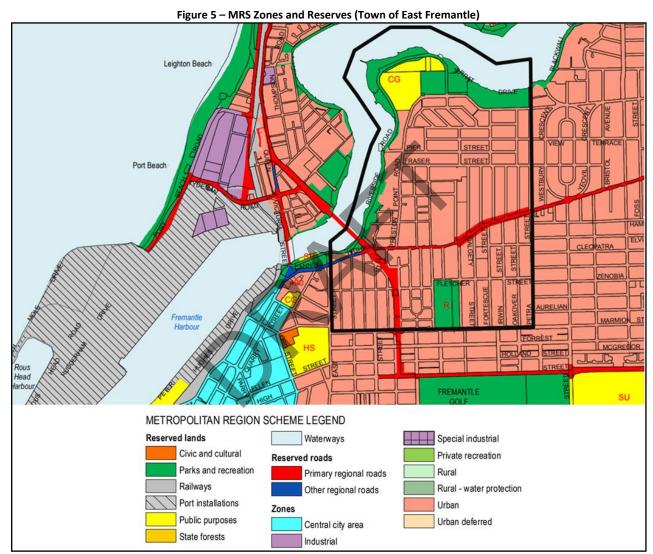
Metropolitan Region Scheme

The Metropolitan Region Scheme (MRS) defines the future use of land within the Perth region, dividing it into broad zones and reservations. The MRS requires local government local planning schemes to provide detailed plans for their part of the region which must be consistent with the MRS.

The MRS zones and reservations that apply to the Town of East Fremantle are shown in Figure 5 (over page) and include: Other Regional Roads (portion of Canning Highway); Primary Regional Roads (Stirling Highway and portion of Canning Highway); Parks and Recreation (Swan River foreshore); Parks and Recreation Restricted (East Fremantle Oval); Public Purposes Commonwealth Government (Leeuwin Barracks); and the Urban Zone (balance of the Town).

The LPS does not propose changes to the MRS, however, supports consideration of the following changes subject to detailed investigation and planning within the Town of East Fremantle boundaries:

- Rezoning of the Leeuwin Barracks site to possibly Urban to allow for allocation of an appropriate zone within Local Planning Scheme No. 3 to support redevelopment of a mixed use nature, including residential. The Federal Government intends to vacate and sell the land and the Town of East Fremantle supports rezoning this land.
- Reduction of the width of the Primary Regional Road Reserve for Canning Highway between Osborne Road/Allen Street and Petra Street (proposed possible Amendment to MRS – Canning Highway - Beach Street, Fremantle to Hannibal Street, Palmyra).



Source: Metropolitan Region Scheme 1:25,000 series Map 19, Department of Planning, Lands and Heritage website, https://www.planning.wa.gov.au/dop_pub_pdf/MRS_Map19_25000_Fremantle_updated.pdf

Development Control and Operational Policies

Liveable Neighbourhoods (WAPC, 2009) and Draft Liveable Neighbourhoods (WAPC, 2015)

Liveable Neighbourhoods (2009) is a WAPC operational policy developed to guide the structure planning and subdivision of greenfield and large brownfield (urban infill) sites. It seeks to deliver communities that embody such elements as integrated use of public transport, cycling networks, walkable neighbourhoods, safe streets, reduced car dependency, sustainability, employment integration, and greater community self-sufficiency.

The WAPC initiated a review of Liveable Neighbourhoods in 2015 which broadly included: a staged approach aligned to Liveable Neighbourhoods content or 'elements'; comprehensive stakeholder engagement, including the establishment of a technical advisory group, to identify issues, operational effectiveness, emerging trends and solutions; and identification of major interpretation, inconsistency and implementation issues between Liveable Neighbourhoods and existing WAPC policies.

The review will be considered and finalised as part of the *Design WA* project.

Implications for the Town of East Fremantle

Future statutory and strategic planning will need to consider the elements of Liveable Neighbourhoods or any future policy that supersedes this.

DC 1.5 - Bicycle Planning (DPLH, 1998)

Development Control Policy 1.5 – Bicycle Planning (DC 1.5) objectives include:

- To make cycling safer and more convenient through the provision of end-of-trip facilities and by the provision of better cycle route networks.
- To ensure that the needs of cyclists, are recognised and provided for by planning and road construction authorities.
- To encourage more work, school and shopping trips to be made by bicycle through the provision of more (and better) cycling facilities.
- To increase the general awareness of the benefits of cycling.
- To ensure adequate consideration is given to the provision of cycling facilities in planning studies and in the implementation of statutory planning controls.

Implications for the Town of East Fremantle

The Town is serviced by a number of dedicated cycling facilities. As part of an Integrated Traffic Management and Movement Strategy (to be completed before the end of 2019) an active transport plan is being developed to maximise the safe and sustainable movement of pedestrians and cyclists throughout the Town.

Local Planning Policy 2.1.4 - Town Centre Redevelopment Guidelines considers some aspects of bicycle access and parking facilities, however, this could be revisited to provide a stronger emphasis in this regard.

DC 1.6 - Planning to Support Transit Use and Transit Oriented Development (DPLH, 2006)

Development Control Policy 1.6 - Planning to Support Transit Use and Transit Oriented Development (DC 1.6) seeks to encourage public transport use by integrating land use and public transport infrastructure. DC 1.6 seeks to ensure the optimal use of land within transit oriented precincts supporting the intentions of *Directions 2031 and Beyond*.

A transit-oriented development (TOD) is typically a mixed-use residential and commercial area with strong access to public transport. A TOD neighbourhood typically has a centre with a transit station or stop (train station, metro station, tram stop, or bus stop on a high frequency route), surrounded by relatively high-density development with progressively lower-density development spreading outward from the centre. TODs generally are located within a radius of 400 to 800 metres from a transit stop such as a railway station.

Implications for the Town of East Fremantle

There are no train stations within the Town of East Fremantle (the closest being Fremantle Station and North Fremantle Station both approximately 1.5 km from the closest Town boundary). There is, however, one high frequency bus route along Canning Highway.

The LPS proposes to investigate higher density residential development generally within the walking catchments of Canning Highway and Marmion Street (the latter not currently a high frequency bus route, however, identified as an urban corridor).

DC 5.1 - Regional Roads (Vehicular Access) (DPLH, 1998) and Draft (DPLH, 2018)

Development Control Policy 5.1 - Regional Roads (Vehicular Access) (DC 5.1) sets out the principles to be applied when considering proposals for vehicle access to or from developments abutting regional roads. The Policy objectives include ensuring that vehicle access to regional roads and the type of abutting development is controlled and conforms with sound town planning principles as well as minimising the number of junctions or driveways to improve traffic flow and safety on all regional roads.

The access control requirements of this policy apply to Primary and District Distributors, which includes all categories of regional roads designated in the MRS, however, many District Distributors are not classified in a regional scheme and control of development on these roads in accordance with this policy is the responsibility of the local government.

DC 5.1 seeks to minimise the creation of new driveways on regional roads and rationalise existing access arrangements. No access is permitted to the regional road where alternative access is, or could be, made available from side or rear streets or from rights of way unless special circumstances apply.

Adjoining owners may be required to make arrangements to enter into cross-easement agreements to provide reciprocal rights of access across adjacent lots as a means of rationalising access to the regional road. Where access is permitted, conditions may be imposed prescribing junction or driveway details to ensure adequate visibility and to provide for the safe and convenient movement of vehicles both entering and leaving the traffic stream.

Draft DC 5.1 was released in January 2018 for public comment. This draft policy refers to a functional road classification system contained within *Liveable Neighbourhoods* (2009) which comprises of Primary Distributors, Integrator Arterials, Neighbourhood Connectors and Access Streets.

Access control requirements apply to all regional roads as shown in the MRS (that is Primary Regional Roads and Other Regional Roads). The three categories of regional roads are: Category 1 — no access permitted; Category 2 — access may be allowed subject to approval; and Category 3 — the road reservation is not accurately defined or is the subject of review by the agency responsible for planning of the regional road. Integrator Arterials are not shown in the MRS and control of access is the responsibility of the Local Government.

Implications for the Town of East Fremantle

This policy applies to development on properties that abut Canning Highway and Stirling Highway which are regional roads within the MRS (Primary Distributors) and development that abuts Marmion Street and Preston Point Road (District Distributor A and B, respectively).

Clause 5.3.2 Local Planning Scheme No. 3 addresses this to some extent. For sites zoned Residential R12.5/R40 and Residential R20/R40 with frontage to Canning Highway this provision only allows for development of the higher density where sole access is via a street other than Canning Highway.

This restricted access needs to be considered when investigating higher residential density and intensification of land use particularly along Canning Highway and Marmion Street. Measures may need to be investigated to provide redevelopment incentives that will reduce the number of access points needed; specify crossover location; pairing or combining multiple development sites to reduce the number of crossovers; and the inclusion of common Rights of Carriageway (ROCW) to the rear of lots.

DC 5.3 - Use of Land Reserved for Parks and Recreation and Regional Open Space (DPLH, 2017)

The purpose of this policy is to outline the circumstances under which the WAPC may approve the use and development of land reserved for parks and recreation for different purposes, specifically for land in the ownership of the State. The policy also sets out the procedure for handling requests from sporting club and community groups for the use of reserved land.

Implications for the Town of East Fremantle

This policy has implications for the implementation of the Town of East Fremantle *Recreation and Community Facilities Strategy (2016)*, including development of a Vision/Master Plan for the East Fremantle Oval and a Master Plan for the Preston Point Road North Sport Recreation Facilities; and implementation of the *East Fremantle Foreshore Master Plan (2016)*.

Other Relevant Strategies, Plans and Policies

There are no other relevant strategies, plans and policies that currently impact on the Town of East Fremantle. The following documents related to planning reform, however, are acknowledged:

Draft Green Growth Plan for Perth and Peel @ 3.5 million (DPC, 2015)

The *Draft Green Growth Plan for Perth and Peel @ 3.5 million* is a whole of government initiative developed in collaboration with the Perth & Peel @3.5million sub-regional planning frameworks to deliver two critical outcomes:

- Cutting red tape by securing upfront Commonwealth environmental approvals and streamlining State environmental approvals for the development required to support growth to 3.5 million people; and
- Unprecedented protection of our bushland, rivers, wildlife and wetlands through implementation of a comprehensive plan to protect our environment.

It aims to provide an environmental assessment program for the protection of both Commonwealth matters of national environmental significance and State environmental values through integrating environmental protection and land use planning at an early stage to deliver a long term and comprehensive program of conservation actions at a landscape scale. It will provide certainty in relation to the environmental outcomes that will be delivered, the areas where developed can be contemplated and the environmental obligations that will apply in terms of avoidance, mitigation and conservation actions.

Most of the land within the Town of East Fremantle is included within the 'Urban Class of Action' where streamlined environmental approval processes will apply and referral under the Part 9 of the *Environment Protection and Biodiversity Conservation Act 1999* will no longer be required.

Strategic Assessment of the Perth and Peel Regions (SAPPR) which is to deliver the Green Growth Plan for Perth and Peel was suspended in April 2018 pending a review of the ongoing costs, risks and benefits to Western Australia by the State government.

Green Paper – Modernising the Western Australian Planning System (May 2018)

Commissioned by the Minister for Planning, an independent review of the planning system has resulted in the development of the *Modernising the Western Australia's Planning System* green paper which was released for public comment in May 2018.

The Green Paper identifies four key principles to underpin the planning system in WA (fairness, transparency, Integrity and efficiency) and focusses on five key reform areas (Strategically-led, legible, transparent, efficient and delivering smart growth).

The submissions inform an Action Plan of reform initiatives for the planning system involving opportunities for stakeholders to be involved in shaping delivery.

Guidelines, Forecasts and Reports

This LPS has been guided by a number of fact sheets, guidelines, forecasts and reports provided by the WAPC and Department of Planning, Lands and Heritage including the following:

- Diverse City by Design (WAPC, 2015);
- Local Planning Manual (WAPC, 2010)
- Visual Landscape Planning in Western Australia (WAPC, 2008);
- Better Urban Forest Planning of Perth and Peel (WAPC, 2018);
- Transport Impact Assessment Guidelines (WAPC, 2016);
- Tourism Planning Guidelines (WAPC, 2014);
- State Coastal Planning Policy Guidelines (WAPC, 2013);
- Coastal Hazard Risk Management and Adaptation Planning Guidelines (WAPC, 2019);
- Holiday Homes Guidelines (WAPC, 2009);
- Implementation Guidelines for SPP 5.4 Road and Rail Transport Noise and Freight Considerations (WAPC, 2014);
- Acid Sulfate Soils Planning Guidelines (WAPC, 2009);
- Better Urban Forest Planning of Perth and Peel (WAPC, 2018);
- Better Urban Water Management (WAPC, 2008)
- Designing Out Crime Planning Guidelines (WAPC, 2006);
- Western Australia Tomorrow Population Forecasts 2016-2031 Population Report No. 11 (WAPC, 2019)

The Western Australia Tomorrow (WA Tomorrow) set of forecasts is the official State Government forecast to 2031 and represents the best estimate of future population size based on current fertility, mortality and migration trends. In addition, data has been drawn from the 2016 Australian Bureau of Statistics Census as well as the Informed Decisions (id) suite of programs (which are based on the Australian Bureau of Statistics data from Census and other sources and combine more recent information such as applications for development approval, demolitions, migration patterns and strategic planning to improve profiles and forecasts).

3. Local Planning Context

Town of East Fremantle Strategic Community Plan 2017-27

The Local Planning Strategy is one of a number of tools to achieve the vision and objectives of the Town of East Fremantle Strategic Community Plan (adopted September 2017).

The Strategic Community Plan is a long-term planning document that sets out the community's vision, aspirations for the future, and the key strategies on which to focus to achieve those aspirations.

The Strategic Community Plan outlines the vision for the Town of East Fremantle and identifies community priority areas for the next years and is summarised as follows:

Strategic Priority Areas





Before undertaking consultation with the community for the Strategic Community Plan, feedback from the biennial Community Perception Survey was reviewed together with community engagement activity carried out in the previous year across other areas.

The Community Perception Survey identified seven priority areas that the Community would like the Town to focus on:

- 1. Continue to protect and maintain the Town's unique character and identity;
- 2. Consistent decision making with planning and building approvals;
- Take action with the East Fremantle Oval Precinct;
- 4. Improve the appearance of streetscapes;
- 5. Improve footpaths and cycleways, using asphalt for dual use paths;
- 6. Address concerns with traffic congestion and on-street parking; and
- 7. Address safety concerns with break-ins.

In March-April 2017 the Town of East Fremantle administered a MARKYT Community Scorecard to evaluate community priorities and measure Council's performance against key indicators in the previous Strategic Community Plan. In general, the following perceptions were recorded:

Most valued aspects of the Town of East Fremantle

Proximity to the river, ocean and Fremantle. The area is described as beautiful and friendly. There is appreciation for the area's unique character and identity and sense of community.

Planning and Building approvals

Approvals process to be consistent with clear and concise guidelines that are enforced the same way for all. Develop a heart in the city centre, building a sense of community with smaller street fests and community events.

Character and Identity

Maintain and protect the unique character and quality of East Fremantle. Avoid planning decisions that drastically alter the area's identity by: keeping subdivisions to a minimum; maintaining the quality of the foreshore and increasing its vibrancy; innovation for future development and community connection; promote George Street; upgrade buildings at Petra Street and Canning Highway; fewer large homes on small blocks and better aesthetics in newer areas).

East Fremantle Oval Precinct

Provide certainty regarding the future of the East Fremantle Oval Precinct. Upgrading of the precinct while maintaining its congruence with the community.

Streetscapes

Maintain streetscapes to improve the overall appearance, character and identity of the Town.

Footpaths and cycleways

Level, unobstructed footpaths and better maintenance are a priority to allow more walking, wheelchair and pram use and safer access for the elderly. More cycleways especially along busy routes.

Traffic and parking management

Concerns with on-street parking and growing traffic congestion.

A further MARKYT Community Scorecard was administered in February 2019 and it was found that Town had improved in 39 performance measures over the past two years. In general, the following was identified by the community:

Higher performing greas that continue to improve include:

Access to housing options to meet future needs, footpaths and cycleways, traffic management, the Town's social media presence on Facebook and safety and security.

Perceived strenaths include:

Waste collection services and the area's character and identity.

Areas that have declined include:

Youth services and facilities, access to services and facilities for people with a disability, recycling services and verge-side bulk and green waste collections.

Moving forward, Priority Cluster 1 – Streetscapes, Footpaths and Cycleways

- Protect and plant more trees;
- Identify appropriate trees for the area;
- Enhance George Street;
- Work to protect local streetscapes despite higher density development;
- Safer footpaths for all levels of mobility;
- Improve pedestrian safety along Canning Highway;
- Increase cycleways connectivity;
- Consider an alternative for cyclists on Preston Point Road or provide more space for both cars and bicycles.

Priority Cluster 2 – Managing Growth and Development

- Preserve, protect and enhance East Fremantle's heritage identity;
- Consider sustainable development;
- Ensure traffic and parking are planned into future growth and development;
- Enforce height restrictions on multi storey development;
- Maintain the area's heritage appeal;
- Ensure new developments are in keeping with the Town's heritage character;
- Enhance and protect the historic qualities of the Town and key sites including the Royal George.

Priority Cluster 3 - Traffic and Parking

- Address the congestion along Canning and Stirling Highway;
- Improve flow at traffic lights;
- Deter the 'rat running' though residential streets;
- Increase traffic calming devices including speed humps to stop speeding in local streets;
- Restrict parking on narrow streets:
- Provide more parking and reduce restrictions in popular areas;
- Include parking permits with rates;
- Allow parking on verges;
- Ensure enough parking is provided for in higher density planning.

Priority Cluster 4 – Recreation and Leisure

- Move forward with redevelopment of the East Fremantle Oval Precinct;
- Maintain and enhance sport and recreation within the precinct;
- Protect and provide more recreation facilities, especially for youth;
- Increase and improve public open space;
- Enhance areas along the foreshore;

Provide more facilities in parks including toilets, barbeques, shade, seating etc;

Priority Cluster 5 – Conservation and Environmental Management

- Protect the Town's existing trees;
- Plant more native trees and plants;
- Increase focus on and promotion of sustainability including reducing waste, reusing and recycling;

Local Planning Scheme No. 3

The *Town of East Fremantle Local Planning Scheme No. 3* was gazetted on 3 December 2004 in accordance with section 87(3) of the *Planning and Development Act 2005* and comprises of the scheme text and the scheme map. A number of local planning policies have also been adopted under the provisions of the Scheme.

The preparation of this LPS will guide and inform the preparation of a new local planning scheme which will eventually replace *Local Planning Scheme No. 3*.

Figure 6 shows the zones and reserves that apply within *Local Planning Scheme No. 3*. The scheme map is shown in Figure 7 (over page) and identifies Metropolitan Region Scheme reserves; classifies land within local zones and reserves; and prescribes residential density codes.

The scheme text includes objectives for each of the zones; a zoning table (which indicates the permissibility of land uses within the various zones); and a number of various standards, requirements and provisions relating to development control and process.

The gazettal of the *Planning and Development (Local Planning Schemes) Regulations* 2015 automatically included Schedule 2 - Deemed provisions for local planning schemes into all local government local planning schemes in Western Australia. For *Local Planning Scheme No. 3*, this action:

- Superseded provisions contained within Part 2: Local Planning Framework; Part
 7: Heritage Protection; Part 9: Applications for Development Approval; Part 10:
 Procedure for Dealing with Applications; Part 11: Administration and
 Enforcement; and subsequently superseded a number of schedules and forms;
 and
- Included additional provisions relating to Terms used; Structure Plans; Activity Centre Plans; Local Development Plans; and Bushfire Risk Management.

The Regulations also include Schedule 1 - Model Provisions for local planning schemes. Local Planning Scheme No. 3 was based on a Model Scheme Text associated with the former Town Planning Regulations 1967 which have been superseded by the new Regulations. As such, although the intent is similar, the scheme provisions (other than the Schedule 2 - Deemed Provisions for local planning schemes) do not exactly match up with the Schedule 1 - Model Provisions for local planning schemes. Any future scheme review will be required to more closely align with the new model provisions.

Figure 6 – Local Planning Scheme No. 3 - Zones and Reserves **LEGEND** REGION SCHEME RESERVES (MRS) Civic and cultural CP Public purposes - Car park Other regional roads CG Public purposes - Commonwealth Government Parks and recreation Public purposes - High school R Parks and recreation restricted Public purposes - Hospital Portrinstallations Public purposes - Prison Primary regional roads Public purposes - Special uses Railways SEC Public purposes - State Energy Commission Public purposes - Technical school State forests Public purposes - University Waterways WSD Public purposes - Water Authority of WA Water catchments LOCAL SCHEME ZONES Special business (see scheme text for additional information) Special zone - Royal George hotel Mixed use Residential LOCAL SCHEME RESERVES (see scheme text for additional information) Public purposes: Hospital Local road Public purposes : School Public purposes: Water Authority of Open space Public purposes : Drainage

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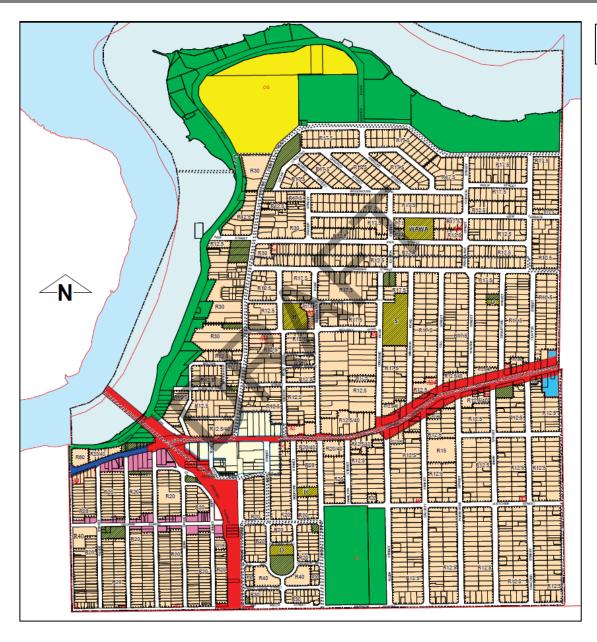


Figure 7 - Local Planning Scheme No. 3 – Scheme Map

Local Planning Policies

LPP 3.1.1 - Residential Design Guidelines

The Residential Design Guidelines policy builds on the development requirements (Acceptable Development and Performance Criteria) of *State Planning Policy 7.3 - Residential Design Codes Volume 1*, in order to ensure consistency between State and Local Planning Policy approaches in conserving character and amenity. Relevant provisions of *State Planning Policy 3.5 - Historic Heritage Conservation* have also been included where appropriate.

The policy identifies seven residential precincts covering the entire Town area (with the exception of the Town Centre Zone) as follows: Plympton, Woodside, Richmond, Richmond Hill, Riverside, Preston Point and Raceway.

The policy objectives include:

- To conserve and protect individual residences considered to have significant heritage value;
- To provide development and design guidance to landowners wanting to extend or refurbish existing dwellings of heritage significance;
- To guide additions to existing dwellings, which do not adversely affect the significance of the dwelling, or of neighbouring heritage places;
- To guide new dwellings and additions/alterations to existing dwellings (particularly second storey additions), which are compatible with the character, form and scale of existing residential development in the locality, and harmonise with the existing streetscape; and,
- To encourage creative design solutions of quality that meet the standards of this
 policy, and which enhance the character of the residential precincts and Policy
 Area.

This policy also addresses residential development within Buffer Areas 2 and 3 of the Fremantle Inner Harbour Buffer Definition Areas in accordance with the Fremantle Ports Guidelines. For development within Buffer Area 2, consideration is given to the potential impacts of ingress of toxic gases in the event of an incident at the Port; shattering or flying glass as a consequence of explosion at the Port; noise transmission emanating from the Port; and odour. Generally, the potential risk and amenity impacts for Buffer Area 3 are not as great and require less control.

Other policy measures include:

- Notifications on titles for development and subdivision proposals advising of the potential amenity impacts associated with living in proximity to the Port;
- Referral of any proposal Council considers necessary to Fremantle Ports for comment; and
- Advising Fremantle Ports of any proposed scheme amendment that would result in the increase or intensification of sensitive uses within the buffer areas.

Where the LPP 3.1.1 policy area overlaps with the precincts identified in LPP 3.1.3 – Town Centre Redevelopment Guidelines, the requirements of the latter policy take precedence. This aspect of both policies may require review to ensure greater clarity, particularly for higher density residential development.

LPP 3.1.2 - Signage Design Guidelines

This policy provides the scope for advertising and information signage for commercial property in a manner which does not overwhelm or compromise visual amenity within the landscape, with the following objectives:

- To provide adequate opportunities for commercial advertising to support and encourage local business activity;
- To promote and protect significant positive visual elements which contribute to East Fremantle's 'sense of place' and the visual amenity of the streetscape;
- Protect the cultural heritage values of a place of cultural significance;
- Coordinate multiple signage on single buildings through the establishment of an approved signs regime for the site;
- Ensure the type and size of signs is appropriate for their location;
- Minimise the proliferation of advertisements;
- Ensure that advertisements do not adversely impact on traffic circulation and management, or pedestrian safety; and
- Ensure advertisements are generally erected on land where the advertised business, sale or goods or service is being carried out.

The policy defines different sign types and identifies those that are exempt from planning approval, permitted, discretionary and prohibited.

LPP 3.1.3 - Town Centre Redevelopment Guidelines

The Town Centre Redevelopment Guidelines policy provides a position on what constitutes an acceptable form of development to meet higher order planning policy; what will satisfy the concerns of the local community; and enables the viable redevelopment of the under-performing town centre. It focusses on growth in the centre to relieve development pressure in the surrounding suburban neighbourhood, which contains a long-established building stock with desirable character (including some with heritage significance).

The defined policy area is in excess of the current Town Centre zone to generally include land along Canning Highway that is zoned Mixed Use, Residential with a high or dual density code, or has additional use rights. It is divided into the Town Centre Core, Canning Highway and Frame precincts. The precincts group together areas with similar characteristics and enable differing development provisions to be applied where necessary.

The planning and urban design objectives for the East Fremantle Town Centre are to:

- Encourage and stimulate renewal of the town centre and transform it into a desirable urban village that is the focal point for the local community;
- Establish a character that is sympathetic to, but not a continuation of, the surrounding suburban neighbourhoods;
- Establish an active and attractive street experience;
- Provide diverse and adaptive housing types that are not readily available in the local area;
- Encourage mixed-use development;
- Create a context for a diverse range of businesses and services;
- Retain a local supermarket, and other attractors such as a Post Office, within the town centre;
- Maintain and improve, where possible, pedestrian connectivity to the surrounding neighbourhoods;
- Restrict the perceived and overall heights of new buildings to a scale that is appropriate to their settings within an urban village;
- Encourage buildings that are elegantly proportioned and richly articulated to provide visual interest and relief from uniformity;
- Maintain the significance and visual prominence of the Town Hall, and treat adjacent buildings with respectful sensitivity;
- Reduce the scale of new development at the edge of the town centre where there
 is an interface with existing suburban residents;

- Avoid disruption of the urban form with large areas of car parking, and encourage parking that is under, above, or behind new buildings;
- Retain and enhance existing view corridors;
- Encourage the use of alternative modes of transport to the motor car;
- Distribute traffic movement where possible and avoid 'bottlenecks'. Incorporate
 a network of publicly accessible open spaces, such as arcades and piazzas;
- Incorporate a generous amount of vegetated landscape, either by means of new planting or the retention of existing; and
- Maintain a degree of continuity in the landscaping of publicly accessible areas.

LPP 3.1.3 provides development standards that address such matters as urban structure; preferred land uses and land use mix; pedestrian movement and amenity; vehicle movement and access; parking; landscaping and public spaces; resource conservation; signage and services; and maximum street wall storeys and overall storeys.

It is acknowledged that aspects of this policy require review to provide clarity regarding density and building height; to include the Fremantle Ports Inner Harbour buffer requirements; and to better address the WAPC's Draft SPP 5.4 relating to road and transport noise and freight considerations.

LPP 3.14.- George Street Mixed Use Precinct New Development Contribution to the Management of Access and Parking

The George Street Precinct is a characteristic and vibrant mix of uses, however, prevailing building stock and small lots have resulted in limited onsite parking capacity to service commercial and residential activities.

This policy allows for a monetary contribution for car parking spaces that would otherwise be required to be provided on site as part of the proposal for new development, redevelopment and change of use proposals within the George Street Mixed Use Precinct.

The objectives of this policy are to:

- Establish a clear, consistent and equitable framework for the application of contributions from new development towards a defined parking strategy;
- Provide for the sustainable co-existence of a mix of land uses including residential, retail, recreational, commercial and entertainment uses;
- Contribute to the effective management of future access and parking demands in the Precinct to the benefit of commercial and residential land users;

- Assist in the protection of the amenity of existing and future residents within (and near) the mixed-use precinct; and
- Facilitate the establishment of mixed use, commercial and residential developments where adequate onsite parking provisions cannot be established.

