URBIS

ANZAC DRIVE WEST
STRUCTURE PLAN
LOT 500-502
ANZAC DRIVE, YILKARI

PREPARED FOR

DEVELOPMENTWA

April 2020
FINAL

URBIS STAFF RESPONSIBLE FOR THIS REPORT WERE:

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Project Code	PA1516
Report Number	v_Final

Urbis's Public Policy team has received ISO 20252 Certification
for the provision of public policy research and evaluation, social planning,
community consultation, market research and communications research

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This Structure Plan is prepared under the provisions of the City of Kalgoorlie Boulder Local Planning Scheme No.1.

IT IS CERTIFIED THAT THIS STRUCTURE PLAN WAS APPROVED BY RESOLUTION OF THE WESTERN AUSTRALIAN PLANNING COMMISSION ON:

6 May 2020

Signed for and on behalf of the Western Australian Planning Commission:

an officer of the Commission duly authorised by the Commission pursuant to section 16 of the Planning and Development Act 2005 for that purpose, in the presence of:

Witness

6 May 2020

Date

6 May 2030

Date of Expiry

TABLE OF AMENDMENTS

AMENDMENT NO.	SUMMARY OF THE AMENDMENT	AMENDMENT TYPE	DATE APPROVED BY WAPC

EXECUTIVE SUMMARY

Lots 500-502 (formerly Lot 352) Anzac Drive, Yilkari ('the Structure Plan area') is approximately 187.5ha in total area, and located to the east of the Kalgoorlie City Centre, within the locality of Yilkari. The area to the east of Anzac Drive, and land to the north of Great Eastern Highway (GEH) has already been developed for industrial purposes. There is a growing demand for industrial land within the area, and limited opportunities for other industrial areas in Kalgoorlie.

The Structure Plan area was identified within the Kalgoorlie-Boulder Hotspots Report in 2008 for investigation for industrial purposes and more recently within the City of Kalgoorlie-Boulder Local Planning Strategy for industrial purposes, together with other land to the south-east along Anzac Drive.

The Structure Plan area is bound by GEH to the north, Anzac Drive to the east, the future Kalgoorlie bypass (PortLink) to the south (and future industrial land), and the Eastern Goldfields Clay Target Club to the west. The land is ideally suited to industrial land use given its locational context adjacent to other industrial uses, being removed from residential areas, and located along Great Northern Highway and other existing and proposed major transport routes which provide excellent transport connections.

To facilitate the development of the land for industrial purposes and to provide the zoning framework for the site, the land was rezoned from 'Parks and Recreation' and 'Rural' zone to 'Future Industry' via Amendment No.97 in June 2019.

This Structure Plan is intended to provide the detailed framework to deliver this industrial area in a timely and coordinated manner, and in a form which will facilitate flexibility in lot size and layout, and enable access and manoeuvrability within the Estate for industrial vehicles.

The framework of this document follows the *Planning and Development (Local Planning Scheme) Regulations 2015*, including the Western Australian Planning Commission's (WAPC) Structure Plan Framework (August 2015). It provides the necessary information that addresses the requirements of the City of Kalgoorlie Boulder Local Planning Scheme No.1 (LPS1) and includes technical reports to support the development of the land for industrial purposes.

STRUCTURE PLAN SUMMARY TABLE

Item	Data	Structure Plan Ref (section no.)
Gross land area	187.5ha	2.2.3
Total area covered by the Structure Plan	166.53ha	2.2.2
Area of each land use proposed: Industrial Parks & Recreation Roads (not including PortLink)	 153.81ha 2.84ha 9.98ha	-
Total estimated lot yield	110-130 lots	2.1

CONSULTANT TEAM

The Structure Plan has been prepared on behalf of DevelopmentWA (formerly LandCorp), with input from the following consultants:

Consultant	Input
Urbis	Structure Plan preparation and reporting Urban Design Landscape Architecture
PGV	Environmental Assessment Management Plan
WGE	Engineering Servicing
Uloth & Associates	Transport Impact Assessment
Strategen JBS&G	Bush Fire Management
GHD	Local Water Management Strategy
Galt Geotechnics	Geotech Assessment

PART ONE – STATUTORY SECTION

1. IMPLEMENTATION OF STRUCTURE PLAN

1.1. STRUCTURE PLAN AREA

The Anzac Drive West Structure Plan (the 'Structure Plan'), once endorsed, will become the guiding document in the consideration of future subdivision and development for the land contained within the inner edge of the line denoting the Structure Plan boundary on the Structure Plan Map as shown in **Figure 1 – Structure Plan Map**.

1.2. STRUCTURE PLAN CONTENT

This Structure Plan comprises:

- Part 1: Implementation Section
- Part 2: Explanatory Section
- Part 3: Technical Appendices

The Structure Plan should be read in conjunction with the City of Kalgoorlie-Boulder Local Planning Strategy and Local Planning Scheme No.1 (LPS1).

Part 1 of this Structure Plan is the implementation component of the Structure Plan which contains the Structure Plan map; and outlines the purpose and intent of the Structure Plan.

Part 2 of this Structure Plan is the explanatory section which contains the background information and explanation of the Structure Plan including design methodology, relevance and compliance with the planning framework. Part 2 also contains all supporting plans and figures.

Part 3 of this Structure Plan includes the relevant reporting which has been undertaken in support of the Structure Plan.

1.3. OPERATION

This Structure Plan comes into effect on the date of approval by the Western Australian Planning Commission (WAPC). An approved Structure Plan is a document to which planning decision-makers are to give due regard to when making decisions on the subdivision and development of land within the Structure Plan area.

1.4. STAGING

The Structure Plan has been designed to allow for flexibility in the staging of development based on market demand, and the associated timing for release of land under Notice of Intention to Take (NOITT) agreements, as indicated on **Figure 2 – Staging Plan**. The internal road network and access arrangements allow for any part of the Structure Plan area to be accessed for operation and construction purposes without impeding the use or development of other land within the Structure Plan area.

Figure 1 – Structure Plan Map

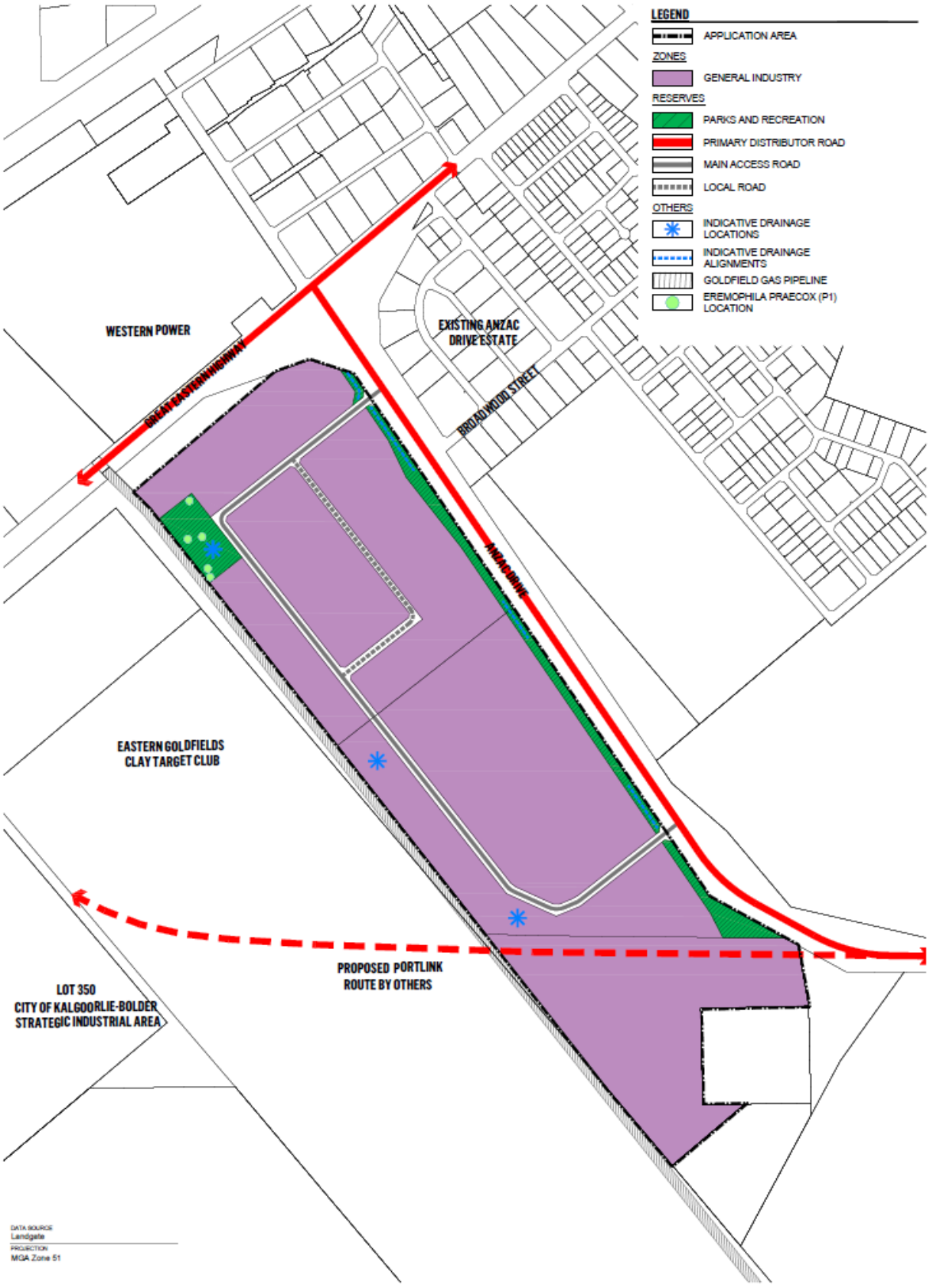
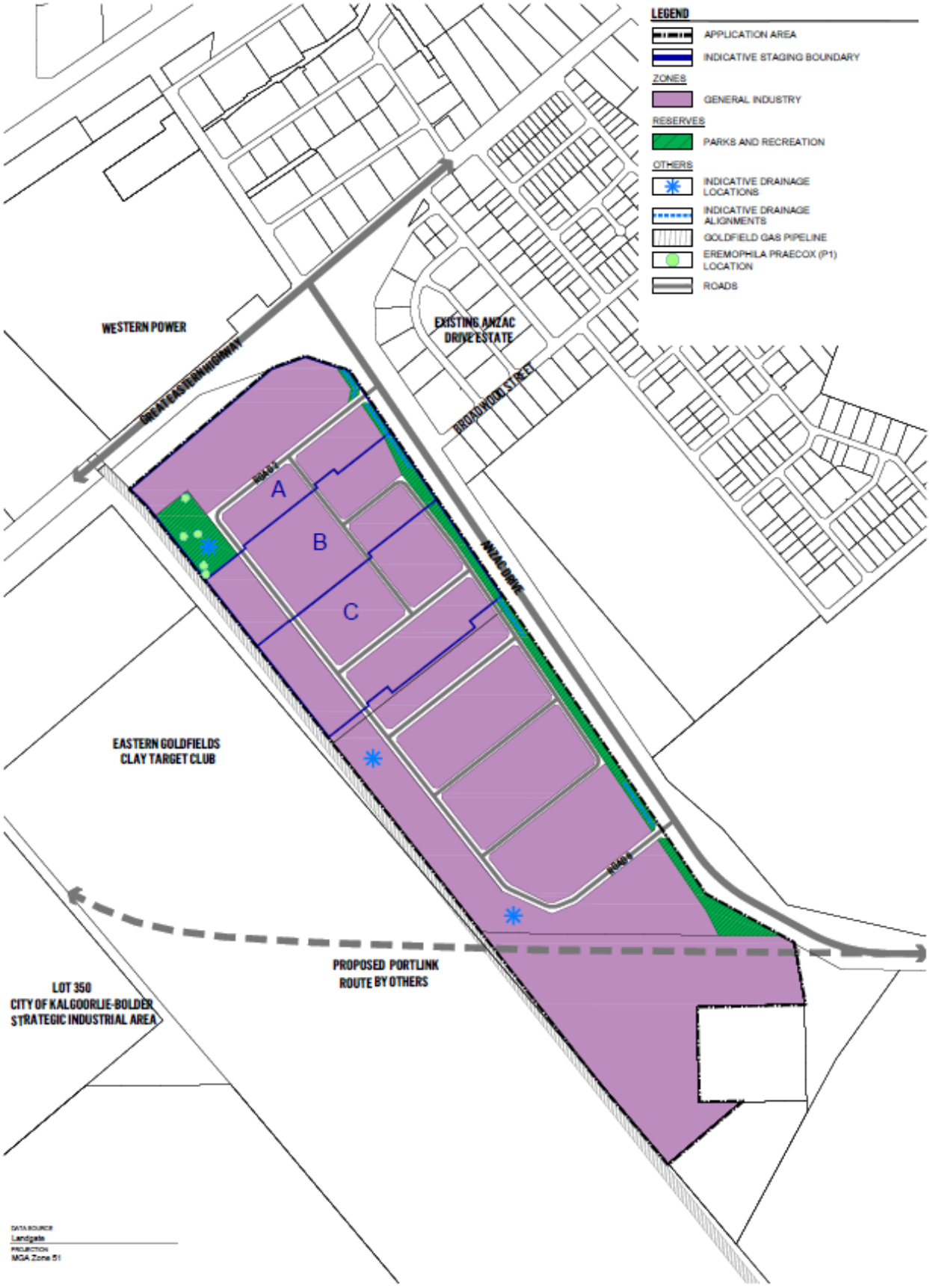


Figure 2 – Staging Plan



1.5. SUBDIVISION AND DEVELOPMENT REQUIREMENTS

1.5.1. Land Use Permissibility and Development

Land use within the Structure Plan area shall be consistent with the General Industry Zone as set out in Table 1 – Zoning Table of LPS1.

1.5.2. Local Development Plan

No Local Development Plan is required for the Structure Plan area.

1.5.3. Subdivision Layout

The Structure Plan provides a flexible road layout to accommodate a range of industrial landuses, particularly those associated with transport logistics and mining support activities.

1.5.4. Servicing Requirements

The land the subject of this Structure Plan shall be serviced with:

- Reticulated water supply to provide potable drinking water and fire hydrant supply
- Connection to a reticulated power supply
- Wastewater disposal shall be provided by on site reticulated ATU's designed to the satisfaction of the City of Kalgoorlie Boulder as informed by a Site and Soil Evaluation to be provided with any application for subdivision demonstrating compliance with the Government Sewerage Policy
- Drainage shall be provided in the general locations shown on the Structure Plan

1.5.5. Road Design Requirements

- Roads shown on the Structure Plan shall be developed to accommodate RAV10 industrial vehicles
- Subdivision of the southern portion of the subject land generally comprised within Lot 502, shall accommodate a suitable reserve to the satisfaction of the City of Kalgoorlie and Main Roads WA to accommodate PortLink

1.5.6. Priority 1 Species

The Parks and Recreation Reserve containing the Priority 1 species *Eremophila praecox* (P1 Flora), shown on the Structure Plan, shall be provided at the time of subdivision and vested in the Crown for the purposes of conservation and drainage.

1.5.7. Additional Information

The following additional information is required to be undertaken at future planning stages:

Additional Information	Purpose	Approval Stage	Consultation Required
Landscape and Public Open Space Management Plan	To detail the ongoing management and maintenance arrangements of landscaping and open space areas. To detail the protection, propagation and replanting of P1 Flora species during the subdivision stage	Lodged to satisfy a condition of subdivision approval.	City of Kalgoorlie-Boulder

Additional Information	Purpose	Approval Stage	Consultation Required
Traffic Management Plan	To provide technical specifications relating to the subdivision and development of the land.	Lodged prior to building permit stage as condition of subdivision/development approval	City of Kalgoorlie-Boulder
Geotechnical Report	Detailing the specific design and construction recommendations and requirements.	Lodged prior to development application, at subdivision or building permit stage (whichever comes first), managed as a condition of subdivision approval.	City of Kalgoorlie-Boulder
Design of PortLink	Ensure the PortLink reserve is protected and acquired at subdivision stage	Subdivision stage	City of Kalgoorlie-Boulder and DPLH
Aboriginal Heritage	To be reviewed closer to subdivision works.	Subdivision works	Registered Native Title Claimants
Bushfire Management Plan	To demonstrate compliance with State Planning Policy 3.7 Planning in Bushfire Prone Areas and Section 8 of Part 2 of the Structure Plan.	Subdivision stage	City of Kalgoorlie-Boulder
Urban Water Management Plan	To progress conceptual design to detailed design including infrastructure requirements, flow rates and water levels, design criteria, management and implementation	Subdivision stage	DWER and City of Kalgoorlie-Boulder
Sulphur Dioxide EPP	To protect air quality by reducing sulphur dioxide concentration in ambient air	Development Application stage	City of Kalgoorlie-Boulder
Notifications on title – Mosquito-borne disease	To provide notification to prospective purchasers of land in high risk area	Subdivision stage	City of Kalgoorlie-Boulder and DPLH
Site and Soil Evaluation	To demonstrate compliance with the	Subdivision stage	City of Kalgoorlie-Boulder

Additional Information	Purpose Government Sewerage Policy	Approval Stage	Consultation Required
Consultation with Goldfields Gas Pipeline operator	To demonstrate compliance with Draft Development Control Policy 4.3 Planning for High-Pressure Gas Pipelines in ensuring previous and future mitigation measures are implemented through subdivision and that necessary consultation is carried out	Prior to subdivision or development application	Goldfields Gas Pipeline operator
Consultation with Western Power	To ensure future subdivision minimises impacts on existing electricity supply infrastructure	Prior to subdivision application	Western Power

PART TWO – EXPLANATORY REPORT

2. PLANNING BACKGROUND

2.1. INTRODUCTION AND PURPOSE

Kalgoorlie has a production economy tied to the resources sector and primary industrial activity. Lots 500-502 Anzac Drive, Yilkari (formerly Lot 352) has been identified for industrial purposes in a number of strategic planning documents for over 10 years, including within Amendment 1 to the Local Planning Strategy which allows for future industrial development to be extended to the south-east of the site.

