NORTH SOMERVILLE DISTRICT STRUCTURE PLAN

SOMERVILLE – KALGOORLIE-BOULDER

APRIL 2022

ROWE GROUP DESIGN

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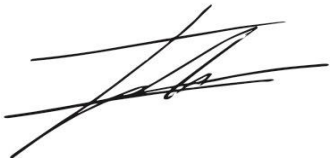

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RECORD OF ENDORSEMENT

This structure plan is prepared under the provisions of the City of Kalgoorlie-Boulder Local Planning Scheme No.

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

..... Date

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

..... Date

..... Date of Expiry

TABLE OF AMENDMENTS

MODIFICATION NO.	DESCRIPTION OF MODIFICATION	DATE ENDORSED BY COUNCIL	DATE ENDORSED BY WAPC

EXECUTIVE SUMMARY

The ***North Somerville District Structure Plan*** ('DSP') has been prepared to provide a framework which supports the coordinated development of an urban infill site within the suburb of Somerville, Kalgoorlie-Boulder.

The site is centrally located within the City of Kalgoorlie-Boulder urban area, approximately two kilometres from the City Centre, in close proximity to community amenities and services. It adjoins the Gribble Creek reserve and Centennial Park recreation areas.

The site compromises multiple land parcels in fragmented ownership. This DSP provides for a cohesive and equitable approach to the future development of the DSP area and its integration with surrounding land uses.

The DSP has been conceived to facilitate the development of the individual landholdings within the site independently of each other, whilst contributing to a holistic residential outcome, which improves pedestrian and vehicular connectivity with the surrounding areas.

The spatial layout of the DSP has been prepared in consideration of the following elements:

- Rationalise the irregular DSP site boundary.
- Integrate and extend the existing road network.
- Retain existing subterranean infrastructure.
- Accommodate stormwater management requirements.
- Incorporate existing stormwater drains and infrastructure.
- Connect with surrounding residential development.

The DSP proposes a site responsive residential layout which provides a well positioned urban infill development and contributes a master planned community of approximately 600 lots and supporting community land uses.

This DSP forms the precursor to further local structure planning to be undertaken through the grouping of individual landowners into logical precincts informed by their location, and interface with the immediate surrounds.

STRUCTURE PLAN SUMMARY

ITEM	DATA	SECTION NUMBER REFERENCED IN PART TWO OF THIS REPORT
Total area covered by the Structure Plan	35.49 hectares	Section 5.1
Area of Gross Residential	29.64 hectares	Section 5.2
Total estimated lot yield	604 lots	Section 5.2
Estimated number of dwellings	600 dwellings	Section 5.2
Estimated residential site density	26 dwellings per site hectare	Section 5.2
Estimated population	1620 people	Section 5.2
Number of high schools	Nil	
Number of primary schools	Nil	
Estimated Area and % of Public Open Space:	5.85ha (16%)	Section 5.3
Neighbourhood Parks	4.05 hectares, 1 park	Section 5.3
Local Parks	1.79 hectares, 3 parks	Section 5.3

Note: All information and areas are approximate only and are subject to survey and detailed design.

CONTENTS

PART ONE - IMPLEMENTATION

PART TWO - EXPLANATORY SECTION

FIGURES

TECHNICAL APPENDICES

APPENDIX NUMBER	DOCUMENT TITLE	NATURE OF DOCUMENT	REFERRAL/APPROVAL AGENCY	APPROVAL STATUS AND MODIFICATIONS
1.	Transport Impact Assessment	Supporting	Main Roads WA; City of Kalgoorlie-Boulder	
2.	District Water Management Strategy	Approval Required	Department of Water and Environmental Regulation. City of Kalgoorlie-Boulder	

PART ONE
IMPLEMENTATION

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1. STRUCTURE PLAN AREA

This District Structure Plan applies to the area of land contained within the inner edge of the line denoting the District Structure Plan boundary on **Plan 1 - District Structure Plan Map.** The District Structure Plan provides the framework for the coordinated planning and development of the DSP area, including recognition of cultural and heritage considerations, hydrological requirements, existing service infrastructure, vehicular access and movement considerations.