An Access and Parking Management Plan was developed in June 2013 (by consultants GHD) and a number of implementation options identified in the plan have been progressed. This is to be updated as part of the Integrated Traffic Management and Movement Strategy (to be completed before the end 2019) which will include a parking management plan for the entire Town of East Fremantle which may lead to changes to LPP 3.1.4.

LPP 3.1.8 - Wood Encouragement Policy - General

This Wood Encouragement Policy has been developed to encourage the use of sustainably sourced wood in the construction/ development/ redevelopment of a dwelling within the Town of East Fremantle and is responsive to environmental issues such as climate change and environmental protection.

This policy does not in any way mandate the use of wood, only that wood should at least be considered as a preferred choice of material for construction and fit out in any development or redevelopment of a property. Council recognises the importance of forestry and the timber products industry to the broader Western Australian region. Central to Council's desire to be environmentally and ecologically sustainable is to enable wood to be utilised as a preferred material, where deemed appropriate.

The objectives of this policy are to:

- Reinforce Council's preference for quality wood buildings in the development of briefs for residential development within the Town.
- Encourage the design of residential development in a manner that promotes the use of wood within the built form.
- Recognise all of the benefits that make sustainably sourced wood a smart choice for residential buildings and infrastructure.
- Encourage the use of sustainably sourced wood in the construction and fit out of any development/ redevelopment of a property within the Local Government area, where it is practical to do so.

LPP 3.1.9 - Percent for Public Art

Adopted in February 2018, the Percent for Public Art Policy applies to development applications for residential (for 15 or more multiple dwellings), commercial, non-residential and mixed use developments of a significant construction value.

Where the amount is \$3 million and over, the policy requires that no less than 1 per cent of the construction value of development be attributed towards the provision of public art. Where the construction cost reaches \$100 million, the contribution rate is set at 0.75 per cent. The provision of public art may either be provided in-kind by the developer on-site or within the adjacent public realm and/or as a cash-in-lieu contribution to the Town for the provision of public art in the immediate locality.

LPP 3.2.2 - Noise Attenuation

The Noise Attenuation Policy aims to:

- Provide a clear framework for addressing noise concerns in (and near) mixed-use
 areas and areas subject to ambient environmental noise, that may be subject to
 higher levels of noise than average suburban areas;
- Establish appropriate criteria for measuring and identifying potential noise impacts before they occur;
- Clarify the process and extent of reporting required in certifying proposed noise attenuation measures; and
- Protect the amenity of existing and future residents within (and near) mixed-use
 precincts and areas subject to ambient environmental noise, through enhanced
 building design and construction.

To provide for the sustainable co-existence of a mix of land uses within, and adjacent to, areas that are likely to be subject to an ambient environmental noise (including traffic and street noise, port operations, entertainment and mechanical plant) the policy includes measures to minimise the adverse impacts of noise such as:

- Requirement for an acoustic report;
- Construction and design requirements; and
- Notifications on titles for development and subdivision proposals where necessary.

It may be opportune to expand LPP 3.2.2 to address and include requirements of the WAPC's Draft SPP 5.4 relating to road and transport noise and freight considerations.

Other Council Policies relating to Planning

3.1.5 - Community Design Advisory Committee

The Community Design Advisory Committee (CDAC) provides professional and technical advice, in a non-adversarial and informal manner to the Town's Administration and the Council in relation to the design of buildings and other related matters. The CDAC has specific terms of reference and performs an advisory function only. It does not make decisions on, or approve applications.

Membership may include up to ten external members with a demonstrated high level of expertise and knowledge in architecture, urban design, landscape architecture, sustainability or heritage with preference given to residents of the Town. The CDAC Chairperson is an Elected Member of Council (appointed by Council).

3.1.6 – Town Planning Advisory Panel

A short statement of procedure advising that:

- Contact and lobbying of Town Planning Advisory Panel (previous name given to the now CDAC) members by applicants is considered to be inappropriate; and
- The opportunity for applicants to present their proposals to the Town Planning (Advisory Panel and members, either jointly or severally, is not permitted.

3.1.7 – Wood Encouragement – Council

An environmental policy that demonstrates local and national leadership by encouraging the sustainable use of wood for any Council owned building/infrastructure, as a response to environmental issues such as climate change and environmental protection.



Local Strategic Planning

A number of other strategic planning studies relevant to this strategy have been undertaken as follows:

- Town of East Fremantle Strategic Community Plan 2017-2027 (2017);
- Town of East Fremantle Recreation and Community Facilities Strategy (2016);
- Town of East Fremantle Foreshore Management Plan (2016);
- Town of East Fremantle Housing Capacity Study (2018);
- The Town Centre and George Street Public Realm Style Guides (2016) (Note: to be reviewed/incorporated into new study involving an Urban Streetscape Public Realm Style Guide for the entire Town area);
- Town of East Fremantle Precision Urban Forest Monitoring Final Report (2018);
- Town of East Fremantle Public Art Strategy (2017);
- Leeuwin Vision Plan (2016);
- Town of East Fremantle Public Health Plan 2018-22 (2018);
- Disability Access and Inclusion Plan 2016-2026 (2017);
- East Fremantle Oval Precinct Revitalisation Vision (2019); and
- Town of East Fremantle Corporate Business Plan 2019-23 (2019).

Furthermore, the Town of East Fremantle is currently in the process of undertaking a number of additional studies, including:

- An Integrated Traffic Management and Movement Strategy to define a 10+ year future for the Town's transport network and will include a Parking Management Plan, Traffic Management Plan and an Active Transport Plan;
- An Urban Streetscape and Public Realm Style Guide to establish an appropriate
 and consistent style guide for the Town's streetscape and public realm, which
 includes all the spaces between buildings to which the public has access;
- A Local Commercial Centres Strategy to identify retail and other commercial needs
 of the community for the next 10 to 15 years and provide a strategy for how the
 Town of East Fremantle can work towards accommodating development to meet
 those needs:
- East Fremantle Oval Precinct Revitalisation —Further to the Vision/Master Plan for the oval and adjacent reserves, more detailed implementation studies are to be carried out co-funded by the Department of Local Government, Sport and Cultural Industries and the Town of East Fremantle;
- Preston Point Road North Facilities Master Plan involving the sporting reserves north of Preston Point Road (Wauhop Park, Henry Jeffery Oval, Chapman Oval and Preston Point reserve); and

 Activity Centre Plan for the Petra Street (cnr Canning Highway) District Centre (Note: not yet commenced, possible future joint project with the City of Melville).

Major Development Projects

There are a number of key short and medium term developments projects within the Town at various stages of planning and development, including:

- Southern Plus Aged Care an 86 bed residential facility situated on the corner of Wolsely and Staton Roads which is recently completed (2018) and now operational (redevelopment of former Kaleeya Hospital site);
- Amendment No; 14 (Roofing 2000 site) Amendment in progress that may allow the Mixed Use zoned properties on the corner of Canning Highway, Sewell Street and Saint Peters Road to support mixed use (residential and commercial) in a multi-storey development;
- Amendment No; 15 (Royal George Hotel site) Amendment in progress that may allow additional mixed use (residential and commercial) in a multi-storey development in addition to the old hotel building;
- The East Fremantle Oval Precinct (oval and adjacent reserves) is the subject of a Vision/Master Plan study (completed 2019 and now moving through project implementation stages and business case development) which is co-funded by the Department of Local Government, Sport and Cultural Industries and the Town of East Fremantle;
- Leeuwin Barracks this site on Riverside Road is earmarked for sale by the
 Department of Defence. A Vision Plan (non-statutory) endorsed by Council and
 the Department of Defence includes a possible mixed use development concept
 for approximately 1,440 apartments and some low key commercial and
 community land uses. Amendment processes are expected to soon be initiated
 and ultimate development outcomes for this site are yet to be fully determined;
- Former Woodside Hospital site The site at No. 18-24 Dalgety Street is zoned Residential R15 and is intended to be redeveloped as a 125 bed Aged Care Facility.
 An application for planning approval is expected to be submitted in the near future.

4 Local Profile

Physical Setting

The Town of East Fremantle is a compact municipality measuring approximately 3.2 square kilometres in area and is bound by the Swan River, East Street, Marmion Street and Petra Street.

Located approximately 12 kilometres south-west of the Perth CBD, the Town of East Fremantle is recognised as part of, and contributing to that portion of the south-west metropolitan region which has the Fremantle Strategic Centre as its main service centre.

The Town was established in 1897 and is one of the region's historic suburbs developed around early mansions and inner harbour workers' cottages. The locality is significant as a remnant of the early development of the Perth Metropolitan Region and this is reflected in the recognition given to the area in both local and State heritage registers. Fortunately, much of the original urban fabric has been preserved and there is now widespread recognition of the need to protect the area from the indiscriminate redevelopment often associated with the pressures for urban consolidation.

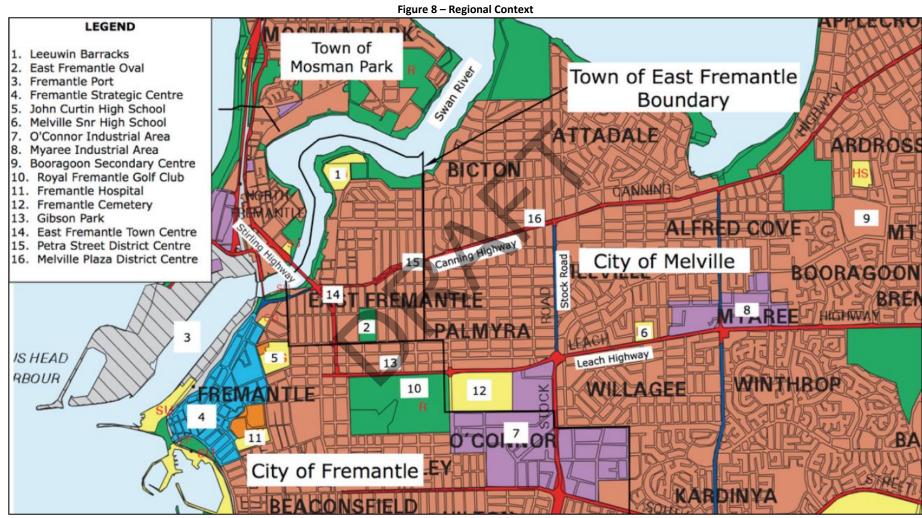
The major regional commercial and industrial facilities to which the community has access include the Fremantle City Centre, the Fremantle Port, Booragoon Activity Centre and a number of industrial estates located in adjacent local government areas.

Regional recreational facilities include the East Fremantle Oval, the Swan River and associated foreshore reserves. The river not only provides for a wide range of recreational activities, but is also the location of an important transport hub in the form of the Fremantle Port.

Figure 8 (over page) shows the Town of East Fremantle in its local and regional context and highlights the Town's proximity to the Strategic Centre of Fremantle and a range of other regional employment, educational and recreational facilities in surrounding areas. A relationship with these facilities is significant in the planning of the Town, which is not able to support the full range of services available in larger municipalities.

The Town is traversed by two primary regional roads, being the Canning and Stirling Highways which provide road access to other parts of the region on which the area relies for many of its services.





Source: (Base map) Metropolitan Region Scheme Map

Physical Features, Climate, Natural Heritage and Natural Resource Management

Topography and Landform

East Fremantle is located on the southern, lower reaches of the Swan River and is one of the few local governments that extend to the centre of the river. The local topography consists of high undulating hills and low-lying foreshore regions of the Spearwood Dune System on the Swan Coastal Plain.

As seen in Figure 9, the highest point is located between Pier Street/View Terrace (in the vicinity of Penshurst House). A ridgeline running along these streets, with land sloping down to the river offering commanding views. The elevated regions of East Fremantle provide excellent views of the inland, river and coastal environments, whilst the foreshore areas promote extensive public recreational use.

Geology and Soils

The Perth region lies within the Swan Coastal Plain which stretches from the Darling Scarp in the east to the Indian Ocean to the west. It comprises of Aeolian and alluvial sediments forming a series of four geomorphic elements parallel to the coast known as (moving eastwards) Quindalup dunes, Spearwood dunes, Bassendean dunes and Pinjarra plain.

The Town of East Fremantle is located within the Spearwood dune system characterised by brown and yellow sands that retain some iron elements with their carbonate element having leached to form a hard limestone cap deposited just beneath the surface.

In many areas of the Spearwood dune system weathering has exposed this limestone cap (Tamal or Coastal Limestone geological formation) and its gradual erosion has led to the formation of two distinct soil associations, the Karrakatta and the Cottesloe Sands. The foreshore is characterised by various limestone outcrop features as well as beaches.

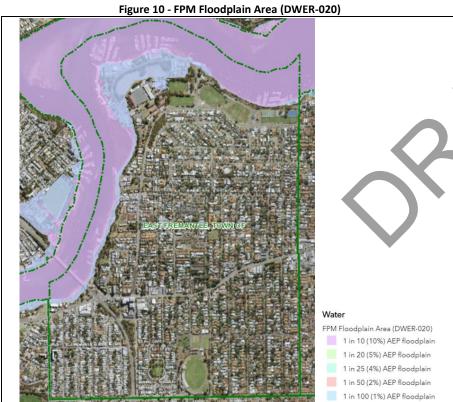


Source: https://maps.slip.wa.gov.au/landgate/landinfowa/

Swan River 1:100 Floodplain Area

Land subject to the 1:100 Annual Exceedance Probability (AEP) Floodplain is shown in Figure 10. This affects land immediately adjacent to the Swan River in the proximity of Riverside Road and Jerrat Drive and expands further in the vicinity of Preston Point (*Niergarup* in Noongar language), where it extends across Riverside Road and into portion of the Leeuwin Barracks site.

Some of the reclaimed areas around Zephyr Café, Leeuwin Barracks and Swan Yacht Club may suffer from flat grade lines and therefore the stormwater system may not be able to flush adequately. Some nuisance flooding in these areas may occur, particularly if the stormwater flows are coincident with higher storm surge levels within the Swan River.

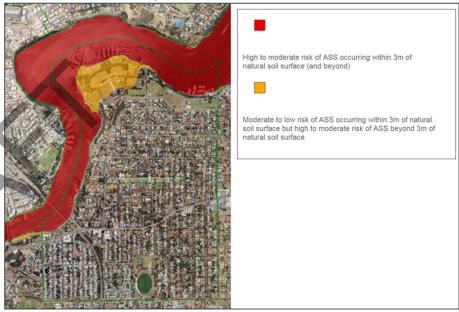


Source: https://maps.slip.wa.gov.au/landgate/landinfowa/

Acid Sulfate Soil Risk

The Town of East Fremantle is mostly free from acid sulfate soil risk. Figure 11, however, indicates a potential high to moderate risk for the entire foreshore with a low to moderate risk of acid sulfate soil occurring within 3m of natural soil surface level in the vicinity of Preston Point and the Leeuwin Barracks (coinciding with the extent of the 1:100 AEP).

Figure 11 - Acid Sulfate Soil Risk



Source: https://maps.slip.wa.gov.au/landgate/landinfowa/

Naturally occurring iron sulfides are generally found in a layer of waterlogged soil or sediment, and are benign in their natural state. When disturbed and exposed to air they oxidise and produce sulfuric acid, iron precipitates, and concentrations of dissolved heavy metals such as aluminium, iron and arsenic. Acid sulfate soils have come to prominence in land use planning as a result of detrimental consequences, including significant harm to the environment and infrastructure, which can arise from disturbing them. This is a consideration for future development in these areas.

The WAPC's Acid Sulfate Soils Planning Guidelines 2008, aim to ensure that the subdivision and development of land containing acid sulfate soils is planned and

managed to avoid potential adverse effects on the natural and built environment. General principles underpinning the guidelines include:

- Principle 1: Acid sulfate soils should be considered in all planning decisions to avoid potential adverse effects on the natural and built environment.
- Principle 2: Disturbance of acid sulfate soils should be avoided wherever practicable.
- Principle 3: Where the disturbance of acid sulfate soils is unavoidable, subdivision and development should be undertaken in a manner that:
 - Mitigates the potential adverse effects on the natural and built environment using the most appropriate mitigation strategies and management techniques; and
 - Achieves acceptable soil and water quality outcomes.
- Principle 4: The rehabilitation of previously disturbed acid sulfate soils and existing acid drainage should be encouraged.

Natural Environment Features

The Town of East Fremantle is an older, well-established local government area with no greenfield urban expansion areas. The majority of the Swan River foreshore in East Fremantle has been modified since settlement and is now used primarily for recreational and other activities associated with the use of the River.

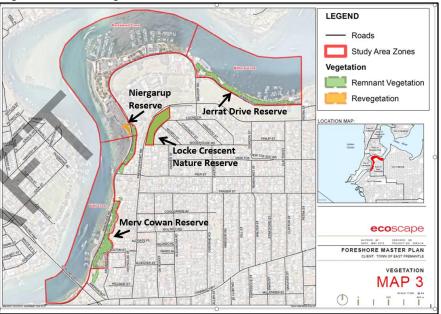
Whilst East Fremantle is an extensively urbanised municipality, limited and small isolated pockets of native vegetation remain along the foreshore in established recreational areas and along sections of the foreshore escarpment near Jerrat Drive Reserve, Niergarup Reserve and Merv Cowan Reserve; and in a small pocket of bushland at Locke Crescent Nature Reserve (refer to Figure 12).

The cliff and embankment area between Andrews Road and the Leeuwin Barracks consists of an overstorey of Eucalyptus gomphocehala (Tuart trees), Agonis flexuosa (Peppermint trees), Eucalyptus decipiens (Fremantle Marlock), Eucalyptus foecunda (Fremantle Mallee), Callitris preissii (Rottnest Island Pine) and understorey species of Acacia xanthina, Acacia rostillifera (Summer-scented Wattle), Phythanthus calcinus, Spridium globulosum, Acanthocarpus preissii (Prickly Lilly) and a number of native herbs (Ecoscape, 2016).

The bushland on the cliff and embankment area below Jerrat Drive between the East Fremantle Yacht Club and the Navy store consists of Eucalyptus gomphocehala (Tuart trees), Agonis flexuosa (Peppermint trees), and Acacia xanthina and Acacia rostillifera (Banksia species), over Leshenaultia liniariodes, Rhagodia baccata and Acanthocarpus

preissii. A previous study (Ecoscape, 1993) identified 40 indigenous native flora, 36 exotic weed species and 16 planted species (e.g. various eastern states eucalypts). This is the most floristically diverse area on the foreshore (Ecoscape, 2016).

Figure 12 - Remnant Vegetation - Swan River Foreshore and Locke Crescent Nature Reserve



Source: (Base map) East Fremantle Foreshore Master Plan, 2016

An environmental management plan was prepared in 1993 for the Jerrat Drive area, known as the Jerrat Drive Foreshore Rehabilitation Plan. No environmental management plan exists for the cliffs and embankment area between Andrews Road and the Leeuwin Barracks. This is an important environmental area as it contains locally significant plant species and contributes to the foreshore's natural character.

The Town of East Fremantle prepared the *East Fremantle Foreshore Master Plan* which was adopted by Council in December 2016. Recommendations in this plan include a review of the Jerrat Drive Foreshore Rehabilitation Plan (undertake an audit on recommendations that have been implemented and update the plan to match the current status of the foreshore); and develop an environmental management plan for

the bushland along the cliff of Riverside Road (to include weed control, removal of exotic tree species, revegetation using native species, improvement of access and management of fire threats).

The Locke Crescent Nature Reserve comprises of closed heath and a low shrub layer typically Templtetonia retusa, Acacia xanthina and Dryandra sessilis, Acacia Pulchella, Grevillea thelemanniana, Dryandra nivea, Leucopogon parviflorus, Hardenbergia comptoniana, Clemitis microphylla and some Callitris preissii (Rottnest Island Pine) and Eucalyptus gomphocephala (Tuart trees) (Hoj-Hansen, 2000).

A draft Locke Crescent Nature Reserve Management Plan was adopted by Council in 2000 and a further report was completed in 2001. It may be timely to consider an updated environmental management plan for this site.

These areas of remnant vegetation currently also enjoy a level of protection by falling within MRS Parks and Recreation Reserve and/or Local Planning Scheme No. 3 Open Space Reserve. The *Local Planning Scheme No. 3* Heritage List includes four Landscape Protection Areas which (for the most part) equate to the areas identified in Figure 12 and are described as follows:

Location	Description
East side of Riverside Road between Putney Road (now referred to as Andrews Road) and Lot 177. (i.e. Merv Cowan Reserve vicinity)	A site comprising limestone cliff face, rock outcrops and natural vegetation; significant for its natural characteristics which should be protected from despoliation or the intrusion of development.
East side of Riverside Road north of Pier Street, comprising the western edges of Lot 5297, Lot 6152 and reserve No. 28163. (i.e. Niergarup Reserve vicinity)	A site comprising limestone cliff face, rock outcrops and natural vegetation, significant for its natural characteristics which should be protected from despoliation or the intrusion of development.
Lot 5069 between Preston Road and Locke Crescent. (i.e. Locke Crescent Nature Reserve vicinity)	A site comprising natural vegetation significant for its undeveloped characteristics, which should be protected from despoliation of the intrusion of development.
Cliff face between Jerrat Drive and the Swan River foreshore, extending between Lot 8008 and East Fremantle Yacht Club house. (i.e. Jerrat Drive Reserve vicinity)	A site comprising cliff face and natural vegetation significant for its relatively unspoiled characteristics in association with the Swan River foreshore.

There are no 'Bush Forever' sites within the Town and as of 31 July 2019, there are no designated bushfire prone areas. Notwithstanding this, these small pockets of bushland need to be managed, including the need to lower potential fire damage risk.

A Bushfire Risk Management Plan prepared for the Town of East Fremantle (Entire Fire Management, 2018) focuses on the bushland areas of Jerrat Drive Reserve, Locke Crescent Reserve, Niergarup Reserve and Merv Cowan Reserve. Bushfire Attack Level (BAL) Contour Assessments were carried out and mitigation measures for the high risk areas have been identified. These measures will be undertaken to reduce the impact or intensity of a potential bushfire event, or preferably remove the threat altogether.

Rare and Endangered Flora and Fauna

To assess the potential for protected flora and fauna species within the Town of East Fremantle, information was sourced from the Department of Biodiversity, Conservation and Attractions *NatureMap: Mapping Western Australia's Biodiversity* (DBCA, 2019 https://naturemap.dbca.wa.gov.au/)

According to this database, there are no species of flora or fauna that are endemic to the Town of East Fremantle. Of the 98 species listed to be within the Town, 88 are native and 10 are considered naturalised (i.e. not native to the area but have become established and can reproduce there). The following species are identified for conservation:

	Species	Conservation Code
	Grevillea thelemanniana (spider net Grevillea)	Rare or likely to become extinct.
Flora	Angianthus micropodioides	Priority 3*
	Actitis hypoleucos (Common Sandpiper)	Protected under international agreement
	Hydropogne caspia (Caspian Tern)	Protected under international agreement
F	Thalasseus bergii (Crested Tern)	Protected under international agreement
Fauna	Calyptorhynchus latirostris (Carnaby's cockatoo, White-tailed Short-billed Black Cockatoo)	Rare or likely to become extinct.
	Calyptorhynchus sp. (white-tailed black cockatoo)	Rare or likely to become extinct.
	Lerista lineata (Perth Slider, Lined Skink)	Priority 3*
	Tyto novaehollandiae subsp. novaehollandiae (Masked Owl (southwest))	Priority 3*

^{*}Priority 3 refers to species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat.

Climate

The Perth/Fremantle region of the Swan Coastal Plain experiences a Mediterranean style of climate comprising of a hot dry summer and a mild wet winter. The climate varies seasonally, with rainfall, temperature and winds following a well-defined annual cycle. Most rainfall (90 per cent) occurs between the colder months of April to October.

The Bureau of Meteorology records show that the mean daily temperatures for the Perth metropolitan area in 2016 ranged from a maximum of 24.2 degrees in the month of February, to a minimum of 12.7 degrees in the month of July. The total rainfall experienced in 2016 was 715.8 millimetres, which was below the average of 844.9 millimetres.

Perth is known for being a windy city with a trend of south-easterly winds in the mornings from the months of October to March, and north-easterly winds from April to September. By late afternoon, the winds trend to a south-westerly direction, locally referred to as the "Fremantle Doctor", bringing cool relief in summer.

Climate Change

The Town of East Fremantle is part of the South West Group (SWG) Voluntary Region of Councils within the South West Metropolitan Region together with the Cities of Cockburn, Fremantle, Kwinana, Melville and Rockingham. In recognising that climate change is an emerging and priority issue for the region, a number of high priority strategies/actions related to climate change adaptation were included in the SWG Strategic Plan 2015 to 2025.

The Framework for Regional Approach to Climate Change Adaptation two-phase project was initiated, consisting of climate change information consolidation and a climate change adaptation strategy. The SWG aims to support and assist member Councils to achieve regional and local climate change adaptation outcomes by: lobbying and advocacy, research and analysis (thermal mapping, heat vulnerability mapping, estuarine foreshore erosion and inundation, ecological vulnerability, reduced water availability); and facilitation and coordination.

The East Fremantle Foreshore Master Plan study undertaken by Ecoscape and MP Rogers & Associates in 2016, states that the effects of climate change on infrastructure assets around the East Fremantle foreshore are likely to be minimal over the next 5 to 15 years. The small increase due to mean sea level increases will be within the natural variability of the mean sea level offshore from Fremantle due to other effects such as El Nino. There have been periods where the contribution from the effects of El Nino/La

Nina on the Leeuwin current have held water levels at Fremantle consistently higher than 0.1m above the mean sea level for several months.

The Town of East Fremantle has undertaken a water management plan (in relation to bore use); a Foreshore Master Plan which includes management recommendations; and welfare recovery plans for emergency events.

Urban Forests

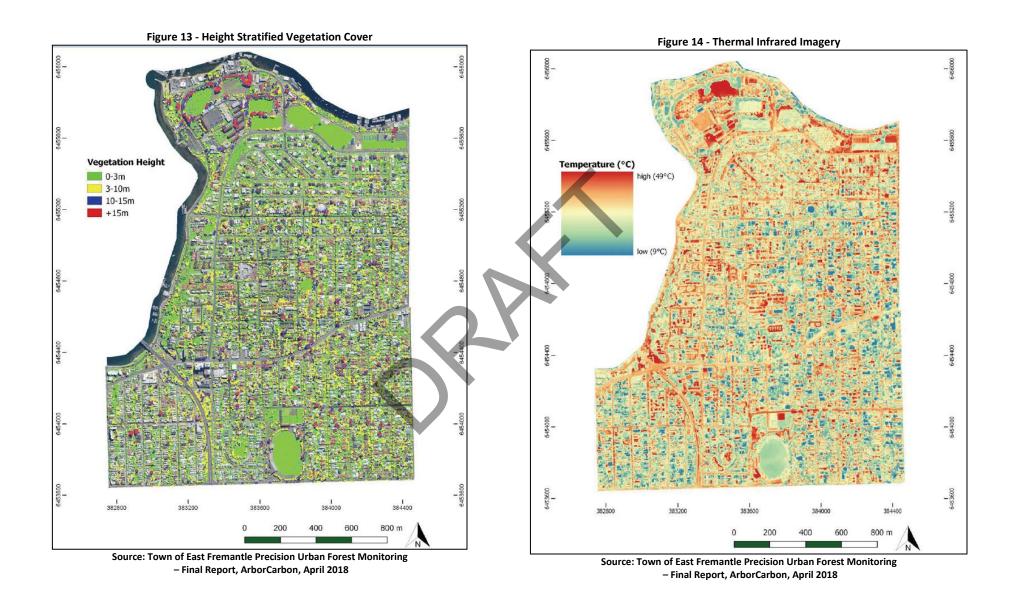
Urban forests (broadly defined as the collection of green spaces, trees and other vegetation that grows within an urban area, on both public and private land) are important in helping to reduce the heat island effect and offer green spaces for residents in increasingly urban areas.

The Western Australian Local Government Association (WALGA) is collaborating with the Department of Planning, Lands and Heritage (DPLH) in the development of an Urban Tree Canopy Framework to assist Local Government in the strategic planning of their urban canopy and to promote best practice in its management.

Urban forest density mapping provided by the DPLH includes the Town of East Fremantle and other central local governments south of the Swan River. Between 2011 and 2016, most local governments within the Perth Region experienced no significant change to their level of green cover. In contrast, however, East Fremantle together with Gosnells, Cockburn, Kwinana and Melville experienced a significant loss of green cover where the traditional backyard is losing ground to densification and infill.

Accurate and current data is essential for guiding management strategies and measurement of the success of such strategies and consultancy ArborCarbon was engaged by the Town of East Fremantle to acquire and analyse high-resolution multispectral imagery and produce accurate baseline data of tree canopy cover. This will provide a valuable tool to enable management of the Town's urban forest area, accurately set targets and track changes in canopy area, as well as tree health at an individual tree level. This data can also be used to target areas within the Town that could benefit the most from new planting programs.