This Structure Plan will facilitate the release of additional industrial land to appropriately service the resources industry and provide for the diversification of Kalgoorlie's local economy through the future provision of land suitable for a range of industrial purposes.

The Structure Plan area is bound by GEH to the north, Anzac Drive to the east, the future Kalgoorlie bypass to the south (and future industrial land), and the Eastern Goldfields Clay Target Club to the west. The land is ideally suited to industrial land use given its locational context adjacent to other industrial uses, being removed from residential areas, and located along GEH and other existing and proposed major transport routes providing excellent commercial exposure and accessibility.

This Structure Plan is intended to provide the detailed framework to deliver this industrial area in a timely and coordinated manner, and in a form which will facilitate flexibility in lot size and layout, and enable access and manoeuvrability within the Estate for industrial vehicles.

The Structure Plan will provide approximately 110-130 lots with areas of around 2500m2 – 6.7ha to accommodate a wide range of industrial uses.

Note: Lot sizes and number of lots are indicative only and will ultimately depend on market demand.

The Structure Plan is not only consistent with the State and strategic planning framework, but is consistent with contemporary industrial development practices.

The planning and design process has been guided by technical investigations, including:

- Traffic investigations
- Civil engineering investigations
- Hydrological investigations
- Bushfire reporting
- Environmental investigations
- Geotechnical investigations
- Landscape concept
- Indigenous heritage investigations

2.2. LAND DESCRIPTION

2.2.1. Location

The subject land is bounded by GEH to the north, Anzac Drive (west) to the east, vacant land to the south and the current clay target club to the west. The APA gas pipeline follows the western boundary of the site, and power lines run along the northern and eastern boundaries. The Kalgoorlie Bypass (also known as PortLink) traverses the southern portion of the site; and will effectively land-lock the extreme southern portion of the site, until land further to the south east is developed.

The site is located approximately 3km from Kalgoorlie-Boulder Airport and 1km south of the West Kalgoorlie Railway Station which is a dual gauge line, providing for passenger and freight services. A spur line services the West Kalgoorlie Industrial Area which is located to the north and east of the site. The Anzac Drive Industrial Estate, also developed by DevelopmentWA, is located west of the site. There is a growing demand for industrial land within the Kalgoorlie area, and limited opportunities for other industrial areas to be developed within the City.

Refer **Figure 3 – Location Plan, Figure 4 - Aerial Plan** and **Figure 5 – Cadastral Plan.**

2.2.2. Area and Land Use

The Structure Plan area is 166.5ha in area and is vacant and vegetated. There is no evidence of previous landuses other than 4wd tracks and minor areas of excavation and revegetation which are understood to be related to soil testing.

2.2.3. Legal Description and Ownership

The subject land comprises Lots 500-502 Anzac Drive, Yilkari, Kalgoorlie (formerly Lot 352). Details of the subject land's legal particulars are provided below. A copy of the Certificate of Title is included in **Appendix A**:

Lot	Plan/Diagram	VOL/FOL	Land Area	Proprietor	Encumbrances
500	49648	LR3170/893	74.0435ha	UCL/State of WA	Registered NOITT for industrial purposes 30.10.2019
501	49648	LR3170/894	63.5963ha	UCL/State of WA	NOITT as per Lot 500
502	49648	LR3170/895	49.910ha	UCL/State of WA	Gas pipeline easement F924685 (Alinta Energy and Southern Cross Pipelines)

Note: The attached Technical Reports were prepared prior to lot numbers over the subject land changing and therefore refer to the former lot number of Lot 352.

Figure 3 – Location Plan

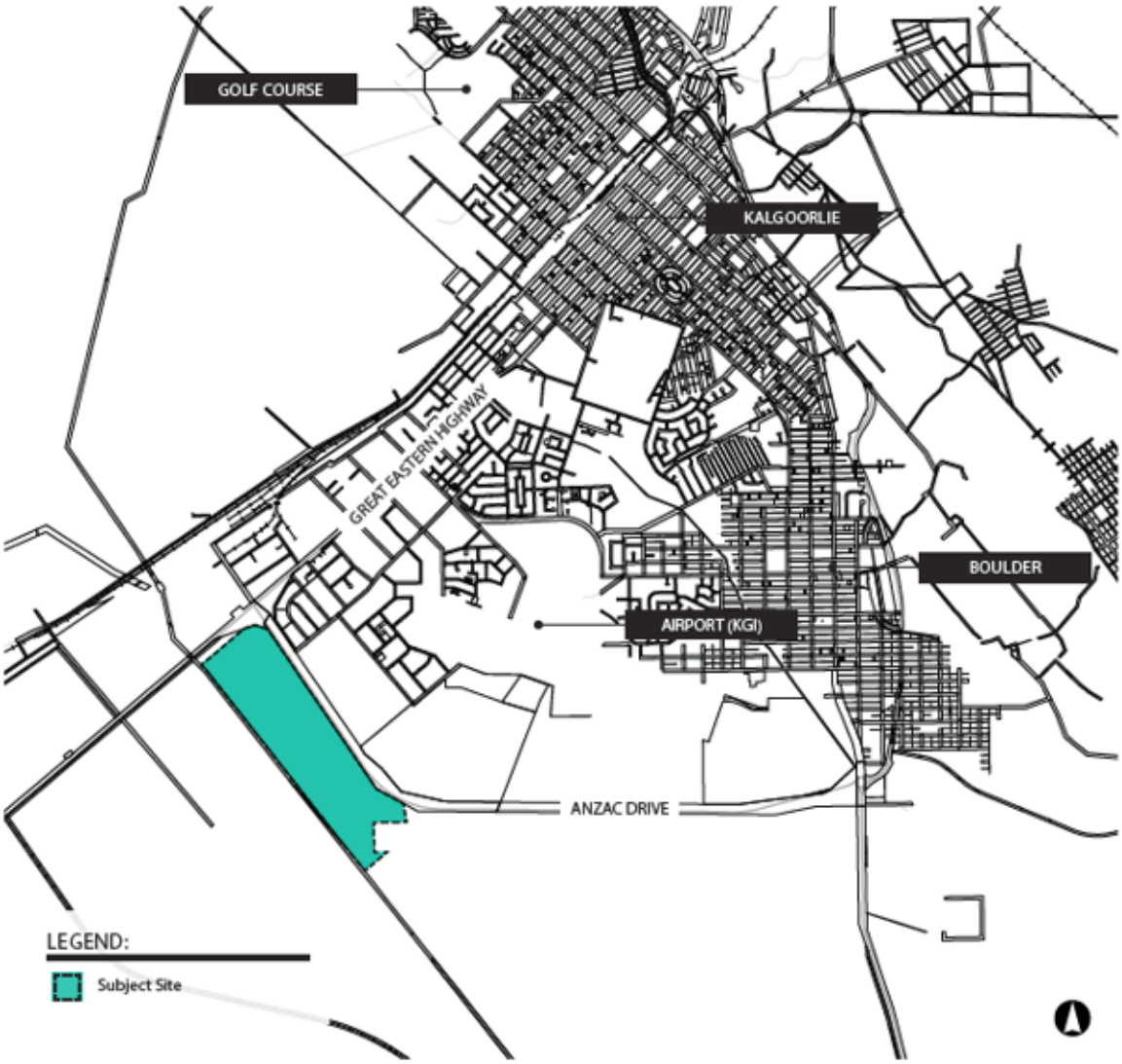


Figure 4 – Aerial Plan

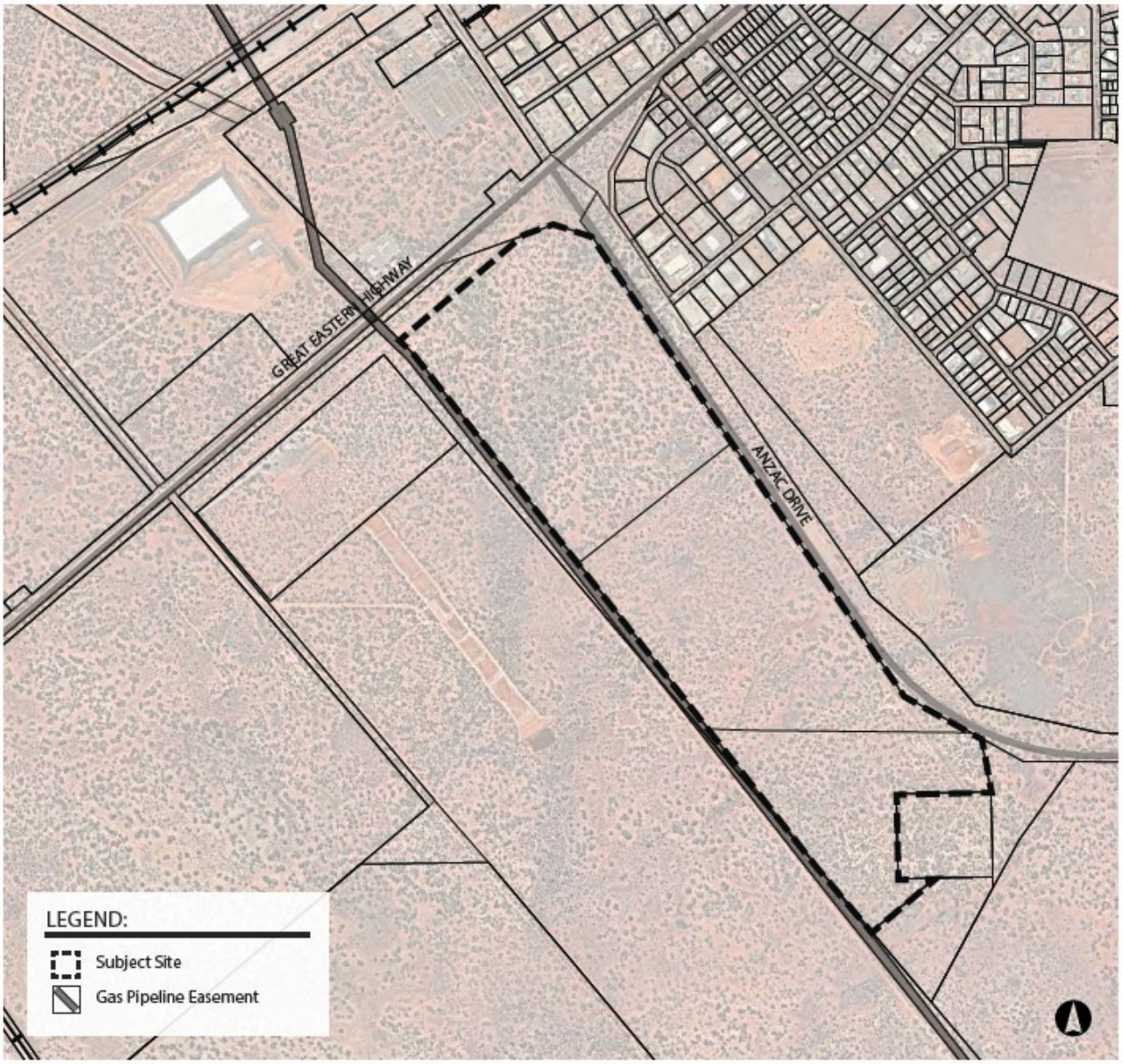
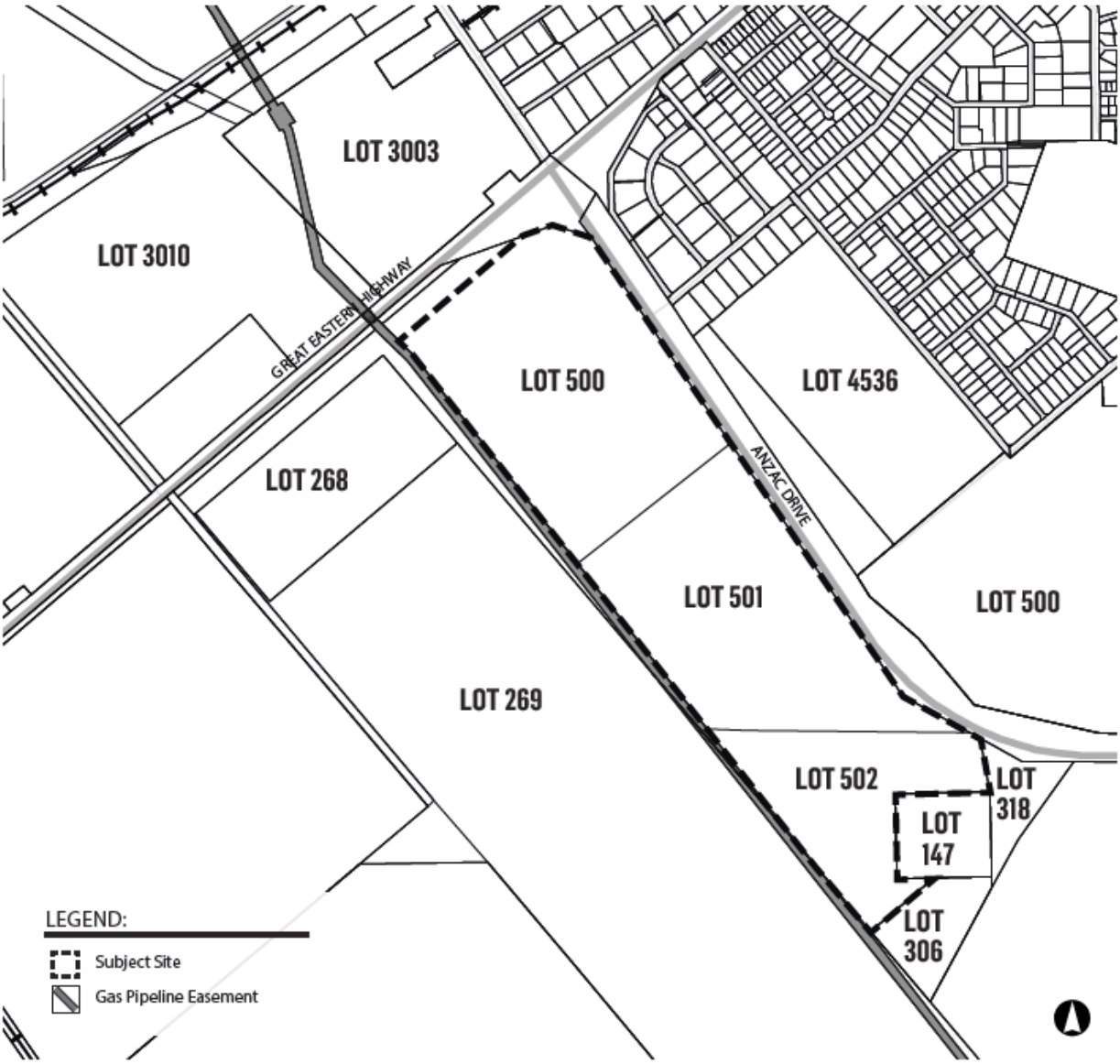


Figure 5 – Cadastral Plan



2.3. PLANNING FRAMEWORK

The following section provides an overview of the relevant planning framework as it relates to the Structure Plan area.

2.3.1. Zonings and Reservations

2.3.1.1. City of Kalgoorlie-Boulder Town Planning Scheme No.1

The Structure Plan area has recently been rezoned from 'Rural' and 'Parks and Recreation' to 'Future Industry' under Amendment 97 to the City of Kalgoorlie-Boulder LPS No.1 (LPS1), which was gazetted in June 2019. The OEPA set a level of 'Scheme Not Assessed - Advice Given' in respect to this Amendment (refer **Figure 6 – Local Planning Scheme No.1 Map – Amendment No.97**).

Within the proposed Local Planning Scheme No.2 (LPS2), currently under preparation, it is expected that the land will be zoned under LPS2 to 'Industrial Development' in accordance with the Regulations. Gazettal is expected during 2020.

The purpose of the Future Industry Zone is '*to identify land suitable for future industrial development in accordance with an outline development plan (Structure Plan) prepared in accordance with Clause 5.16 approved by the Council and the Western Australian Planning Commission'*

GEH and Anzac Drive, where they abut the site, are identified as Other Regional Roads, and are under the control of Main Roads WA (MRWA).

Land use permissibility is not defined in the Zoning Table within LPS1 for the 'Future Industry' zone, and therefore land use permissibility defers to an appropriate zone under the Scheme, in this case the General Industrial Zone.