2. OPERATION AND PURPOSE

Pursuant to Clause 28, Schedule 2 of the Planning and Development (Local Planning Schemes) Regulations 2015 (the 'Regulations'), this Structure Plan comes into effect on the day it is approved by the Western Australian Planning Commission and is valid for a period of 10 years from the date of approval, unless the period of approval is otherwise extended in accordance with the Regulations. This Structure Plan comes into effect on the day it is approved by the Western Australian Planning Commission.

The principal objectives of the DSP are to:

- Coordinate future development of fragmented land parcels.
- Establish a spatial layout that guides planning and development within the DSP area based upon individual landowner aspirations.
- Allow for the retention of existing service infrastructure within the site and support future service connections.
- Provide connections to existing movement networks to complete an integrated movement network.
- Allow for assimilation and compatibility with surrounding land uses.
- Inform subsequent local structure plans, further technical work required and planning approvals.

The DSP will guide State and Local Government on subsequent stages of the planning process.

3. DISTRICT STRUCTURE PLAN IMPLEMENTATION

The DSP has been prepared to guide the future development of the site in accordance with the City's Draft Town Planning Scheme No. 2 ("TPS2"). The land is to be zoned Urban Development under the Draft City's TPS2, requiring the preparation of a Structure Plan to guide future development. The DSP informs and provides the foundations of future Local Structure Plans which will be required to expand upon the DSP with consideration to issues specific to each landholding.

The DSP provides the high-level framework to allow for a coordinated and equitable approach to the urban development of the site for residential purposes. The DSP allows for landowners to develop independently whilst requiring each land owner to address existing site conditions intrinsic to each landholding.

3.1 LOCAL STRUCTURE PLANS

Local Structure Plans ("LSPs") are required to be prepared for each identified area on the Plan 1 - District Structure Plan Map. The DSP Map identifies two (2) LSP areas. The LSP areas on Plan 1 are indicative and subject to refinement as further local planning occurs.

The formal process to prepare a Local Structure Plan is detailed under Part 4 Section 15 of the *Planning and Development (Local Planning Schemes) Regulations 2015* and may commence concurrently with the consideration and determination of the DSP.

3.1.1 LOCAL STRUCTURE PLAN AREA 1 – WESTERN PRECINCT

Local Structure Plan Area 1 - 'Western Precinct" incorporates Portion of Lots 67 and Reserve 44344, and Lot 209 and 400 comprising approximately 19.31 hectares in area.

3.1.2 LOCAL STRUCTURE PLAN AREA 2 – EASTERN PRECINCT

Local Structure Plan Area 2 – "Eastern Precinct" incorporates Lots, 151, 208, 210, 211, 500 and 2892 comprising approximately 16.15 hectares in area.

3.2 DEVELOPMENT CONTRIBUTION PLANS

The equitable distribution of Public Open Space ("POS") as applied to the DSP spatial layout shall be considered through the provisions of a Development Contribution Plan ("DCP") to provide for equitable compensation to landowners and their contribution to Public Open Space in accordance with the POS Schedule in Part 2 - Section 4.3 of this report.

The DCP shall be administered by the City and may include the exchange of developable land in lieu of financial compensation for the over/under provision of POS across individual landholdings.

4. STAGING

Staging of development within the Structure Plan area will be based on triggers such as:

- Individual landowner aspirations.
- Further studies and investigations.
- Servicing and infrastructure provision.
- Road constructions/upgrades.

5. SUBDIVISION & DEVELOPMENT REQUIREMENTS

The provisions of the District Structure Plan and subsequent Local Structure Plans are to be given due regard in the preparation and assessment of subdivision and development applications.

5.1 GRIBBLE CREEK

The Site is located within proximity to the Gribble Creek reserve and impacted by the floodway and flood fringe of the Creek. A dedicated overland drainage corridor is located along the southern periphery of the site. It forms an extension of Ochiltree Street and directs stormwater downstream of the Site and ultimately into Gribble Creek.

A District Water Management Strategy has been prepared to inform the urban development of the site and mitigate the risk of flooding. The Local Structure Plan/s relating to this area shall accommodate the floodway and flood fringe and further consider these elements at LSP stage.

5.2 SERVICE INFRASTRUCTURE

The DSP is located within an existing urban area where significant infrastructure already exists within the DSP area and surrounds. The infrastructure comprises primarily sub terranean services, including:

- Sewer,
- Water reticulation,
- Effluent, and
- Stormwater Drainage.