Imagery was acquired in May 2017 and analysed to determine the height-stratified vegetation cover (<3m, 3-10m, 10-15m,>15m) within the Town and thermal infrared imagery was acquired in March 2018 to determine surface temperature (refer to Figures 13 and 14 respectively).



The Town of East Fremantle Precision Urban Forest Monitoring – Final Report was endorsed by Council in April 2018. The main findings of this study were:

- Total vegetation cover within the Town of East Fremantle is 1,150,089m² (36.4 per cent).
- The area of vegetation above 3 metres (Canopy) is 528,832 m² (16.7 per cent).
- The average surface temperature recorded by the thermal imagery in the Town
 of East Fremantle was 33.4°C.
- Vegetated areas (32.1°C) were markedly cooler than non-vegetated areas (34.1°C).
- Temperature of vegetated areas decreased with increasing vegetation height.
 Canopy greater than 15m in height had the lowest average temperature (29.0°C).
- Exposed soil and dead grass contributed substantially to urban hotspots and were hotter than surrounding pavement and roads.

Based on these findings, the study recommends:

- 1. Airborne multispectral vegetation surveys be repeated on an annual or periodic basis to track changes in vegetation cover over time to set realistic targets for future vegetation and canopy cover.
- 2. More detailed analysis of the vegetation cover be undertaken within different land-use categories to inform existing and proposed policies and the impact on canopy cover of future zoning (e.g. R-code) changes.
- 3. Periodic airborne multispectral surveys be used to detect changes in canopy condition and tree health. This data can be used as an early warning system for the onset of symptoms of tree decline allowing early management intervention which can significantly increase the survival of established urban trees.
- Consider establishing perennial trees or shrubs in areas currently containing nonirrigated turf, as dead grass or exposed soil can contribute significantly to the Urban Heat Island Effect.
- 5. Street tree selection to favour trees with a greater maximum height (where appropriate) to maximise heat island mitigation benefits.

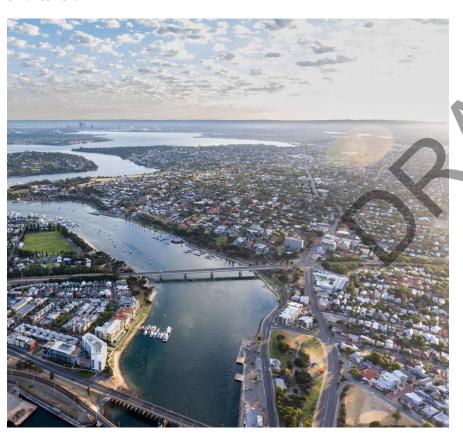


Water Management

The Town employs a number of measures to ensure effective total water cycle management and integrated urban water management.

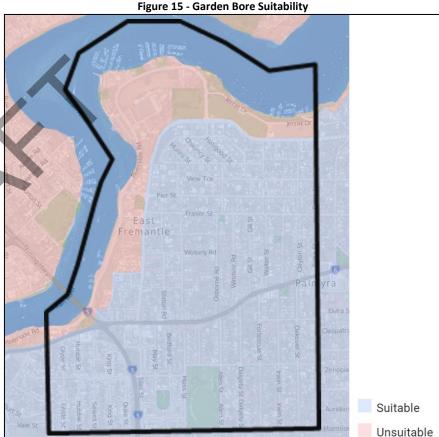
Swan River

The Swan River is the major water resource associated with the Town of East Fremantle and this, together with the foreshore, is the responsibility of the Department of Biodiversity, Conservation and Attractions (Parks and Wildlife Service) and the Swan River Trust. The Town of East Fremantle, however, prepared the East Fremantle Foreshore Master Plan (2016) to provide a strategic vision for its protection and enhancement.



Wetlands and Groundwater

There are no wetlands or public drinking water sources within the Town of East Fremantle. Groundwater is found at various depths (maximum of approximately 35m from the surface) with marginal salinity levels generally between 500 - 1,000 mg/L. Although generally not suitable between Preston Point Road and the river, the groundwater throughout the rest of the Town is suitable for garden bores (refer to Figure 15).



Source: Department of Water and Environmental Regulation website https://maps.water.wa.gov.au/#/webmap/gwm

Stormwater Management

A number of stormwater outfall pipes occur along the river edge which discharge directly into the river. It is not clear how many of these are active. Despite the poor condition of exposed pipe infrastructure, the internal and functional abilities of the drains appear to be satisfactory. It is uncertain as to whether any structural stormwater management processes such as gross pollutant traps (GPTs) to filter large particulate matter are incorporated into the pipe network.

Water Sensitive Urban Design (WSUD) methods employing structural interventions (such as GPTs) and non-structural interventions (such as biofilters) are now largely used to improve stormwater quality before it is discharged to environmentally sensitive environments. Together they provide physical, chemical and biological processes to filter stormwater runoff.

The carpark for the boat launching facility south of John Tonkin Park contains such a biofiltration system. The *East Fremantle Foreshore Master Plan* highlights where additional biofilters could be incorporated, however, it recommends that an Urban Water Management Plan (UWMP) be undertaken for the stormwater network that outfalls into the Swan River.

Drainage collection areas are shown in Figure 16 There are two surface stormwater drainage catchment reserves controlled by the Town, one at Raceway Road and one on Stratford Street. These are shown as drainage reserves within *Local Planning Scheme No. 3*.

In addition, there are four drainage reserves under private properties (Allen Street to Canning Highway, Dalgety Street to Allen Street, Irwin to Fortescue Street and Oakover Street to Irwin Street). These reserves are vested in the Town of East Fremantle. A compensation drainage sump also exists at the corner of Marmion Street and Allen Street, on the East Fremantle Oval Reserve. Drainage easements exist between Preston Point Road and Riverside Road in the vicinity of Tingira Circus.

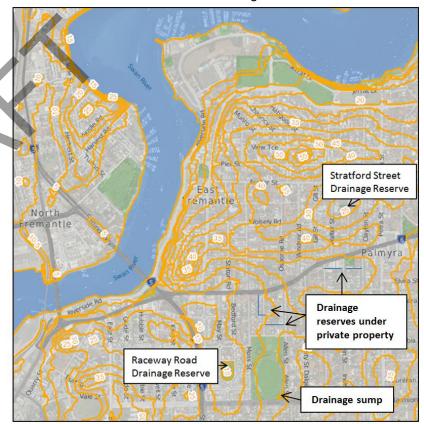
Natural Drainage Areas

Zones and reserves allocated within the MRS and *Local Planning Scheme No. 3* offer land use protection and separation to natural drainage areas. Areas of remnant vegetation are appropriately protected by MRS Parks and Recreation Reserve along the river foreshore and by Open Space Reserve under the Local Planning Scheme for the Locke Crescent Nature Reserve. The two surface drainage areas are shown as reserves for Public Purpose - Drainage under *Local Planning Scheme No. 3* and both are

adjacent to Open Space Reserves. A number of drainage easements also exist on private property between Preston Point Road and Riverside Road.

Local Planning Policy 3.1.1 - Residential Design Guidelines includes requirements for site works and landscaping to maintain the prevailing natural ground levels to minimise the need for cutting and filling of sites and boundary walls and minimise hard surfaces. In addition, the policy facilitates the provision of water tanks.

Figure 16 - 10m contour intervals Swan Coastal Plain and East Fremantle Drainage Reserves



Source: (Base map) Department of Water and Environmental Regulation website

Water Use

The Water Corporation website (https://www.watercorporation.com.au/save-water/check-your-suburbs-water-use) identifies a downward trend in water use for the Town of East Fremantle community. In 2015-16, the average residential household water use in East Fremantle was 222 kilolitres per connection for the year. Compared to the previous year, this is a decrease in use of 6.9 per cent. This further decreased in 2016-17, where the average residential household water use was 217 kilolitres per connection for the year (2.28 per cent less than the previous year).

Contaminated Sites

The *Contaminated Sites Act, 2003* was introduced to identify, record, manage and clean up contamination. This Act is administered and enforced by the Department of Water and Environmental Regulation (DWER) which includes classifying sites (in consultation with the Department of Health) and making information on contaminated sites available to the public (including a Contaminated Sites Database).

No sites are listed on the DWER contaminated sites register within the Town of East Fremantle, however, the Swan River Trust (SRT 2007) detected hotspots of the contaminant tributyltin (TBT) within the sediments surrounding of Swan and East Fremantle Yacht Clubs and Aquarama marina. In June 2010, a memorial was registered by the then Department of Environment and Conservation under section 59 of the *Contaminated Sites Act* on the title of the lot occupied by the Swan Yacht Club. The memorial records the site classification as 'possibly contaminated - investigation required'.

Further investigation would be required to check for possible contamination prior to any development of the vacant property at No. 243 Canning Highway (old petrol station and owned by Department of Planning, Lands and Heritage). Another existing service station site at No. 180 Canning Highway may also have a risk of contamination, given the nature of its use and investigation would be required prior to development or a change in use.

With regards to the Leeuwin Barracks site, the Department of Defence has confirmed that there are minor contamination issues including the presence of asbestos and fuel residue and will make available comprehensive environmental assessment to potential purchasers as part of the future land sale process. Remediation would be required as part of any development on the site.



Population and Housing

Population and Housing Snapshot

According to the Australian Bureau of Statistics 2016 Census of Resident Population (unless otherwise stated):

			Town of East Fremantle	Perth Metropolitan Area	Western Australia	Australia
Age	动机物	Median age	43 yrs	36 yrs	36 yrs	38yrs
		Total Population	7,376			
Income	(a)	Median weekly household	\$2,051	\$1,643	\$1,595	\$1,438
Families	i İİ i	Couples with children (.id forecasts 2016)	32.8%	32.3%	30.93%	30.3%
		Empty nesters and retirees (.id forecasts 2016)	11.9%	9.7%	10.1%	10.6%
Cultural diversity	THE	Born overseas	23%	36%	40%	33%
		Aboriginal/Torres Strait Islander	0.5%	1.6%	3.1%	2.8%
Education	\$	Bachelor or higher degree	39.1%	22.9%	20.5%	22%
Dwellings		Medium and high density housing (.id forecasts 2016)	37%	24.7%	17.3%	27%
		Total private dwellings	3,277			
		Unoccupied private dwellings	13.1%	11%	13.3%	11.2%
Cost of housing		Home ownership with/without mortgage	75.4%	70%	68.2%	65.5%
Housing	MACA	Median monthly mortgage repayments	\$2,500	\$2,000	\$1,993	\$1,755
		Median weekly rent	\$400	\$360	\$347	\$335
		Rental housing	22.2%	26.6%	28.3%	30.9%
		Repayments > 30% of household income	8.1%	9.3%	8.6%	7.2%

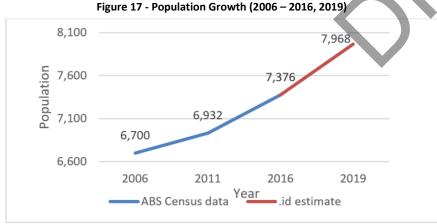
Population Characteristics and Change

Some key points:

- The 2019 estimated population for the Town of East Fremantle is 7, 968.
- Population increased by approximately 10 per cent between 2006 and 2016 Census periods.
- Projections forecast a population of 9,480 by 2031 under a median growth scenario (WAT Band C, WAPC.).
- Median age of the population in 2016 was relatively high at 43 years, compared to the Greater Perth median age of 36 years.
- It is expected that the Town will continue to be well represented by an older population base, yet there are indications that there will be some increases of young and established families to 2026 and beyond.

Population Growth

Population forecasts by independent demographer .id the population experts, estimate a current (2019) population of 7,986 for the Town of East Fremantle. The 2016 *Census of Population and Housing* recorded 7,376 residents within the local government area of the Town of East Fremantle. This represents an increase of 676 persons (or 10.08 per cent) over the ten year period since the 2006 Census, when the resident population was 6,700. Growth rates almost doubled over the past two census periods from 3.46% (between 2006 and 2011) and 6.4% (between 2011 and 2016) (refer to Figure 17).



Source: Australian Bureau of Statistics (2006, 2011, 2016) and .id the population experts (2019)

Future Population

The Department of Planning, Lands and Heritage's Western Australia Tomorrow, Population Report No. 11 Medium Term Population Forecasts for Western Australia 2016 to 2031 (WAPC, 2019) contains the latest medium term population forecasts by age and sex, for WA and its regions. They represent the official State Government forecasts to 2031 based on historical trends in fertility, mortality and migration.

Working from a base population of 7,770 at the time of the 2016 census, the WA Tomorrow forecast shows a population of between 8,115 and 10,800 (under five different growth scenarios) within the Town of East Fremantle by 2031 (refer to Figure 18).

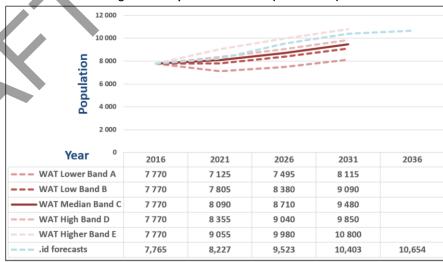


Figure 18 - Population Forecasts (2016 - 2036)

Source: Western Australia Tomorrow, Population Report No. 11, Medium-term Forecasts for Western Australia 2016 to 2031) and Population and household forecasts, 2016 to 2036, prepared by .id the population experts, 2017.

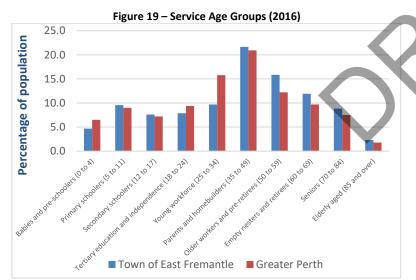
It is generally accepted practice to use the median growth scenario Band C for future forecast purposes. For the Town of East Fremantle this equates to an anticipated total population of 9,480 by 2031. The .id population experts' forecast shows a faster growth rate and higher population by 2031 of 10,403 persons, however, it forecasts slower growth from then to 2036 with an estimated population of 10, 654.

Age Structure

The median age of persons in the Town of East Fremantle at the time of the 2016 Census was 43 years, which is high compared to Greater Perth where the median age was 36 years. The dominant age structure was between 45-49 years, accounting for 8.3 per cent of the population.

As shown in Figure 19, the Town of East Fremantle had a lower proportion of preschoolers and a higher proportion of persons at post retirement age than Greater Perth in 2016. In addition, other major differences between the age structure of the Town of East Fremantle and Greater Perth were:

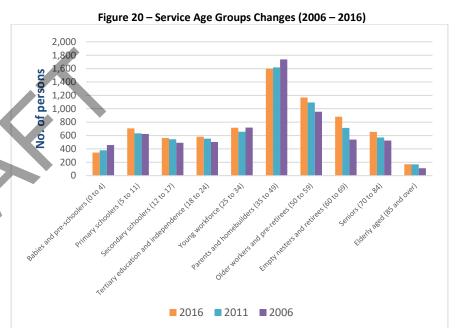
- A larger percentage of 'Older workers & pre-retirees' (15.8 per cent compared to 12.2 per cent)
- A larger percentage of 'Empty nesters and retirees' (11.9 per cent compared to 9.7 per cent)
- A smaller percentage of 'Young workforce' (9.7 per cent compared to 15.8 per cent)
- A smaller percentage of 'Babies and pre-schoolers' (4.7 per cent compared to 6.5 per cent).



Source: Australian Bureau of Statistics, <u>Census of Population and Housing</u> 2011 and 2016. Compiled by <u>.id</u>, the population experts. (Usual residence data)

As shown in Figure 20, the most significant changes in the age structure in the Town of East Fremantle between 2006 and 2016 Population and Housing Census periods were in the following service age groups:

- Empty nesters and retirees (60 to 69) increased (+341 people)
- Older workers and pre-retirees (50 to 59) increased (+213 people)
- Seniors (70 to 84) increased (+128 people)
- Primary schoolers (5 to 11) increased (+85 people).

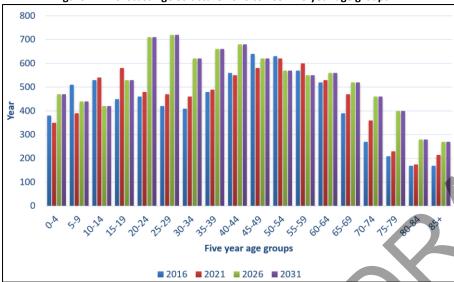


Source: Australian Bureau of Statistics, <u>Census of Population and Housing</u> 2006, 2011 and 2016. Compiled by <u>.id</u>, the population experts. (Usual residence data)

Age Structure Forecasts

Although there continues to be a relatively older population within the Town, there are also signs of an emerging trend towards an increase in young and established families.

Figure 21 - Forecast Age Structure 2016 to 2031 - 5 year age groups



Source: Western Australia Tomorrow, Population Report No. 11, Medium-term Forecasts for Western Australia 2016 to 2031) (Band C)

WAT (Band C) future age structure forecasts in five year age groups from 2016 to 2031 are shown in Figure 21 and indicate the following:

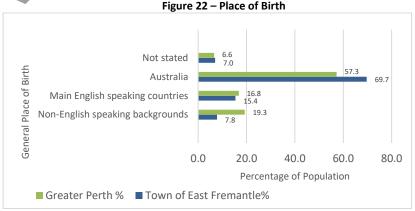
- A continuation of the traditional pattern of net migration during 2016 and 2026 with the Town attracting established families into existing housing stock;
- There is a marked increase in the 20-44 years age groups in 2026 and remaining high in 2031 with corresponding increases in the age groups 0-4 years and 15-19 years. Numbers are also solid in the 5-14 years age groups, however, these fall slightly over the same time period. This suggests that more young families, as well as families with older children are attracted to the area.
- The marked increase in persons aged 20 to 24 from 2016 to 2026, then numbers relatively levelling out to 2031, may also suggest that young couples enjoy the

- lifestyle that the Town has to offer or that older children are staying home longer and living with their parents.
- Persons aged 50-64 years (possibly empty nesters or parents of older children still living at home) form a significant proportion of the population, however, numbers are expected to remain relatively steady to 2031.
- The trend of an ageing population continues with a progressive increase in persons in all five year age groups from 65 to 85 years and over from 2016 to 2031. The most significant increase is within the 70-79 years groups.

Cultural Diversity

Only 23 per cent of residents were born overseas, which is low compared to 36 per cent for Greater Perth (refer to Figure 22). Consequently, language spoken at home other than English was a low 8 per cent compared to 20 per cent for Greater Perth.

In relation to those born in Australia, Aboriginal and/or Torres Strait Islander people made up 0.5 per cent of the population (a low figure compared to 1.6 per cent for Greater Perth). Of those born overseas, just over 10 per cent were born in the United Kingdom, followed by New Zealand at just over 2 per cent.



Source: Birthplace - Summary, prepared by .id the population experts, December 2017

Housing and Household Characteristics

Some key points:

- The average household size in the Town of East Fremantle in 2016 was 2.45 persons, which did not significantly change from the 2011 Census. This was lower than the Greater Perth average of 2.55 persons per household.
- Households mostly comprised of 'Couples with dependents' in 2016, however, growth to 2031 and 2036 is expected to occur more strongly for 'Lone person' households and households with 'Couples without dependents'.
- Proportionately, the Town of East Fremantle provides a wider range of housing types than Greater Perth and trends towards increased higher density dwellings seems to be continuing.
- A high proportion of residents own, or are paying off a mortgage to own, their home. Others mostly rent privately and a low proportion of residents are accommodated in social housing.

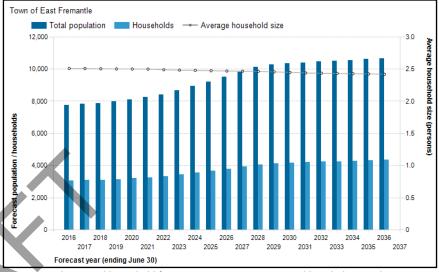
Household size and structure

The census usual resident population of the Town of East Fremantle in 2016 was 7,376, living in 3,283 dwellings resulting in an average household size of 2.45 (similar to the 2011 census average household size of 2.43 persons per dwelling and less than that for Greater Perth of 2.55 persons per dwelling).

Based on a population of 10,403 by 2031 (at an average annual growth rate of 2.97 per cent), .id the population experts expect an increase of over 1,100 households by that time, with the average number of persons per household falling to 2.44 by 2031 (refer to Figure 23). (Note that the .id forecast roughly equates to midway point between WAT Higher Band D and E, and is almost 1,000 persons over the WAT Band C growth scenario population forecast).

In 2016, the dominant household type in the Town of East Fremantle was 'Couple families with dependents'. Although expected to remain relatively dominant, this household type may not grow as significantly as 'Couples without dependents' and 'Lone person households' (refer to Figure 24).

Figure 23 - Forecast Population, Households and Average Household Size



Source: Population and household forecasts 2016 to 2036, prepared by .id, the population experts, December 2017

Town of East Fremantle	2016	2016 2026			2036		Change between 2016 and 2036
Туре	Number	%	Number	%	Number	%	Number
Couple families with dependents	993	32.5	1,148	30.3	1,274	29.4	+281
Couples without dependents	870	28.5	1,136	29.9	1,295	29.9	+425
Group households	138	4.5	191	5.0	207	4.8	+69
Lone person households	766	25.1	975	25.7	1,176	27.1	+410
One parent family	234	7.7	279	7.4	309	7.1	+75
Other families	50	1.6	65	1.7	72	1.7	+22

Source: Population and household forecasts, 2016 to 2036, prepared by .id, the population experts, December 2017

Dwelling Type

There are approximately 3,300 private dwellings currently within the Town of East Fremantle. Single separate dwellings represented a major proportion of the housing stock (62 per cent) within the Town of East Fremantle at the time of the 2016 census, however, this was significantly less than Greater Perth where separate dwellings amounted to more than 74 per cent of total dwellings.

There was also a marked difference in the proportion of high density dwellings in the Town at 14 per cent compared to 5 per cent for the Greater Perth area. Medium density housing notably also makes up a little less than a quarter of the Town's housing stock (refer to Figure 25)

Town of East Fremantle 2016

O.7

14.3

22.7

62.3

Separate house
High density
Other and Not Stated

Figure 25 - Housing Mix (per cent of total dwellings)

Source: Based on Australian Bureau of Statistics, Census of Population and Housing 2016.

The total number of dwellings in the Town of East Fremantle increased by 192 between 2011 and 2016 (refer to Figure 26). The mix of dwelling types within the Town of East Fremantle has changed over the ten years between the 2006 and 2016 census periods most distinctly in relation to:

- An increase of high density dwellings (+203 dwellings)
- A decline, then resurgence of medium density dwellings
- A slowing of growth in separate houses (+46 dwellings).

Figure 26 – Dwelling Type

Town of East Fremantle - Dwellings (Enumerated)		2016		2011			2006			Change
Dwelling type	No.	%	Greater Perth %	No.	%	Greater Perth %	No.	%	Greater Perth %	2006 to 2016
Separate house	2,040	62.3	74.6	2,092	67.8	76.7	1,994	66.7	77.4	+46
Medium density	745	22.7	19.6	653	21.2	17.9	704	23.5	17.8	+41
High density	469	14.3	5.1	330	10.7	4.8	266	8.9	4.1	+203
Other and Not Stated	23	0.7	0.7	9	0.3	0.6	26	0.8	0.7	-3
Total Private Dwellings	3,277	100	100	3,084	100	100	2,990	100	100	+287

Source: Australian Bureau of Statistics, Census of Population and Housing 2011 and 2016. Compiled and presented by .id, the population experts.

Other Residential Accommodation

A number of Residential zoned properties within the Town of East Fremantle provide accommodation other than private dwellings, which perform an essential housing function that needs to be acknowledged. These include:

- Pilgrim Juniper a 39 place residential facility is situated on the corner of Wolsely and Preston Point Roads. It includes 15 dementia specific care places, as well as 10 one-bedroom independent living apartments. This is an Additional Use (A13 Hostel and ancillary uses) under *Local Planning Scheme No. 3*.
- Braemar House a 58 place residential facility on Windsor Road and includes a 24room specialist care service called Lee House, which is designed to support
 individuals with high support needs. This is an Addition Use (A14 Nursing Home)
 under Local Planning Scheme No. 3.
- Southern Plus an 86 bed residential facility situated on the corner of Wolsely and Staton Roads (redevelopment of old Kaleeya Hospital site) which opened in 2018.
- The old Woodside Hospital site situated on Dalgety Street and proposed for redevelopment as a privately operated aged care facility. No application for planning approval has been made and no further details are available at this stage.
- Council's records show that approximately 45 units have been approved as ancillary accommodation (i.e. ancillary to existing residential dwellings). The majority of these have been for properties located within the historic Plympton Ward characterised by smaller lot sizes and older style cottages.

According to .id the population experts, there were 108 people estimated to be living in non-private dwellings in the Town of East Fremantle in 2016 and this number is expected to increase to 155 persons in 2026 and to 170 persons in 2036 (refer to Figure 27). Between 2016 and 2036, a gain of 62 persons in non-private dwellings is forecast. This is due to an increase of persons in non-private dwellings aged 75 years and over, which is predominantly aged care.

Figure 27 - Persons in non-private dwelling

	riguie 2	7 - FEI30	יוק-ווטוו ווו פווט	vate uweiling	
Town of East	Ye	ear		Change betwee	n 2016 and 2036
Fremantle	e 2016 2036		Total	Aged 18 to 24	Aged 75+
			change	years	years
	108	170	+62	0	+62

Source: Population and household forecasts, 2016 to 2036, prepared by .id the population experts, December 2017.

Vacancy Rates

In 2016, a total of 13.1 per cent of the private dwellings in the Town of East Fremantle were unoccupied on Census night, compared to 11 per cent in Greater Perth.

Education

The residents of the Town of East Fremantle are relatively highly educated, which appears to be a continuing trend.

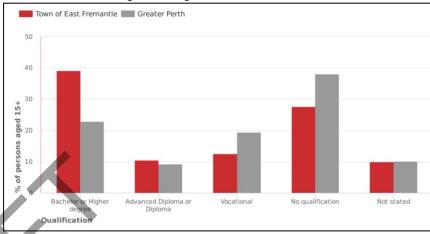
A high proportion of residents over the age of fifteen years have achieved a qualification level of bachelor or higher degree (39.2 per cent compared to 22.9 per cent for greater Perth). Less than 28 per cent of residents have no qualifications compared to approximately 38 per cent for Greater Perth (refer to Figure 28)

Income

In the Town of East Fremantle, 25.1 per cent of the population earned an income of \$1,750 or more per week in 2016 and 37 per cent of households earned an income of \$2,500 or more per week.

Generally reflective of the relatively high levels of education, median weekly personal income for people aged 15 years and over in East Fremantle was \$938, this being more than \$200 higher than the median weekly personal income for Greater Perth. Family and household incomes also follow suit (refer to Figure 29).

Figure 28 - Highest Qualification Achieved



Source: Highest Qualification Achieved, 2016, prepared by .id the population experts, December 2017

Figure 29 - Median Weekly Incomes

Median weekly incomes People aged 15 years and over	East Fremantle \$	Greater Perth \$
Personal	938	728
Family	2,780	1,955
Household	2,051	1,643

Source: Australian Bureau of Statistics, 2016 Census

Housing Tenure

Analysis of the housing tenure of the population of the Town of East Fremantle in 2016 compared to Greater Perth shows that there was a larger proportion of households who owned their dwelling (36.9 per cent compared to 26.7 per cent); a smaller proportion purchasing their dwelling (35.1 per cent compared to 39.7 per cent); and a smaller proportion who were renters (21.3 per cent compared to 25.5 per cent). Refer to Figure 30 (over page).

Figure 30- Housing Tenure

Town of East Fremantle - Households (Enumerated)	2016		- 8	2011		J	Change	2006			Change
Tenure type	No.	%	Greater Perth %	No.	%	Greater Perth %	2011 to 2016	No.	%	Greater Perth %	2006 to 2016
Fully owned	1,058	36.9	26.7	986	35.8	28.1	+72	960	35.4	29.8	+98
Mortgage	1,006	35.1	39.7	936	34.0	38.0	+70	906	33.4	37.3	+100
Renting - Total	610	21.3	25.5	655	23.8	26.7	-45	627	23.1	24.7	-17
Renting - Social housing	58	2.0	3.1	69	2.5	3.6	-11	55	2.0	3.7	+3
Renting - Private	540	18.8	22.0	566	20.6	22.6	-26	556	20.5	20.4	-16
Renting - Not stated	12	0.4	0.4	20	0.7	0.5	-8	16	0.6	0.6	-4
Other tenure type	9	0.3	1.0	4	0.1	1.1	+5	15	0.6	1.0	-6
Not stated	186	6.5	7.1	170	6.2	6.1	+16	201	7.4	7.2	-15
Total households	2,869	100.0	100.0	2,751	100.0	100.0	+118	2,709	100.0	100.0	+160

Source: Australian Bureau of Statistics, Census of Population and Housing 2011 and 2016. Compiled and presented by .id, the population experts.