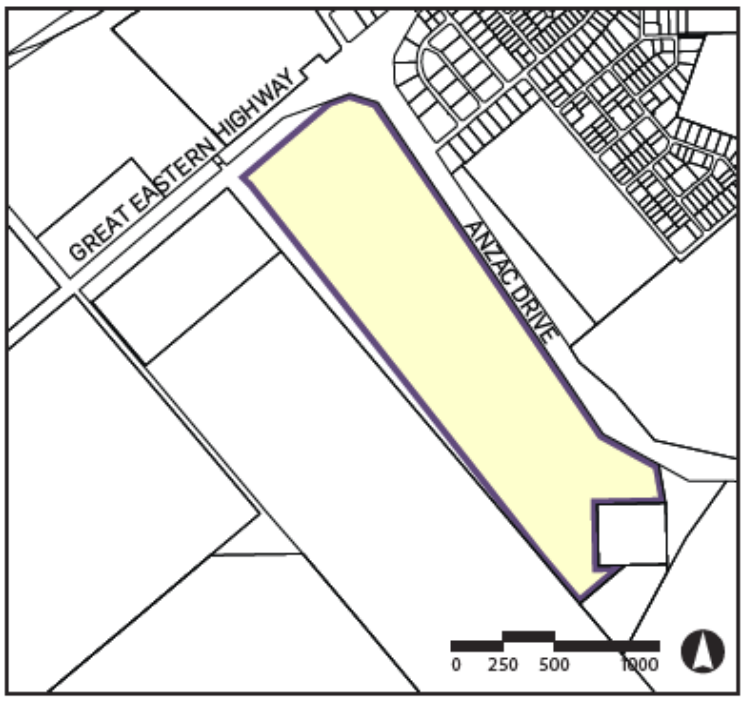
Figure 6 – Local Planning Scheme No.1 Map – Amendment No.97

CITY OF KALGOORLIE-BOULDER TOWN PLANNING SCHEME NO.1 AMENDMENT NO. 97

EXISTING ZONING

LEGEND:

- Freight / Transport
- Industrial Estate
- Future Industry
- Parks and Recreation
- Primary Distributor Road
- Private Recreation
- Rural
- Railways
- Airport
- Extensive Residential



PROPOSED ZONING CHANGES

LEGEND:

- Freight / Transport
- Industrial Estate
- Future Industry
- Parks and Recreation
- Primary Distributor Road
- Private Recreation
- Rural
- Railways
- Airport
- Extensive Residential

2.3.2. State Planning Framework

2.3.2.1. State Planning Strategy 2050 (2014)

The State Planning Strategy is the overarching strategy for Western Australia and is underpinned by six planning principles:

- Community: Enable diverse, affordable, accessible and safe communities
- Economy: Facilitate trade, investment, innovation, employment and community betterment
- Environment: Conserve the State's natural assets through sustainable development
- Infrastructure: Ensure infrastructure supports development
- Regional Development: Build the competitive and collaborative advantages of the regions; and
- Governance: Build community confidence in development processes and practices

It identifies a network of regional centres, infrastructure and economic activity in order to guide investment; and recognises the importance of regional planning.

Kalgoorlie is located within the Central Sector which 'has a growing and diverse economy underpinned by mining, agriculture, fisheries and tourism and is poised to be become a significant contributor to the nation's mining, scientific, technological, research and innovation industries by 2050'. Development of the Structure Plan area for industry will support mining and other industry in Kalgoorlie and is therefore consistent with this objective.

2.3.2.2. WA Regional Freight Transport Network Plan

This document focuses on the State's freight planning, policy and project priorities to ensure an interconnected and robust freight transport system. The purpose of the Plan is to '*guide the future development of the regional freight network to successfully respond to the needs of the growing Western Australian economy and population, while protecting the environment and quality of life aspirations that the community value*'.

The plan identifies priority upgrades to rail and road infrastructure in Kalgoorlie which is further reinforced through the PortLink Inland Freight Corridor Development Plan, traversing the southern portion of the subject land.

2.3.2.3. PortLink Inland Freight Corridor Development Plan

The Portlink Inland Freight Corridor Development Plan incorporates:

- An intermodal freight terminal in Kalgoorlie with associated freight logistics arrangements
- New road and railway alignments around the city centre
- New road and railway corridors connecting to Yilgarn, Midwest Pilbara and export ports in Esperance, Geraldton/Oakajee, Port Hedland and Fremantle.

Feasibility studies have concluded the intermodal terminal is not economically feasible in the short or medium term, only in the longer term when freight quantities demand. Road option 1 (which traverses the south of the subject land) and Rail Option 1 are the current preferred options.

The status, location, timing and implications of the Freight Terminal (and associated road infrastructure identified in the Portlink Inland Freight Corridor Development Plan) is currently undetermined. The Structure Plan shows an assumed alignment only.

2.3.2.4. EPA Guidance Statement No.3 – Separation Distances between Industrial and Sensitive Land Uses (2005)

The Guidance Statement provides generic separation distances between different types of industry and sensitive land uses to avoid or minimise the potential for land use conflict. Separation distances vary from 100m to 2000m based on typical emissions that may affect the amenity of sensitive landuses.

Sensitive landuses include residential, hospitals, short term accommodation, caravan parks, schools, nursing homes, child care, shopping centre, playgrounds, and some public and private buildings. In relation to the Structure Plan area, however, there are no sensitive uses identified within the surrounding area.

2.3.3. Regional Planning Framework

2.3.3.1. Goldfields-Esperance Regional Planning and Infrastructure Framework (2015)

The objectives of the framework are to:

- Provide the regional context for land use planning in the Goldfields-Esperance region
- Provide an overview of the major regional issues facing the Goldfields-Esperance region including economic, social, cultural and environmental matters
- Identify the priority actions required to enable comprehensive regional planning and to guide local planning processes
- Indicate regional infrastructure projects that are considered significant from the region's perspective to facilitate further economic and population growth

The framework sets out the key drivers for economy and infrastructure and identifies major projects and other initiatives to support the framework. The development of the subject land for industrial development, whilst not addressed specifically in this high level framework, will assist in supporting the objectives.

2.3.3.2. Goldfields-Esperance Strategic Development Plan 2011-2021

This document was prepared by the Goldfields-Esperance Development Commission to advance long term development in the region through priorities including:

- A diverse and robust economy that fosters enduring business development and personal prosperity
- Equitable, regionally focussed social conditions, services and amenities
- A natural environment protected and preserved for its intrinsic value and foundation role in economic and social advancement and
- Contemporary governance conditions that promote regional development opportunities and accommodate regional circumstances

Whilst not specifically addressed in this high level document, the development of the land for industrial purposes, to support mining and other industry and in providing local employment, will be consistent with the intent of the Development Plan.

2.3.4. Planning strategies

2.3.4.1. City of Kalgoorlie-Boulder Local Planning Strategy (2013)

The City of Kalgoorlie-Boulder Local Planning Strategy (LPS) 2013 sets out the strategic direction for the City *'focussed on the diversification of industry and playing a major role in the principal service hub for commercial, industrial, agricultural and mining activities. The City aims to maintain its standing as a dynamic regional centre with a proud history and a high quality of life, striving to be the most successful city in regional Western Australia, whilst at the same time complimenting the success of neighbouring regional towns'.*

The current approved LPS identifies the subject land as 'Future Urban' with the proposed PortLink (also referred to as the bypass road) alignment option 1 traversing the southern portion of the land (refer **Figure 7 - City of Kalgoorlie-Boulder Local Planning Strategy (2013**). The land to the west is identified for private recreation. The Structure Plan area is located within the West Kalgoorlie Planning Area. The land is identified for the future expansion of the Ray Finlayson Sports College, with land to the west earmarked for a 'Noisy and Hard to Locate Sports Precinct' for activities such as shooting and motorsports.

Amendment 1 to the Strategy (refer **Figure 8 – City of Kalgoorlie-Boulder Local Planning Strategy Amendment 1**) was prepared in May 2016 and was endorsed by the WAPC in August 2018. This amendment included a range of changes including increasing the amount of industrial land within the LPS area by 370ha in a band extending generally from GEH towards the east, including the subject land along Anzac Drive. The amendment recognised that there is limited land available for growth in industrial land use and that there is a need to 'future proof' the industrial sector within the City's economy. The Structure Plan is key to addressing this objective.

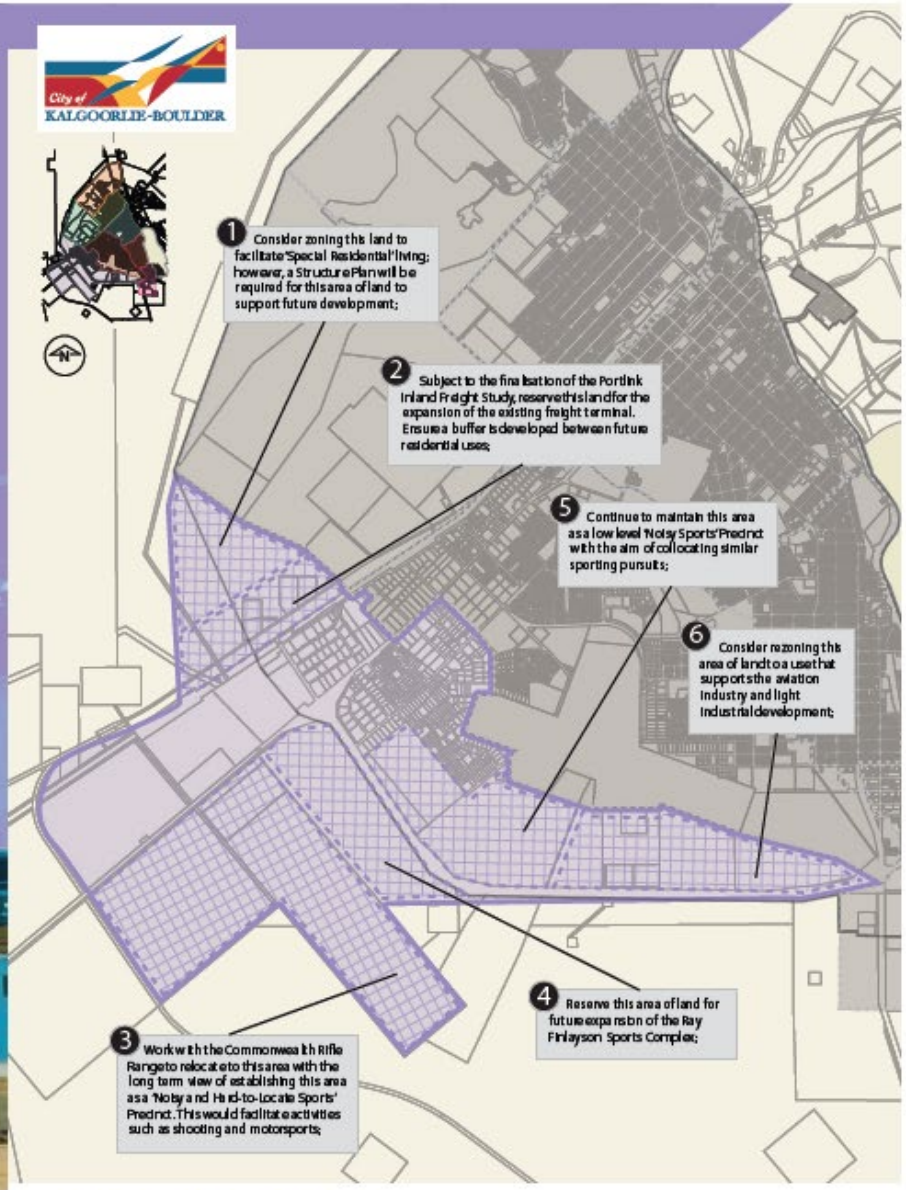
7.8 West Kalgoorlie

Strategic Direction

West Kalgoorlie is regarded as the City's industrial hub with the majority of industrial uses located within this planning area. At present, there are a number of industrial uses established outside of the West Kalgoorlie planning area which impact on residential amenity and commercial viability. To ensure this is reduced in the future, planning provisions will be introduced to encourage these industrial uses to relocate to this planning area. Also, giving that this planning area is a significant distance from the Kalgoorlie and Boulder CBD's and the nature of industrial development, this area lends itself well to accommodate a multi-purpose 'Noisy and Hard-to-Locate Sports' Precinct. With this said, the future development proposed for this planning area hinges on the outcomes of the Portlink Inland Freight Study.

Table 18: West Kalgoorlie planning area development

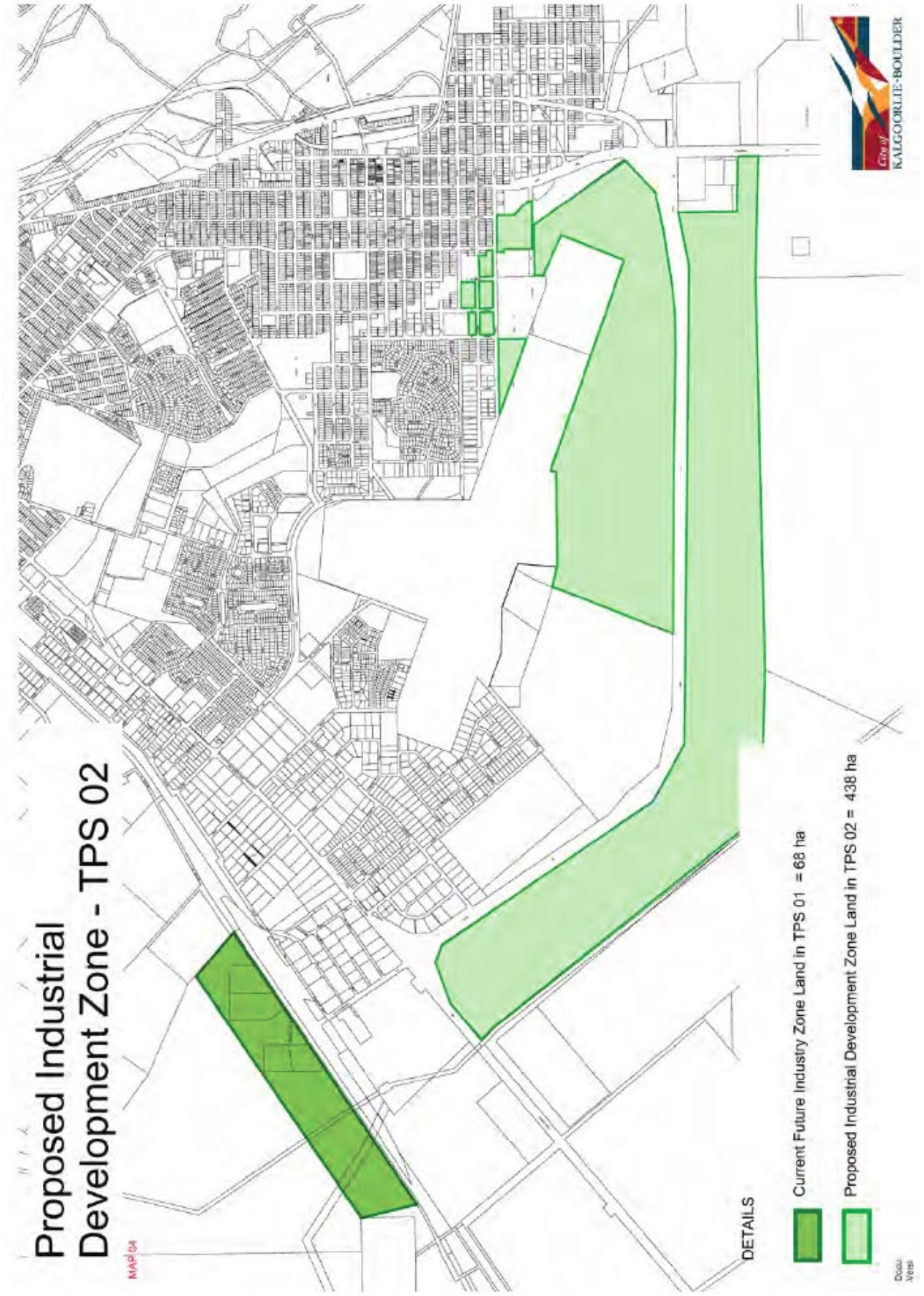
Objectives
1 Consider zoning this land to facilitate 'Special Residential' living; however, a Structure Plan will be required for this area of land to support future development;
2 Subject to the finalisation of the Portlink Inland Freight Study, reserve this land for the expansion of the existing freight terminal. Ensure a buffer is developed between future residential uses;
3 Work with the Commonwealth Rifle Range to relocate to this area with the long term view of establishing this area as a 'Noisy and Hard-to-Locate Sports' Precinct. This would facilitate activities such as shooting and motorsports;
4 Reserve this area of land for future expansion of the Ray Finlayson Sports Complex;
5 Continue to maintain this area as a low level 'Noisy Sports' Precinct with the aim of collocating similar sporting pursuits;
6 Consider rezoning this area of land to a use that supports the aviation industry and light industrial development;



West Kalgoorlie Strategic Direction Planning Area

Figure 7 – City of Kalgoorlie Boulder Local Planning Strategy (2013)

Figure 8 – City of Kalgoorlie Boulder Local Planning Strategy Amendment 1



2.3.4.2. Kalgoorlie-Boulder Regional Hotspots Land Supply Update (2008)

The subject land is identified as project area KB66 (Anzac Drive West) for investigation for industrial development subject to resolution of native title and mineralisation enquiries. The proposed development of the land for industrial purposes is consistent with the Hotspots report.