Service infrastructure locations have been included within the Site Plan.

The spatial layout of the DSP Concept has allowed for the retention of existing infrastructure insitu and for future connections as required, subject to investigation of the capacity of the existing services to accommodate additional connections. A servicing report will be required to be prepared in support of future Local Structure Plans.

5.3 INTERFACE WITH ADJOINING LAND

The DSP adjoins multiple land uses, including existing streets and rear boundaries of existing residential lots. The DSP integrates with the surrounding road network via a direct interface with existing roads and the extension of roads into the site. Trasimeno Way on the western edge of the site forms an existing internal road.

The southern periphery of the site maintains an interface with existing residential development and adjacent road network. The western edge of the site adjoins the existing short stay accommodation on Ochiltree and Hannan Streets. The site maintains a short interface with Hannan Street. The City of Kalgoorlie - Boulder Shire offices are located at the intersection of Hannan Street and Patroni Road, adjoining the Site. The northern interface is with the Gribble Creek Reserve across Patroni Road with the north eastern corner of the site directly adjoining the Creek. The eastern edge of the Site adjoins O'Conner Street and primarily vacant land with a small residential estate.

The preparation and assessment of the subsequent LSPs shall have further regard to those land use interface considerations.

5.4 RESIDENTIAL DENSITY TARGETS

The DSP provides for residential lot densities in accordance with Western Australian Planning Commission (WAPC) guidelines under Liveable Neighbourhoods (LN).

The DSP provides for approximately 600 lots which achieves;

- 16 dwellings per gross urban hectare, and
- 26 dwellings per residential hectare

The subsequent Western Precinct and Eastern Precicnt LSPs shall target the equivalent residential density outcomes.

6. OTHER REQUIREMENTS

6.1 MOVEMENT NETWORK INFRASTRUCTURE AND UPGRADES

Due to its location as an infill development opportunity, the site is well serviced by existing movement infrastructure. The future local structure planning process will require further investigation with regard to the capacity of the existing movement network to support future additional connections and the volume of traffic forecast.

The significant infrastructure considerations addressed through this report include vehicular movement and the capacity of the surrounding road network, via the Traffic Impact Assessment (TIA).

This will require further review at LSP stage through a precinct specific Transport Impact Assessment.