Housing Cost and Affordability

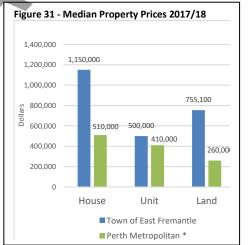
Housing costs to buy or rent within the Town of East Fremantle are relatively high compared to the Perth Metropolitan region. In 2017/18, it is estimated that the median cost of a house or land in East Fremantle was almost three times as much as the Greater Perth median (\$1.15 million compared to \$510,000 and \$755,000 compared to \$260,000 respectively). The cost of units was \$500,000 in East Fremantle compared to \$410,000 in Greater Perth (refer to Figure 31).

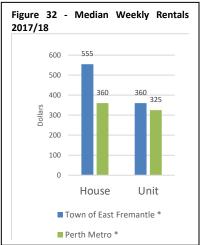
Similarly with the rental market, median rentals for a house in East Fremantle over 2017/18 were estimated to be \$555 compared to \$360 for Greater Perth. Median weekly rentals for units were \$360 compared to \$325, respectively (refer to Figure 32).

Although the cost of buying and renting property in the Town of East Fremantle is significantly higher than Greater Perth, household incomes are also higher (as referred to in Figure 30 previously).

Mortgage stress is commonly defined to be when monthly mortgage repayments are thirty percent or more of the monthly household income. The 2011 Census reported that 11.4 per cent of households in the Town of East Fremantle had mortgage repayments equating to at least thirty percent of the household income, compared to 10.2 per cent for Greater Perth. By 2016, this lowered for both the Town of East Fremantle and Greater Perth to 8.1 per cent and 8.6 per cent respectively. This generally indicates that housing in the Town of East Fremantle has become more affordable, similar to that for Greater Perth.

The Socio-economic Index of Advantage and Disadvantage (SEIFA) measures the relative level of socio-economic disadvantage based on a range of Census characteristics, providing a general view of relative disadvantage in one area compared to others. A higher score means lower level of disadvantage. The SEIFA score for the Town of East Fremantle in 2016 was 1,119 (97 percentile). Compared to the score for Greater Perth of 1,029 (71 percentile) the Town of East Fremantle (similar to other central metropolitan local governments) is clearly a relatively more advantaged locality.





Source: REIWA https://reiwa.com.au/the-wa market/suburb-rentals-search-results/ (*Estimates only - based on Jul-Sept 2017 to April-June 2018 Quarterly medians)

Economy and Employment

Economy and Employment Snapshot

According to the Australian Bureau of Statistics 2016 Census of Resident Population:

	bureau of Statistics 2010 Cerisus of	Town of East Fremantle	Perth Metropolitan Area	Western Australia	Australia
Employed	Full time	55%	56.4%	57%	57.7%
	Part time	34.8%	30.6%	30%	30.4%
¶~	Unemployed (looking for work)	5.6%	8.1%	7.8%	6.9%
Occupation	Professionals	36.3%	22.2%	20.5%	22.2%
	Technicians and trades	9.5%	11.5%	16.2%	13.5%
	Labourers, machinery operators and drivers	6.6%	15.5%	17.2%	15.8%
Industry sectors residents employed	Health care and social assistance	14.8%	12,3%	11.7%	12.6%
Tesidents employed	Education and training	13.6%	8.8%	8.7%	8.7%
	Professional, scientific & technical services	9.9%	7.2%	6.4%	7.3%
Travel to work	Private car (driver or passenger)	68.5%	71.3%	70.4%	68.4%
	Public transport	8.3%	10.3%	9.2%	11.5%
	Work from home	7.3%	3.9%	4.3%	4.7%
Other	Residents who work in East Fremantle	13.8%			
Circi	Local Businesses (ABS 2017)	914			
	Local jobs (NIEIR 2017)	2,151			

Labour Force

There were 3,943 people who reported being in the labour force in the week before the 2016 Census count in the Town of East Fremantle. Of these 55 per cent were employed full time, 34.8 per cent were employed part-time and 5.6 per cent were unemployed. There was a higher percentage of part time workers in East Fremantle than in Greater Perth and the unemployment rate is considerably lower in East Fremantle than Greater Perth (refer to Figure 33).

Figure 33 - Labour Force

Employment <u>-</u> People who reported being in the labour force, aged 15 years +	East Fremantle	%	Greater Perth	%
Worked full-time	2,168	55.0	565,148	56.4
Worked part-time	1,374	34.8	306,272	30.6
Away from work	179	4.5	48,775	4.9
Unemployed	222	5.6	81,482	8.1

Source: Australian Bureau of Statistics, 2016 Census

In East Fremantle, of couple families with children, 19.6 per cent had both partners employed full-time, 4.2 per cent had both employed part-time and 26.2 per cent had one employed full-time and the other part-time. East Fremantle had more families with one parent working full time and the other working part time or not at all, than for Greater Perth (refer to Figure 34).

Figure 34 - Employment of Parents in Couple Families

rigure 34 – Employment of Fa	arents in Coup	ne ranni	ues	
Employment status of parents in couple families - Labour force, parents or partners aged 15 years +	East Fremantle	%	Greater Perth	%
Both employed, worked full-time	334	19.6	85,462	19.8
Both employed, worked part-time	72	4.2	17,492	4.1
One employed full-time, one part-time	447	26.2	96,267	22.3
One employed full-time, other not working	234	13.7	72,827	16.9
One employed part-time, other not working	122	7.1	25,951	6.0
Both not working	268	15.7	74,085	17.2
Other (includes away from work)	89	5.2	22,903	5.3
Labour force status not stated (by one or both parents in a couple family)	142	8.3	36,569	8.5

Source: Australian Bureau of Statistics, 2016 Census

Of the employed **people** in East Fremantle, 4.8 per cent worked in Hospitals (except Psychiatric Hospitals). Other major industries of employment included Primary Education 3.5 per cent, Higher Education 3.4 per cent, Cafes and Restaurants 2.8 per cent and Secondary Education 2.2 per cent (refer to Figure 35).

Figure 35 – Industry of Employment

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Industry of employment, top responses Employed people aged 15 years +	East Fremantle	%	Greater Perth	%
Hospitals (except Psychiatric Hospitals)	175	4.8	35,137	3.8
Primary Education	127	3.5	22,680	2.5
Higher Education	124	3.4		
Cafes and Restaurants	101	2.8	22,771	2.5
Secondary Education	81	2.2		

Source: Australian Bureau of Statistics. 2016 Census

The most common occupations in East Fremantle at the time of the 2016 Census included Professionals 36.3 per cent, Managers 17.9 per cent, Clerical and Administrative Workers 11.5 per cent, Technicians and Trades Workers 9.5 per cent, and Community and Personal Service Workers 9.3 per cent. This represents significantly higher levels of professionals, and conversely significantly lower levels of labourers and machinery operators and drivers, than Greater Perth (refer Figure 36)

Figure 36 - Occupation of Employed Persons

Tigure 30 Occupation o	or Employeur			
Occupation	East	%	Greater	%
Employed people aged 15 years +	Fremantle		Perth	
Professionals	1,343	36.3	204,472	22.2
Managers	663	17.9	143,621	15.6
Clerical and Administrative Workers	425	11.5	125,233	13.6
Technicians and Trades Workers	352	9.5	105,412	11.5
Community and Personal Service Workers	343	9.3	99,683	10.8
Sales Workers	276	7.5	84,231	9.2
Labourers	160	4.3	82,364	9.0
Machinery Operators and Drivers	87	2.3	60,231	6.5

Source: Australian Bureau of Statistics, 2016 Census

In East Fremantle, of people aged 15 years and over, 77.5 per cent did unpaid domestic work in the week before the Census. During the two weeks before the Census, 30.7 per cent provided care for children and 12.8 per cent assisted family members or others due to a disability, long term illness or problems related to old age. In the year before

the Census, 26.8 per cent of people did voluntary work through an organisation or a group. Across all sectors, a higher percentage of East Fremantle residents did unpaid work, which could partially be the result of more retirees and stay-at home parents (refer to Figure 37).

Figure 37 - Unpaid Work

Tigure :	37 Olipala Wol	.,		
Unpaid work	East	%	Greater	%
People aged 15 years +	Fremantle		Perth	
Did unpaid domestic work (last week)	4,669	77.5	1,104,256	70.2
Cared for child/children (last two weeks)	1,850	30.7	451,741	28.7
Provided unpaid assistance to a person with a disability (last two weeks)	771	12.8	156,231	9.9
Did voluntary work through an organisation or group (last 12 months)	1,616	26.8	281,373	17.9

Source: Australian Bureau of Statistics, 2016 Census

Main Industries

An analysis of the jobs available in Town of East Fremantle in 2016 shows that 782 people (43.6 per cent) were employed in the following largest industry sectors:

- Accommodation and Food Services;
- Health Care and Social Assistance; and
- Public Administration and Safety.

Figure 38 shows that the major differences between the jobs within the Town of East Fremantle and Greater Perth were:

- A *larger* percentage of workers employed in Accommodation and Food Services (17.6 per cent compared to 6.8 per cent)
- A *larger* percentage of workers employed in Public Administration and Safety (11.5 per cent compared to 6.8 per cent)
- A *smaller* percentage of workers employed in Retail Trade (4.4 per cent compared to 10.4 per cent)
- A smaller percentage of workers employed in Manufacturing (1.5 per cent compared to 5.9 per cent).

At the time of the 2016 Census, there were 1,792 persons employed within the Town of East Fremantle. This represents 230 persons less than the 2011 Census, where 2,022 were recorded. This may be partially explained by the significant decrease of employment within the Health Care and Social Assistance sector. It is likely that the

rationalisation of public health services arising from the opening of the Fiona Stanley Hospital in October 2014 (including the closure of Woodside and Kaleeya Hospitals) has reduced the number of employees working in the Town.

Other changes to jobs included increases in the Construction and Accommodation and Food Services Industries, and a decline in the Retail Trade industry.

Figure 38 - Employment Industries

Figure 36 – Employment muustries						
Industry	2016 No.	%	2011 No.			
Accommodation and Food Services	316	17.6	287	14.2		
Health Care and Social Assistance	260	14.5	569	28.1		
Public Administration and Safety	206	11.5	232	11.5		
Construction	168	9.4	137	6.8		
Professional, Scientific and Technical Services	159	8.9	178	8.8		
Education and Training	143	8.0	144	7.1		
Inadequately described/industry not classified	89	5.0	22	1.1		
Retail Trade	78	4.4	125	6.2		
Other Services	77	4.3	50	2.5		
Rental, Hiring and Real Estate Services	64	3.6	44	2.2		
Administrative and Support Services	49	2.7	28	1.4		
Arts and Recreation Services	44	2.5	51	2.5		
Financial and Insurance Services	29	1.6	21	1.0		
Manufacturing	26	1.5	38	1.9		
Information Media and Telecommunications	25	1.4	18	0.9		
Transport, Postal and Warehousing	23	1.3	18	0.9		
Wholesale Trade	19	1.1	32	1.6		
Agriculture, Forestry and Fishing	10	0.6	10	0.5		
Electricity, Gas, Water and Waste Services	8	0.4	3	0.1		
Mining	6	0.3	15	0.7		
Total	1,792	100%	2,022	100%		

Source: Australian Bureau of Statistics, 2011 Census and 2016 Census

Employment Self Sufficiency

Some 3,714 residents within the Town of East Fremantle are employed, however, there are only 1,781 people that work within the boundaries of the Town.

In simple terms (refer to Figure 39):

- The Town potentially has enough jobs for almost half of its working population (1,781 jobs versus 3,714 employed persons (48 per cent);
- Only 511 residents actually live and work within the Town of East Fremantle (filling almost one third or 28.7 per cent of the jobs available);
- Some 3,084 residents need to seek work outside of the area (86.2 per cent of the East Fremantle workforce), however, according to .id the population experts, most do not venture further than the nearby Cities of Fremantle, Melville and Cockburn.
- Approximately 120 residents have no fixed place of work.

Residential location of local workers, 2016 Employment location of resident workers, 2016 Town of East Fremantle Town of East Fremantle Live and work in Live and work in the area the area Live in the area, Work in the area, but work outside but live outside No fixed place of work

Figure 39 – Living versus Working in the Town of East Fremantle

Source: Australian Bureau of Statistics, Census of Population and Housing, 2016 (Usual residence data), .id the population experts

Travel to Work

In East Fremantle, on the day of the Census, the most common methods of travel to work for employed people were: Car, as driver 63.3 per cent, Worked at home 7.3 per cent and Car, as passenger 3.4 per cent. Other common responses were Bus 3.3 per cent and Walked only 2.8 per cent. On the day, 8.3 per cent of employed people used public transport (train, bus, ferry, tram/light rail) as at least one of their methods of travel to work and 68.5 per cent used car either as driver or as passenger. Travel to work by car as the driver is similar to Greater Perth, however, a significantly higher proportion of people worked from home compared to Greater Perth (refer to Figure 40).

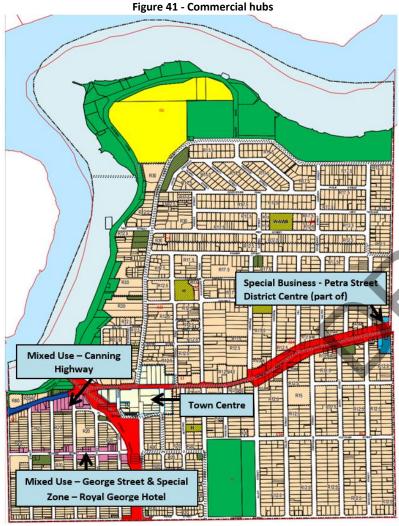
Figure 40 – Travel to Work

Travel to work, top responses Employed people aged 15 years +	East F	East Fremantle		
	No.	%		
Car, as driver	2,347	63.3	64.1	
Worked at home	272	7.3	3.9	
Car, as passenger	125	3.4	4.6	
Bus	123	3.3	3.7	
Walked only	104	2.8		
Train			2.8	
Travelled to work by public transport	309	8.3	10.3	
Travelled to work by car as driver or passenger	2,548	68.5	71.3	

Source: Australian Bureau of Statistics, 2016 Census

Retail and Commerce

There are several areas of commercial activity within the Town of East Fremantle as shown in Figure 41.



Source: Town of East Fremantle

Town Centre (Neighbourhood Centre)

The Town of East Fremantle's Town Centre is identified as a 'neighbourhood centre' under SPP 4.2 and is located on both sides of Canning Highway within the Town Centre zone as follows:

- On the northern side of Canning Highway between Preston Point Road and Staton Road with land uses comprising of a mix of community, residential and commercial (including church and presbytery, counselling services, housing, private indoor swimming pool and local shops); and
- On the southern side of Canning Highway between Stirling Highway, St Peters Road and just east of May Street with land uses comprising of a mix of civic, commercial and higher density residential (including Council's offices and town hall; supermarket and retail tenancies; and mixed use commercial/residential development).

Canning Highway Mixed Use

A Mixed Use zone is located west of the Town Centre (generally between Glyde Street and Stirling Highway) and adjacent to Canning Highway which supports a major bus route between Fremantle and the Perth CBD.

Aside from the Tradewinds Hotel, this area has not been developed to its full commercial potential and is characterised by some small office development and low to medium density housing. A development site on the corner of Canning Highway/Sewell Street/St Peters Road is proposed to include multiple storey residential apartments/mixed use development.

George Street Mixed Use and Special Zone – Royal George Hotel (Local Centre)

Another Mixed Use zone is located along George Street. This is an historic main street that provides a small range of shops, cafes and services for the local community in a village-like setting and is classified as a 'local centre'.

The old Royal George Hotel building is located at the eastern end of the street, which is currently vacant. It is identified as a development site, however, involving proposals for restoration and redevelopment including multiple storey residential apartments on the vacant portion of the site.

Retail floor space in this local centre area is confined to a small number of individual main street shops. George Street will continue to provide for a range of local services to supplement the local and surrounding centres.

Petra Street Special Business (part of District Centre)

The shopping centre located at the intersection of Canning Highway and Petra Street, is defined under SPP 4.2 as a 'district centre' The main shopping precinct is located in the City of Melville, however, it also serves the local shopping and service needs of the residents of East Fremantle.

The western portion of this district centre is located in East Fremantle on either side of Canning Highway. These tenancies have traditionally provided local and professional services and specialty shops that complement the main Petra Street shopping centre.

The DPLH undertake a Land Use and Employment Survey (LUES) approximately every five years to assist land use planning in relation to where people will live and work in the future. The responses help planners establish what needs to be delivered to accommodate future growth and development. According to the DPLH's 2015/17 LUES, the total amount of occupied floorspace within the Town of East Fremantle is 106,719m² (i.e. total 116,578m² – vacant 9,859m²). A breakdown of floorspace in various planning land use categories is shown in Figure 42. It is noted that shop/retail and office/business land uses amount to 17 per cent of occupied floorspace; whilst uses involving health/welfare/community services and entertainment/recreation and culture amount to 34 per cent.

Figure 42 - Land Use and Employment Survey (Town of East Fremantle)

rigare 42 – Land Ose and Employment St		
	Floorspace	Proportion of
Planning Land Use Category (PLUC)	(m² nla)	Occupied
		Floorspace
Primary/Rural	0	
Manufacturing/Processing/Fabrication	0	
Storage/Distribution	2,315	2%
Service Industry	123	0%
Shop/Retail	10,300	10%
Other Retail	222	0%
Office/Business	7,174	7%
Health/Welfare/Community Services	11,359	11%
Entertainment/Recreation/Culture	24,413	23%
Residential	47,501	45%
Utilities/Communications	3,312	3%
Vacant Floor Area	9,859	
TOTAL	116,578	
Total minus VFA	106,719	

Source: Department of Planning, Lands and Heritage, 2015/17 Land Use and Employment Survey https://www.planning.wa.gov.au/lues.aspx The Town of East Fremantle is currently developing a Local Commercial Centres Strategy to identify current and future commercial needs and assist in making provisions to accommodate further economic growth and employment opportunities.

Commercial Uses in Residential Zones

Additional Uses

Local Planning Scheme No. 3 allows for additional uses that would not otherwise be permitted within the zone they are located. The Scheme allows for the following commercial additional uses (note that not all additional uses are in operation):

	Property	Status of Additional Use
Consulting rooms, home	2 Marmion Street (No heritage listing)	No additional use in operation
business and/or shop (100m²)	99 Hubble Street (No heritage listing)	Takeaway coffee and art gallery
	99 King Street (Category A Heritage List)	Shop
	41 Dalgety Street (Category B Heritage List)	No additional use in operation
	47 Oakover Street (Category B Heritage List)	No additional use in operation
	38 Wolsely Road (Category B Heritage List)	No additional use in operation
Service station (excluding convenience store)	176-180 Canning Highway (Residential R12.5/40)	Service station use exists with Star Mart.
Office (180m²)	169 Canning Highway (Residential R20/40) (Category C MHI/Local Heritage Survey))	Imperial Homes Office and carpark
Recording studio (300m² and incidental to residence)	238 Canning Highway (Residential R12.5/40) (Category C MHI/Local Heritage Survey)	Recording studio
Nursing home	10 Windsor Road (Residential R12.5/40) and 5 Gill Street (Residential R12.5/40) (Category B Heritage List)	Nursing Home

P, D and A Uses

Local Planning Scheme No. 3 allows for certain commercial uses within the Residential Zone:

- P (permitted) Home Occupation, Home Office;
- D (discretionary) Home Business, Home Store;
- D (discretionary) Consulting Rooms, Office (only Canning Highway);
- A (discretionary/notice required) Bed and Breakfast, Childcare Premises;
- Industry cottage, Educational Establishment, Pre-school/kindergarten.

Council records show that approvals have been given to approximately 50 home occupations, 7 home offices and 4 bed and breakfast establishments.

Tourism and Visitors, including Attractors and Facilities

There are no areas set aside specifically as tourism development areas nor is there seen to be a need for such a category within the Town. Provision for mixed use developments in the Town Centre, the Mixed Use zone along Canning Highway and George Street and the Special Business Zone at Petra Street allow for a range of facilities relevant to the local tourism market. In addition, a number of leases associated with reserved land along the riverfront provide services for an element of tourism.

Some of the uses that may be considered under *Local Planning Scheme No. 3* associated with tourism include Bed and Breakfast, Cinema/theatre, Convenience store, Exhibition Centre, Fast Food Outlet; Hotel, Market, Motel, Recreation - Private, Restaurant, Small Bar and Tavern.

Tourist attractions within the Town include nature based activity associated with the Swan River and the foreshore, heritage walking trails and organised events such the George Street Festival.

Public infrastructure and facilities along the river include toilet facilities, playgrounds, exercise equipment, dual use pathways, and a boat launching facility. Private boat owners access the river via leased jetties and moorings, the boat launching ramp and the boat stacking facility at Aquarama.

The Town of East Fremantle Heritage Trail is a 3km walk featuring buildings of historical and architectural interest, beginning at the Town Hall and Council Chambers and takes approximately one hour to complete. It includes 19 points of interest. This is currently being reviewed and additional sites are likely to be included.

The Niergarup Track ("the place where pelicans meet" in Noongar) runs along the clifftop above Riverside Road, affording outstanding views of sites of the Swan River and its foreshores. It commences at Merv Cowan Park and continues northwards to steps that lead down to Riverside Road, linking up with the foreshore path which continues around to Petra Street.

Privately operated commercial activities attracting visitors to the area include the Swan and East Fremantle Yacht Clubs, Dome Café, Zephyrs Café, Eat Greek Restaurant and the Left Bank Hotel along the riverfront; the Tradewinds Hotel on Canning Highway; and other cafes, restaurants and small bars in George Street, the Town

Centre and the Petra Street centre. Many of the recreation/sporting clubs within the Town also include function space and licensed premises and serve meals.

Tourist accommodation is provided at the Tradewinds Hotel which offers 83 hotel rooms and short stay apartments, swimming pool, range of function rooms and a bar and bistro and some 18 serviced apartments are located at Seashells (Canning Highway/Silas Street).

Council's records show that close to 40 short stay accommodation and/or bed and breakfast uses have further been approved within the Town. In addition, some 60 ancillary accommodation/studio developments have been approved, some of which have the potential to/and may be operating as short term accommodation. Unofficially, short stay accommodation websites show that there are approximately 75 short term accommodation options within the Town of East Fremantle, including single rooms for rent and entire apartments/homes. A number of additional accommodation options are available close by within the City of Fremantle.

To date, the discrepancy between the recorded number of approved accommodation premises and those listed on short stay accommodation websites has not resulted in any known planning and amenity issues. As this appears to be an emerging land use in the Town, however, it may be prudent to consider a local planning policy to guide development and assessment.

Presented by the Town of East Fremantle and supported by Lotterywest, the George Street Festival is held annually, usually at the café strip along George Street at the end of each year. This free street festival typically features music, street food, an artisan market and free entertainment for children and attracts visitors from within the Town as well as other areas. Free Movies in the Park is another event whereby the Town of East Fremantle sponsors movies at John Tonkin Park over two nights once per year, usually in March/April.



Current and Future Proposals

John Tonkin Park Development

In response to a recommendation of the *East Fremantle Foreshore Master Plan*, the Parks and Wildlife Service of the Department of Biodiversity, Conservation and Attractions (DBCA) and the Town of East Fremantle are redeveloping sections of John Tonkin Park and undertaking foreshore stabilisation.

The intent of this project is to stabilise the foreshore area and protect the beach from erosion, as well as enhance the amenity of the foreshore area. Ancillary paths will also be installed to create better connectivity through the Park.

The project involves construction of bays and headlands (completed late 2017); signage and seating; footpath and landscape upgrades in the immediate area of John Tonkin Park; and implementing revegetation works across entire foreshore. It will provide visitors with recreational benefits and will include an interpretation facility with a wooden deck structure shaped to create a multi-use space. This will provide seating, interpretation panels and improved foreshore access. The facility will link to existing interpretation facilities along other areas of the river, encouraging a whole Riverpark linkage by showcasing its natural and cultural values.



Dome apartments

Approval was been granted in October 2016 (Swan River Trust) for 16 short stay accommodation units (involves second storey above the existing Dome Café building); associated decking; pontoons for access to new swimming baths and to provide boat

and other water craft berthing bays; and facilities/services associated with the swimming baths. No development has yet commenced.

Royal George Hotel Refurbishment

The Royal George Hotel site was recently sold by the State Government to a private developer. Development of the property is subject to a Heritage Agreement with the Heritage Council of Western Australia regarding conservation works required for the hotel building and a Conservation Plan has been prepared accordingly.

Some preliminary development plans for the Royal George Hotel building propose a mixed use development including (amongst other things) 11 serviced apartments, restaurant and bar, café and an urban winery. The heritage building itself is an attraction to tourists and possible future provision of short term accommodation and other facilities will offer further enticement to visitors. No formal application for development approval has yet been submitted for consideration.

Leeuwin Barracks

The Leeuwin Barracks site is a rare potential development in a highly sought after location along the Swan River, which offers remarkable north facing views. The Vision Plan for Leeuwin Barracks endorsed by the Town of Fremantle acknowledges that redevelopment of the site represents an opportunity to "...showcase sustainable living, and be a focal point for gathering, reflecting, celebrating and exchange".

The site is slightly remote from the public transport network but has the potential to accommodate a wide range of housing types and densities and possible tourist/commercial/community activities.

Some tourism opportunities include:

- The site's rich history (Junior Recruits Memorial for reflection and commemoration; repurposing the drill hall for a range of civic functions and possible reception centre; use of the former parade ground for community ceremonies and farmers' markets; outdoor cinema; play space; and views to surrounding offsite places of Aboriginal significance).
- Amenity provided by proximity to, and views over the Swan River and the presence of mature trees on site.
- Education and information (through interpretive signage and public art).
- Supporting local business development (enabling establishment of café, restaurants and other facilities for visitors)

Port to Point Regional Trail

The East Fremantle Foreshore Master Plan recommends consideration of a regional trail from Victoria Quay at Fremantle Port (City of Fremantle) to Point Walter (City of Melville). Trails provide a number of benefits including education, tourism and place activation. The proposed trail would be approximately 7 km in length (one way) which could be accessed by foot, bicycle, segways and other vehicles (Refer to Figure 43). It may also be possible to carry out by canoe or boat. The trail would provide excellent views of the river, a range of cafes and eateries, natural bushland, beaches, cliffs, cultural and historic information as well as additional fitness opportunities.

Figure 43 – Port to Point Regional Trail



Source: East Fremantle Foreshore Master Plan Study, Ecoscape 2016

Events Space

The East Fremantle Foreshore Master Plan recommends consideration of the foreshore for special events. Similar to the City of South Perth and City of Perth, the Town of East Fremantle could host public events at three proposed sites as shown in Figure 44.

Figure 44 - Proposed Event Areas



Source: East Fremantle Foreshore Master Plan Study, Ecoscape 2016

Event examples could include festivals, outdoor movies, markets, performance, music, food and athletics. They can be regular or seasonal and can attract large crowds of people. A number of small events for local residents have already taken place from early 2018 at John Tonkin Park and Wauhop Park (food trucks, music and movie nights).

Recreation and Open Space

The Classification Framework for Public Open Space was developed by the Department of Local Government, Sport and Cultural Industries (then Department of Sport and Recreation) in 2012 and was incorporated into the Department of Planning, Lands and Heritage Review of Liveable Neighbourhoods in 2015.

The framework contains two central categories as follows:

- 1. Function recreation, sport and nature; and
- 2. Catchment hierarchy local, neighbourhood, district and regional (based on distance/travel time of 400m or 5 min walk, 800m or 10 min walk, within 2km or 5 min drive and outside of the local government area respectively).

Due to the small land area of the Town of East Fremantle, there are realistically only three catchment hierarchy levels applicable, with the local and neighbourhood being combined as one in this instance.

Figure 45 shows the name and location of the parks and reserves located within the Town and Figure 46 (over page) generally places these into the corresponding public open space classifications provided within the open space framework.

Most residents are within 400m of at least one level of open space, with the exception of the south east corner of the Town of East Fremantle. In this vicinity, residents are located further from all levels of open space and have fewer options in number of open spaces available to them compared, to other areas of the Town. While those properties located on the south east corner of the Town are the most remote from local open space, residents do have access to Gibson Park located nearby in the City of Fremantle.

All residents within the Town, however, have suitable access to district and regional level open space in accordance with the Classification Framework for Public Open Space.

No change to the local open space distribution is anticipated within this LPS, although any future redevelopment of the East Fremantle Oval Precinct should include opportunities to update and improve local open space facilities. In addition, opportunity exists to increase the amount of public open space within the Town when the Leeuwin Barracks site is redeveloped.