2.3.5. State Planning Policies

2.3.5.1. SPP1.0 – State Planning Framework Policy (2017)

SPP1.0 sets out the key principles relating to *'environment, community, economy, infrastructure, regional development and governance which should guide the way in which future planning decisions are made'*. The State Planning Strategy provides the overall vision, with the SPP reinforcing and expanding upon the key principles of the Strategy.

In relation to regional development the objectives include the promotion of diverse land uses and development of regional resources through economic diversification, expansion and inter regional collaboration; allowing regional centres to capture investment; and enable remote settlements to maintain economic and community development through improved connectivity, services and cultural processes.

2.3.5.2. SPP3.7 – Planning in Bushfire Prone Areas (2015)

SPP3.7 aims to reduce the risk of bushfire to people, property and infrastructure by taking a risk-minimisation approach to development proposed in bushfire prone areas. The Policy contains objectives and policy measures along with the bushfire protection criteria contained within 'Guidelines for Planning in Bushfire Prone Areas'. All planning proposals including town planning schemes and strategies are required to address the policy requirements which include the preparation of the level of risk through Bushfire Attack Level (BAL) Assessment which identifies the applicable BAL rating.

The subject land is identified in the WAPC mapping as being bush fire prone (along with surrounding land) and therefore a BAL assessment and Bushfire Management Plan have been prepared through the Structure Plan process (refer **Appendix C – Bushfire Management Plan**).

2.3.5.3. SPP4.1 – State Industrial Buffer (1997)

SPP4.1 provides a Statewide approach to buffers for industry and infrastructure, protecting these from encroachment by incompatible land uses; ensuring safety and amenity of land uses surrounding industry and infrastructure; and protecting the interests of landowners affected by buffers. SPP4.1 requires the assessment of buffer requirements on a case by case basis. The Policy adopts generic buffers identified within the EPA's Guidance Statement No.3 – Separation Distances Between Industrial and Sensitive Land Uses. In the case of the subject land, sensitive uses are remote from the site and therefore the Guidance Statement is expected to have limited, if any, impact.

2.3.5.4. Draft SPP4.1 – Industrial Interface (2017)

The purpose of this policy is to protect industry and infrastructure from the encroachment of incompatible land uses and ensure planning considers the locational constraints of land uses, and their costs and benefits to the community. The Policy seeks to prevent land use conflict between industry, infrastructure and sensitive land uses. The Policy applies to the preparation of scheme amendments and planning strategies and Structure Plans and relates to the implementation of statutory buffers for a variety of infrastructure and industrial activities including for strategic industrial areas.

In reference to the subject land, the policy identifies that the development of land within a pipeline license triggers the requirement for compliance with Draft DC4.3 – Planning for High Pressure Gas Pipelines.

In the case of the proposed development, the industrial area is not considered to be a Strategic Industrial Area or of State significance, however, the need to consider surrounding land uses and ensure appropriate separation distances is still relevant, along with identifying the gas pipeline and the appropriate treatment of its easement. The policy requires Structure Planning to be undertaken for all new general industrial zones including consideration of surrounding landuses to understand the context of the proposal and enable a compatible interface.

In respect to the subject land, discussions have been held with the APA – the resolution of which is detailed in section 7.6 and **Appendix D** of this report.

2.3.5.5. WAPC Structure Plan Framework (2015)

The WAPC Structure Plan framework sets out the structure and content for the preparation of Structure Plans and activity centre plans, along with procedural requirements. Structure Plans are required to comply with the framework for the purposes of consistency and content. This Structure Plan follows the requirements of the Framework.

2.3.6. Development Control Policies

2.3.6.1. DC4.1 – Industrial Subdivision (1988)

This policy provides guidance on matters considered by the WAPC when determining applications for industrial subdivision including design and shape of lots, road layout and utility provision.

The objectives of the policy encourage the development of well-designed industrial areas, provide for the safe and efficient movement of traffic, provide for infrastructure services and public open space consistent with the operational needs of the workforce, and protect the amenity of surrounding land uses. A key policy measure, which is relevant to the future Structure Planning process, is ensuring that designs provide maximum flexibility to accommodate changing needs for lot areas and landuses; provision of a simple and legible road network to allow circulation by industrial and other vehicles, and connection to appropriate services.

2.3.6.2. DC4.2 – Planning for Hazards and Safety (1991)

This Policy seeks to provide guidance for the prevention of potentially hazardous events and to mitigate the effects of events. The objectives of the policy are to:

- Ensure that developments are reviewed with a view to maintaining appropriate public safety
- Maintain acceptably low risk exposure through appropriate planning procedures
- Provide guidelines for the consideration of the influence of existing risk levels in the planning process
- Provide for the development of industries and activities which are hazardous but desirable for the benefit of the wider community

The main implications for the subject land in relation to this policy is to consider potential land use in the context of surrounding development as set out in Draft SPP5.1 and EPA Guidance Statement 3.

2.3.6.3. Draft DC4.3 – Planning for High Pressure Gas Pipelines (2016)

The policy recognises that development along pipelines may pose a risk to pipeline integrity. This may be a risk should a pipeline failure occur which could have significant and far reaching implications. The policy aims to manage the interface between pipelines and other landuses. The objectives of the policy are to:

- Guide strategic planning for land in the vicinity of high pressure gas pipelines in order to minimise land use conflict
- Ensure that people and development in the vicinity of a high pressure gas pipeline are not subject to an unacceptable risk from that infrastructure
- Ensure that people and development in the vicinity of a high pressure gas pipeline do not pose an unacceptable risk to the integrity of the infrastructure
- Provide guidance on how land within pipeline license areas and the DBNGP corridor should be developed and managed.

The Policy requires the proponent of any planning proposal to consult with the pipeline owner/operator to obtain advice on what (if any) risk mitigation measures are required in order to ensure that the proposed development would not result in unacceptable risk. As noted in section 7.6, discussions have been held with the pipeline operator and the resolution is contained in this report.

2.3.6.4. Draft DC5.1 – Regional roads (Vehicular Access) (2018)

DC5.1 sets out the principles to be applied when considering proposals for vehicle access to or from developments abutting regional roads. In this case, both Great Northern Highway and Anzac Drive are regional roads under the control of MRWA. In considering applications for access onto regional roads, the effects of the proposals on traffic flow and road safety will be the primary consideration. Access should be minimised with a presumption against new crossovers on regional roads and to rationalise existing access arrangements. Liaison with MRWA in relation to access and egress arrangements for the subject land, has been undertaken during the preparation of this Structure Plan and the Traffic Impact Assessment is contained in **Appendix E – Transport Impact Assessment**.

2.4. KEY OUTCOMES FROM REVIEW OF STRATEGIC AND STATUTORY PLANNING CONTEXT

Overall, the proposed development of the land for industrial purposes is consistent with the site's strategic and statutory context. The development of the subject land will address the current and expected future shortage of industrial land within Kalgoorlie, and will provide for business growth, increased employment and industrial support for mining operations, consistent with the objectives of the various strategic documents reviewed.

The key considerations arising from the above review are relevant:

- The land is appropriately zoned to accommodate industrial development, being recently rezoned to 'Future Industry' via Amendment No.97 to LPS1
- The Structure Plan is required to indicatively reflect the alignment of PortLink which traverses the southern portion of the land in an east-west direction
- The proposed development is supported by the current Local Planning Strategy which identifies the land for industrial purposes
- A BAL Assessment and Bushfire Management Plan are required, and accompany the Structure Plan within **Appendix C**.
- Design of the industrial area is to be in accordance with DC4.1 – Industrial Subdivision, in terms of providing a robust and legible street network, accommodate servicing and providing flexibility
- Liaison with the gas pipeline operator APA in respect to setbacks and treatment of the easement is integral to the design of the area, and resolution of this aspect has occurred
- MRWA is required to approve access/egress arrangements to the adjacent regional roads

2.5. PRE-LODGEMENT STAKEHOLDER CONSULTATION

During the process of rezoning the land under Amendment No.97 and the subsequent preparation of this Structure Plan, the following pre-lodgement consultation occurred:

Agency	Form of Communication	Date(s)	Topic
Shire of Kalgoorlie-Boulder	Telecon, emails, meetings	Various	Scheme Amendment, pre-lodgement and related matters Engineering servicing considerations
DPLH	Telecon, meetings	Various	Scheme Amendment, Pre-lodgement
DWER	Telecon, meeting & email	Various	Hydrology related matters

Agency	Form of Communication	Date(s)	Topic
MRWA	Telecon, meeting and email	Various	Vehicular intersection position and geometry off Anzac Drive
Kalgoorlie Boulder Urban Landcare Group	Meeting	-	Priority plant
DBCA	Email, Telecon, Meeting	Various	*Eremophila Praecox*- Met onsite to confirm species characteristics and a later survey confirmed 5 plants only exist within the Structure Plan area

3. SITE CONDITIONS AND CONSTRAINTS

The Structure Plan area is bound by native vegetation to the south-west, undeveloped native vegetation to the south-east, various developed and undeveloped industrial lots to the north-east abutting Anzac Drive, and mostly undeveloped native vegetation to the north-west across GEH.

PGV Environmental has prepared an Environmental Assessment Report for the Structure Plan area (refer **Appendix F**).

Environmental and other considerations are reflected on **Figure 9 – Opportunities and Constraints Plan**.

3.1. BIODIVERSITY AND NATURAL AREA ASSETS

PGV Environmental undertook a Flora and Vegetation Survey of the site in August 2012 and conducted a vegetation appraisal in June 2018. These reports are contained within the Environmental Assessment Report in **Appendix F**.

3.1.1. Vegetation

The site is in the Eremaean Botanical Province and within the Coolgardie Bioregion and Eastern Goldfields sub-region. The vegetation is mapped as Beard vegetation "Medium woodland; Salmon Gum and Goldfields Blackbutt". More than 85% of the extent of Beard vegetation occurs in the Eastern Goldfields sub-region. The site currently contains native Eucalypt woodland vegetation over most of the area. A small area near the centre of the site has previously been cleared and rehabilitated with native shrubs. Portions of the south-eastern end of the site have been excavated at shallow depth with the excavations strategically undertaken to avoid trees. Numerous vehicle tracks traverse the site.

Seven vegetation types were mapped on the site as follows:

Refer Figure 10 – Flora and Vegetation

- *Es Eucalyptus salmonophloia (Salmon Gum) Low Woodland over Eremophila scoparia/E. alternifolia/ Senna artemisioides subsp. filifolia Open Shrubland to Shrubland*
- *Salmon Gum dominated woodland occurred primarily in the north-western and western sides of the site.*
- *EcEs Eucalyptus clelandii (Cleland's Blackbutt)/E. salmonophloia Low Open Forest over Eremophila scoparia/ Senna artemisioides subsp. filifolia/Acacia hemiteles Shrubland*
- *Eg Eucalyptus griffithsii (Griffiths' Grey Gum) Low Open Woodland over Senna artemisioides subsp. filifolia Shrubland to Open Heath*
- *EsEgEc Eucalyptus salmonophloia/E. griffithsii/ E. clelandii Low Woodland over Acacia hemiteles/Senna artemisioides subsp. filifolia/Eremophila scoparia/Atriplex nummularia Open Shrubland*
- *EtEs Eucalyptus transcontinentalis (Redwood)/E. salmonophloia Low Open Forest over Acacia hemiteles/Eremophila maculata Shrubland*
- *ErsSa Eremophila scoparia/Senna artemisioides subsp. filifolia Open Heath*
- *Ch Chenopod Open Low Heath*

An area close to the centre of the site contains Chenopod shrubs which appear to have been planted by seed following shallow excavation. This area is approximately 200m long by 100m wide and contains *Maireana brevifolia, M. georgei, M. erioclada, Atriplex vesicaria and Sclerolaena microcarpa*. Ward's Weed (*Carrichtera annua*) is abundant which reflects the previous disturbance of the site.

The vegetation condition over the site was assessed according to the condition rating scale used in the Bush Forever process. Most of the vegetation was considered to be in Very Good to Excellent condition. The approximately 2ha area of Chenopod revegetation in the centre of the site is rated as being Degraded due to the total clearing in the past and regeneration to a different vegetation type. Portions of the south-eastern part of the site have had some shallow excavation in the past, however, this was done in a way that retained most of the Eucalypt trees and a large amount of understorey. These areas were therefore rated as Very Good.

Figure 9 – Opportunities and Constraints Plan

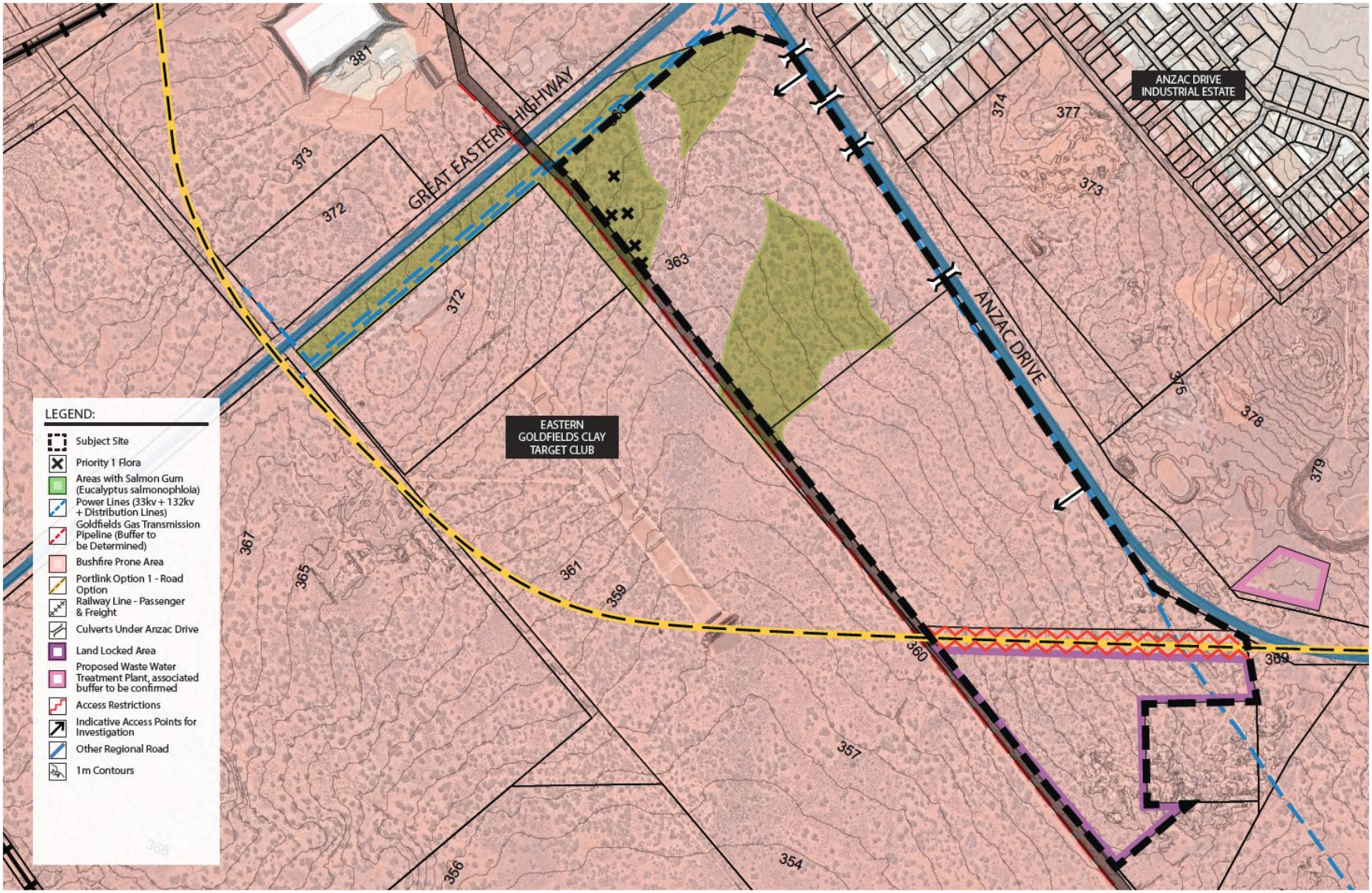
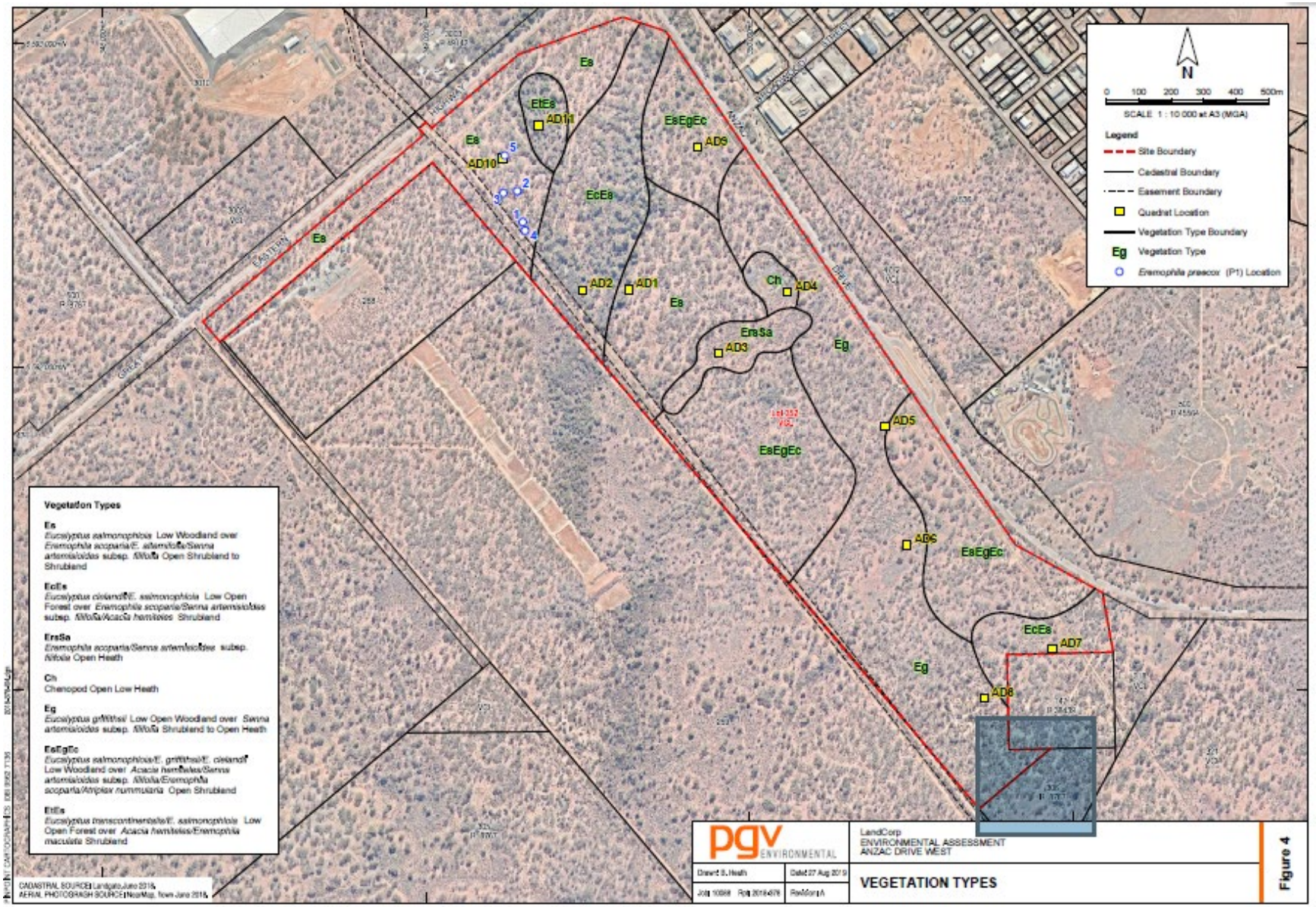