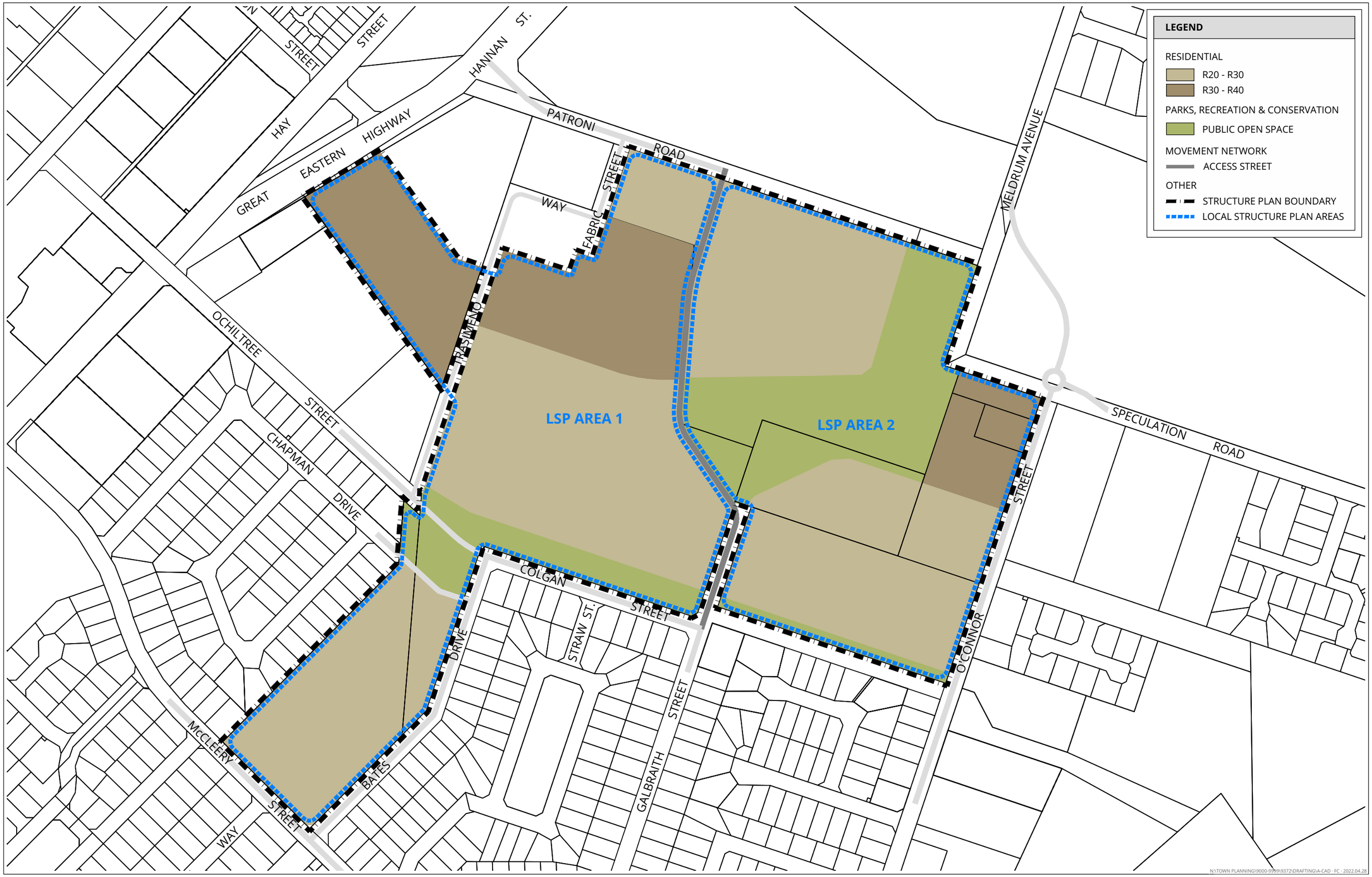
6.2 LOCAL WATER MANAGEMENT STRATEGY

The subsequent LSP's required under this DSP shall be accompanied by a Local Water Management Strategy (LWMS) which addresses the findings of this DSPs District Water Management Strategy (DWMS).

7. ADDITIONAL INFORMATION

The following table identifies elements to be investigated further as part of the LSP process.

ADDITIONAL INFORMATION	APPROVAL STAGE	CONSULTATION REQUIRED
Servicing Report	Local Structure Planning	City of Kalgoorlie-Boulder
Preliminary Site Investigations	Local Structure Planning	DWER
Environmental Assessment Report	Local Structure Planning	DBCA



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PLAN 1

NORTH SOMERVILLE DISTRICT STRUCTURE PLAN

PART TWO

EXPLANATORY SECTION

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1. INTRODUCTION AND BACKGROUND

1.1 PURPOSE

The North Somerville District Structure Plan (DSP) has been prepared on behalf of the City of Kalgoorlie-Boulder as the majority landowner of the DSP area. The balance of the DSP area is held as crown land and in private ownership. The intent of the DSP is to coordinate fragmented landholdings and provide for urban infill development which integrates with surrounding land uses and provides for legible and considered movement networks. It will provide for residential development which maintains high community amenity and connections to areas of public open space.

1.2 LAND DESCRIPTION

1.2.1 LOCATION

The DSP area is located approximately 2 kilometres south of the town centre in the suburb of Somerville, centrally located within the broader Kalgoorlie-Boulder townsite.

The land is immediately east of the intersection of Great Eastern Highway and Hannans Street, adjacent the City's Council offices. The site abuts Centennial Park, with the Gribble Creek reserve to the north. The southern portion of the DSP area interfaces with existing residential land uses. The eastern periphery interfaces with vacant land and the western edge interfaces with the Council administration building and short stay holiday park.

The DSP area's irregular geographic footprint has multiple road frontages including, Patroni Road, Great Eastern Highway, McCleery Street, O'Conner Street, Fabric Street, Bates Drive and Colgan Street. Roads which are proposed to be extended to form an integral part of the development include Ochiltree Street, Chapman Drive and Galbraith Street. Trasimeno Way, currently under construction forms an internal road within the DSP.