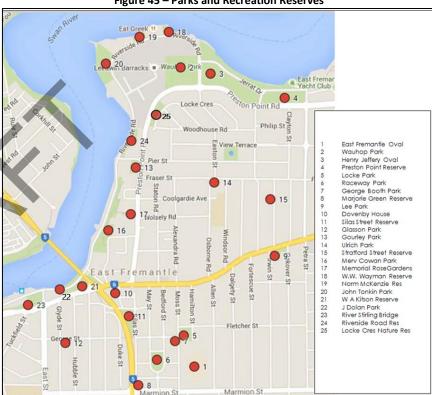


Figure 45 - Parks and Recreation Reserves

Source: Town of East Fremantle Recreation and Community Facilities Plan Background Report, 2016

Figure 46 – Current Public Open Space Framework

	Recreation	Sport	Nature
Local/ Neighbourhood	5.Locke Park 7,780m² 6.Raceway Park: 10,332m² (approx. 1/3 area for drainage) 7.George Booth Park 680m² 8.Marjorie Green Res. 510m² 9.Lee Park 3,700m² 10.Dovenby House 3,000m² 11.Silas St Reserve 4,000m² 12.Glasson Park 6,110m² 13.Gourley Park 6,110m² 14.Ulrich Park 2,000m² 15.Stratford St Park 1,027m² 16.Merv Cowan Park 2,550m² 17.Memorial Rose Garden 1,200m² 21.W. H.Kitson Park 2,500m²		25.Locke Crescent Nature Res 8,954m²
District		2.Wauhop Park (soccer) 19,000m² 3.Henry Jeffrey Oval (football & cricket) 21,000m² 4.Preston Point Reserve (cricket & lacrosse) 16,000m² & East Fremantle Lawn Tennis 23,000m² 7.East Fremantle Lawn Bowls and Croquet 11,300m²	
Regional		1.East Fremantle Football Oval 29,000 m ²	18.W.Wayman Reserve 3,850m² 19.Norm McKenzie Park 2,800m² 20.John Tonkin Park 14,000m² 22.J. Dolan Park 3,500m² 23.River Stirling Bridge 3,000m² 24.Riverside Road Reserve 3,500m²

Source: Town of East Fremantle

South of Canning Highway

South of Canning Highway, the East Fremantle Oval , which is home to East Fremantle Football Club (Australian Rules Football) provides a regional level sports facility and immediately adjacent to the north district sports facilities include the Lawn Bowls and Croquet Club.

East Fremantle Oval Precinct is contained within an 'A' Class Reserve that is classified in the MRS as Parks and Recreation Reserve - Restricted. In addition to the football

ground and associated facilitates, the precinct includes the East Fremantle Bowling Club; East Fremantle Croquet Club; the East Fremantle Family Play Group and East Fremantle Child Health Centre; Locke Park; the Council depot; and five rental group dwellings fronting Allen Street (owned by the Town of East Fremantle).



North of Canning Highway

The main recreation open space is along Riverside Road and the foreshore of the Swan River. The portion of Swan River contained within East Fremantle boundaries is heavily used, with a significant level of river traffic for a variety of uses. The foreshore (including Riverside Road) is part of the MRS regional open space and is reserved for Parks and Recreation. The western foreshore area is mostly used for passive recreational purposes that include picnic areas and scenic walkways. Further along, the river accommodates various boating and rowing clubs, marine facilities, boat pens, mooring facilities and a regional recreational boat launching facility.

Riverside Road is an important infrastructure asset providing easy access to the foreshore. Demand for foreshore recreation areas is likely to increase as the population grows. The redevelopment of the Leeuwin Barracks site is also likely to place additional pressure on the existing foreshore open space network. A recommendation of the *East Fremantle Foreshore Master Plan* includes modification

of the Riverside Road alignment and width to enable expansion of the foreshore area and to assist with traffic calming. This would also allow for greater connectivity between John Tonkin Park and Norm McKenzie Park and provide opportunity to modify lease areas of the foreshore clubs. There may be an opportunity to work towards relocation of Riverside Road and the provision of additional open space when considering any statutory public open space contribution required in the future redevelopment of the Leeuwin Barracks site.

A number of district sports facilities are located between the riverfront and Preston Point Road and include Wauhop Park, Henry Jeffery Oval, Preston Point Reserve and the East Fremantle Tennis Club. These cater for Australian Rules Football (ARF), Football (Soccer), Lacrosse, Cricket, and Tennis.

The Town of East Fremantle has a number of small local/neighbourhood parks, many with play spaces. A majority of these smaller sized parks are located close to the river and may perform all three local/neighbourhood, district and regional functions.

Facilities Outside of the Town of East Fremantle

Other recreation facilities within the City of Fremantle, however, close to the boundary of East Fremantle, include Fremantle Oval (ARF), Fremantle Park (multiple sports), Fremantle public and private golf courses, Booyeembarra Park (nature park) and Frank Gibson Park (netball) and are likely to be used by East Fremantle residents. Major recreation facilities in both the Town of Fremantle and City of Melville are reasonably accessible to East Fremantle residents including swimming pools and leisure centres. Ideally walking and cycling linkages will connect East Fremantle to facilities to the west, east and south.

Given the size, population and location of the Town of East Fremantle, it is not surprising that not all recreation, sport activities and facilities are available within the town boundary. Notwithstanding this, the consultation program conducted during the preparation of Town of East Fremantle *Recreation and Community Facilities Strategy (2016)*, identified no major gaps or deficiencies in major facilities as being wanted or required by recreation and sporting groups.

Although a number of sporting facilities are not actually located within the Town of East Fremantle, they are provided in close proximity or within easy access and there appears to be no need to replicate them in East Fremantle.

Recreation and Community Facilities Strategy

In 2016, the Town of East Fremantle adopted a *Recreation and Community Facilities Strategy* to:

- Provide a strategic framework for addressing the current and future recreation and community facilities' needs;
- To guide future investment and management of recreation and community assets; and
- Consider and recommend the most affordable, achievable and realistic options that are a balance between community needs, expectations, capital funding availability and sustainability requirements.

The Recreation and Community Facilities Strategy aims to provide a long term blueprint for the provision of recreation and community service facilities which will enable Council to deal with requests from the community for funding for new facilities, to upgrade existing Council facilities or to address degradation of open spaces in a strategic, considered and equitable manner.

The Recreation and Community Facilities Strategy recommends a series of principles to guide future development of recreation and community facilities in East Fremantle:

- Priority will be given to infrastructure which meets the needs of the broader East Fremantle community and has higher levels of use and community access. Lower priority will be given to infrastructure which has lower levels of use and limited community access.
- Priority will be given to developing recreation and community hubs which cater for multiple activities and user groups.
- Priority will be given to infrastructure projects which are supported by a master plan, feasibility study and/or business plan.
- 4. Priority will be given to the development of flexible, multipurpose, multiuse infrastructure over single purpose, infrastructure. The exception to this rule is for infrastructure which is specifically designed to cater for an activity, such as synthetic athletics track, bowling green and velodrome. It is expected that these facilities will be for the exclusive use of one group or organisation.
- 5. Priority will be given to infrastructure which demonstrates financial, environmental and social sustainability.
- Priority in the allocation of Council funding, and Council support to external funding bodies, will be given to
 multiuse and multifunctional infrastructure. Infrastructure which is for the exclusive use of a single group, and
 which excludes the general public will be given a low or no priority in Council funding allocations.
- 7. Priority will be given to funding infrastructure maintenance which allows general community access:
- Infrastructure which allows community access will be maintained at the joint cost of the users and the Council, and reflect the extent of use by the user group and the general community. Thus, Council will contribute to the cost of maintaining playing fields which are not fenced with lockable gates, and available for community use at times not used by the lessee.
- Infrastructure which is for the exclusive use of a user group lessee will be fully maintained at the cost of the user group. This will primarily apply to buildings, specialist sporting facilities (e.g. bowling greens) and fenced areas.
- Priority will be given to upgrading infrastructure to ensure it is fit for purpose, rather than developing new facilities, except when infrastructure has reached the end of its useful life.

Key actions in relation to recreation facilities within the *Recreation and Community Facilities Strategy* are summarised in Figure 47 as follows:

Figure 47 – Recreation and Community Facilities Strategy 2016 - Key Actions

Heart is the decision and community radiates strately 2020 they state in					
Recreation and Community Facilities Strategy 2016					
Facility	Action				
East Fremantle Oval	Prepare a Master (Vision) Plan				
Precinct	Implement the Master (Vision) Plan				
Foreshore	Implement the East Fremantle Foreshore Master Plan				
	Investigate viability of introducing a boat ramp fee				
Parks and	Prepare a master plan for the sporting reserves north of Preston				
Playgrounds	Point Road (Wauhop Park, Henry Jeffery Oval, Chapman Oval and Preston Point reserve)				
	Establish significant multi age play spaces in major open space precincts				
	Multi age play spaces to be complemented by pre and primary				
	school age play spaces at local open space area.				
Trails	 Prepare a Cycling and Walking Trail Plan including a network of on and off road routes. 				
	Liaise with the City of Fremantle and City of Melville to ensure trails within East Fremantle link up.				
	 Optimise the opportunity to establish smaller local trails through major recreation and sports hubs. 				
	Master planning the Leeuwin Barracks site to include a network of				
	trails linking to the foreshore and other open space areas.				
Leeuwin Barracks	 Ensure that adequate and usable open space is acquired as public open space. 				
	Establish physical and visual linkages with adjacent open space.				

The Town of East Fremantle is currently further developing the East Fremantle Oval Precinct Vision Plan which considers:

- Developing the area to service the whole East Fremantle community;
- Providing active sporting, passive recreation and community spaces;
- Minimising or reducing the number of buildings;
- Establishing a community centre hub;
- Creating multipurpose playing fields; and
- Possible relocation of Council depot to another location.

The East Fremantle Foreshore Master Plan (referred to in the key actions of the Recreation and Community Facilities Strategy) includes the following recommendations in relation to parks and playgrounds:

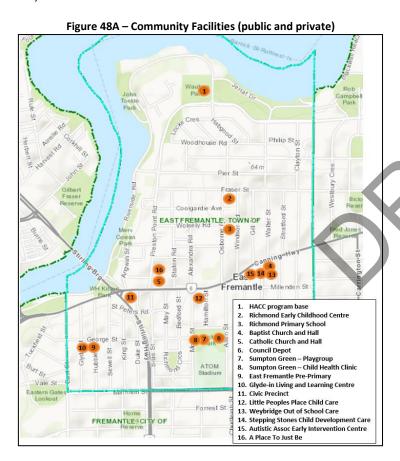
- Establish a regional trail from the Port to Point Walter (works to John Tonkin Park are underway, including an interpretation node);
- Improve the amenity of J Dolan Park;
- Redesign Merv Cowan Park to improve recreation and general amenity;
- Redesign the linear park north of the Dome Café building to provide greater recreation and amenity value (funding grant requested for road realignment);
- Major redesign and development of John Tonkin Park to improve the functionality and amenity of the park (works in progress);
- Redevelop Norm McKenzie Park;
- Redevelop W Wayman Park;
- Improve pedestrian access along the foreshore at river level through the
 development of a natural access way along the foreshore (John Tonkin Park
 headland works completed, further work along river yet to be undertaken); and
- Revenue from the boat ramp can be used to maintain and upgrade the foreshore area (to be fully investigated).



Community Facilities

There are 14 sport and recreation clubs within the Town of East Fremantle. Council generates revenue from a small number of its facilities including commercial rent from aquatic recreation and sporting clubs and facilities, however, most sporting clubs contribute very little to use Council facilities.

In addition to Council-owned buildings associated with recreation reserves, a number of community facilities exist within the Town (shown in Figure 48A and listed in Figure 48B) as follows:



Source: Town of East Fremantle

Figure 48B - List of Community Facilities

		rigure 400 List of Community Facilities
		Community Facilities
Government/	1.	Home and Community Care (HACC) program neighbourhood base
Not for Profit		(associated with the Fremantle City, formerly Tricolore, soccer club
		facility
	2.	Richmond Early Childhood Centre (associated with Ulrich Park)
	3.	Richmond Primary School (including small playing field, playground, 2 x
		tennis courts)
	4.	East Fremantle Baptist Church and hall
	5.	Catholic Church (Immaculate Conception) and hall
	6.	Town of East Fremantle Depot
	7.	Playgroup (Sumpton Green)
	8.	Child Health Clinic (Sumpton Green)
	9.	East Fremantle Pre-primary (associated with Glasson Park)
	10.	Glyde-in Living and Learning Centre
	11.	Civic precinct – Administration, Dovenby House, Old Police Station, Old
		Post Office
Private	12.	Little Peoples Place (193 Canning Highway)
	13.	Weybridge Out of School Care Centre (4 Fortescue Street)
	14.	Stepping Stones Child Development Centre (6 Fortescue Street)
	15.	Autistic Association Early Intervention Centre (217 Canning Highway)
	16.	A place to just be (4 Preston Point Road)

Draft Liveable Neighbourhoods (2015) specifies that community purpose sites provide space for facilities and are:

- Located in activity centres or adjoining POS;
- Generally at least 2,000m² in size;
- Generally provided on the basis of one for each group of three neighbourhoods (1,500–1,800 dwellings); and
- Identified on an approved structure plan and will be required to be transferred free of cost to the local government where included as part of the 10 per cent public open space contribution.

The Recreation and Community Facilities Strategy adopted by Council in December 2016, notes the existence of a number of small community buildings located throughout the Town of East Fremantle (many located on small open space parks) with a distinct lack of a multipurpose community centre suitable for a range of community, social, art and craft and passive recreation activities. In addition, many of the buildings are in declining condition, with inconsistent leasing and maintenance arrangements.

Key actions in relation to community facilities within the *Recreation and Community Facilities Strategy* are summarised as follows:

Recreation and Community Facilities Strategy 2016			
Facility		Action	
Community Centres	•	Consolidate as many community facilities into a single community hub Prepare a feasibility study and business plan for a community hub	
Recreation and Community Buildings	•	Adopt a consistent approach to the leasing and maintenance of buildings, based on the Recreation and Community Principles	

It recommends that Council focusses resources on multipurpose, multiuse and accessible buildings and suggests East Fremantle Oval precinct as a community hub site as it is well located to service East Fremantle and adjacent suburbs in Fremantle and Melville. Consolidating community buildings may enable some local parks to be expanded and a new facility may be designed to accommodate new groups and activities such as a Men's/Women's Shed and a Bridge Club.

A review is required to ascertain the structural integrity of all buildings and Council needs to negotiate consistent occupancy, usage and maintenance arrangements with all user groups.

Education facilities

Education facilities other than pre-primary and primary schools need to be accessed from out of the Town of East Fremantle boundaries. The nearest secondary schools are John Curtin College of the Arts and South Fremantle High School (City of Fremantle) and Melville Senior High School (City of Melville). Higher education TAFE and university (Notre Dame University) campuses are located in Fremantle, however, most are located elsewhere in the Perth metropolitan area.

Medical services

A number of medical practitioners operate within the Town of East Fremantle and numerous medical and health related services have tended to locate in the vicinity of the Town Centre.

The closest public emergency hospital is Fiona Stanley, located at Murdoch.

The public maternity hospital previously located in Dalgety Street (Woodside) which later moved to Wolsely Road (Kaleeya) has since been relocated to form part of the Fiona Stanley complex and is no longer in the Town

Emergency Services

There are no police stations within the Town of East Fremantle. The closest police stations are located at Fremantle, Palmyra and Cottesloe and the Water Police are located at North Fremantle.

Likewise, there are no fire stations within the Town of East Fremantle. In the event of a fire emergency services, the closest fire stations are located at Fremantle, Claremont and Murdoch.

Permissibility

Local Planning Scheme No. 3 allows for the following community uses within specified zones:

	Residential	Mixed Use	Special Business	Town Centre
Child care premises	Α	Α	D	D
Club premises	Χ	Α	D	D
Community Purposes	Α	D	Р	Р
Educational Establishment	Α	Α	D	Α
Family Day Care	Α	D	D	Α
Hospital	Х	Х	X	Α
Place of Worship	Х	Α	Α	D
Pre-school/kindergarten	Α	D	D	Р

Urban Design, Character and Heritage

Aboriginal Heritage

The Town of East Fremantle acknowledges the Whadjuk Noongar people, who are the traditional custodians of the land in the region. The Town also acknowledges other Aboriginal language groups who live in the area.

Long before European settlement within the Town of East Fremantle, the local aboriginal tribe known as Whadjuk Noongar obtained food and drinking water from the river edges and open grassy areas.

The Noongar people live in the south west corner of Western Australia (south of Geraldton to Esperance) comprising of 14 tribal groups all sharing one language, yet each with their own dialect. Perth's original people lived within an approximate 50km radius of Kings Park and are known as the 'Whadjuk', meaning 'Guardians of the link between the land and the sea'.

The link is otherwise known as the Swan River (Derbal Yarrigan) and once a year the Whadjuk would travel along the river to meet at Walyalup (Fremantle) to celebrate the country and waterway they cared for. The Whadjuk had an abundance of bush tucker to eat, many stories to tell and a Dreaming that still continues today.

The Swan River and its immediate environs have spiritual, cultural and environmental significance for contemporary Noongars. It is believed to have been created in the Dreamtime by the actions of the Waugal (Rainbow Serpent). DIA Site ID 3536 Swan River is a registered mythological site.

There are no other registered Aboriginal Sites within the Town of East Fremantle, however, there are sites nearby at Cantonment Hill (Plant, resource, Camp, Named Place - Ceremonial, Mythological) and Rocky Bay (Named Place - Mythological). Other heritage places in close proximity include a site in Fremantle (Camp); South Fremantle (Ceremonial, Mythological); Mosman Park (Water Source - Ceremonial, Mythological, Artefacts/Scatter, Historical, Grinding, Patches/Grooves; and Fremantle Prison (Other: Deaths in Custody Site – Painting, Historical).

The Town is committed to working towards developing a Reconciliation Action Plan (RAP) within the context of the Town's core business and in-line with the over-arching community strategic plan and corporate business plan.

The purpose of a RAP is to outline practical actions to drive the Town's contribution to reconciliation, both internally and within the community. A RAP aims to advance the five dimensions of reconciliation (Race Relations; Equality and Equity; Unity; Institutional Integrity; Historical Acceptance) by supporting development of respectful relationships and create meaningful opportunities with Aboriginal and Torres Strait Islander peoples.

Through this process Aboriginal heritage and associated issues may also be identified and acknowledged.



European Heritage

The track which linked the fledgling Swan River Colony based in Fremantle to the future city centre of Perth in 1831 is documented as traversing along the East Fremantle cliff edge finishing at the river ferry crossing at Preston Point. Early European settlement of the area consisted of large farm holdings, however as the colony prospered during the 1890s gold rush the nature of settlement altered dramatically, rapidly changing to a residential area.

The Plympton Precinct today contains many charming worker's cottages which were established largely between 1890 and 1910. Riverside was established by the merchant elite of Fremantle and is perched high on the cliffs overlooking the River. Gracious homes, some from the gold rush era, are dotted along the escarpment. Further northwards, the Preston Point area was developed in the 1950s with houses typical of the period also enjoying the expansive views over the river. The Woodside and Richmond precincts contain many homes dating from 1900–1940, characterised by fine brick and tile bungalows on generously sized sites with mature garden settings.

The Leeuwin Barracks site within the Town of East Fremantle was an important part of defence history. In August 1940, the Leeuwin Barracks site was originally commissioned as HMAS Leeuwin's shore establishment of the Royal Australian Navy. After WWII the naval depot was adopted for use as a training facility initially for reservists and national servicemen, and later as the Junior Recruits Training Establishment from 1960 until 1984. The site was decommissioned from naval service in 1986 and later reopened under the control of the Australian Army as Leeuwin Barracks. The site is a significant landmark within the Town and has commanding views of the Swan River.

The Town of East Fremantle Local Heritage Survey (formerly Municipal Heritage Inventory) lists more than 1,000 places of cultural significance and assigns various management categories as follows:

CATEGORY A (Properties listed on the State Register of Heritage Places) - LPS 3 Heritage List Already recognised at the highest level - the WA State Register of Heritage Places; redevelopment requires consultation with the Heritage Council of Western Australia and the local government authority, and planning approval shall be in accordance with HCWA advice.

Conservation Plans generally required to be developed / adopted prior to further development and conservation of places. Provide maximum encouragement to the owner under the Town of East Fremantle Town Planning Scheme to conserve the significance of the place. Incentives to

promote heritage conservation should be considered where desirable conservation outcomes dependent on viability of development.

CATEGORY A (Properties not listed on the State Register of Heritage Places) - LPS 3 Heritage List

High heritage significance at a local level, and may have potential State Heritage significance; informed consideration should be given to nomination for State Register listing prior to or at the time of consideration for further development, and prior determination of any significant development application for the place.

Places to be generally retained and conserved, are worthy of a high level of protection. Conservation Plans may be required depending on relative significance and apparent impact of development on the place; detailed Heritage Assessments otherwise required as corollary to any development application. Strong encouragement to the owner under the Town of East Fremantle Town Planning Scheme to conserve the significance of the dwelling. Incentives to promote heritage conservation should be considered where necessary to achieve desirable conservation outcomes in context of permissible development.

CATEGORY B - LPS 3 Heritage List

Considerable heritage significance at a local level; places generally considered worthy of high level of protection, to be retained and appropriately conserved; provide strong encouragement to owners under the Town of East Fremantle Town Planning Scheme to conserve the significance of the place. A Heritage Assessment / Impact Statement is required as corollary to any development application. Incentives to promote heritage conservation may be considered where desirable conservation outcomes may be otherwise difficult to achieve.

CATEGORY C

Some heritage significance at a local level; places to be ideally retained and conserved; endeavour to conserve the significance of the place through recognised design guidelines; a Heritage Assessment / Impact Statement may be required as corollary to a development application, particularly in considering demolition of the place. Further development is required to be within recognised design guidelines. Incentives should be considered where the condition or relative significance of the individual place is marginal but where a collective significance is served through retention and conservation.

CATEGORY D

Limited local significance; May be generally redeveloped within recognised design guidelines; photographically record the place prior to any major redevelopment or demolition.

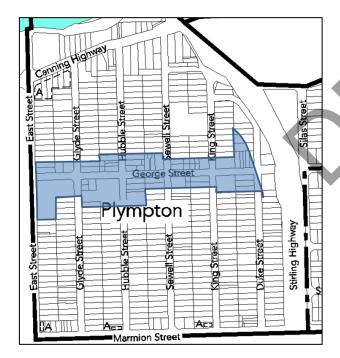
CATEGORY E

Historic site with few or no built features. Recognise for example with a commemorative plaque, place name, or reflection in urban or architectural design.

All properties listed as Category A and Category B (approximately 700) are also included within the *Local Planning Scheme No. 3* Heritage List, affording the highest level of conservation and protection. A number of other places of heritage value are also included on the Heritage List as a carryover from the previous Town Planning Scheme No. 2 (Appendix V – Schedule of Places of Heritage Value). These include the George Street Precinct (an area adjoining George Street between East Street and Silas Street) and four Landscape Protection Areas previously mentioned in this report in the **Physical Features, Climate, Natural Heritage and Natural Resource Management**. Section, under the heading **Natural Heritage and Natural Resource Management**.

The George Street Precinct is shown in Figure 49 and is described as: *An area comprising individual Places of Heritage Value and adjoining properties which should be viewed as a precinct. It is Council's intention to undertake the revival of the precinct as an historic and community focus for the Plympton and surrounding areas.*

Figure 49 - George Street Precinct (Heritage Listing)



It is recognised that the George Street Precinct requires updating and adjustment. This is timely (and possibly considered overdue). Changes have been long been made to the reservation required for Stirling Highway (previously has included the Royal George Hotel), which had originally determined the extent of the eastern boundary of the precinct.

More recent work prepared as part of the Municipal Heritage Review in 2014/15 identified a number of proposed heritage areas within the Town, including the George Street vicinity. The Town intends to consider the designation of Heritage Areas in accordance with the provisions of Schedule 2, Part 2 and 3 of the *Planning and Development (Local Planning Schemes) Regulations 2015* (the Regulations).

This LPS provides further opportunities for the on-going sustainable protection of all of these important buildings and places identified, however, this can often provide a challenge when considering density options.

State Registered Places within the Town of East Fremantle

Further to the Local Planning Survey and the Local Planning scheme No. 3 Heritage List, the following places are listed on the State Heritage Register:

Heritage			
Place No.	Place Name	Description	Significance
787	East Fremantle Post Office 101 Canning Highway	A finely designed two storey Federation Classical style building constructed in brick and rendered brick with a corrugated iron roof.	Refer to Place No. 789
788	East Fremantle Town Hall 135 Canning Highway	A two storey building with a fine façade rendered in the Federation Free Classical Style constructed in limestone and rendered brick with a hipped corrugated iron roof.	Refer to Place No. 789
789	Public Buildings East Fremantle (East Fremantle Post Office, Police Station, Town Hall) 101, 133 & 135 Canning Highway	Also listed separately as Place No. 787, 24909 & 788 respectively. Individually the buildings exhibit pleasing aesthetic qualities and together provide a visual focal point for the Town with a strong aesthetic value representing the civic heart.	Public Buildings, East Fremantle has exceptional historic value. They are significant in the occupation of Western Australia as the public buildings of the Town of East Fremantle. They were brought about by the rapid expansion of Fremantle following the Western Australian Gold Boom.
792	Woodside Hospital (Moore Family Residence) 18 Dalgety Street	A one hectare site comprising of one and two storey buildings and significant mature trees. Woodside Hospital was originally a two storey Federation Free Classical house constructed in brick and rendered brick.	It was W. D. Moore's family home and is associated with the expansion of East Fremantle and the subdivision of W. D. Moore's Woodside Estate from 1912. Its use associated with health care and maternity functions has considerable social value.
794	Royal George Hotel 34 Duke Street	A handsomely proportioned two storey, Federation Free Classical style brick and limestone hotel building with corrugated roof sheeting and corner tower/cupola.	Has considerable historic value with its association to the Mulachy brothers and considerable social value as a community gathering place, first as a hotel, then as a school and an arts and community centre.
799	Ferniehurst (House and Gardens) 15 Parker Street	A single storey Federation Bungalow constructed in limestone, brick and rendered brick with a hipped and gable tiled roof.	One of the most prominent and substantial Federation Bungalow style residences constructed in East Fremantle in the Inter-War period.
802	Aldgate, house, 7 Aldgate Place	A single storey Federation Queen Anne style house constructed in limestone, tuck pointed brick and rendered brick with a hipped and gable corrugated iron roof.	A reminder of a period when elevated locations on Preston Point Road and the immediate surroundings were desirable residential locations for the more affluent. Has extensive and rare interior decorative treatments.
803	Knocknagow, house, 24 Preston Point Road	A single storey rendered masonry construction and Zincalume custom orb roofed residence in the Federation Queen Anne bungalow style with a belvedere and associated single storey former stables.	A well-known landmark on Preston Point Road associated with a significant area of middle class federation and Inter-War period development which contributes to community's sense of place. Also has association with the Mulachy family.
805	Woodlawn, house, 20 Osborne Road	A single storey residence, constructed of stone and iron, in the Federation Queen Anne style, set in a lush garden landscape.	Part of the suburban residential development associated with the expansion of East Fremantle and the subdivision of Walter Eston's Estate from 1901.
3352	Glanville's Buildings 5A & 5B Riverside Road	A Federation Free Classical style brick residence with rendered details and low-pitched corrugated iron roofs that are concealed by a decorative and flamboyant parapet. The street elevation is arranged to accommodate two shopfronts with their entrance doors and modest windows.	A prominent landmark located high on Canning Highway extending down to Riverside Road. A very fine and eccentric expression of the Federation Free Classical style exhibiting many of architect Norman Hitchcock's 'signature' details. The contrast of stucco decoration against tuck-pointed brickwork is quite striking and quite unlike any other building in Perth.
3694	Penshurst, house, 51 View Terrace	A two storey late Victorian residence constructed of limestone masonry with extensive verandahs on the north-east corner and timber skillions at the rear, as well as two palm trees in front of the house.	Has exceptional aesthetic value as a two storey late Victorian residence and for its architectural and landmark qualities prominently sited on Richmond Hill and visible from various vantage points along the Swan River. Has historic value for its relationship with shipping in Fremantle and particularly its connection with the firm of Symon, Hammond and Hubble.
4645	House, 26 King Street	Federation Bungalow. Single storey cottage constructed in timber framing and weatherboard cladding with a hipped and gable corrugated iron roof.	Part of the suburban residential development associated with the expansion of East Fremantle during the Gold rush period of the 1880s and 1890s.
24909	Former Police Station 133 Canning Highway	A single storey competently executed Federation Bungalow constructed in limestone and brick with a hipped corrugated iron roof.	Refer to Place No. 789