Figure 10 – Flora and Vegetation



Many vehicle tracks occur throughout the site; however, the openness of the vegetation and flat heavy soils has allowed a network of tracks on the site without greatly disturbing the native vegetation. There are very few weeds on the site apart from the 2ha regeneration area and along the large access track running down the south-west boundary.

3.1.2. Flora

A total of 55 species were recorded during the 2012 flora survey (PGV Environmental, 2012). This total consisted of 52 native species and 3 introduced species. The low proportion of introduced species (5%) reflects the overall good condition of the vegetation on the site. The low number of native species reflects the low diversity of Goldfields woodlands and the uniformity of the vegetation type on the site.

One P1 Flora, *Eremophila praecox*, was recorded on the site. A total of 5 individual plants were recorded in good condition woodland at the north-western end of the site. Whilst this species is known to occur in reserves within 20km of the site, the PGV report recommends retaining as many of these plants as possible. Cuttings may also able to be propogated and used in landscaping in portions of the development.

3.1.3. Conservation Significance of Flora and Vegetation

P1 species are not protected specifically under the State Wildlife Conservation Act 1950 or Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act).

The plants on site are proposed to be retained within a reserve and adjoining road reserve within the future development. The species is also being successfully propagated from cuttings at the Kalgoorlie Boulder Urban Landcare Group's nursery in Karlkurla Park in Kalgoorlie.

There are no known occurrences of a TEC or PEC within 10km of the site.

The site contains numerous mature Eucalyptus trees, including Salmon Gums, which should be considered for retention as much as possible in the future development.

3.1.4. Fauna

Terrestrial Ecosystems undertook a Level 1 Vertebrate Fauna Risk assessment for the site (December 2012) which concluded that the clearing of vegetation will have short term impacts on fauna and is not significant in a bioregional context. Impact on fauna species and species of conservation significance will be minimal.

There is one broad fauna habitat type on the site. This habitat type is best described as an open eucalypt woodland with a mixed understory of scattered shrubs and chenopods. There were variations in the densities of trees, shrubs and ground cover, but these differences were not sufficient to support a significantly different vertebrate fauna assemblage. Much of the site is in reasonable condition, however, there is evidence of well used tracks through the area, and ground disturbance and rubbish has been dumped in some areas.

3.1.4.1 Conservation Significant Fauna Species

Eight species listed under the Commonwealth EPBC Act 1999 and 10 species listed under the WA Wildlife Conservation Act 1950 potentially occur in the vicinity of the site. In addition, another 12 listed as Priority species may occur in the vicinity of the site. Of these species three may occur intermittently on the site but would not be reliant on the site for their survival. The three species are *Falco peregrinus* (Peregrine Falcon), *Platycercus icterotis xanthogenys* (Mallee) Western Rosella and *Nyctophilus major* or Central Long-eared Bat.

The fauna habitat type represented in the project area is abundant and in similar condition in adjacent areas. The available fauna survey data provides a good indication of the vertebrate fauna that are potentially in the project area. From a fauna perspective, some of the vegetation in the project area could be described as in good condition, however, the area also contains some well-established tracks, prior ground disturbance and dumped rubbish. The biodiversity value of the area would generally be rated as low given the disturbance and its proximity to the Kalgoorlie urban area.

Clearing of vegetation and developing an industrial estate on the site will impact on the terrestrial fauna, however, it is unlikely that any conservation significant species, when considered in a regional context, will be significantly impacted by vegetation clearing or development.

Clearing native vegetation is likely to result in the loss of small vertebrate fauna on-site that are unable to move away during the clearing process. The few larger animals, such as goannas, and most of the birds will move into adjacent areas once clearing commences. Impacts on the vertebrate fauna associated with clearing vegetation on the site in a landscape or bioregional context are likely to be low, as there are vast tracts of similar habitat in adjacent areas. Clearing methods that largely leave the soil intact are recommended, enabling many of the small mammals and reptiles to escape being injured or killed.

3.2. LANDFORM AND SOILS

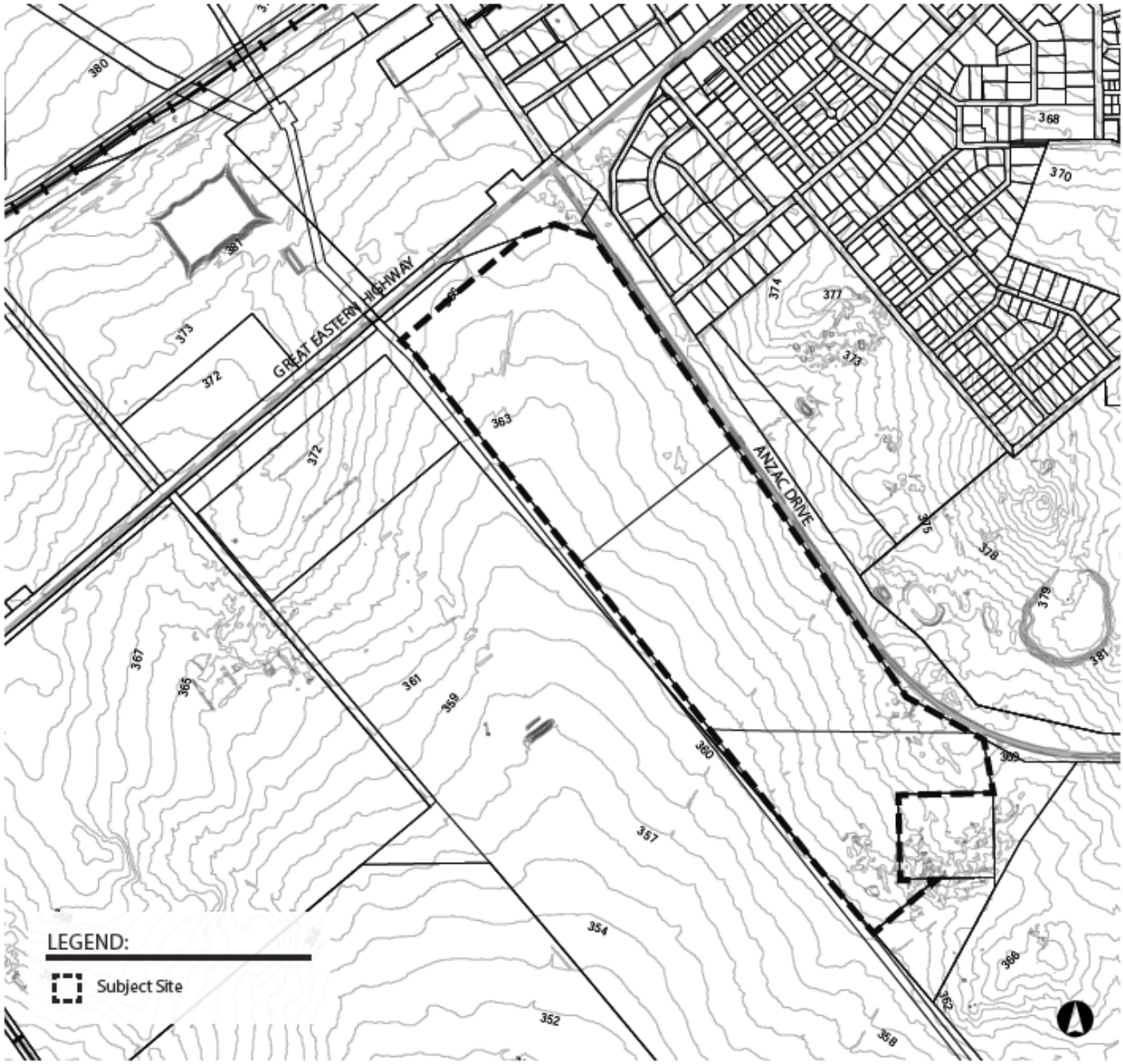
Galt Geotechnics was engaged to prepare a Geotechnical Study for the northern portion of the site which is intended to accommodate the first stage of development subject to issue of the NOITT (refer **Appendix G – Geotechnical Report**).

The site is flat with an elevation range of 368-376m AHD across the site (refer **Figure 11 – Site Contours**). The geology on the site is mapped in the Geological Survey of WA as follows:

- Qa Alluvium, clay, silt and gravel in channels; and
- Czc Colluvium; gravel, sand and loam as sheetwash and talus

The soils on the site are labelled as 265 Kambalda zone which consist of an extensive plateau, with flat to undulating plains and small valleys. The soils are very fine-grained and have a characteristic reddish colour, derived from their high iron oxide content. The soils in this zone are characterized by extensive areas of calcareous loamy earths, red loamy earths, red deep and shallow loamy duplexes. The subsurface conditions are similar across most of the site.

Figure 11 – Site Contours



3.3. GROUNDWATER AND SURFACE WATER

GHD has prepared a Local Water Management Strategy (LWMS) for the Structure Plan area (refer **Appendix H – LWMS**).

3.3.1. Groundwater

The site is located in the Goldfields Groundwater Area which is gazetted as 'Proclamation' under the Rights in Water and Irrigation Act 1914 (RIWI Act). There is no specific groundwater data associated with the site. The LWMS indicates that shallow groundwater is not present at the site and true groundwater is likely to be at around 40m depth. This is not expected to affect the proposed development. Perched groundwater may develop on the site following rainfall, however this is typical of clay sites and would be dealt with via normal surface water drainage.

3.3.2. Surface Water

Essential Environment in March 2015 undertook a desktop review in consultation with the City and DoW and concluded that the site is close to the top of the catchment and not likely to receive water from upstream as a result of GEH forming the upstream boundaries of the site.

There are no defined watercourses or flowpaths evident on the site from aerial imagery, although there are parts of the site where overland flow is likely to collect and run off towards the south west. These areas are darker green and greener (new growth) on aerial photography. Stormwater is likely to form small channels and move within and off site due to the impervious nature of the clay soils.

There is one significant culvert under GEH east of the Western Power depot and 3 or 4 culverts under Anzac Drive where stormwater will need to be managed. Finished site levels should be above street level to ensure lots are not flooded.

The results of the permeability testing show that the upper (Unit A) clayey sand is somewhat permeable and may be expected to allow some infiltration to dispose stormwater. However, this capacity is limited as the underlying materials are minimally permeable or essentially impermeable. Lot connections and side entry pits are required, and stormwater disposal into swales will be the most appropriate means of dealing with stormwater. On-site stormwater disposal on individual lots and below roads will not be possible. Drainage design and water quality management will be focussed on erosion management and sediment control.

Groundwater or surface water monitoring will not be required and there is not expected to be any need for specific groundwater management requirement at the site. The Department of Water and Environmental Regulation (DWER) has endorsed this position.

Mosquito borne disease is identified as an occasional very high risk. Notifications on title at the subdivision stage may be required.

3.3.3. Pre-development runoff

The existing catchment areas are relatively flat and heavily vegetated with localised depressions. External drainage from upstream catchments enter the site through culvert crossing under GEH and Anzac Drive. All flows enter the site via existing culverts which provide a quasi-detention storage effect in combination with the road embankments. Peak flows are located downstream of the culverts where flows enter the site. Minor channels are apparent from the contours of the area. During a site walkover a number of these channels appear to dissipate to overland flow. Further, a number of informal roads and paths within the study area have interrupted the natural flow paths.

3.3.4. Flood Protection

Due to the nature of the soils, climate and hydrology of the Kalgoorlie-Boulder area, the overarching principle for flood protection is to safely convey the catchment runoff for up to the 1% AEP (100 yr ARI event) through the site, via overland flow paths and/or storage to ensure flooding does not enter lots, and protecting infrastructure and assets. The development area does not occur within a published floodway or flood fringe area.

3.3.5. Site Contamination

The DWER Contaminated Sites Database (DWER 2017) does not identify any registered contaminated sites within or adjacent to the project area and an assessment of current and historical aerial photographs do not identify any potentially contaminating activities as being present on site.

A Preliminary Site Assessment (PSI) has, however, been undertaken and identified some evidence of illegal dumping of household, automotive (including broken vehicle batteries) and general building waste and camping activity with some buried rubbish in multiple locations across the site. Some asbestos fragments have also been identified within isolated parts of the site, predominantly associated with small scale rubbish dumps. Further assessment will be undertaken in two identified locations in due course.

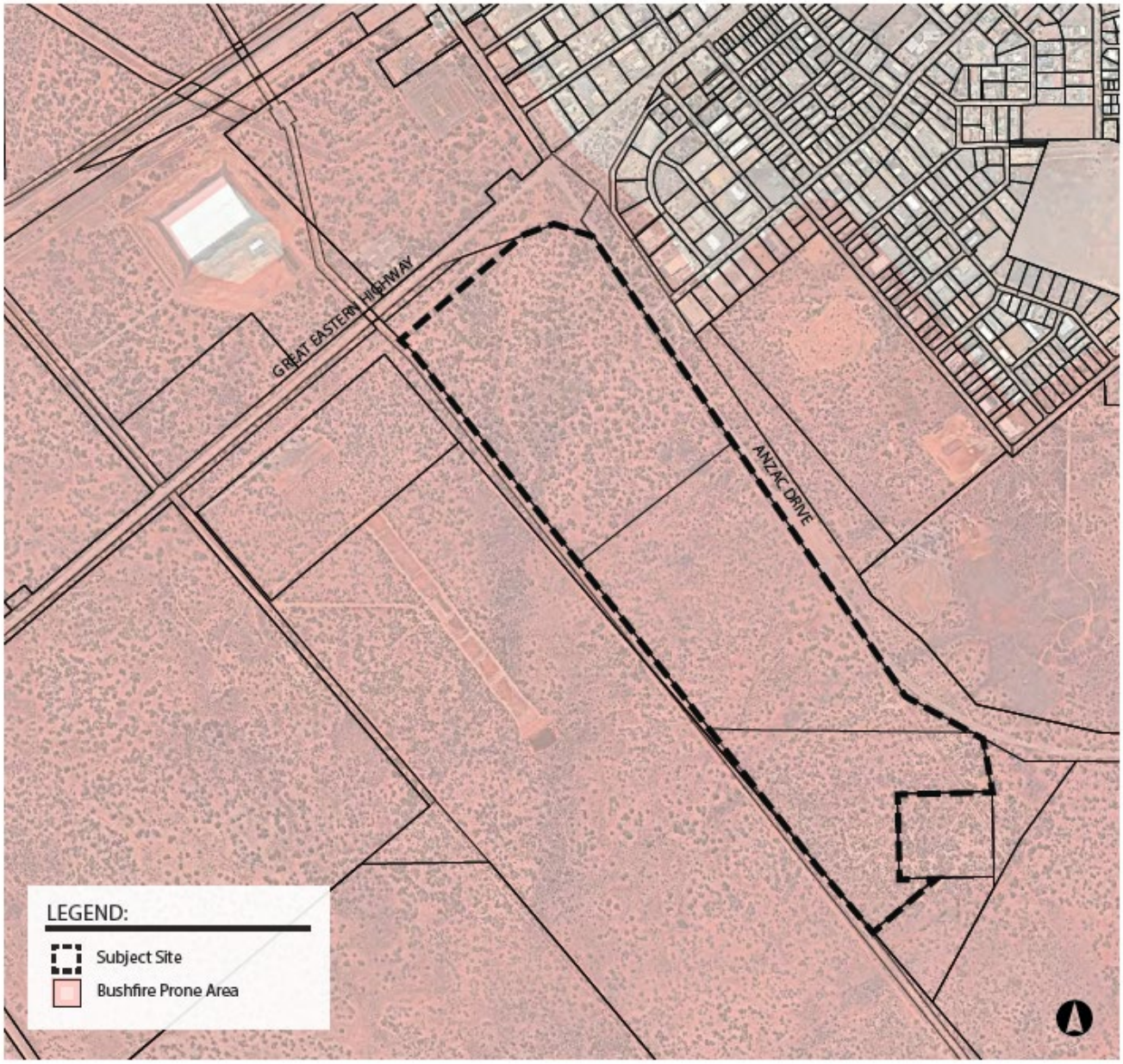
3.3.6. Acid Sulfate Soils

Acid Sulphate Soils are not known or mapped to occur on the site.