Figure 1 - Location Plan

1.2.2 AREA AND LAND USE

The DSP area comprises multiple land holdings with a combined total area of 35.46 hectares. The existing land use is predominately vacant cleared land. Portions of the site support existing residential dwellings, specifically, fronting Patroni Road and Oconner Street. Areas of the site retain a legacy to their former use with remnant dam located in the northeast corner and a smaller dam internally. The site retains areas of scattered remnant vegetation

A dedicated drainage corridor is located on the southern periphery of the site, to convey stormwater from Ochiltree Street to the east of the site.

An easement is centrally located within the site for the protection of the existing sewer which traverses the site north – south.

Figure 2 – Site Plan

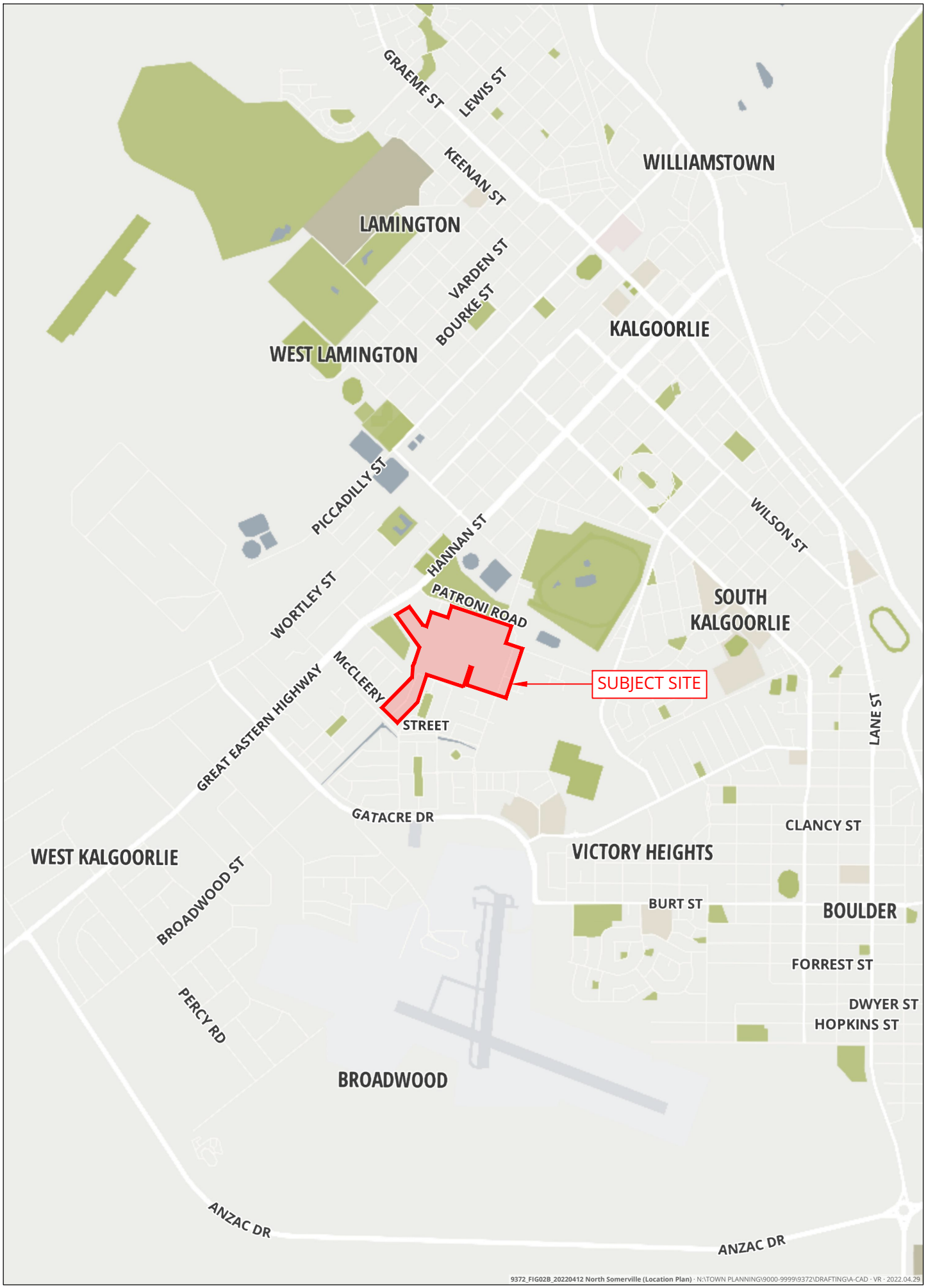

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FIGURE 1

LOCATION PLAN

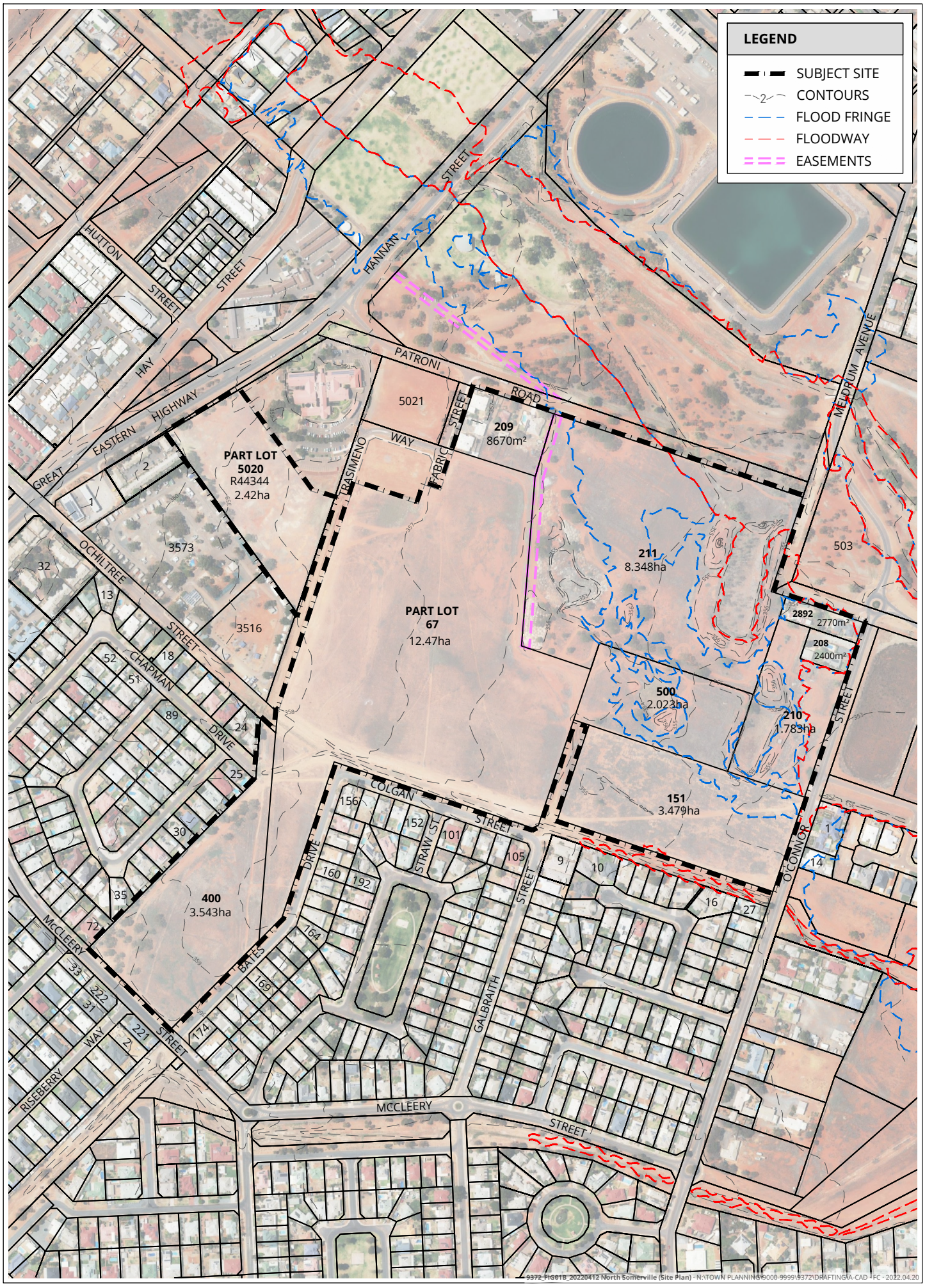

FIGURE 2
SITE PLAN

1.2.3 LEGAL DESCRIPTION AND OWNERSHIP

The Lots which comprise this DSP area are summarised in the table below.