Urban Design and Character

The Residential Design Guidelines policy divides the Town of East Fremantle into seven different precincts: Preston Point (Parks and Recreation Reserve and Public Purposes – Commonwealth Government Reserve), Plympton, Raceway, Woodside, Riverside, Richmond and Richmond Hill. The urban design and character of each residential precinct is described below:

Overview of Residential Precincts (Residential Design Guidelines)

Precinct	Character and Historical Context	Lot Sizes and Streetscape	Actual Density
Preston Point	Preston Point Is an area within the Noongar Whadjuk land, known as Nieragup (the place where pelicans are located). The river is of spiritual significance to Noongar people. Early European activity at Preston Point dates back to the early days of settlement when the river was used as the main means of transport between Perth and Fremantle. By 1833, a jetty had been built from which a cable operated "horse ferry" provided river crossing to Minim Cove. A sandy track provided access from here to Perth. This mode of passage continued until the North Fremantle Bridge was built in	No residential land uses exist in this precinct. This precinct comprises of wide open spaces and vistas of the Swan River and boat moorings. Pedestrian and cycle paths skirt the river frontage and roadside. Shady trees line Riverside Drive in parts. Access is maintained to the river frontage even though recreational club	Not applicable.
	The drill hall, HMAS Leeuwin, established in Fremantle in 1926, was decommissioned and moved to Preston Point in 1942 and the base became a training depot for reserves and national servicemen following the end of WWII. The base operated as a Junior Recruit Training establishment from 1960 to 1985. Commercial and recreational developments did not commence in the Preston Point precinct until the 1950s. The foreshore area is now home to the Leeuwin Boat Ramp; Zephyr Café and Eat Greek restaurant; Swan and East Fremantle Yacht Clubs, Fremantle Rowing Club and Fremantle Swan Dragon Boat Club; and John Tonkin Reserve and Norm McKenzie Reserve. Further back is the East Fremantle Tricolore Soccer Club, East Fremantle Junior Football Club, East	buildings are located between small landscaped parklands. Buildings are generally single storey (yacht clubs are two storeys) of varying architectural design and construction. Further back from the river are large playing fields, tennis courts and sporting clubs. The Leeuwin Barracks is a dominant part of the precinct with the complex comprising of Inter-War Moderne buildings of brick and mainly tiled construction in a landscape setting. Various blocks of accommodation are three storeys in height. A high voltage powerline traverses the river from Mosman Park and cuts through the Leeuwin	
Plympton Precinct	Fremantle Lacrosse Club and Cricket Club and the East Fremantle Tennis Club. Mostly single detached 19th century houses with some redevelopment post World War II reflecting influence of immigrants who settled in the precinct (e.g. old homes altered to include concrete verandahs and newly constructed southern European style homes). The area was subdivided into small lots with small houses. A few of the simplest two-roomed detached cottages survive. These comprise of timber framed, weatherboard clad buildings with corrugated iron roofs and service facilities under a skillion extension at the back. There are also some limestone wall examples and one in brick. There are only two sets of terrace houses, but several remnants of paired or terrace floor plans remain. The houses are on small blocks with very little front setback (thus creating an urban, rather than suburban, density and streetscape) and their architectural and social history closely connected with Fremantle, the inner harbour and the Gold Rush. Building materials include weatherboard, brick, rendered masonry and some fibre cement. Roofs mostly uncoloured corrugated iron (custom orb profile) however, around a quarter of roofs are tiled. Gables are dominant and verandahs are common.	Barracks site. Lots in the precinct are narrow and deep (generally around 12m x 42m) resulting in relatively small lot sizes of just over 500m². A number of lots are even narrower and have been developed either with semi-detached dwellings or freestanding houses. Buildings are therefore located close together, many built on one side boundary and separated from neighbours by 1m-2m, or a narrow driveway. A significant number of houses have no driveway access and street parking is therefore commonplace. Front setbacks are irregular, ranging from houses built up to the street boundary to those set far back and obscured by gardens. A relatively small setback of 2m-4m is the most common. Front yards are generally characterised by low front fences of brick or rendered construction. Most buildings are single storey, however, buildings of two storeys or more are found on George Street and Canning Highway. Height at the street level varies, however, most are built above the street level. This is	Urban rather than suburban density. In many instances the existing residential density codes in Local Planning Scheme No. 3 reflect the actual residential densities (i.e. R40 along Canning Highway and George Street, with the majority of single residential properties being R20). An exception to this is a nine storey apartment building at the corner of George and East Streets coded at R40, which has an actual density more closely related to R60-80.
	In contrast, a 9 storey block of units exists on the corner of East and George Streets and some commercial properties along George Street and Canning Highway. Commercial development began in George Street with several buildings constructed up to the street verge and corner shops on Sewell and Hubble Street intersections. Blocks between were filled in with housing, some as terraces, and the Royal George Hotel marked the limit of the developed area. Land rises up from Canning Highway towards the southwest corner of the precinct providing views of the river near the Highway, and ocean views from East Street.	more evident on lots located close to Canning Highway and on East Street where the topography has required houses to be built up. The landform rises from Canning Highway towards the southwest corner of the precinct. This provides views of the river from certain properties close to the Highway and ocean views from houses on East Street. Houses have been designed to take advantage of these views.	

Precinct	Character and Historical Context	Lot Sizes and Streetscape	Actual Density
Raceway Precinct	Previously the Richmond Raceway trotting and pacing track (closed in 1991) and subsequently developed as a residential estate with a centrally located park signifying the location of the former horse racecourse. Mostly single detached homes, with some group housing. Design guidelines have given rise to a development form in-keeping with the qualities of adjacent Woodside and Plympton precincts. Mostly rendered brick and some weather board construction with corrugated iron (custom orb) roofing of various colours.	Lot sizes 450m ² to over 600m ² with a number of larger group housing sites. Frontages for single house lots 10-12 m, with 3-5m setbacks. High proportion of two storey development coupled with small front and side setbacks has created a character and streetscape suggestive of an earlier era.	Properties in the northern portion of the precinct are coded R20 whilst properties in the southern portion of the precinct are coded R30 and R40 and have been developed according to those density codes.
Woodside Precinct	Named after one of the first residences in the district owned by W D Moore (former Woodside Hospital) and includes the East Fremantle Oval. Predominantly single residential, although about a third of residential lots include a second dwelling (new dwelling to the rear of existing houses) or new duplex development. The majority of residential buildings are pre-World War II and a number are on the Heritage List and Local Heritage Survey. There is a concentration of large pre-1920 homes on large blocks (1000m²-2000m²) on or close to Canning Highway particularly around Allen and Dalgety Streets. A majority of the old homes are well maintained, and have been renovated or restored. The large houses that remain are individual designs with complex roof forms, extensive and elaborate verandahs. Non-residential uses exist along Canning Highway together with some commercial facilities on the western corners of Petra Street that are essentially extensions of the Petra Street District Centre.	The precinct is predominantly single residential, although about a third of residential lots include a second dwelling (new dwelling to the rear of existing houses) or new duplex development. Non-residential uses exist along Canning Highway together with some commercial facilities on the western corners of Petra Street that are essentially extensions of the Petra Street District Centre. The majority of residential buildings are pre-World War II on lots of about 1000m², with wide frontages of approximately 20m. Houses are uniformly set back a generous distance from the front boundary and most are single storey, although there are some isolated second storey extensions. Most of the old homes are well maintained, and have been renovated or restored. Streetscapes are generally attractive with narrow road carriageways flanked by wide, well maintained verges and front gardens. Street trees are mature and regularly placed, which increase the attractiveness of the area.	Predominantly coded R12.5 east of Hamilton Street, however, R20 west of Hamilton Street (closer to the Town Centre). Split coding along Canning Highway allows density up to R40 in certain circumstances. An R 40 code applies to the land within the Petra Street District Centre and R15 applies to the former Woodside Hospital site. Actual density within the R12.5 area is slightly higher (around R15). The Canning Highway split coded areas display inconsistent densities. A three storey unit development on the corner of Moss Street exceeds the R40 density; two separate townhouse developments on the corner of Fortescue Street and Irwin Street are developed according to the R40 density; and
		Some subdivision apparent along Marmion Street (east of the oval) and Petra Street.	other development is generally single residential (consistent with the R12.5 and R20 codes).
Riverside Precinct	By 1913, there were subdivisions along the river around Putney and Bellevue Streets (no longer in existence) and Hillside, Surbiton and Bolton (previously called Hill) Streets, with scattered buildings around Pier Street. Blocks were large by comparison with Plympton. By 1915, a fairly dense group of houses filled out the area - large houses on the hilltop streets, smaller ones along Preston Point Road and some tiny huts along the riverbank, with Castlemain Brewery at the base of Putney Street. Many of the large hilltop houses remain and although much altered and added to, represent a dense pocket of original fabric with a unique and particular character. The single residential pocket on the hillside is on the highest part of the precinct.	There are two main pockets of single residential, on Pier Street and the other on the hillside, centred on Angwin and Bolton Streets. Apartment buildings and townhouses are located between these along Preston Point Road and on Canning Highway, although some single houses also remain along these streets. The river and foreshore are major components near the precinct including the Dome Café and a number of parks such as Merv Cowan, Niergarup and Gourley Park.	There are two pockets of R12.5 coded properties coded R12.5 in the precinct with the remaining land coded R30. Split coding along Canning Highway allows density up to R40 in certain circumstances. Single residential housing is reflective of the R12.5 density coded areas. An exception to this is a four storey apartment building at 9
		The streetscape is unique due to its heritage and topography. The streets are narrow with few street trees, narrow verges and bitumen footpaths. Lot sizes are irregular and setbacks are designed to take advantage of views. A number of garages are built up to the street boundary and there are limestone cuttings and paths that contribute to a more intimate scale in these short and curving streets. Buildings range from one to three storeys, mostly built to take advantage of views. A nine storey apartment building (Harbour Views) on the corner of Canning Highway and Angwin Street is the only building of such a height.	Preston Point Road (Preston Heights). The R30 areas comprise of townhouses and apartment complexes, generally reflective of this code. The R12.5/40 split coded area along Canning Highway includes the Harbour Views nine storey apartment building that is more closely related to a R60-80 density code, together with townhouse units (similar to R40 density) and three single residential properties (similar to R12.5 density).

Precinct	Character and Historical Context	Lot Sizes and Streetscape	Actual Density
Richmond Precinct	Development in this area began in the late 1890s with some large houses on large lots along Preston Point and Richmond Roads extending north up the hill in the period between 1910 and 1920. The houses were of individual design, Edwardian in character with extensive verandahs. Many of the original houses remain today. A cluster of smaller houses filled out the scarp between Preston Point Road and Alexandra Road. These were two and four room cottages more like those in Plympton. Richmond School opened to 85 children on 31 March 1921. The precinct has a range of housing types. Single housing dominates west of Alexandra Road and north of Wolsely Road with a number of townhouses, villa units and duplexes scattered through the area. The street block south of Wolsely Road and east of Alexandra Road includes a high proportion of 2-3 storey flats and large villa unit developments. Single houses remain mainly on Wolsely Road and the southern half of the street block. The southern half of the precinct has a concentration of pre-war housing, and recent post 1960 residential units/flats. There are distinct groups of pre-1913 homes at the Canning Highway end of Staton, Alexandra and Osborne Roads. Most are picturesque Edwardian bungalows although several are small, Victorian cottages. Also along and near Preston Point Road, there are substantial homes on large blocks remaining from the turn of the 18th/19th century.	Original lot sizes retained, generally 20m wide. Between Alexandra and Osborne Roads, lots 100m deep. Original lots have been amalgamated to form lots in excess of 4000m² and developed with 2-3 storey multiple dwellings. Elsewhere the depth of lots is irregular, although a high proportion are in the order of 50m (i.e. about 1000m² lots). Some infill housing has occurred recently producing smaller lots. Streetscapes vary throughout the precinct. Some streets are narrow with little or no verge and few or irregularly spaced street trees. Buildings are generally situated close to the front boundary along Staton and Alexandra Roads, and Salvado and Parry Avenues. This creates an intimate urban environment. Elsewhere setbacks vary but intimacy is retained along other narrow streets.	Other than those lots fronting Canning Highway that have a split code to allow density up to R40 in certain circumstances, all of the suburban blocks in the precinct are currently coded either R12.5 or R17.5. The area bound by Canning Highway, Osborne, Wolsely and Alexandra Roads has the highest density in the precinct at more than 25 dwellings per net hectare. This area is unique as it is characterised by very large lots, some in excess of 2,000m² in size. Many of the lots in this area have been developed for apartments and town houses, while others contain heritage dwellings.
Richmond Hill Precinct	The area along the riverfront had a scattering of houses by 1913, with some large individual houses along the scarp as far as Pier Street, and a small group of cottages on Fraser Street. It was otherwise undeveloped until the 1930s and only fully developed in the 1950s. A group of interwar California Bungalows were built between View Terrace and Preston Point Road. Other developments included a variety of styles comprising of timber and masonry construction with face brick finishes, weatherboard and asbestos cladding. A shortage of building materials following the Depression and World War II led to a simplified building style and Post War austerity housing. Predominantly single residential with some unit developments in the southwest corner and the occasional second dwelling. Large homes built in the 1950s take advantage of river views. Pre-World War II housing mostly located east of Gordon Street and on the western ends of View and Pier Streets. A combination of single and double storeys with townhouse unit development on Pier/Parker streets partly three storeys in height and two x three storey blocks of units near the corner of Pier Street and Preston Point Road.	Lots bound by Preston Point Road, Parker, Woodhouse and Pier Streets have been subdivided or redeveloped for higher density and are largely unaffected by heritage dwellings. Lots bounded by Preston Point Road, Petra and Woodhouse Streets are generally 700m² in size. The precinct is dominated by large homes that take advantage of river views. The precinct also has some renovated pre-World War II housing (around 1930s), mostly located east of Gordon Street and on the western ends of View and Pier Streets. Buildings are a combination of single and double storey, and two unit development sites are located on Pier and Parker streets up to three storeys in height. There are generous front setbacks with well-maintained gardens that flow into the verge. Road carriageways are narrow. These features blend together to provide attractive suburban streetscapes although there is an apparent lack of street trees and the angled intersections create extensive areas of bitumen. Two places of local significance include Penshurst House (a two storey Victorian residence prominently sited on Richmond Hill) and Ferniehurst House (a single storey Federation bungalow situated on a sloping site with extensive lawns and mature trees). The topography of the precinct is a prominent feature. Limestone cliffs feature in Pier, View and Easton Streets. Richmond Hill on the southern boundary is the highest point of the Town occupied by a Water Corporation storage tower. Views enjoyed in most directions (to the river and across the Town) from most parts of the precinct from individual sites and as open vistas along most roads.	Predominantly has density code of R17.5 with some R12.5 coded properties generally along Pier Street and along View Terrace only for that portion east of Gordon Street. Some isolated R30 properties on Pier Street and Preston Point Road. The area generally bound by Preston Point Road, Petra and Woodhouse Streets is generally homogenous with an actual density of around R15. The area has been subject to some redevelopment and subdivision, particularly south of View Terrace. The lots between Pier and Fraser Streets represent a transitional area between the Richmond and Richmond Hill Precincts with an actual density generally higher than the R12.5 coding.

With regard to commercial areas, there are four distinct areas of character and design described as follows:

Overview of Commercial Precincts

		Character and Design
1.	Town Centre	Historically located at and along the juncture of two major roads. In 1985, Stirling Highway was extended to High Street which effectively divided the eastern and western precincts of the Town of East Fremantle and the Town Centre.
		A small group of civic buildings remains at the junction of Stirling Highway and Canning Highway set in green space and car park surrounds. These include the town hall building (two storeys and has been recently renovated and houses Council's administration offices), the old post office (two storeys) and old police station (single storey), together with a relocated residence known as Dovenby House (single storey).
		The core area of the Town Centre on the southern side of Canning Highway comprises of a single level supermarket and shop tenancies with associated parking expanses, some lower level commercial premises with residential above (two storey). There is a general lack of cohesion in materials, finishes and quality throughout the Town Centre with lack of a defined central location for civic functions (no "urban square"). The rear of some commercial tenancies are visible to the public. Some illegible spaces, limited opportunity for passive surveillance and uncoordinated repairs means the area is generally regarded as unattractive and outdated. Recent development, however, includes high density housing and mixed uses with a pedestrian plaza (Richmond Quarter at seven storeys). This is seen as a benefit to the Town and is expected to trigger further redevelopment of the Town Centre setting the standard for future public works.
		Properties to the north are separated from the core by Canning Highway, have irregular setbacks and are not generally not conducive to active streetscape or passive surveillance. A mix of uses include a Roman Catholic church, single residence, indoor swimming pool and a group of single storey shopfront tenancies. Aside from the pool, these buildings are heritage listed.
2.	Mixed Use – George Street	George Street and the streets that intersect it are characterised by period brick built homes and traditional timber framed workers' cottages. It is 'bookended' by the Royal George Hotel (two storeys) and Brush factory buildings (three-four storeys) to the east and Harbour Heights apartment building (nine storeys) to the west.
		The retained heritage is a key reason for the George Street precinct's popularity. The area has evolved into a charming streetscape whereby many owners have sought to engage more effectively with the street and installed a range of artistic and high quality architectural inventions. The George Street precinct has experienced transition from a typical residential street to a 'mainstreet' archetype.
		Rich architectural heritage contributes to a well-loved, boutique shopping destination popular for its eclectic mix of retailers. A commercial desire to attract a broader consumer base and encourage increased business, however, it is offset by concerns for losing its unique ambiance. On street parking is prevalent in the area. Although it is important to maintain an individual identity for George Street as distinct from the Town Centre, a strong physical connection/visual cohesion with the Town Centre is noticeably lacking.
3.	Mixed Use - Canning Highway	Comprises of some older style commercial development with residential development between premises, rather than mixed use on the same site. Mostly low level buildings (up to two storeys) with the Tradewinds Hotel at three storeys. Some off street parking is available. Views from the Mixed Use Canning Highway area include the cranes at Fremantle Harbour and vistas across the river to North Fremantle.
		Scattered along Canning Highway are a number of heritage buildings that significantly enhance the townscape, contributing to a distinct sense of identity and recognition of the Town's past. Whilst the pressure to increase densities continue, the preservation and promotion of the remaining streetscape elements and facades is of considerable importance.
4.	Special Business	Located on the western side of the Canning Highway and Petra Street intersection. Comprises of single level simple architectural style commercial premises. Off street parking on the southern side of Canning Highway visually dominates part of the site. Some heritage buildings on the northern side of Canning Highway. Generally lacks cohesive style and streetscape appeal.
		The opposite corners are within the City of Melville and comprise of a supermarket, commercial tenancies and carparks fronting Canning Highway and part of Petra Street.

Importance of Character to the Community

The Town of East Fremantle carried out its biennial Community Perceptions Survey in 2017 which identified seven priority areas on which to focus. One of these included maintaining and protecting the unique character and quality of East Fremantle. Residents suggested avoiding planning decisions that drastically alter the area's identity; keeping the overall character of East Fremantle; and keeping subdivisions to a minimum. A Community Scorecard evaluation (MARKYT, 2019) identified the community's priority to enhance and protect the historic qualities of the area and key sites. It was suggested that Council ensure that new developments are in keeping with existing heritage character and identity.

Recent public consultations involving two scheme amendments within the Town have resulted in some further clear messages from residents regarding height and scale. Whilst new development is encouraged, it is critical to ensure that it is of an appropriate height and scale to respect the long standing character and heritage of the area within which it is located. Careful consideration is required to ensure that associated servicing (such as car parking and traffic movements) are also highly scrutinised in their effects on the older established street configurations and capacities.

The Strategic Community Plan 2017-2027 includes the following principle in its vision for an "Inclusive community, balancing growth and lifestyle":

Balanced Growth, Valued Heritage and Unique Places

Our community wants to live in a Town which:

- Has a unique sense of character.
- Balances heritage and charm with growing community and natural environment.
- Offers housing and hospitality options.

Our decisions will contribute to accessible, well-planned built landscapes, which are in balanced with the Town's unique heritage and open spaces.

It is recognised that in order to satisfy community expectations whilst providing for increased dwelling numbers and types, a progressive yet sensitive and innovative approach is required.

Development Guidelines

In addition to *Local Planning Scheme No. 3* provisions and requirements of the *Residential Design Codes*, the Town of East Fremantle has developed and adopted a

set of guidelines to assist in designing development proposals to ensure that the existing, or otherwise desired, character of different parts of the Town is respected and attained.

LPP 3.1.1 - Residential Design Guidelines has a strong heritage and streetscape focus. This policy aims to conserve and protect individual residences of heritage significance and also considers quality creative solutions that enhance the character of the residential precinct as a whole.

LPP 3.1.3 - Town Centre Redevelopment Guidelines includes a concept plan and design guidelines for the Town Centre core area and the Mixed Use land along Canning Highway. Amongst other things, this policy provides guidance in relaxation of scheme provisions for height and scale of developments to encourage redevelopment. Although allowing for building heights and scale in excess of the general scheme requirements, they are reflective of the generally low rise nature of the Town. It is recognised that Town of East Fremantle does not contain a high level activity centre nor a Transit Oriented Development centre (TOD) which is a major consideration in the need (or desire) for additional building heights and scale of a significant nature. Development of other planning tools for guiding future development within the George Street precinct and the Special Business areas may also be beneficial.

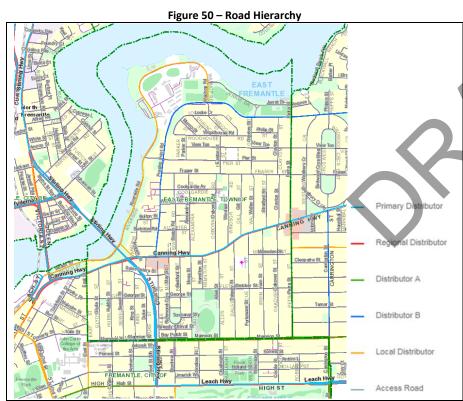
It is also recognised that certain aspects of the Residential Design Guidelines and the Town Centre Redevelopment Guidelines require review. Furthermore, additional development guidelines will be required for future changes resulting from future projects and investigations highlighted within this local planning strategy. Any new and revised guidelines will need to respect, protect and enhance the character and amenity of each residential and commercial precinct area.

The Town Centre and George Street Public Realm Style Guides endorsed by Council in July 2016 establish consistent design themes for the George Street Precinct and the Town Centre. The Town of East Fremantle, however, is in the process of preparing a comprehensive Urban Streetscape and Public Realm Style Guide to guide future development across the entire Town (which will incorporate the Town Centre and George Street Public Realm Style Guides). The guide will establish an appropriate style for the Town's streetscape and public realm that captures its unique quality and will be influenced by, and respond to, the Town's culture, heritage, character, ecology and environment.

Traffic and Transport

Road Network

The WAPC has adopted a road classification system within urban areas as described in DC 1.4 includes Primary Distributors, District Distributors, Local Distributors and Access Roads. The Primary Distributor network is managed by Main Roads Western Australia (MRWA) and provides for major regional and inter-regional traffic movement carrying large volumes of generally fast moving traffic. District Distributors 'A' and 'B' carry traffic between industrial, commercial and residential areas and typically connect to the Primary Distributor network. This network is managed by Local Government. Local Distributors carry traffic within an urban cell while Access Roads allow for direct property access.



Source: https://maps.slip.wa.gov.au/landgate/landinfowa/

Based on this road hierarchy, the following applies to the road network within the Town of East Fremantle (refer to Figure 50):

- Canning Highway Primary Distributor (less than 40,000 vehicles per day)
- Stirling Highway Primary Distributor (less than 40,000 vehicles per day)
- Preston Point Road Distributor B
- Marmion Street (between Stirling Highway and Petra Street) Distributor A
- Riverside Road/Wauhop Road Local Distributor
- Andrews Road Local Distributor
- East Street Local Distributor
- Petra Street Local Distributor
- All other streets/roads Access Roads.

East Fremantle is divided by Stirling and Canning Highways, which are also both classified as regional roads in the MRS.

Canning Highway

Canning Highway extends eastwards from Fremantle (to become Great Eastern Highway in the vicinity of Victoria Park) traversing the Town of East Fremantle between East Street and Petra Street.

The reservation for Canning Highway from Osborne Road/Allen Street to Petra Street has a nominal 80m width reservation and a significant impact on properties, buildings and parking facilities. Further west, between Osborne Road/Allen Street and East Street is nominally 20m in width with minimum impact on abutting properties.

Canning Highway is within the Other Regional Road (ORR) reservation from East Street to Stirling Highway and a Primary Regional Road (PRR) reservation from Stirling Highway to Petra Street (and beyond). These reserves constrain development of 71 affected properties within the Town in terms of land requirement and/or control of vehicular access, which is a consideration for future development along the Canning Highway corridor.

In December 2016, the WAPC advised of its consideration for an amendment to the MRS to slightly increase the Canning Highway reservation requirement between East Street and Osborne Road/Allen Street and between Petra Street and Antony Street (Melville), and significantly reduce the reservation requirement between Osborne Road/Allen Street and Petra Street. In addition, the amendment will change part of the highway reservation shown as Other Regional Road to PRR (between Beach Street and

Sewell Street), to provide consistency in its MRS zoning and function and management responsibility.

The amendment proposal is based on a design concept to provide a four lane divided road along the whole length of Canning Highway, signalised intersection at East Street, bus queue jumping facilities at the Stirling Highway and Petra Street intersections; cycling facilities between May Street and Stirling Highway; and an access strategy to assist and/or restrict right turn movements at some intersections.

The MRS amendment proposal would affect a further 22 properties, however, it is important to note that some opportunity would also be provided for potential future development with the partially or full release of 50 properties from the MRS reservation requirement (amounting to almost 4 hectares of land area).

This LPS would not support any widening of Canning Highway (particularly between East and Allen Streets) that would impact on significant homesteads, the historic Town Hall, old police station and post office buildings or prejudice development options for the Town Centre.

The intentions and progress of the proposed MRS amendment is currently unknown.

Stirling Highway

Parts of Stirling Highway are elevated No properties within the Town of East Fremantle have direct access to Stirling Highway and road access is only available from Marmion Street and Canning Highway. Vehicular (St Peters Road) and pedestrian (George Street) underpasses are provided to accommodate local vehicular and pedestrian traffic.

Stirling Highway restricts east-west pedestrian movement and traffic flow within the south west section of the Town. A pedestrian underpass serves to connect the George Street Precinct with the Town Centre. The underpass involves changes in grades and connects the residential areas to the east of the Highway with the historic 'main street' located to the west. St Peters Road forms an underpass for both vehicles and pedestrians and connects residents to the west of the highway with the Town Centre. The two underpasses appear to work independently and their effectiveness in connecting the historic George Street with the Town Centre is somewhat in dispute.

Stirling Highway is a well-established freight route to the Fremantle Port. The Westport Port and Environs Strategy is currently planning for development and growth of the

Inner Harbour at Fremantle and the Outer Harbour at Kwinana, whilst also examining how the Port of Bunbury may contribute to the overall freight task. The Westport project is investigating the requirement for supporting rail and road networks. It identifies where intermodal terminals may be needed and how adjacent land may be best utilised.

The Westport strategy will be an integrated plan to meet the freight and logistic needs for Perth and the South West for the next 50 to 100 years. As part of the strategy development, a number of options have been developed and are going through a process of assessment and consultation. Depending on the option ultimately selected by State Government, there could be varying implications and consequences to the Stirling Highway section of the freight link that need to be considered in the light of impacts on the Town of East Fremantle.

MRWA's long term plans for Stirling Bridge include additional lanes (total of three in both directions).

Local Roads

In addition to the regional road network, there are four local roads that serve as neighbourhood connector roads (*Liveable Neighbourhoods* defines neighbourhood connector roads as streets with mostly residential frontage that typically provide the low order sub-arterial network and serve to link neighbourhoods and activity centres):

- East Street:
- Marmion Street;
- Preston Point Road; and
- Petra Street.

East Street is a north-south road located on the western boundary of the Town. The street is a traditional 20m wide divided single lane road with on-street parking bays. The road provides convenient access particularly to and from the Plympton Precinct intersecting with Canning Highway, Marmion Street and High Street.

Marmion Street, located on the southern boundary of the Town, is a major local road that provides east-west access. Marmion Street supports the regional road network (Canning Highway and High Street/Leach Highway) by providing additional east-west capacity. The road is a 30m wide divided single lane carriageway with on-street parking and cycle lanes on both sides of the road. The road is as an attractive boulevard with a 6m wide median lined with mature trees.

Petra Street located on the eastern boundary of the Town also serves as a north-south feeder road into the Petra Street District Centre. Petra Street is 20m wide, with undivided single carriageways and cycle lanes on either sides of the road.

Preston Point Road is a through road located between Canning Highway and the Swan River and terminating in the City of Melville. This road provides convenient access for residents located north of Canning Highway and also provides access to the River. The road is a 20m wide divided single carriageway road. Sections of the road closest to Canning Highway have on-street car parking bays, while a small section east and west of Wauhop Road also includes a separate service road for residential properties.