3.4. BUSHFIRE HAZARD

As a result of proximity to vegetation on and adjacent to the project area, the project area is situated within a designated bushfire prone area according to the DFES State Map of Bush Fire Prone Areas (refer **Figure 12**), which triggers bushfire planning requirements under State Planning Policy 3.7 (SPP 3.7) and reporting in accordance with the associated Guidelines for Planning in Bushfire Prone Areas (the Guidelines). A Bushfire Management Plan and BAL Contour Map have been prepared for the Structure Plan area and are included at **Figure 13** and at **Appendix C**.

Figure 12 – Bushfire Risk



Strategen has undertaken a BAL contour assessment to support the Structure Plan. The highest BAL applicable to the external boundary of the proposed development cells is BAL–FZ. Through the implementation of APZ setbacks, BAL-29 or lower will be achievable for all future industrial lots given the size of each industrial lot will be sufficiently large enough to cater for appropriately sized buildings plus any required APZ setbacks.

Table 3: BAL contour assessment results

Method 1 BAL determination						
Vegetation Plot	Vegetation classification	Effective slope	BAL contour width	Highest BAL	APZ width/ building setback	Modified BAL ^
1	Class B Woodland	Flat/upslope (0°)	<10 m	BAL–FZ	14 m	BAL–29
2	Class C Shrubland	Flat/upslope (0°)	<7 m	BAL–FZ	9 m	BAL–29
3	Class D Scrub	Flat/upslope (0°)	<10 m	BAL–FZ	13 m	BAL–29
4	Excluded – Non-vegetated & Low threat (Clauses 2.2.3.2 [e] and [f])	N/A	N/A	N/A	N/A	N/A

Figure 13 – BAL Contour Map and Bushfire Management Measures

The predominant Class B woodland and Class C shrubland vegetation observed is typical of the Great Western Woodlands in that it consists of a sparse and scattered overstorey and low density/fuel carrying understorey with significant areas of bare earth between individual plants. On this basis, bushfire behaviour is likely to be highly moderated.

Furthermore, the landscape adjacent to the project area is fragmented by significant infrastructure corridors, tracks and existing industrial development that would reduce the ability for fire spread and significant bushfire escalation at the development interface. Overall, much of the project area and adjacent vegetation is degraded through previous earthworks/excavation and previous grazing.

3.4.1. Bushfire Hazard Issues

A compliant bushfire management response to the abovementioned risks is considered readily achievable through the following strategies, which will be incorporated into future subdivision application and development application stages:

- On-site clearing will provide vast areas of land rated at BAL-29 or less to accommodate future industrial development
- The larger size of future industrial lots (comparative to urban residential lot sizes), combined with an appropriately designed internal road network, will provide significant scope to contain the necessary setbacks/APZs to the development footprint to ensure BAL-29 or less is achieved, including in response to any vegetation retained on-site
- Ultimately, two different vehicular access routes will be provided to Anzac Drive
- The project area abuts both Anzac Drive (east) and GEH (north), meaning a variety of options are available to address vehicular access and temporary secondary access during development staging if required
- The site has capacity to receive a reticulated water supply through extension of water supply infrastructure from adjacent industrial land to the east.

3.5. GOLDFIELDS RESIDENTIAL AREAS – SULPHUR DIOXIDE EPP

The site is located within the Goldfields Residential Areas – Sulphur Dioxide EPP which aims to protect air quality by progressively reducing sulphur dioxide concentration in ambient air. Sulphur Dioxide (SO2) is a waste gas produced as a by-product in the processing of gold and nickel ores, which contain sulphur compounds.

The Environmental Protection (Goldfields Residential Areas) Sulphur Dioxide Policy Order refers to a boundary for Sulphur Dioxide levels. The site falls inside the boundary and Sulphur Dioxide levels must not exceed 0.25ppm from the year 2008 onwards. The EPP is to be considered at the time of the City of Kalgoorlie Boulder considering development applications over individual lots.

3.6. INDIGENOUS HERITAGE AND NATIVE TITLE

3.6.1. Indigenous Heritage

A desktop search of the Aboriginal Heritage Inquiry System has revealed that there are no known sites of heritage significance on the site registered under the Aboriginal Heritage Act 1972 (Slip, 2018).

In 2008, Deep Woods Surveys undertook an Aboriginal Heritage Survey with representatives from the Widji Group on behalf of DevelopmentWA. The subject land was found to be clear of any Aboriginal sites of heritage significance. The Aboriginal Heritage Survey Report does, however, recommend that if any ground disturbing activities are to be undertaken on the subject land, that representatives from the Widji Group be engaged as monitors.

R. O'Connor undertook an Aboriginal Heritage Survey in 2008 on behalf of DevelopmentWA. With the sole exception of the Widji Group who undertook their own Aboriginal Heritage Survey, all relevant native title claimant groups and certain other knowledgeable regional Aboriginal elders were engaged in consultation and participated in an Aboriginal Heritage Survey of the subject land.

As a result of the consultation process and on site Aboriginal Heritage Survey, it was established that all of the Aboriginal claimant group members and elders are satisfied that the subject land does not contain any Aboriginal sites of heritage significance.

Refer **Appendix I – Aboriginal Heritage Survey Report** with Widji Group Representatives (Greenfield and Cue) and Report on Aboriginal Heritage.

3.6.2. Native Title

The site is subject to Native Title with two currently registered claimants.

4. STRUCTURE PLAN

4.1. ZONING AND LAND USE

The subject land is zoned 'Future Industry' under LPS1. Land use is to comply with the land use permissibility set out in the General Industry zone as follows:

Land Use	Permissibility	Land Use	Permissibility
Amenity Building	IP	Industry - Light	AA
Animal Establishment	SA	Industry - Service	AA
Auction Mart	AA	Lunch Bar	P
Automotive Hire	AA	Marine Collectors Yard	SA
Auto Panel Beating/Spray Painting	P	Nursery	AA
Automotive Repairs	P	Occasional uses	AA
Automotive Sales	AA	Office	IP
Automotive Wrecking	AA	Out-Building	P
Builders yard	P	Open Air Display	AA
Caretakers Dwelling	IP	Petrol Filling Station	AA
Car Park	AA	Public Utility	AA
Car Wash	P	Radio/Communication Equipment	AA
Civic Building	AA	Radio and TV Installation	AA
Convenience Store	IP	Salvage Yard	AA
Depot	P	Service Station	AA
Dry-Cleaning Premises	P	Shop	IP
Dwelling - Transportable	AA	Showroom	AA
Factory Unit Building	P	Solid Fuel Depot	AA
Fuel Depot	AA	Stables	SA
Hire Premises - Industrial	P	Transport Depot	P
Industry - General	P	Warehouse	PP

All other uses are 'X' (not permitted).

Note: land use permissibility may be subject to change through amendment and/or review of Local Planning Scheme No.1

Development control is required to comply with the Industrial Zones provisions set out in clause 3.12 of LPS1: Industrial Zones as follows:

3.12 Industrial Zones

Objective

(a) To nurture existing and encourage new industries compatible with the amenity of the City.

(b) To facilitate diversification of industry to provide greater local economic stability and a range of employment opportunities.

Landscaping

(1) A minimum of 5 per cent of the lot area or the standard specified for a particular use in the Development Standards Table, whichever is the greater, is to be provided as landscaped area in accordance with clause 4.13.

(2) The landscaped area shall comprise a minimum of 2 metres in width within all street setback areas.

(3) Landscaping of lots shall comprise native species selected from those listed in Schedule 7 or as otherwise approved by Council.

Facades

(4) All facades of buildings fronting roads shall be of masonry, plate glass or other material approved by the Council.

4.2. DESIGN PHILOSOPHY

The Structure Plan provides the framework for the development of the Structure Plan area for a variety of industrial land uses. The objective of the Structure Plan is to deliver a well-planned and highly accessible industrial estate designed to provide economic activity, employment growth and service delivery to the Kalgoorlie region.

A preferred Design Concept was identified through the design exploration phase. The design Concept Option is considered to be one potential spatial outcome for the subject land at maturity (refer **Figure 14 – Concept Plan**).

The plan should be used only as a guide for interpretation and decision making, but in no way should be viewed as a requirement or standard.

The Design Concept has responded to site requirements and the outcomes of technical investigations, whilst ensuring a design which is flexible and implementable. It identifies the estate's core components such as key road links, and open space and drainage areas and interfaces.

The following summarises the adopted design philosophy:

Environment

The existing environmental features being the retention of vegetation along portions of GEH, and the protection of the five P1 flora have been key drivers in the design of the Structure Plan. Several drainage corridors have been designed to connect with culverts, allowing drainage to traverse the site in a westwards direction. In particular, a reserve has been provided along the western boundary to protect five (5) P1 Flora. This area will also provide a drainage component. Drainage will also be provided in two other locations along this boundary.

Exposure and Interface

The Concept Plan presents an attractive interface towards Anzac Drive. A strip of open space is provided along Anzac Drive which also incorporates landscaping, drainage and the overhead powerlines. The landscape strip adjoins a possible future a cap road onto which the industrial tenancies will be oriented. This orientation will allow for built form will front Anzac Drive to provide a representative interface and benefit from exposure to passing traffic.

Movement

The Structure Plan movement network has been designed to provide sufficient spacing between Great Eastern Highway to the northern access point (Road 2), and then generous separation to the southern access point (Road 8). The access points avoid the occurrence of four-way intersections with roads servicing the existing industrial area to the east of Anzac Drive.

The access points, coupled with a simple and legible internal road network based on a grid design, will provide suitable access and manoeuvrability for industrial vehicles. Further this will facilitate a flexible streetblock layout to allow for lot size variety to accommodate a wide range of industrial activities to take place as the market demands, over time. The road network allows for a frontage road along the majority of Anzac Drive for commercial exposure.

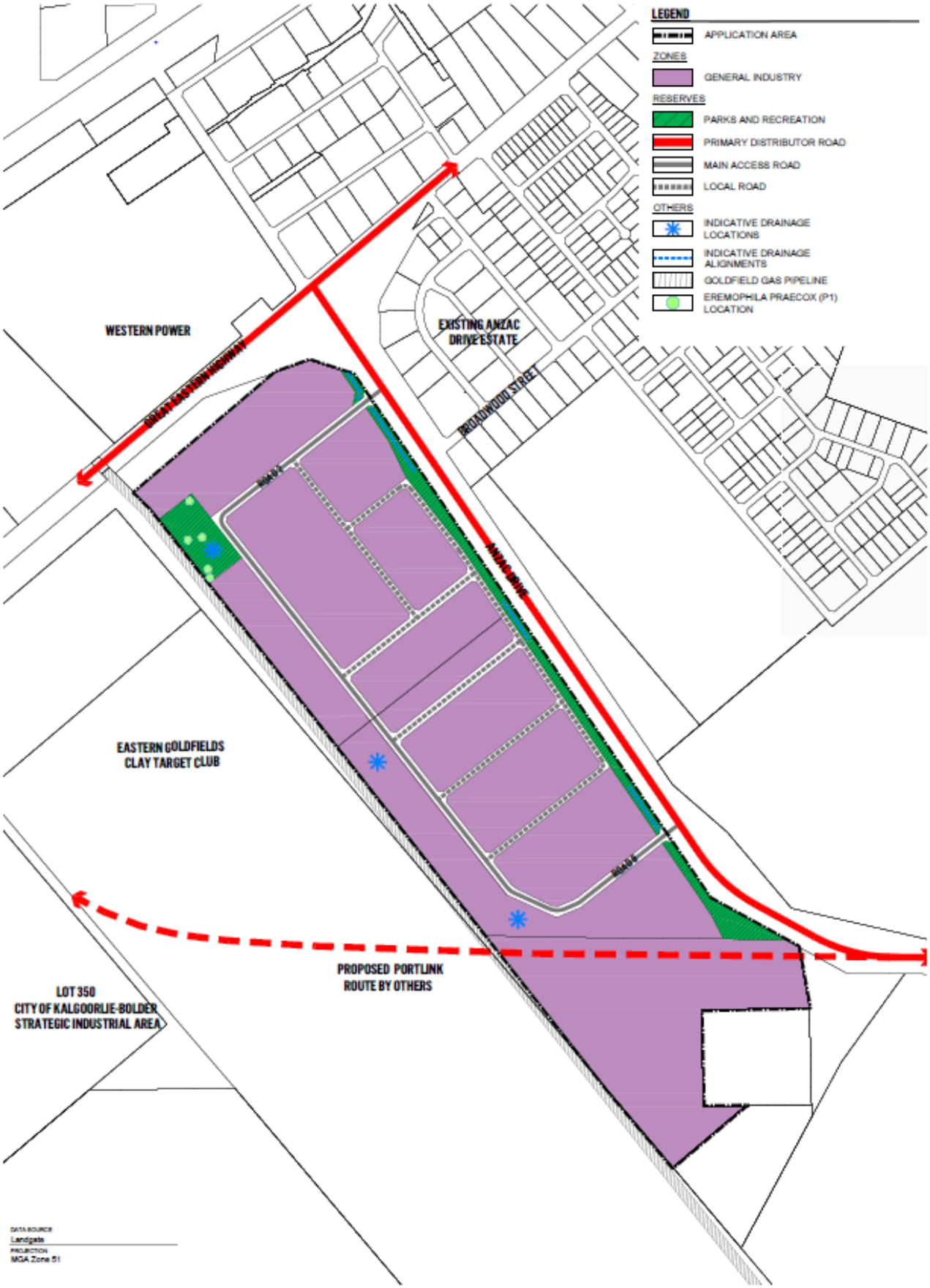
The main spine road has been designed to ultimately accommodate RAV10 vehicles. As the subdivision will occur on a staged basis, the road network will provide temporary turning circles for vehicles as required.

Flexibility

The Structure Plan has been designed to be flexible to cater for a variety of industrial uses and lot configurations. In this regard, larger and smaller development blocks have been established to accommodate a variety of lot sizes and lot mixes, and lot configurations can be designed to allow sites to have double road frontage if required for operational purposes.

Allowance has been made to accommodate the proposed PortLink road in the future. Based upon the Design Concept forming the Part II Structure Plan, PortLink has a potential land take of approximately 9ha, however given the uncertainty about its alignment and design detail, the related land area will be resolved in due course, and most likely at the relevant subdivision stage.

Figure 14 – Concept Plan



5. MOVEMENT NETWORK

Uloth and Associates was appointed to provide input and justification for the proposed access arrangements and intersection locations, and to confirm the traffic impacts of the proposed development (**refer Appendix E – Transport Impact Assessment**).

5.1. EXISTING SITUATION

Anzac Drive is a 2-lane undivided primary distributor road, identified as a Major Highway in LPS1, but downgraded to 'Other Regional Road' in the Local Planning Strategy, following construction of PortLink (also known as the NW Kalgoorlie Bypass). Anzac Drive currently carries approximately 2,100 vehicles per day between Broadwood Street and Goldfields Highway (with almost 42% heavy vehicles), decreasing to approximately 1,300 vehicles per day at GEH.

It has a posted speed limit of 70km/hr at the intersection with GEH, increasing to 90km/hr either side of the existing intersection at Broadwood Street, and then 110km/hr from approximately 165m south of Broadwood Street towards Goldfields Highway.

The existing layout of Anzac Drive in the vicinity of Broadwood Street has a typical pavement width of approximately 8.5m, including 2 travel lanes (approximately 7.5m) and a 0.5m paved shoulder on each side. A channelised right turn lane has been provided within Anzac Drive at Broadwood Street, with a turn lane width of 4.0m of a length of 105m (including taper) to create the right turn lane. This existing geometry does not comply with current Main Roads WA standards for a design speed of 100km/hr.