Traffic and Movement

Figure 51 gives an indication of traffic flow within and through the Town of East Fremantle. Figures depicting estimated vehicles per day (VPD) have been sourced from the Transport Assessment for the Leeuwin Vision Plan and figures depicting average VPD have been sourced from MRWA data provided on its website.

Canning and Stirling Highways (and Marmion Street to a lesser extent) serve a regional movement function. Feedback from Council's Community Scorecard evaluation (MARKYT, 2019) and other community engagement indicates that the community would like Council to focus on improving traffic flow and congestion along Canning and Stirling Highways and deter 'rat running' and speeding through residential streets.

Traffic generally enters the Town of East Fremantle from the east or west via Canning Highway or Marmion Street and from the north and south via Stirling Highway and East Street. Canning Highway, Stirling Highway and Marmion Street generally split the local road network into three distinct areas:

- North (of Canning Highway);
- 2. South (of Canning Highway and east of Stirling Highway); and
- West (of Stirling Highway).

For the most part, the road systems within each separated area operate and function well. Some issues, however, have emerged in the western section of the Town where on-street parking has been identified as a concern in regard to lines of vision at intersections and driveways, lack of general availability in the George Street Precinct and hindrance to traffic movement in narrow streets. Furthermore, traffic movement between the west and south-east sections of the Town is not straight forward.

No speed limits within the Town exceed 60 kilometres an hour (km/hr). A limit of 50km/hr applies to the majority of streets with the exception of:

- Canning Highway and Stirling Highway (60km/hr);
- George Street between East and Duke Streets (40km/hr);
- Portions of East Street and Marmion Street (40km/hr during school hours); and
- Portions of Osborne, Wolsely and Windsor Roads and Coolgardie Avenue (40km/hr during school hours).

Figure 51 - Traffic volume – Two-way Vehicles per Day (VPD) showing data collection year

	Estimated VPD Jacobs Report	Average VPD (Mon-Fri) MRWA		
Canning Highway	-	20, 202 (West of Carrington Street – 2018/19)* 24,037 (West of Preston Point Road – 2018/19) 11,982 (East of East Street – 2018/19) 13,485 (East of Queen Victoria Street – 2019/19)*		
Stirling Highway	-	29,173 (North of Marmion Street – 2018/19) 17.5% trucks 25,504 (North of High Street – 2018/19)* 10.1% trucks		
Preston Point Road	6,000 – 9,000 (2016)	5,031 (North of Canning Highway – 2018/19)		
Petra Street	4,000 (2016)	-		
Riverside Road	2,000 – 6,000 (2016)	6,414 (2012/13)		
Marmion Street	-	14,137 (West of Carrington Street – 2018/19)* 7.3% trucks 5,638 (West of Stirling Highway – 2018/19) 6.3% trucks 10,990 (East of Stirling Highway – 2018/19) 6.5% trucks 4,848 (East of East Street – 2013/14)		
East Street	-	7,327 (South of Marmion Street 2013/14)* 3,363 (South of Canning Highway – 2018/19) 8.2% trucks 3,187 (North of Canning Highway – 2018/19) 7.8% trucks		

*Just outside of ToEF boundary

Source: Leeuwin Vision Plan Transport Assessment, Jacobs Group, 2016 and Main Road Western

Australia website https://trafficmap.mainroads.wa.gov.au/map

Figure 52 shows the possible traffic movements to and from Canning Highway, Stirling Highway, Marmion Street and East Street.

Figure 52 – Access to/from Main Access Roads Access to Canning Highway and Marmion Street Left and right hand Access from Canning Highway and Marmion Street 4 way intersection Access from east and west 3 way intersection Access from west only No access Access from east only

Some general comments are outlined as follows:

movement across **Canning Highway**

Side streets that access Canning Highway are staggered to avoid North - South four way intersections. Traffic can only directly travel between the north and south across Canning Highway at a controlled signalised intersection at Petra Street, a controlled signalised intersection at Stirling Highway and an unsignalised intersection at East Street. All other traffic movements across Canning Highway occur via left and then right hand turns, or vice versa. Traffic lights at Preston Point Road also assist with the northsouth connection.

> Right hand turns are not possible between Canning Highway and some of the adjacent side streets. Traffic median islands constructed on Canning Highway prevent access to Angwin Street, Alexandra Road and Osborne Road unless travelling from the west; and Allen Street, Moss Street and Sewell Street unless travelling from the east. Correspondingly, it is only possible to make a left hand turn from these streets on to Canning Highway. Access to and from Silas Street is not possible at all which is closed to traffic at the Canning Highway end.

West movement across **Stirling Highway**

The only direct vehicular access available from the western side of Stirling Highway to the eastern side is via an underpass located at St Peters Road. Access to the east can be gained indirectly from Canning Highway (via East Street) and Marmion Street on the southern border (via all side streets except Duke Street).

Access to/from **Marmion Street**

Traffic entering or leaving the Town of East Fremantle via Marmion Street can do so from all side streets on the northern side, with the exception of Duke Street, which is a cul-de-sac.

Right hand turns are not possible between Marmion Street and all of the adjacent side streets on the northern side. Traffic median islands constructed on Marmion Street prevent access to Fortescue Street and Irwin Street unless travelling from the west. Correspondingly, it is only possible to make a left hand turn from these streets on to Marmion Street (to head east only).

Access to/from Stirling Highway

Access to and from Stirling Highway is restricted to the signalised intersections at Canning Highway and Marmion Street.

There are no current traffic reports for the entire Town of East Fremantle, however, the Town has initiated an Integrated Traffic Management and Movement Strategy (to be completed before the end of 2019). A traffic management plan and parking management plan are being developed as part of this.

A Transport Assessment was conducted by Jacobs Group (Australia) Pty Limited in November 2016 as part of the Leeuwin Vision Plan and the George Street Access and Parking Management Plan was developed by GHD Pty Ltd in June 2013. These will be reviewed/form part of the Integrated Traffic Management and Movement Strategy as applicable.

Preliminary findings from the draft Integrated Traffic Management and Movement Study indicate that:

- The current road hierarchy generally aligned with its current intended function.
- The intersections of Canning Highway/Stirling Highway; Canning Highway/Preston Point Road; Canning Highway/Petra Street; Marmion Street/Stirling Highway; and Canning Highway/East Street currently operate near or at practical capacity and as a result of traffic growth are likely to experience congestion issues in the future, requiring upgrades.
- Significant developments (such as Roofing 2000 and Royal George Hotel sites) are likely to generate moderate impact traffic volumes and development approvals should require traffic impact assessments, parking management plans and green travel plans.
- Future traffic volumes generated by the Leeuwin Barracks redevelopment (based on the endorsed Vision Plan) is likely to affect the Canning Highway/Stirling Highway, Canning Highway/Preston Point Road and Pier Street/Preston Point Road intersections.
- An increase in traffic volumes is expected along Preston Point Road as a result of regional traffic using Preston Point Road to bypass Canning Highway.

Public Transport

The Public Transit Authority (PTA) operates five public bus routes that service the Town of East Fremantle as shown in Figure 53 These include:

 Route 148 – Operates between Fremantle Station and Applecross, via Bicton and Attadale. Within the Town of East Fremantle, it travels along Canning Highway and Preston Point Road.

- Route 111 Operates between Fremantle Station and Perth Elizabeth Quay Bus Station, via Canning Highway, the Canning Bridge Station and Kwinana Freeway. Within the Town of East Fremantle, it travels along Canning Highway.
- Route 910 Between Fremantle Station and Perth Busport, via Canning Highway, Victoria Park Transfer Station and the Causeway. Within the Town of East Fremantle, it travels along Canning Highway. This is also known as a as 'high frequency' route as it runs at least every 15 minutes between 7am and 7pm Monday to Friday; every 15 minutes between 8am and 7pm on Saturdays; and every 15 minutes between 9am and 7pm on Sundays.
- Route 501 Between Fremantle Station and Bull Creek Station, via Marmion Street, Booragoon Bus Station, Riseley Street and Leach Highway. Within the Town of East Fremantle, it travels along Marmion Street.



Source: https://www.transperth.wa.gov.au/Portals/0/Asset/Documents/Journey%20Planner/Network%20Maps/Map5.pdf and https://maps.slip.wa.gov.au/landgate/landinfowa/

In addition to providing transport within the Town, these services provide links to areas outside of the Town and to transfer stations such as Fremantle Station, Perth Busport, Canning Bridge Station, Booragoon Bus Station and Bull Creek. All of these stations provide easy access to other metropolitan bus and train networks, with the exception of Booragoon Bus Station.

There are no train stations within the Town of East Fremantle (the closest being Fremantle Station and North Fremantle Station both approximately 1.5 km from the closest Town boundary). The Department of Transport is currently investigating potential light rail routes within the region, however, it is not anticipated that alignments would traverse the Town of East Fremantle.

A Traffic Management and Movement Plan is to be developed as part of the Integrated Traffic Management and Movement Strategy (initiated by the Town and to be completed before the end of 2019). In relation to public transport, preliminary findings from this study indicate that:

- The PTA's long term plans include a future bus station at Canning Bridge that
 would act as a feeder eservice for commuters to then switch to the train to ease
 congestion on the freeway and allow for the removal of bus lanes. This is likely to
 result in increased bus service frequencies that operate through the Town.
- The PTA intends to increase the frequencies and operating hours of Route 910 regardless of the new bus station.
- Route 111 primarily operates as a peak hour service to supplement Route 910 and is likely to be discontinued if the Canning Bridge station is developed and services for Route 910 increase in its place.
- Route 148 and 158 are likely to be modified to take passengers directly to Canning Bridge from Attadale and avoid the Applecross deviation. Consideration may be required for changes to the route alignment to service the Leeuwin Barracks redevelopment in the future.
- Route 501 will potentially become a high frequency route with increased frequency and number of services.

Cycle Routes and Pedestrian Facilities

The *Town of East Fremantle Bike Plan 2003* has been substantially implemented. Dedicated cycling facilities are provided along Petra and Marmion Streets which, together with multiple dedicated cycle use paths available along the Swan River, form part of the regional cycling network (refer to Figure – 54). The routes provide

opportunities for both commuter and recreational cycle travel and are well established.

The Town's traditional grid network of streets and footpaths on both sides of all roads provides convenient pedestrian access throughout the area. In addition, the pedestrian network located adjacent to the Swan River provides an attractive and well-used leisure route. Several streets have three footpaths with some intended to be used as cycleways, however, this did not formally eventuate.

Notwithstanding existing facility provision, the *Town of East Fremantle Recreation and Community Facility Strategy 2016* identified the need to prepare a Cycling and Walking Plan which should include:

- Three existing walks River Walk, Heritage Trail and Niergarup Track;
- Longer trails linking with trails originating in the City of Fremantle and City of Melville:
- A linear trail along the foreshore linking the Port of Fremantle with Point Walter;
- On and off road trails linking residential areas with recreation and sport facilities, schools, shops and other community facilities;
- Shorter, local trails through major recreation and sport hubs;
- Trails through the Leeuwin Barracks site linking to the foreshore and other open space areas;
- On road bike paths in 'safe' residential streets; and
- Safe crossing points across Canning Highway and Stirling Highway.

Feedback from Council's Community Scorecard evaluation (MARKYT, 2019) and other community engagement indicates that the community would like Council to prioritise improvements with footpaths and cycleways with improved infrastructure and connectivity.

As part of the Integrated Traffic Management and Movement Strategy (initiated by the Town and to be completed before the end of 2019) an active transport plan is being developed for the entire Town. Preliminary findings from this study indicate that:

- A number of gaps in the cycling network leads to poor cycling connectivity;
- Safety is a key issue for cyclists especially when sharing the road with cars;
- Walking routes are generally well defined, yet improvements are required near key activity areas; and
- Canning and Stirling Highways are significant barriers for pedestrians and cyclists as there are few opportunities to cross safely.

The Department of Transport is also currently reviewing the Long Term Cycle Network (LTCN) for Perth and Peel and is closely liaising with relevant local governments (including the Town of East Fremantle) in this regard. The outcome of the Town's Active Transport Plan will inform the LTCN of Council's aspirations. It is intended to improve links to activity modes such as commercial, recreation and community hubs, including the Richmond Primary School

Figure 54 - Regional Cycling Network (Town of East Fremantle) _egend Principal Shared Path (PSP) High Quality Shared Path Other Shared Path (Shared by Pedestrians & Cyclists) Good Road Riding Environment Perth Bicycle Network (PBN) - Continuous Signed Routes Gradient Arrow Bicycle Lanes or Sealed Shoulder Either Side Contra Flow Bike Lane

Source: Perth, Fremantle and Stirling Comprehensive Bike Map, Department of Transport website - https://www.transport.wa.gov.au/mediaFiles/active-transport/at_CYC_map_PerthFremantle-Stirling.pdf

Preliminary recommendations include:

- Continuing the cycle route along Wauhop Road and east along Preston Point Road;
- Extending the route all the way along Petra Street; and
- Providing better links to key activity nodes including Richmond Primary School, the riverfront recreation and sporting areas, East Fremantle Oval precinct, the Town Centre, George Street centre and Petra Street centre.



Infrastructure Services

Solid Waste

The South Metropolitan Regional Council provides the waste and recycling facility for the Town of East Fremantle. Putrescible waste and recycling bin collection takes place weekly for residential and commercial properties. Residents are also issued with one free tip pass per household, per year, for use at the Henderson Waste Facility located in the City of Cockburn. The Town of East Fremantle has recently partnered with the City of Fremantle to allow East Fremantle residents to use the City's Recycling Centre free of charge. This is likely to reduce the need to access the Henderson Waste Facility in the future. In July 2019, the Town commenced a third bin system for Food Organics Garden Organics (FOGO). A junk and whitegoods/metals verge collection occurs once a year and a greenwaste verge collection takes place three times a year.

Water Supply

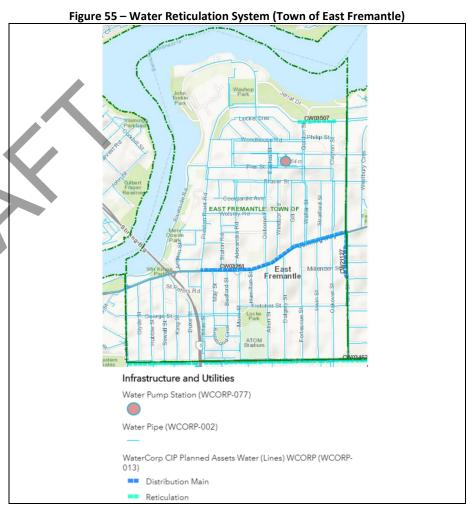
The Water Corporation owns and maintains the water reticulation system within the Town of East Fremantle as shown in Figure 55.

The Town and surrounding suburbs are provided with potable water from the Water Corporation's West Melville Gravity Water Supply Zone. Water is supplied under gravity from the Melville Reservoir, which is located in Melville approximately 2km to the east at an elevation of around 60mAHD.

Some of the land to the north of Canning Highway, around the Richmond and Richmond Hill Precincts, is elevated above the height of the Melville Reservoir and is therefore serviced via a separate high level water scheme (tanks and pump infrastructure located on the top of Richmond Hill). The Richmond Hill High Level Water Supply Zone covers an area of approximately 70ha and currently supplies around 520 residences. The amount of reserve water storage in the elevated supply tank is limited and the system is relatively sensitive to any large or unplanned increases in development and demand. The Water Corporation currently has no long term plans to build more elevated storage tanks at the tank site.

The Water Corporation has advised that the established networks of water reticulation mains are likely to have some inherent capacity to service a small to moderate amount of additional subdivision and development, however, it is not possible to determine the exact extent of any spare capacity as the system varies in age, pipe size and development demand.

The Water Corporation will need to test the implications of any density code increases or zoning changes arising from the local planning strategy against the capacity of the elevated water scheme. Provided that any development increases in the high level water zone are kept to a minimum, the system is likely to cope without the need for any upgrades.



Source: https://maps.slip.wa.gov.au/landgate/landinfowa/

Sewerage

The Water Corporation owns and maintains the sewerage reticulation system within the Town of East Fremantle as shown in Figure 56.

The Town is located within the Water Corporation's Fremantle Sewer District whereby wastewater generated by residences and businesses in the area flows under gravity generally westwards into the Fremantle Main Sewer, or in a northerly or northwesterly direction into the catchments of the Bruce Street, Riverside Drive or Preston Point wastewater pump stations along the Swan River. These pump stations pump their wastewater westwards into the Fremantle Main Sewer.

The Water Corporation has advised that it will need to test the implications of any density code increases or zoning changes arising from the local planning strategy against the modelled capacity of the Fremantle sewerage network and the receiving pump stations.

Modest increases in development spread over a large network are unlikely to require system upgrades, however, it is impossible to rule out the need for some localised upgrades to the sewerage network that may arise from high density development proposals. Individual density developments may give rise to need to protect, relocate or upgrade a section of gravity sewer.

The Water Corporation's current (2010) wastewater planning has assumed that the Leeuwin Barracks would remain. The more recent proposal for high density redevelopment of this land will require the Water Corporation to determine how best to service the development and to establish any downstream impacts on the pump stations and sewers and a wastewater and water servicing strategy for this area will need to be prepared in conjunction with the land developer.

Water Corporation odour buffers around existing and future sewerage pumping stations will impact on land use compatibility and mitigation measures.



Source: https://maps.slip.wa.gov.au/landgate/landinfowa/

Drainage

Local governments plan, construct, operate and maintain local drainage networks, while the Water Corporation designs, constructs, operates and maintains main arterial drainage networks to protect properties from flooding. The DWER provides the overall strategic planning and regulatory functions.

The drainage system within the Town appears to be performing well and there are no major projects identified. The *East Fremantle Foreshore Master Plan* highlights where additional biofilters could be incorporated into the stormwater system and also recommends that an Urban Water Management Plan (UWMP) be undertaken for the network that outfalls into the Swan River.

Drainage collection areas are located at two surface stormwater drainage catchment reserves controlled by the Town, one at Raceway Road and one on Stratford Street. These are shown as drainage reserves within *Local Planning Scheme No. 3*.

Gas

The Perth Metropolitan Region is within the Mid West and South West gas distribution system. Western Australians have multiple choices of gas provider including Alinta Energy, Kleenheat and AGL. The gas pipeline network, however, is provided by Atco. Reticulated gas is provided throughout the Town of East Fremantle, which is described as medium-low to medium pressure gas service.

National Broadband Network

Services provided over the National Broadband Network (NBN) will replace telephone and internet services provided over most of the existing landline networks, including copper and the majority of hybrid fibre-coaxial (HFC) networks within the fixed line footprint. HFC is a telecommunications industry term for a broadband network that combines optical fibre and coaxial cable. The Town of East Fremantle is covered by the Palmyra NBN rollout regions — 6PMY-21 and 6PMY-20. The new build was completed in early December 2017 and fibre to the node (FTTN) service is now available to the entire Town of East Fremantle. All NBN services are fixed line, there are no fixed wireless connections.

Electricity

The South West interconnected System (SWIS) is the primary electricity grid in WA, supplying the bulk of the South-West of the State. Energy production within the SWIS is derived predominately from non-renewable fuels such as black coal, natural gas and oil, however, renewable energy sources such as solar, wind, hydro and biomass are expected to have an increased role over time.

The WA energy market has not been fully deregulated and two companies, Synergy and Horizon Power, sell most of WA's domestic electricity. Synergy is the energy provider for customers within the SWIS and generates its own power from a range of sources, including renewables.

Western Power provides the transmission and distribution network for energy supply within WA. The Western Power Network Capacity (Figure 57 over page) shows that the Town of East Fremantle is serviced by:

- A series of high voltage distribution lines (HVOH 3Ph and HVUG 3Ph) predominantly located within local road reserves;
- A 66 kV transmission line from Pole 14 (corner of Marmion Street and Hubble Street) to Pole 17 (corner Marmion Street and East Street) located within Crown Land (road reserve);and
- A 132 kV transmission line from Pole 51 (Swan River to Town of Mosman Park boundary) to Pole 19 (corner Marmion Street to City of Fremantle boundary) located within Crown Land (road reserve).

All powerlines are located underground with the exception of the 132kV transmission line (note that this traverses the Leeuwin Barracks site).

The 66 kV line extends from the Edmund Street Substation – North Fremantle (E-NF 71) and the 132 kV line extends from Amherst Street Substation – Cottesloe (AMT – CTE 81). There are no substations located within the Town of East Fremantle boundaries. Based on Western Power's Long-term Network Development Plans and the Department of Planning, Lands and Heritage's sub-regional structural planning process, no substation investigation sites have been identified within the Town of East Fremantle.



Source: https://westernpower.com.au/technical-information/calculators-tools/network-capacity-mapping-tool/

Where Western Power does not have easements over freehold land, it relies on Restriction Zones under the powers of the *Energy Operators (Powers) Act (1979)* to ensure appropriate development occurs within the vicinity of its assets. The 66 kV transmission line requires a 16m restriction zone and the 132 kV transmission line requires a 20m restriction zone. Restriction zones have been developed based on relevant Australian Standards and occupational health and safety compliance requirements for power lines as follows:

	Clearance (horizontal and vertical from centre line)	
Transmission 66 kV	8.0m	
Transmission 132 kV	10.0m	
Distribution = 33 kV</th <th>3.0m</th>	3.0m	

Western Power's future network augmentation is fundamentally based on increased utilisation of the 132 kV transmission network. Western Power has advised of the following network upgrades, however, the timing, capacity, location and approval of proposed future corridors may be subject to change:

Indicative Future Transmission Lines	Indicative Timeframe	Indicative Easement/Restriction Zone Width
Upgrade E-EF 72 from 66 kV to 132 kV	15 – 25 years	20m easement/restriction zone along existing corridor (currently 16m)

5. Opportunities and Issues Analysis

Residential Development

Existing Dwellings and Potential - Residential Zone

The Residential Zone dominates the Town of East Fremantle. Figure 58 shows the extent of the Residential zone (generally indicating low and medium/high density coded areas) within the seven precincts identified in LPP 3.1.1 – Residential Design Guidelines, including: Preston Point (Parks and Recreation Reserve), Riverside, Richmond Hill, Richmond, Plympton, Raceway and Woodside.

The residential additional dwelling target set by *Perth and Peel* @ 3.5 million for the Town of East Fremantle is 520 by 2031, and 890 by 2050. Census data shows that between June 2011 and June 2016, a total of 192 additional dwellings were counted within the Local Government area (refer to http://profile.id.com.au/east-fremantle/dwellings). Based on the Town of East Fremantle's records for net residential dwelling approvals (i.e. building approvals minus demolition approvals) it is estimated that a further 23-dwellings have been built since July 2016 taking the total additional dwellings to be approximately 215 (note that this figure does not include ancillary accommodation).



Figure 58 - Existing Residential Zoned Land Preston

Under the current local planning framework, the *Town of East Fremantle Housing Capacity Study (2018)* identifies limited opportunity for residential development in existing Residential zoned areas under current density code controls (refer to Figure 59). This study estimates an ultimate potential for 220 additional dwellings within the Residential zone and only 36 of these are highly likely to be developed within the short term (within 5 years) on the basis that there are no major constraints to prevent development from occurring. It is further estimated that 46 additional dwellings have the potential to be developed in the medium term (5-10 years) and 138 within the long term (more than 10 years).

Figure 59 - Potential Additional Dwellings (Existing Residential Zone only)

		<u> </u>			
Potential Additional Dwellings Summary		Estimated Timing			Total Additional
Residential Zone 138 potential properties 42 on LPS 3 Heritage List		Short term (within 5 years)	Medium term (5-10 years)	Long term (10+ years)	Dwellings
pc	High	36	0	0	36
Estimated likelihood	Medium	0	40	9	49
₩ =	Low	0	6	129	135
	al Additional Owellings	36	46	138	220*

^{*(}excluding Woodside site, 235 including Woodside site if developed at R15 density but not for aged or dependent persons dwellings)

Source: Town of East Fremantle Housing Capacity Study, June 2018

The likelihood of development for some of these properties varies between medium to low due to constraints imposed by heritage listings; MRS Reserves; and the general nature, age and condition of existing capital investments on properties that may not be currently developed to their full density potential. In some cases additional development may be considered as highly unlikely to occur at all. This number could increase to 235 additional dwellings should the former Woodside Hospital site be developed for general residential dwellings (i.e. not for aged or dependent persons dwellings) at its allocated density code of R15.

Ancillary Dwellings

The Town's records show approval for approximately 45 units as ancillary accommodation (i.e. ancillary to an existing single residential dwelling). Under the provisions of the R-Codes, ancillary accommodation may be permitted on lots of

minimum 450m² in area within a 70m² plot ratio. Single house lot sizes within the Town are typically larger than 450m² in many areas (excluding Plympton and Raceway Precincts) where opportunities for further ancillary accommodation units may be an option for additional dwellings.

Additional Uses, Non-Conforming Uses and Non-complying Uses

Additional Uses (Cl 4.5), Non-conforming Uses (Cl 4.8) and Non-complying Uses (Cl 5.3.3) of *Local Planning Scheme No. 3* provide an important and significant number of dwelling units that would otherwise be permitted.

The *Town of East Fremantle Housing Capacity Study (2018)* estimates that approximately 285 medium to high density dwelling units have been provided by non-conforming and non-complying use developments, and potentially 23 dwellings more due to Additional Use rights.

Existing Dwellings and Potential - Mixed Use Development

Within the Town of East Fremantle, residential dwellings may also be developed within a number of Non-Residential zones. *Local Planning Scheme No. 3* allows for R40 density in all of the commercial zones (i.e. Mixed Use, Special Business, Special Zone – Royal George Hotel and Town Centre Zones) and greater than R40 in the Town Centre Zone under certain circumstances. It is noted that the Special Zone – Royal George Hotel and the Roofing 2000 site in the Mixed Use Zone are currently the subject of scheme amendments, and the ultimate residential density for these properties will potentially exceed R40. Figure 60 (over page) shows the extent of the Non-Residential zoned land where residential development may be allowed (applicable density codes shown).

Aside from some pockets within the Town Centre, higher density residential land use is not yet markedly established in the non-Residential zones. The *Town of East Fremantle Housing Capacity Study (2018)* identifies moderate to significant potential for additional residential dwellings as part of mixed use development at a number of commercially zoned properties (without the need to change the current local planning framework), however, this has not yet been taken up to any great extent.

Potential for additional residential dwellings within the zones other than Residential is more difficult to estimate and the housing capacity study did not calculate additional dwelling yields for these properties. For the purposes of this LPS, it may be reasonable to estimate that approximately 300 dwellings could be supported within the non-residential zones, even under current local planning scheme requirements. This is a

conservative and high level estimate based on redevelopment that has taken place within parts of the Town Centre.

Figure 60 - Non-Residential Zoned Land Where Dwellings are Permitted Preston

Other Accommodation

A number of properties within the Town of East Fremantle provide accommodation other than private dwellings, which perform an essential housing function. These include:

- Southern Plus a recently developed 86 bed residential facility (includes dementia specific care) situated on the corner of Wolsely and Staton Roads (former Kaleeya Hospital).
- Pilgrim Juniper a 39 place residential facility (includes 15 dementia specific care places, as well as 10 one-bedroom independent living apartments) situated on the corner of Wolsely and Preston Point Roads.
- Braemar House a 58 place residential facility (includes a 24-room specialist care service called Lee House, which is designed to support individuals with high support needs) situated on Windsor Road.

Some tourist accommodation is provided at the Tradewinds Hotel; at several privatelyowned serviced apartments (for example Seashells in the Richmond Quarter); within short stay rooms for rent (within existing private dwellings); and within entire private single dwelling homes.

Current Development Project Opportunities

There are a number of projects involving further additional dwellings and aged care beds that are in various stages of planning as follows:

Project	Estimated potential additional
	dwellings/timing
1. Leeuwin Barracks Redevelopment	1,440+ dwellings
The Leeuwin Barracks site on Riverside Road is earmarked for sale by the Department of Defence. To provide the new owner and the Town with a guide for future planning over the site, the Town of East Fremantle with support from the Department of Defence, oversaw development of a non-statutory Vision Plan (by consultants TPG Placematch). Council endorsed the plan in December 2016 which includes possible development of approximately 1,440 apartments. Once the site has been sold and there is a new landowner, there will be a number of planning processes required such as changes to the site's current zoning (under the MRS and <i>Local Planning Scheme No. 3</i>) and structure planning as well as development approvals. The Department of Defence is progressing planning activities, in consultation with the WA Government and Council to assist the future owner with development opportunities.	10+ years
2. Mixed use development on the corner of Canning Highway, Sewell Street and Saint Peters Road (Roofing 2000 site). Amendment No. 14 to Local Planning Scheme No. 3 is in progress which will potentially allow for 80+ additional dwellings as part of a mixed used development. The Mixed Use zoned properties are under single party ownership and the site is affected by PRR reserve under the MRS (Canning Highway) which also restricts vehicular access. An application for development approval would need to follow.	80+ dwellings 5-10 years
3. Mixed Use Development on the corner of George and Duke Streets (Royal George Hotel site).	20+ dwellings 5-10 years
Amendment No. 15 to Local Planning Scheme No. 3 is in progress which will potentially allow for 20+ additional dwellings as part of a mixed use development. The Royal George Hotel is a permanent entry in the State Heritage register, classified by the National Trust, listed on the LPS 3 Heritage List and a Category A classified property on the Municipal Heritage Inventory. The site was recently sold to by the State Government to a private developer and is subject to a Heritage Agreement and the hotel building is to be refurbished accordingly. An application for development approval would need to follow.	

Project	Estimated potential additional dwellings/timing
4. Aged Care/Retirement Village (Former Woodside Hospital site) The site is appropriately zoned and an application for planning approval is expected to be lodged in the near future for 125 aged-care beds for singles and couples in a precinct with specialist palliative, dementia, disability and young disability care services. Plans include generous living spaces, 5,000m² of community gardens, a centre for healing and wellness and services for in-home and community care for residents living nearby (refer to https://thewest.com.au/business/commercial-property/60m-to-turn-old-woodside-maternity-hospital-into-aged-care-hub-ng-b88944289z). Alternatively R15 density applies allowing for 15 single residential dwellings. Built in 1897 as a grand residence, which was later converted into flats in the 1920s, it began operating as a hospital in the mid-1940s. In 1951, the State Government acquired the site and converted the building into a maternity hospital. The old hospital was permanently entered into the State Register of Heritage Places in 1998 before closing in 2006. The site has been sold to a private joint venture formed by Hall & Prior Health & Aged Care Group and Fresh Fields Projects, who have entered into a Heritage Agreement with the Heritage Council of WA to ensure the heritage buildings are appropriately maintained in perpetuity.	125 aged-care beds (or 15 dwellings) Within 5 years
Total Potential	1,555 dwellings or 1,540+ dwellings & 125 aged care beds

There is a high level of certainty that these current projects will occur at least in some capacity, and the abovementioned estimated potential dwelling numbers are considered to be conservative. Estimated timing for development is based on the level of planning approval status to date and is also subject to private developer decisions and intentions.

Analysis of Potential to Meet Dwelling Targets under Existing Conditions and Current Project Opportunities

Figure 61 shows the Town's potential to meet additional dwelling targets calculated under a scenario of 'business as usual'. This tracks where deficiencies may occur and informs the LPS in relation to where the current local planning framework struggles to deliver residential dwellings as, and when, required.

The WAPC additional dwelling targets are shown in green and the estimated additional dwellings provided are shown in blue (within the existing Residential Zone), red (within the existing Non-Residential zones where dwellings are permitted) and purple (within the Leeuwin Barracks site).



Figure 61 - Current Potential to meet Additional Dwelling Targets

Source: Town of East Fremantle

The results for the Town of East Fremantle are summarised as follows:

	Additional Dwelling	Estimated Business as Usual Scenario	Achievement of Target
	Target	Osual Scellario	Target
2016	240	192	-48
2021	360	241	-119
2026	440	362	-78
2031	520	1,295	+775
2050	890	2,165	+1,275

The following assumptions were made in arriving at these calculations:

- Amendments No. 14 and 15 are finally approved and appropriate zoning and subdivision approvals are in place to accommodate the redevelopment of the Leeuwin Barracks site.
- 100% take up of current Residential Zone potential by 2031 (based on 425 additional dwelling units since 2011).
- Some interest taken in developing dwellings in Non-Residential Zones within the next 10 years (i.e. by 2026).
- 50% take up of current Non-Residential zones potential by 2031 (based on total 300 units).
- 50% take up of Leeuwin Barracks redevelopment potential by 2026 (based on total 1440 units).
- 100% take up of potential of Royal George Hotel amendment and Roofing 2000 amendment (based on 20 units + 80 units) by 2031.
- 100% take up of current Non-Residential zones potential by 2050.
- 100% take up of Leeuwin Barracks redevelopment potential by 2026.

(Note: Does not include ancillary dwellings)

Under the current local planning framework, the Town has the potential to significantly exceed targets by 2031, however, in the short to medium term (less than 5 years and between 5-10 years) achieving targets will be more difficult.

Within the next ten years (i.e. by 2026) the Town needs to provide for approximately 245 (48 + 119 + 78) further additional dwellings to be on track, yet thereafter the Town is expected to well-exceed the additional dwelling targets by more than double. The major increase in dwelling opportunities at this later time (i.e. by 2031) results from when the Leeuwin Barracks redevelopment is expected to come online.

Should the Leeuwin Barracks redevelopment not eventuate as anticipated, additional dwelling targets could still be met by 2031. However, some deficiencies would remain in the short to medium term delivery and again after 2031, leading up to 2050.

It is reiterated that the additional dwelling yield estimates for the Roofing 2000 site, the Royal George Hotel site and the Non-Residential zones are conservative. Furthermore, ancillary dwellings have not been included in the calculations. With this in mind, the Town's actual additional dwellings could be more significant than stated in the short to medium term.

New Opportunities

In addition to current projects, other opportunities for further investigation of housing density and diversity have been identified. These include a number of sites suggested in the *Town of East Fremantle Housing Capacity Study (2018)* as worthy of investigation to potentially provide additional residential development. Generally, these include the following (note that some sites may be included in more than one investigation area):

- Strategically located properties at the western entry point to the Town generally under single (public agency) ownership (along Canning Highway between East Street and Glyde Street);
- Strategically located properties at the eastern entry point to the Town generally under single ownership (commercial properties north and south corners of Canning Highway and Petra Street);
- Actively promoting of ancillary dwellings on large lots, without the need to change density codes or subdivide land;
- Formalising/securing non-conforming and non-complying use rights of existing higher density development in selected areas;
- Higher density near high frequency transport routes/urban corridors and activity hubs (Town Centre, Petra Street/Canning Highway District Centre, Canning Highway and Marmion Street);
- Increased residential development within commercial zones (as part of mixed use in the Town Centre, the Canning Highway Mixed Use area, Petra Street/Canning Highway District Centre);
- MRS Reserved land subject to a possible amendment to reduce the width of the Primary Regional Road reserve for Canning Highway (between Osborne Road/Allen Street and Petra Street);
- Other publicly owned land no longer required, or underutilised; and
- Applying Additional Use rights under Local Planning Scheme No. 3 to increase density for suitably identified development sites.

Issues and Considerations

Some issues and considerations identified in relation to future residential development include:

- Meeting the required dwelling targets in a timely manner, especially in the short to medium term.
- Protection of heritage and character in relation to individual buildings, residential precincts and the Town as an entity through design controls.
- There is limited existing capacity for additional residential dwellings within the Residential Zone in the Town of East Fremantle aside from ancillary accommodation.
- There is a need to provide and maintain adequate housing mix/variety for changing household needs and addressing affordability.
- Environmental/Physical considerations may impose some restrictions (e.g. roads noise; Fremantle Ports Buffers, possible land contamination, maintaining and increasing tree canopy areas; housing design and construction to maximise energy and water efficiency; restricted access to/from Canning Highway; extent of MRS road reservation for Canning Highway; Western Power high voltage power line buffers; sewage pumping station buffers).
- The need to maximise access to public and active transport.
- Parking and traffic issues associated with existing and future development, particularly in the Plympton Precinct.
- It is difficult to coordinate land development especially when reconfiguration of
 property boundaries is required (involving multiple individual privately-owned
 properties each with separate landowner details) to allow access, particularly
 along Canning Highway and to a lesser extent Marmion Street.
- Existing housing stock within the Town of East Fremantle is generally in good condition with no outstanding areas of blight. In some areas, housing investment is high reflecting the value of properties of a sizeable nature, general amenity (due to proximity to services and facilities) and pleasant views. Where property size and current planning controls theoretically allow for increased residential development potential, the extent and possible loss of capital already invested does not necessarily outweigh the further investment required for additions or to redevelop the property.
- Increased densities in certain areas will see the need to upgrade and increase key infrastructure capacity such as water and sewerage.
- Community angst with regard to development adversely affecting heritage buildings and suburban character and identity and perception of loss of amenity.

Economy and Employment

Due to its physical size, established land use pattern and relatively small population, the Town of East Fremantle does not have a remarkably strong economic and employment base in its own right. Its proximity to the Cities of Fremantle and Melville means that commercial and employment opportunities within those local governments are readily available to the Town of East Fremantle residents.

Population growth to 2050 is not expected to be exceptionally high, but is likely to increase sporadically if and when larger development projects come online such as the Leeuwin Barracks redevelopment.

The Town of East Fremantle will be preparing a Local Commercial Centres Strategy which will identify current and future commercial needs and assist in making provisions to accommodate economic growth and employment opportunities within the Town.

Current projects such as Amendment No. 14 and 15 (should they be approved) will provide some economic and employment opportunities through construction phases, and then through the ongoing operational phase in terms of these being intended mixed use developments which includes commercial floorspace.

The Town of East Fremantle's *Recreation and Community Facilities Strategy (2016)* and *Foreshore Management Plan (2016)* include recommended key actions that are likely to attract more local and non-local visitors to the Town, which is likely to create spin off economic and employment opportunities.

One of these recommendations includes the East Fremantle Oval Precinct Vision Plan (endorsed in 2019) which will guide revitalisation of the precinct. This may attract more visitors to the area and potentially additional employment opportunities associated with any new community/sporting-related commercial activities as part of the facility redevelopment.

Issues and Considerations

Some issues and considerations identified in relation to future economic and employment development include:

 The Town Centre could be improved in terms of design, connectivity and aesthetics. The pedestrian underpass from George Street and the St Peters underpass appear to work independently and their effectiveness in connecting the historic George Street with the Town Centre could be improved.

- Collaboration with the City of Melville is required to develop a suitable activity centre/precinct plan for the District Centre at the intersection of Canning Highway and Petra Street. Land on the western side of Petra Street is within the Town of East Fremantle and is zoned Special Business. This area could benefit from some upgrading and other ways of attracting tenants to vacant tenancies.
- As the population continues to age, opportunities could focus on aged persons accommodation and services.
- Changes in retail shopping (e.g. increased online purchasing) and changes in work practices (e.g. technology enabling virtual offices).

Open Space and Community Facilities

The Town of East Fremantle's *Recreation and Community Facilities Strategy (2016)* and *Foreshore Management Plan (2016)* identify opportunities and provide guidance for recreation and community facilities throughout the Town.

Recommendations and actions from these are currently being undertaken in stages. It will be appropriate to carry out regular reviews of these documents and further audits of facilities as time progresses. Some of the projects that have progressed from these include various works along the Swan River foreshore, the East Fremantle Oval Precinct Revitalisation Vision/Master Plan and the Preston Point Road North Facilities Master Plan (not yet finalised).

Maintaining and enhancing the character and amenity of the Town of East Fremantle is of critical importance to its residents. In relation to streetscapes and public areas, the Town of East Fremantle is in the process of preparing a comprehensive Urban Streetscape and Public Realm Style Guide to guide future development across the Town. The guide will establish an appropriate style for the Town's streetscape and public realm that captures its unique quality and will be influenced by, and respond to, the Town's culture, heritage, character, ecology and environment. The Style Guide will incorporate industry best practice and place making principles.

Issues and Considerations

Some issues and considerations identified in relation to future open space and community facilitates include:

 Funding and community attitude issues associated with providing a centralised community hub to service the existing and future population which may involve a possible rationalisation of existing facilities.

- Declining condition of existing facilities at the East Fremantle Oval Precinct, uncertainty of the level of future playing facilities required by the East Fremantle Football Club, the future of the non-conforming uses on the site (residential and Council depot), permissible future uses within the status of an A Class Reserve.
- Inconsistent approach to some design elements that contribute to the streetscape and other areas within the public realm.

Environment

The *Town of East Fremantle Foreshore Management Plan (2016)* identifies recommended key actions to address environmental issues and improve and protect natural features along the Swan River foreshore, some of which have already been implemented.

The Bushfire Risk Management Plan (Entire Fire Management, 2018), recommends action to be taken by the Town of East Fremantle to reduce the impact or intensity of a potential bushfire event, or remove the threat altogether, for natural bushland areas within the Town (no longer classified as Designated Bush Fire Areas).

The Town of East Fremantle Precision Urban Forest Monitoring – Final Report (2018) provides a benchmark of the extent of the tree canopy within the Town so that future monitoring can measure changes and identify opportunity for further intervention measures where required. Some solutions to assist in reaching canopy targets include: buildings having smaller footprints, and being designed around trees; and private open space being of a suitable size, shape and location with materials to support trees.

Tree protection for significant trees or iconic vegetation on public land (and possibly private land) together with additional tree planting policy could be considered. This could also assist in increasing the urban forest to reduce the urban heat island effect and add to climate change mitigation. Investigations are currently underway to develop a draft policy accordingly.

The Town of East Fremantle is also in the final stages of being recognised as being water-wise. Further opportunities could be created to address climate change issues such as water and energy efficiency within the urban environment and development. These could include design on a macro scale (for example Town drainage) and on a micro scale (development requirements for example house design, orientation and construction).

Issues and Considerations

Some issues and considerations identified in relation to the environment include:

- Climate change, changes in sea levels and reduction of carbon emissions.
- Providing for deep planting areas and increased tree canopy areas may conflict
 with land subdivision and development intentions. This poses some challenges
 when properties are being subdivided to create smaller lots and smaller
 backyards.

Traffic and Transport

The Town of East Fremantle is in the process of preparing an Integrated Traffic Management and Movement Strategy to facilitate an effective and efficient transport system for all traffic movements. It will be comprised of a Parking Management Plan; Traffic Management Plan; and an Active Transport Plan.

The Strategy will take a holistic approach to consider all modes of transport to improve the accessibility of residents and visitors to employment, recreation and services based on needs and growth. It also aims to facilitate an increased and sustainable modal shift from private vehicles to public transport (bus), walking and cycling, and consider potential future transport disrupters such as autonomous vehicles and shared vehicle ownership. Other current and future development projects are likely to impact on traffic and transport matters and will need to be considered as part of the Strategy. A number of opportunities may have already been identified as part of these projects.

Issues and Considerations

Some issues and considerations identified in relation to future traffic and transport include:

- Community surveys continue to identify dissatisfaction with traffic movement and car parking problems in the vicinity of George Street. This poses some challenges for residential and commercial developments in this area.
- Parking issues associated with the Town Centre, particularly in the Silas Street area.
- Traffic and parking issues in the vicinity of the Richmond Primary School.
- Parking issues associated with activities along the Swan River foreshore.
- Barriers to all modes of movement created by Canning Highway and Stirling Highway.
- Future traffic/transport implications of the Leeuwin Barracks redevelopment.
- Alternative access to and from Canning Highway for properties that directly abut this road and may otherwise have increased development potential.

6. Constraints to Development

A number of constraints and considerations affecting development potential within the Town of East Fremantle have been identified throughout this report and are summarised as follows.

Acid Sulfate Soils

There is a medium to high acid sulfate risk from the shoreline and into the Swan River. A low to medium acid sulfate risk along the edge of the Swan River in the vicinity of Preston Point and extends back towards Preston Point Road over part of the Leeuwin Barracks site (as seen in Figure 11 in a previous section of this report).

Acid sulfate soils have come to prominence in land use planning as a result of detrimental consequences, including significant harm to the environment and infrastructure, which can arise from disturbing them. This is a consideration for future development in these areas, particularly in relation to the Leeuwin Barracks site.

Swan River 1:100 Floodplain Area

Land subject to the 1:100 Annual Exceedance Probability (AEP) Floodplain affects land immediately adjacent to the Swan River in the proximity of Riverside Road and Jerrat Drive and expands further in the vicinity of Preston Point and extends across Riverside Road into portion of the Leeuwin Barracks site (as seen in Figure 10 in a previous section of this report).

This is likely to impact on future land use on part of the Leeuwin Barracks redevelopment site.

The Department of Water and Environmental Regulation (DWER) and the Department of Biodiversity, Conservation and Attractions' (DBCA) Parks and Wildlife Service and the Swan River Trust are responsible for the Floodplain Development Control Area and the Swan and Canning River Development Control Area, respectively (refer to Figure 65).

DWER in carrying out its role in floodplain management provides advice and recommends guidelines for development on floodplains with the object of minimising flood risk and damage. Guiding principles are used to ensure proposed development in flood prone areas is acceptable with regard to major flooding, so that proposed development has adequate flood protection from a 1 in 100 AEP flood and it does not detrimentally impact on the existing 1 in 100 AEP flooding regime of the general area.

Figure 65 - Development Control Areas FPM 1 in 100 (1%) AEP Floodplain Development Control Area (DWER-003) Yes Property and Planning Swan and Canning River - Development Control Area (DBCA-028)

Source: https://maps.slip.wa.gov.au/landgate/landinfowa/

The Swan Canning Riverpark and associated DCA were established under the Swan and Canning Rivers Management Act, 2006 (SCRM Act). A portion of the Riverpark and the Swan Canning River DCA are located within the Town of East Fremantle. The Parks and Wildlife Service ensures social, environmental and aesthetic values are not compromised by new developments. It also fosters strong partnerships to encourage appropriate planning and development in the DCA established under the SCRM Act. The process for development approvals in and around the river depends on the location of the proposed development with respect to the DCA with approval responsibilities varying between the Minister for Environment, WAPC and the Town of East Fremantle.

Contaminated Sites

Although no sites are listed on the DWER contaminated sites register within the Town of East Fremantle, a number of sites may require further investigation prior to zoning changes or development occurring.

These include the East Fremantle Yacht Club, Swan Yacht Club and Aquarama Marina (where the SRT previously detected hotspots of contaminants) and existing and past service station sites, or other sites where fuel is or has been stored.

Remediation would be required as part of any development on the Leeuwin Barracks site, which the Department of Defence has confirmed has some minor contamination issues including the presence of asbestos and fuel residue.

Local Planning Scheme Heritage List (Local Heritage Survey Category A and B)

The Heritage List under *Local Planning Scheme No. 3* identifies places within the Scheme area that are of cultural heritage significance and worthy of built heritage conservation. It includes all properties identified within the Local heritage Survey (formerly known as MHI) as Category A and B. Development approval is required for additions and alterations to properties on the Heritage List which also afford a high level of conservation.

Approximately one third of the Residential zoned properties identified in the *Town of East Fremantle Housing Capacity Study* as having potential for further development are listed on the Heritage List, whereby conservation and retention is highly encouraged.

A number of properties with dual coding of Residential R12.5/40 and R20/40 are located along both sides of Canning Highway indicating opportunity for further residential density development. Clause 5.3.2 of *Local Planning Scheme No. 3*, however, only allows for properties with dual coding to be developed at the higher density subject to a number of requirements, including maintenance of a heritage place listed within the Scheme. Whilst the theoretical residential density expectations are high, the practicality of constructing additional dwellings whist maintaining Heritage Listed dwellings is often not without challenge.

The number of Heritage Listed properties within the Mixed Use zone is also significant with 50 per cent of the Mixed Use properties along Canning Highway being listed, and 56 per cent of the properties in the Mixed Use zone along George Street being listed.

Heritage Listing has less effect on the Special Business and Town Centre zones in terms of development potential, with the exception of a property on the north-west corner of Canning Highway and Petra Street and a number of properties on the northern side of Canning Highway near Preston Point Road (church and residences).

There are also four areas on the Heritage List that are listed as Landscape protection Areas and another area described as the George Street Precinct which is identified as an area of individual places of heritage value and adjoining properties which should be viewed as a precinct. The Town is currently considering renaming this as a Heritage Area under the provisions of *Planning and Development (Local Planning Schemes) Regulations, 2015* and extending it to include the Royal George Hotel site and the Brush Factory (which were previously omitted due to former land reservation plans for Stirling Highway that have since been amended).

Although not listed on the Scheme's Heritage List, a significant number of other properties of cultural significance (Category C in the Local Heritage Survey) also contribute to the unique character of the Town.

Canning Highway - Land Requirement

Canning Highway is shown as an Other Regional Road (ORR) reserve between East Street and Stirling Highway, and as a Primary Regional Road (PRR) reserve between Stirling Highway and Petra Street, under the MRS (Figure 62 – Canning Highway)

Figure 62 – Canning Highway



From East Street to Osborne Road/Allen Street, the reserve either abuts properties fronting the highway, or in some instances marginally encroaches these properties having minimal effect on development potential in terms of land availability.

Moving eastwards from Osborne Road/Allen Street to Petra Street, however, the PRR Reserve significantly encroaches the abutting properties. Should this reserved land be required for road widening or other road purposes, a significant loss of residential dwellings would result. Furthermore, development potential of properties within the reserve that are currently vacant or have sufficient land available for development is severely limited.

Possible Changes to Canning Highway Reservation

Contrary to the above, the WAPC is investigating a proposal to amend the MRS to (amongst other things) significantly reduce the amount of land required for the PRR reserve for Canning Highway on the north and south sides between Osborne Road/Allen Street and Petra Street.

Details are not currently publicly available and the status of the proposal is uncertain at this time. If the amendment is to go ahead, additional dwelling development potential would increase for some of the properties zoned Residential R12.5/40 and all of the properties within the Special Business zone.

However, it is noted that land required for the Canning Highway reserve is proposed to increase for some properties west of Osborne Road/Allen Street under the MRS amendment proposal which would result in an additional challenge to development potential for those affected properties.

Certainty is required regarding land requirement for the PRR reserve for Canning Highway as development of appropriately higher density coded properties is constrained by current reserve boundaries. In addition, a solution to access to properties along Canning Highway (other than from Canning Highway) is required to encourage and support higher density development.

Canning Highway – Restricted Access

Vehicular access to new development on Canning Highway is restricted by State planning policy and road regulation and by the Town of East Fremantle *Local Planning Scheme No. 3*. This has some effect on development potential and indicates the need for a coordinated approach to site access in some instances.

DC 5.1 (and draft DC 5.1) seeks to minimise the creation of new driveways on regional roads and rationalise existing access arrangements. Where alternative access is or could be made available from side or rear streets or from rights of way, no access shall be permitted to the regional road unless special circumstances apply. Arrangements whereby adjoining owners enter into cross-easement agreements to provide reciprocal rights of access across adjacent lots may be required as a means of rationalising access to the regional road.

Where access is permitted, conditions may be imposed prescribing the location and width of the junction or driveway to ensure adequate visibility and to provide for the

safe and convenient movement of vehicles both entering and leaving the traffic stream. As Canning Highway is an Other Regional Road and a Primary Regional Road within the MRS, this Policy applies to development on land abutting this road frontage.

A number of properties with dual coding of Residential R12.5/40 and R20/40 under *Local Planning Scheme No. 3* are located along both the north and south sides of Canning Highway. Clause 5.3.2 of the Scheme allows for properties with dual codings to be developed at the higher density subject to a number of requirements, including access via a street other than Canning Highway.

These access constraints pose some difficulty for development of properties along Canning Highway at higher densities due to the number of individual lots and multiplicity of landowners, which would involve a certain level of negotiation and coordination to arrive at a suitable access outcome, other than Canning Highway.

Canning Highway and Stirling Highway - Noise

SPP 5.4 suggests that the planning process should apply a precautionary principle of avoidance where there is a risk of future conflict for noise sensitive land use and/or development within 300m of the carriageway edge of Stirling Highway and Canning Highway (where located within the Primary Regional Road reserves) and within 200m of the edge of the carriageway of Canning Highway (where located within the Other Regional Road reserve).

However, where it is unavoidable to place a proposed noise-sensitive land use and/or development to which the policy applies, this may be mitigated to provide acceptable levels of acoustic amenity through appropriate interface management.

Fremantle Inner Harbour Buffer

The Town of East Fremantle is affected by Buffer Areas 2 and 3 of the Fremantle Inner Harbour Buffer (refer to Figure 63) and has potential to influence the number of dwellings proposed within a development concept. It also imposes additional development standards to protect the amenity of new residents, which may affect building costs and affordability.

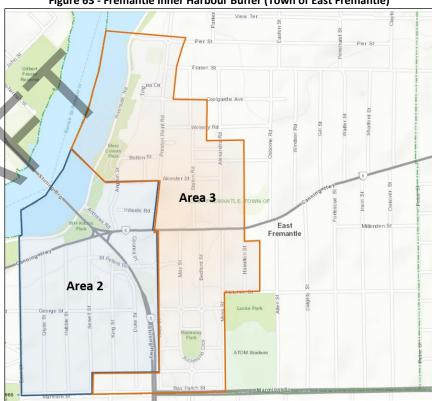


Figure 63 - Fremantle Inner Harbour Buffer (Town of East Fremantle)

Western Power Transmission Lines

The Town of East Fremantle is serviced by:

- A series of high voltage distribution lines (HVOH 3Ph and HVUG 3Ph) predominantly located within local road reserves;
- A 66 kV transmission line from Pole 14 (corner of Marmion Street and Hubble Street) to Pole 17 (corner Marmion Street and East Street) located within Crown Land (road reserve);and
- A 132 kV transmission line from Pole 51 (Swan River to Town of Mosman Park boundary) to Pole 19 (corner Marmion Street to City of Fremantle boundary) located within Crown Land (road reserve).

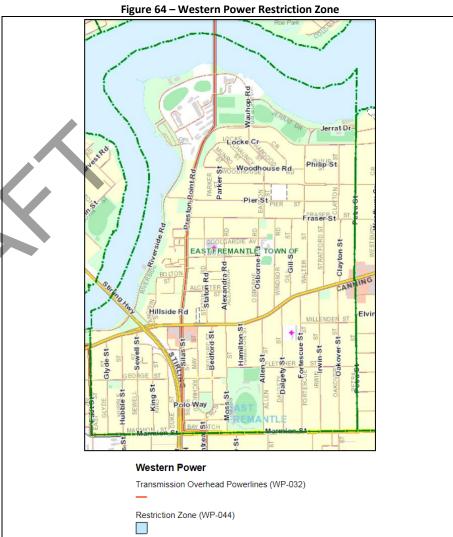
Where Western Power does not have easements over freehold land, it relies on Restriction Zones under the powers of the *Energy Operators (Powers) Act* to ensure appropriate development occurs within the vicinity of its assets. The 66 kV transmission line requires a 16m restriction zone and the 132 kV transmission line requires a 20m restriction zone. Restriction zones have been developed based on relevant Australian Standards and occupational health and safety compliance requirements for power lines requiring clearance (horizontal and vertical from the centre line) as follows:

- Transmission 66 kV 8.0m
- Transmission 132 kV 10.0m
- Distribution </= 33 kV 3.0m

Western Power has advised that within the next 15-25 years, the network will be upgraded such that the 66kV transmission line will be increased to 132 kV (timing, capacity, location and approval of proposed future corridors may be subject to change). This means that the current 16m restriction zone will then increase to 20m. Development setbacks and heights are subject to the restriction zone requirements in the vicinity of the 66kV and 132 kV transmission lines (refer to Figure 64) and consideration should also be given to possible further restrictions in the vicinity of the 66kV line, if/when it is upgraded to 132kV in the future.

Noise mitigation, visual impact, public safety and other amenity matters where development is proposed adjacent to a buffer or restriction zone to the satisfaction of Western Power may also be a consideration.

A 132kV transmission line traverses the Leeuwin Barracks site and this will need to be considered as part of any redevelopment proposal.



Source: https://maps.slip.wa.gov.au/landgate/landinfowa/

Water and Sewerage Services

Some 520 residences are supplied by the Richmond Hill High Level Water Supply Zone which covers approximately 70 hectares. The amount of reserve water storage in the elevated supply tank is limited and the system is already sensitive to any large unplanned increases in development and demand. The Water Corporation currently has no plans to increase this capacity. Aside from minimum increases, density in this vicinity would require substantial water servicing upgrades.

Some parts of the water network comprise of older, cast iron mains typically 75mm and 100mm diameter. Some of these mains extend north and south from Canning Highway. Whilst these mains provide an adequate level of service and pressure to existing patterns of land use and development, it is possible that some classes of higher density, multi-storey and mixed use building proposals may trigger the need for a short section of the main to be upgraded to a larger diameter to meet flow and pressure requirements for firefighting purposes (as required by the Building Code of Australia or FESA firefighting standards and specifications). This would be a consideration at development stage that landowners need to be aware of.

The Water Corporation will need to test the implications of any zoning and density changes resulting from this local planning strategy, however, as development is likely to be spread over a large network it is anticipated to cope without the need for major upgrades. Localised upgrades to the sewerage network may arise from high density development proposals and individual development may give rise to the need to protect, relocate or upgrade sections of gravity sewers.

Future development at the Leeuwin Barracks, however, has not been considered in the Water Corporation's current (2010) wastewater planning. Planning is needed to determine the best way of providing services and establishing impacts on pump stations (including land use buffers) and sewers. The Water Corporation has advised that it will work with the proponent's consulting engineers and planners to prepare a wastewater and water servicing strategy for this area.