The existing intersection provides a spacing of 606 metres along Anzac Drive, between GEH and Broadwood Street.

5.2. INTERSECTION SPACING AND POSSIBLE ACCESS ARRANGEMENT

The minimum spacing for the proposed northern access road (Road 2) for the Structure Plan area should be 250 metres west of Broadwood Street, based on the Safe Intersection Sight Distance for a design speed of 100km/hr for westbound traffic. This provides sufficient separation for a driver on Anzac Drive to pass one intersection before focussing their attention on the second intersection, and still have sufficient time to observe a vehicle moving into a collision situation (e.g. in the worst case, stalling across the traffic lanes), and to decelerate to a stop before reaching the collision point.

A left turn lane for the proposed access road should also be provided, with an overall length of 155m, based on the design speed of 100km/hr for westbound traffic.

For eastbound traffic it is recommended to adopt a design speed of 80km/hr (based on the 70km/hr speed limit at GEH). This means that the right turn auxiliary lane for right turns into the proposed new road should provide a deceleration length of 100m, in addition to a storage length of 53.5m (for the proposed Class 3 triple road trains), resulting in a total auxiliary length of 155m.

5.3. PROPOSED DEVELOPMENT

The Structure Plan proposes 2 access roads off Anzac Drive, located 250m north of Broadwood Street and 250m south of the existing truck stop, respectively, in accordance with the recommended intersection spacing, with the assumption that the existing 90 kilometres per hour speed zone at Broadwood Street will also apply at this new road in the future.

It is estimated that the total land areas within the overall Structure Plan could be in the order of approximately 100 hectares, with a mix of both larger and smaller lots depending on market demands.

It is expected that the fully developed Structure Plan area will generate a total of approximately 6,000vpd, including 1,169vpd during the AM peak hour (with 80% entering and 20% exiting), and 1,272vpd during the PM peak hour (with 20% entering and 80% exiting). For analysis purposes, it is also assumed that this traffic generation will include 40% of heavy vehicles, in accordance with the current breakdown of vehicle types on Anzac Drive.

5.4. FUTURE TRAFFIC FLOWS AND ANALYSIS

In order to confirm that the proposed access road intersections off Anzac Drive will operate at an acceptable Level of Service during the future critical peak hours, the future traffic generation has been assigned onto the proposed access roads, taking into account the internal road layout in the proposed Concept Plan, together with the assumption that 60% of traffic will travel to and from the GEH intersection at the northern end (Road 2), leaving 40% to and from Anzac Drive south (Road 8).

A total of 3,100vpd will access the site to/from Road 2 and 2,900 vehicles per day to/from Road 8. All the other internal roads within the Structure Plan will therefore carry significantly less than 3,000 vehicles per day, confirming that standard 10m road pavements within 20 metre road reserves will be sufficient for traffic operational purposes.

Road 2 will operate at Levels of Service B and C during the critical peak hours, indicating satisfactory operating conditions with average traffic delays. Road 8 junction will also operate at Levels of Service B and C during the AM peak hour, but at Levels of Service A and B during the PM peak hour, indicating good operating conditions with short traffic delays.

5.5. REQUIRED INTERSECTION LAYOUTS

The same intersection layout should also be adopted for the future Road 8 as Road 2 intersection when development progresses further south. However, with an assumed design speed of 100km/hr in both directions at this location, the right turn auxiliary lane will need to be increased to a total length of 185m.

It is also important to note that the Safe Intersection Sight Distance requirement for trucks approaching Road 8 from the south will be 320m for a design speed of 100km/hr.

5.6. PROPOSED ROAD NETWORK

The proposed road network will replicate the transport orientated network of the existing Anzac Drive Industrial Estate to the east. Road network design will satisfy heavy vehicle movements internal to the development as well as access/egress from the surrounding road network.

5.6.1. Internal Road Network

The internal road network design will satisfy heavy vehicle movements up to RAV10 (Triple Road Train) with a 10m wide pavement. Internal road reserves shall be up to 30m wide to cater for subject vehicular movements, stormwater drainage infrastructure and civil services.

5.6.2. Anzac Drive Intersections

Vehicular access off Anzac Drive is a major design parameter that has governed the arterial road layout of the Structure Plan. Access locations have been designed to minimise disruption to existing traffic flow on Anzac Drive and GEH.

A preliminary design application for the northern intersection (Road 2) has conditional in-principle support from Main Roads WA (MRWA). The application addressed minimum intersection offset requirements from existing Broadwood Street and GEH intersection, as well as potential design interface with proposed upgrade to GEH/Anzac Drive signalled intersection. Both proposed intersections will operate at acceptable levels of service during critical peak periods.

5.7. ACCESS TO FRONTAGE PROPERTIES

No lots are proposed to directly access the perimeter roads to the development and therefore no special access provisions are required.

5.8. PEDESTRIAN AND CYCLIST FACILITIES

Given the nature of the development as an industrial area of a similar nature to the Anzac Drive Industrial area to the east, no pedestrian or cyclist paths are proposed.

6. LOCAL WATER MANAGEMENT

The LWMS (refer **Appendix H**) aims to achieve the sustainable management of all aspects of the water cycle within the development. Key outcomes of the LWMS are detailed as follows:

- Potable water use should be as efficient as possible across the estate, and fit-for-purpose water should be utilised where suitable
- Key design criteria for the site are based on the hierarchy of stormwater event management from the Decision Process for Stormwater Management in WA
- For small rainfall events, detain and treat lot stormwater runoff from impervious surfaces on site generated by the first 15 mm of rainfall
- Maintain form and hydrology of sensitive receiving environments and maintain pre-development peak flow rates and total volume runoff from the outlets of the development area for the critical 1 exceedance per year (EY) event
- Design stormwater management systems to provide serviceability, amenity and road safety during minor rainfall events
- Maintain the 1% AEP pre-development flood regime (flood level, peak flow rates and storage volumes) for catchments that do not have a published catchment plan
- Maintain surface quality at pre-development levels, and if possible, improve the quality of water leaving the development area through compliance to the Water Quality Protection Note 52: Stormwater Management at Industrial Sites, detaining stormwater runoff from impervious surfaces to promote settlement of suspended solids, prior to discharge via rock protected overland flowpaths from the development area.
- The builders and landholders of the development will have the option of adopting domestic water efficiency measures such as water saving devices to minimise total water use in the industrial estate. Further water efficiency may be achieved through provision of flow restrictors located at lot boundary connections
- Vegetation guidelines will encourage landholders to use native species to minimise irrigation demands. No irrigation is proposed for public areas. Irrigation of the street trees will be limited to the establishment phase only

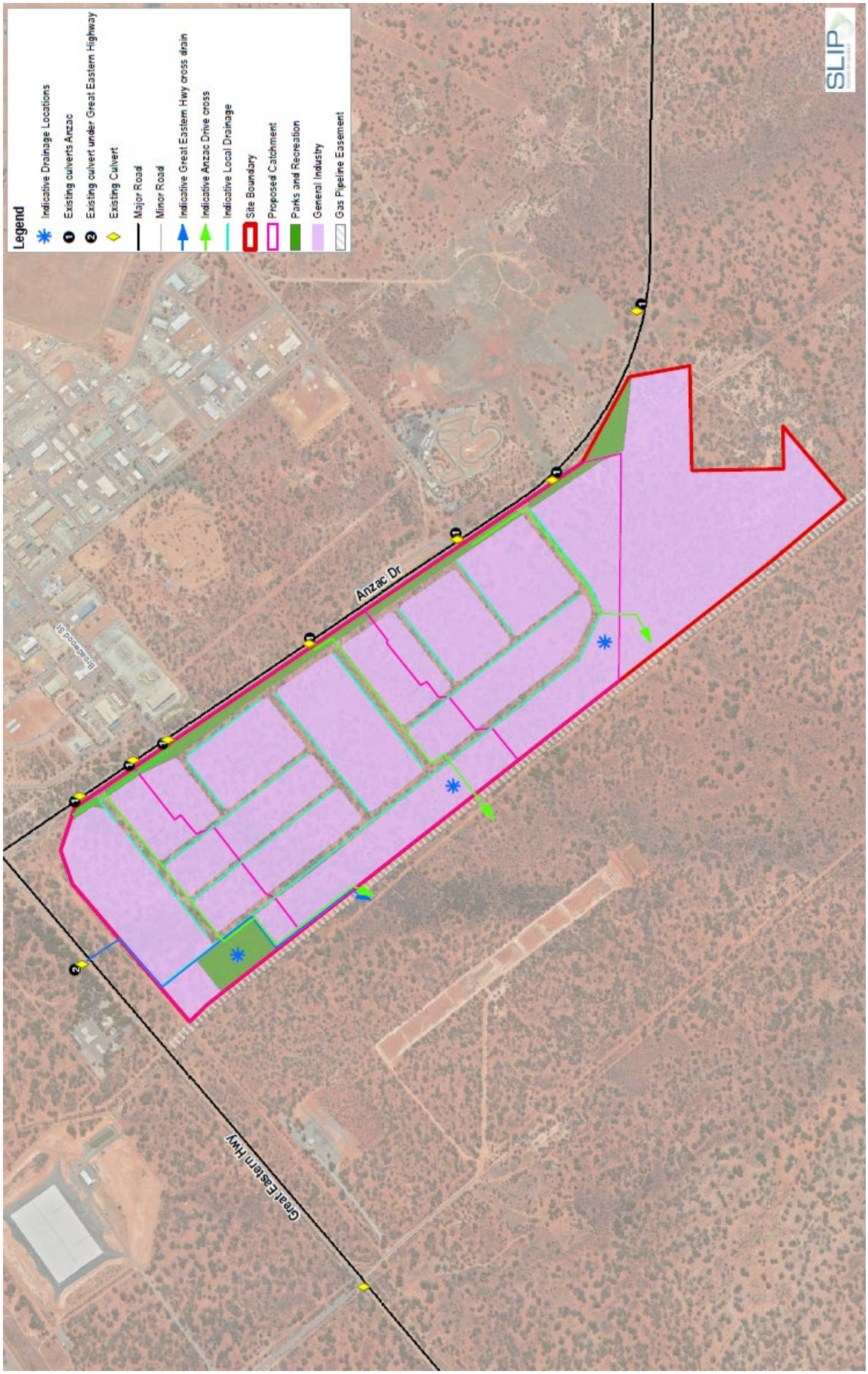
6.1. STORMWATER MANAGEMENT APPROACH

The stormwater drainage system has been designed to maintain existing pre-development peak flow rates from the development area for the critical 1 EY event in line with City of Kalgoorlie-Boulder and DWER requirements. Design of the stormwater drainage system has also attempted to maintain existing flowpaths at the outlet from the site (refer **Figure 15 – Stormwater Management Plan**).

The stormwater management approach features a detention swale system within verges to detain and treat flows close to source. For events larger than the 10% AEP, flows are carried within the detention swale system and roads to drainage basins located along the southwestern boundary of the site. Flows exceeding the capacity of local drainage system are discharged via overland flow to the environment. Key strategies adopted for local water management are outlined as follows:

- 1 EY (1 year ARI event, first 15 mm) - Impervious areas within lots will drain to local drainage swale system; road will drain to the drainage swale system, which will convey flows to drainage basins; drainage swales will feature dumped rock weirs to detain flows to pre-development peak; discharge.
- 10% AEP (10 yr ARI event) - Lots and roads will drain to drainage swale system; weirs and culverts at road crossings will detain flows within the swale system; 1% AEP (100 yr ARI event); major events will be conveyed safely through swales and roads, with the entire road; becoming available for water conveyance for events above the 10 yr ARI event.
- Flows exceeding the capacity of the detention swales, road and drainage basin will discharge to the environment via rock protected overland flowpath.

Figure 15 – Stormwater Management Plan



6.1.1. Post-Development Runoff

External drainage from the catchment to the north of GEH will be conveyed via a drainage swale prior to discharge to the environment via a rock protected overland flowpath. External drainage from catchments to the north-east (from the existing Anzac Drive Industrial Estate and other external catchments to the south) will be conveyed via a combination of pipes and swale drainage within road reserves, subject to longitudinal road grades and detailed earthworks design. Discharge to the environment will be via rock protected overland flowpath.

6.1.2. Local Drainage

Local drainage will be conveyed via a combination of pipes and swale drainage within road reserves, subject to longitudinal road grades and detailed earthworks design. When the storage capacity of local drainage is exceeded flows will be conveyed to the roads and drainage basins sited along the south-western boundary of the Site. Where drainage swales are used, they will incorporate dumped rock weirs to slow and detain stormwater, placed more frequently where the grade is steep. The levels and grade of the local drainage will be dictated by the road level, which is yet to be determined.

6.1.3. Drainage Basins

Drainage basins are proposed to be sited along the south-western boundary of the site with the final form subject to detailed earthworks design. Drainage basins will feature a low flow outlet to ensure adequate drainage of minor events. Flows exceeding the capacity of drainage basins will overflow to the environment via a rock protected overland flowpath. All outlets will be at or near existing ground levels to avoid excavations into the pipeline corridor. Where outlets are below ground, drains will be constructed along the rear of the western lots until the drain daylights and overland flow can be re-established.

6.1.4. Stormwater Quality

Stormwater quality issues which may require management include erosion caused by high flow velocity which can result in loss of soil and increased sediment load in surface flows; and gross, suspended and dissolved pollutants including rubbish, hydrocarbons and dissolved metals. As the majority of pollutants are transported in frequent, minor events, it is these frequent rainfall events which are targeted through detention within the estate swale system for the 1 EY event.

6.1.5. Disease Vector Management

No permanent water bodies will be created. Drainage basins will grade out to a low flow outlet and discharge over a period of time not exceeding 72 hours, less than the recommended maximum for mosquito management of 96 hours.

6.1.6. Groundwater Management

Groundwater is located approximately 40m below ground surface. The low permeability soils do not support a superficial groundwater aquifer; therefore, works to achieve a groundwater clearance are unlikely to be required and groundwater level monitoring and management is not required.

The impermeable nature of the underlying clay minimises the risk of off-site migration of any potential contaminant spill to groundwater.

7. SERVICING AND INFRASTRUCTURE

Wood & Grieve Engineers was commissioned by DevelopmentWA to provide an Engineering Servicing Report (refer **Appendix I: Servicing Report**).

7.1. WATER SERVICING

The recent rezoning of the land via Amendment No.97 has triggered an extension of the Water Supply Zone to include the subject land. The development will be adequately serviced via extension of existing Water Corporation infrastructure to the north of the site. An existing DN200 water main is within 250m, at the intersection of Coath Road and West Kalgoorlie Road, just north of GEH. A secondary connection to an existing DN150 water main will also occur in Broadwood Street, east of the site. The development will have an internal potable water network with Hydrants and for drinking water.

7.2. WASTEWATER DISPOSAL

The existing sewer reticulation network servicing the greater Kalgoorlie Boulder operated by the City of Kalgoorlie-Boulder does not extend to the vicinity of Lot 500-502 and therefore the City of Kalgoorlie Boulder has agreed to onsite treatment of sewer for the subject land via Aerobic Treatment Units (ATU's) The City's plans to develop a new wastewater treatment plant adjacent Anzac Drive have been postponed indefinitely.

Department of Health (DoH) Guidelines will govern the design and operational standards associated with ATU's installed by occupants on an individual lot design basis. Noting the impermeable nature of Kalgoorlie soils, localised assessment will be required to determine the most appropriate location for an ATU and its associated leaching system. Onsite treatment of sewer is also effectively managed within the Anzac Drive Industrial Estate opposite the subject land, which is not serviced by reticulated sewer.

A Site and Soil Evaluation is to be provided with any future subdivision application, when the final design is known, demonstrating compliance with the Government Sewerage Policy.

7.3. POWER SUPPLY

Power supply to the development will come from the existing Western Power zone substation (West Kalgoorlie Terminal) immediately north of the site. Power demand is based on the minimum subdivision servicing requirement of 200kVA/Ha. A new feeder cable will be required to power the initial stage of development, to link directly between the zone substation and the main entrance of the development off Anzac Drive. This would provide opportunity to reticulate a power supply throughout the proposed development in the traditional manner using high voltage equipment and cabling.

The Structure Plan has been designed to minimise the potential for relocation of existing overhead transmission cables within and abutting the northern and eastern boundaries of the site.

Consultation with Western Power is required prior to subdivision to determine impacts of final subdivision design on existing electricity supply infrastructure.

7.4. GAS RETICULATION

Access to a Gas reticulation network is available via extension to existing infrastructure within roads reserves to the north of the site. Connection to this third party network will be the responsibility of individual purchasers or others.

7.5. TELECOMMUNICATIONS

Access to a telecommunications network is available via offsite extension to existing infrastructure in the area. An internal pit and pipe network will exist throughout the development. Application and agreement with telecommunication retailers will be the responsibility of the individual purchasers.

7.6. APA GAS PIPELINE

A high pressure gas main, owned and operated by the Goldfields Gas Pipeline a subsidiary of APA Group, extends along the western boundary of the site, situated within a 30m wide easement. In accordance with Draft DC Policy 4.3: Planning for High Pressure Gas Pipelines (DC4.3), Section 6 Implementation, DevelopmentWA has consulted with the relevant pipeline owner/operator and confirmed its requirements in order to minimise the risk of future land use conflict.

Unlike the metropolitan area, there is no required setback from the pipeline easement, subject to a Qualitative Risk Assessment (QRA). In assessing the setback requirements relative to the subject land, in May 2018 APA undertook a review of its previous safety management study completed on the Goldfields Gas pipeline in 2017 and determined that industrial development could occur up to the boundary of the existing easement (refer **Figure 16 – Gas Pipeline Interface**).

APA advised (in summary, refer **Appendix D** for full correspondence):

'As per AS2885 additional signage will be required within that area. (One sign every 100m)

I see no other issues and I am happy for the industrial lots to proceed.

It was agreed that the development boundary for the … development would be to the northwestern boundary of the existing Goldfields Gas Pipeline easement.

(DevelopmentWA) will email APA our proposal with the project boundary running along (abutting) the northwestern boundary of the Goldfields Gas Pipeline easement. Proposed lots will not encroach onto the gas pipeline easement.

(DevelopmentWA) will keep APA informed of the Structure Plan progress and subdivision application and development timeframe; and

(DevelopmentWA) via its construction contractor at the time of onsite construction activities will undertake a risk assessment/workshop with APA prior to commencement of works. The result may include construction of temporary fencing on the northwestern boundary of the Goldfields Gas Pipeline easement, to ensure no construction vehicles enter the easement area, additionally the pipeline easement is not to be used as a laydown area for construction activities

There is no issue with the development of the land for industrial purposes, and no setback distances are required within the lots abutting the gas pipeline easement.'

The boundary of the proposed Future Industrial zone is therefore compliant with DC4.3).

Consultation with the Goldfields Gas Pipeline operator will be required prior to a subdivision or development application being lodged for adjoining lots. In accordance with draft Development Control Policy 4.3 Planning for High Pressure Gas Pipelines to satisfy pre-subdivision consultation requirements, implementation of the fencing and signage mitigation measures identified during the rezoning of the site and any other potential additional measures will be required.

Figure 16 – Gas Pipeline Interface

7.7. EARTHWORKS

Earthworks planning will ensure optimal site and financial outcomes over the life of the development including:

- Minimising requirements for importation of fill will lead to improved sustainability outcomes as there will be limited availability for a cut to fill source from within Lots 500-501
- Maintaining the alignment of natural depressions and undulations through the development to yield optimal fill saving and address general principles of water sensitive design
- Maintaining multiple flow paths through the developed site to prevent scour and sedimentation at downstream attenuation and discharge areas
- The impermeable nature of Kalgoorlie soils
- Integration of development around selected vegetation (ie: P1 Flora) being retained
- Management of stormwater received from offsite upstream catchments and from its own catchment.
- Accommodating existing service infrastructure

A cut/fill concept prepared by WGE indicates that the site will be subjected to cut to fill earthworks in order to produce some level lots and some inclined lots, with roads to service the area. The maximum cut depth is around 2m and the bulk of cut is less than about 1m.

7.8. ENVIRONMENTAL CONSIDERATIONS

The Environmental Assessment resulted in the following outcomes which are accommodated in the Structure Plan:

- The vegetation on the site is considered to have low regional and local conservation significance as the vegetation type is well protected at the regional and local level. Nevertheless, the site contains numerous mature Eucalyptus trees, including Salmon Gums, which should be considered for retention as much as possible in the future development. In particular, Salmon Gums will be retained in the strip of land which forms part of Lot 500-502, but is located outside of the Structure Plan area, along GEH
- The P1 Flora species *Eremophila praecox* will be retained in open space. Cuttings will also be taken for propagation purposes. These plants can then be used in the landscaped areas in the development
- A raised blade clearing method be adopted for vegetation clearing with a zoologist present during the vegetation clearing to catch and relocate fauna to alternative suitable habitat and to euthanize all animals injured in the clearing process
- The PSI (Soil and Water, 2019) identified two sites requiring further assessment at subdivision stage.

The Environmental Assessment concluded that the site has limited flora, vegetation and fauna values that would be impacted by clearing, and those identified can be appropriately managed. No other environmental characteristics of the site, such as soil type and hydrology are a constraint to clearing and development of the site.

8. BUSHFIRE MANAGEMENT

The Bushfire Management Plan **(Appendix C)** provides the following strategies to manage bush fire risk across the site:

- On-site staging buffers: if development (and therefore clearing) is to occur on a staged basis, clearing in advance will need to occur to ensure development is not unnecessarily inhibited by a temporary vegetation extent/BAL impact from vegetation yet to be cleared on an adjacent development stage
- Each approved stage will be surrounded by a 100m wide, on-site cleared or low threat managed buffer prior to development (not including vegetation proposed to be retained), and managed until the buffer area is developed as part of the next development stage
- Cleared lots will be managed on a regular and ongoing basis by the developer until sale of lots after which time landowners will be responsible for ongoing management
- Road verges will need to be managed to ensure the understorey and surface fuels remain in a low threat, minimal fuel condition. Ongoing road verge management will be the responsibility of the City
- Landscaping plans will need to reflect the bushfire management measures required under the BMP and future subdivision stage BMPs. Landscape design will need to ensure that any vegetation retained on-site is either strategically engineered to be excluded or, if classified, an appropriate APZ can be provided as part of a development response to achieve BAL-29 or less
- Where Asset Protection Zones (APZs) cannot be achieved solely within perimeter roads and low-threat landscaping, APZ building setbacks may be required within individual lots to ensure that no development will occur in BAL-40 or BAL FZ.
- If any vulnerable or high risk land uses are proposed in future planning stages, there will need to be consideration of Bushfire Emergency Evacuation Plan (BEEP) or Bushfire Risk Management Plan (BRMP) provisions at the DA stage

Future BMPs will be prepared to accompany future subdivision and development applications where appropriate, as set out in SPP3.7.

9. LANDSCAPE CONSIDERATIONS

As noted in section 3.1.2, *Eremophila praecox* is recorded on the site. The Conservation Code Priority 1 (P1: Poorly-known species) are plants not protected specifically under the State Wildlife Conservation Act 1950 or Commonwealth Environmental Protection and Biodiversity Conservation Act 1999. They are, however, recognised by DBCA as a species which has few collections or sighted recording, so best endeavours must be undertaken to protect the plant.

The occurrences of *Eremophila praecox* on site are to be protected in situ, within the Parks and Recreation Reserve,

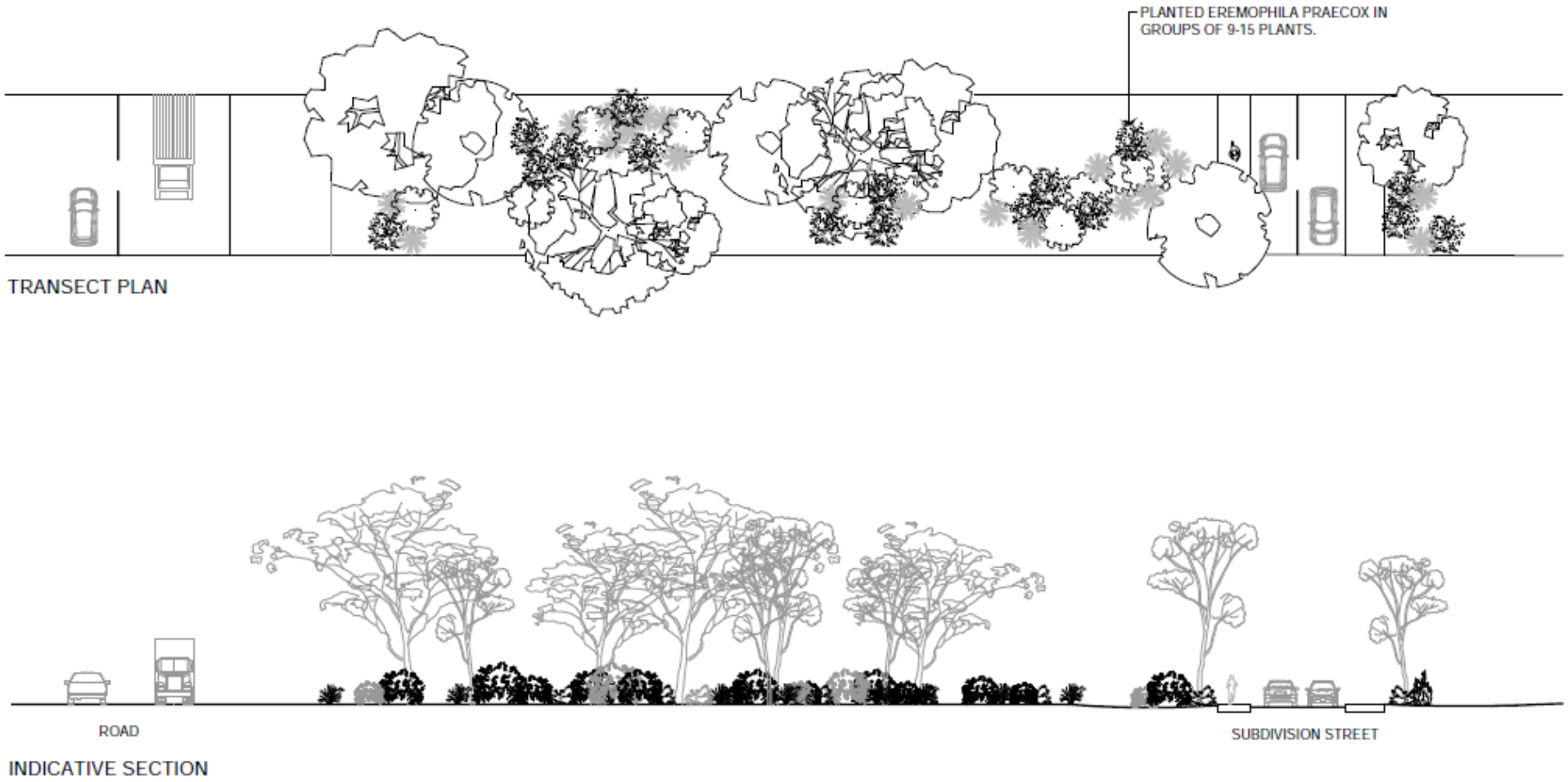
Eremophila praecox may also be propagated from cuttings and planted in road reserves, particularly along Anzac Drive and GEH, and at the main entry at Anzac Drive. These plants would need a temporary irrigation system to help them establish for the first 18 months, however this represents the option to most likely achieve the development objectives and retain a meaningful and sustainable presence of the *Eremophila praecox* on site.

The species is propagatable typically through cuttings in a nursery environment. The Kalgoorlie Boulder Urban Landcare Group has had success with propagating from cuttings, and this organisation is able to assist with growing the plants. Other propagation or retention options, such as onsite transplantation or seed collection and germination does not have a high success rate for this species, and is not a viable cultivation option.

Figure 17 – Typical Landscape Transect Plan and Cross Section provides an example of a typical transect establishing the planting of this species within a landscaped context. This approach may be appropriate to the site and will be explored further.

A Landscape Masterplan will be prepared at subdivision stage.

Figure 17 – Typical Landscape Transect Plan and Cross Section



10. CONCLUSION AND IMPLEMENTATION

10.1. SUPPORT FOR PROPOSAL

This Structure Plan will facilitate the future development of Lots 500-502 Anzac Drive, Yilkari, Kalgoorlie for industrial development to provide for a range of industrial activities generally in accordance with **Figure 1 – Structure Plan Map**, and the considerations outlined in this report.

The proposal is supported by the following key points:

- Industrial development has been identified as a significant economic driver for Kalgoorlie and the broader Goldfields region. The supply of industrial land in Kalgoorlie is limited, and additional provision is required in the short term. The provision of sufficient land to accommodate industrial development is an essential step towards expanding Kalgoorlie's strategic role as a diversified service hub, in compliance with the State and Regional Planning Framework
- The land is located at the western entry point to Kalgoorlie, on the corner of GEH and Anzac Drive – two important transport routes also providing commercial exposure, is remote from sensitive development, and in immediate proximity to other existing and planned industrial development, and is therefore a suitable context for industrial activity
- The zoning of the land for industrial purposes is consistent with the City of Kalgoorlie Boulder's Local Planning Strategy Amendment 1; and with the Kalgoorlie Boulder Hotspots report
- The site is able to be serviced with reticulated water and on site effluent disposal. Other available or extended services are appropriate to an industrial estate
- The site has been provided with section 16(3) clearance under the Mining Act 1978
- Following discussions with APA and conclusion of a QRA process, resolution has been reached on the extent of the area to be rezoned to Industry, with development able to extended up to the edge of the gas pipeline easement
- Previous and more recent reporting on the P1 Flora: *Eremophila praecox* present on the site is included in the report, and confirms opportunities for retention of the 5 plants in situ within the Structure Plan in a reserve located on the western boundary of the site.
- Access and egress points to Anzac Drive will comply with MRWA and other road design criteria
- There are no undesirable risks to fauna identified through site investigations
- Drainage will be managed in accordance with the LWMS

The proposed development of Lots 500-502 Anzac Drive, Yilkari, Kalgoorlie will ensure the timely supply and release of industrial land within Kalgoorlie. This Structure Plan is supported by a range of technical inputs, and demonstrates that the land can be developed for industrial purposes, consistent with the strategic and statutory planning framework.

10.2. IMPLEMENTATION

Prior to subdivision or development within the Structure Plan area, the following tasks and reporting, as outlined below are required to be completed:

Additional Information	Purpose	Approval Stage	Consultation Required
Landscape and Public Open Space Management Plan	To detail the ongoing management and maintenance arrangements of landscaping and open space areas.	Lodged to satisfy a condition of subdivision approval.	City of Kalgoorlie-Boulder

Additional Information	Purpose	Approval Stage	Consultation Required
	To detail the protection, propagation and replanting of P1 Flora species during the subdivision stage		
Traffic Management Plan	To provide technical specifications relating to the subdivision and development of the land.	Lodged prior to building permit stage as condition of subdivision/development approval	City of Kalgoorlie-Boulder
Geotechnical Report	Detailing the specific design and construction recommendations and requirements.	Lodged prior to development application, at subdivision or building permit stage (whichever comes first), managed as a condition of subdivision approval.	City of Kalgoorlie-Boulder
Design of PortLink	Ensure the PortLink reserve is protected and acquired at subdivision stage	Subdivision stage	City of Kalgoorlie-Boulder and DPLH
Aboriginal Heritage	To be reviewed closer to subdivision works.	Subdivision works	Registered Native Title Claimants
Bushfire Management Plan	To demonstrate compliance with State Planning Policy 3.7 Planning in Bushfire Prone Areas and Section 8 of Part 2 of the Structure Plan.	Subdivision stage	City of Kalgoorlie-Boulder
Urban Water Management Plan	To progress conceptual design to detailed design including infrastructure requirements, flow rates and water levels, design criteria, management and implementation	Subdivision stage	DWER and City of Kalgoorlie-Boulder
Sulphur Dioxide EPP	To protect air quality by reducing sulphur dioxide concentration in ambient air	Development Application stage	City of Kalgoorlie-Boulder

Additional Information	Purpose	Approval Stage	Consultation Required
Notifications on title – Mosquito-borne disease	To provide notification to prospective purchasers of land in high risk area	Subdivision stage	City of Kalgoorlie-Boulder and DPLH
Site and Soil Evaluation	To demonstrate compliance with the Government Sewerage Policy	Subdivision stage	City of Kalgoorlie-Boulder
Consultation with Goldfields Gas Pipeline operator	To demonstrate compliance with Draft Development Control Policy 4.3 Planning for High-Pressure Gas Pipelines in ensuring previous and future mitigation measures are implemented through subdivision and that necessary consultation is carried out	Prior to subdivision or development application	Goldfields Gas Pipeline operator
Consultation with Western Power	To ensure future subdivision minimises impacts on existing electricity supply infrastructure	Prior to subdivision application	Western Power

DISCLAIMER

This report is dated April 2020 and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Pty Ltd's (**Urbis**) opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of DevelopmentWA (**Instructing Party**) for the purpose of this Structure Plan (**Purpose**) and not for any other purpose or use. To the extent permitted by applicable law, Urbis expressly disclaims all liability, whether direct or indirect, to the Instructing Party which relies or purports to rely on this report for any purpose other than the Purpose, and to any other person which relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

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

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This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the limitations above.

APPENDIX A CERTIFICATE OF TITLE

APPENDIX B DMR CLEARANCE

APPENDIX C BUSHFIRE MANAGEMENT PLAN

APPENDIX D CORRESPONDENCE FROM APA – 20 OCTOBER 2017

APPENDIX E TRANSPORT IMPACT ASSESSMENT

APPENDIX F ENVIRONMENTAL ASSESSMENT MANAGEMENT PLAN

APPENDIX G GEOTECHNICAL REPORT

APPENDIX H LWMS

APPENDIX I ENGINEERING SERVICES REPORT

APPENDIX J ABORIGINAL HERITAGE SURVEY REPORT WITH WIDJI GROUP RESPRESENTATIVES (GREENFIELD AND CUE) – REPORT ON ABORIGINAL HERITAGE SURVEY

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