LAND SUMMARY TABLE				
LOT NO.	**ADDRESS**	**PLAN NO.**	**VOL. / FOLIO**	**LAND OWNERSHIP**
67	45 Bates Drive, Somerville	P161200	1871/30	City of Kalgoorlie Boulder
151	8 O'Connor Street, Somerville	P186045	2959/885	Goldenstate Properties Pty Ltd
208	4 O'Connor Street, Somerville	P215906	1660/994	Madaleine Louise Grant Trent Colby Fletcher
209	1 Patroni Road, Somerville	P215906	SP22353	Albert Patroni Laura Strachan Nellie Hinchliffe Vilma Marie Chisholm Alfred Con Patroni Anthony Dale Chisholm Christopher Domenic Fanetti Albena Pisano
210	6 O'Connor Street, Somerville	P215906	2154/809	Albert Patroni
211	O'Connor Street, Somerville	P215906	2032/562	Laura Strachan Nellie Hinchliffe Albert Patroni Vilma Marie Chisholm Alfred Con Patroni
400	Vacant Crown Land	P195209	LR3121/323	State of Western Australia
500	Vacant Crown Land	P055691	LR3142/420	State of Western Australia
2892	2 O'Connor Street, Somerville	P130004	1590/938	Tracey Charles Leonard Walter Charles
Lot 5020 (R 44344)	577 Hannan Street, Somerville	P039881	LR3133/163	State of Western Australia

1.3 CONTEXT

1.3.1 RESIDENTIAL LAND SUPPLY

Recognising the challenges of delivering cost effective residential housing lots to the market, the site is well positioned to mitigate the challenges.

The site is centrally located within the broader City area in proximity to major transport and infrastructure. The sites significant land area and its location are well placed to provide for urban infill residential development.

1.3.2 HISTORIC URBAN DEVELOPMENT PATTERN

The broader Kalgoorlie-Boulder townsite has expanded through incremental growth over several cycles. The urban growth of the town site has been undertaken in response to the urban design and town site design movements of varying periods. As a result, the existing spatial layout of the site and its surrounds forms a remnant portion of vacant land which has not historically been considered through a broader integrated district master planning process and does not contribute to community cohesion and logical movement patterns.

2. PLANNING FRAMEWORK

2.1 LOCAL PLANNING SCHEME NO.1

The subject site currently comprises multiple zones under the *City of Kalgoorlie-Boulder Local Planning Scheme No. 1* ("LPS1"). The zones include:

- Public Purposes.
- General Residential.
- Parks and Recreation: and
- Rural.

Figure 3 – Local Planning Scheme No. 1 – (Existing Zoning Plan)

2.2 DRAFT LOCAL PLANNING SCHEME NO.2

The City of Kalgoorlie-Boulder has prepared its *Draft City of Kalgoorlie-Boulder Local Planning Scheme No. 2* ("Draft LPS 2") which is pending formal referral to the Western Australian Planning Commission ('WAPC') for consideration. Under Draft LSPS2, the subject site is proposed to be zoned primarily "Urban Development", with the south east portion zoned "Residential" and the portion fronting Great Eastern Highway to be "Government Services".

Special Control Area (SCA4) Gribble Creek Flood Control

The DSP area is located within the Gribble Creek flood fringe. In accordance with SCA4 any proposed development will need to be considered to ensure adequate protection from the impacts of potential flooding.

Upon the rezoning of the land to "Urban Development" as part of the gazettal of LPS2, and in accordance with the *Planning and Development (Local Planning Schemes) Regulations 2015*, the future development of the land will require the preparation and endorsement (by the WAPC) of a Structure Plan prior to the subdivision and / or development of the land.

This Structure Plan has been prepared in accordance with the requirements of *Planning and Development (Local Planning Schemes) Regulations 2015* to guide the future planning of the site for residential development.

Figure 4 – Draft Local Planning Scheme No. 2 – (Proposed Zoning Plan)

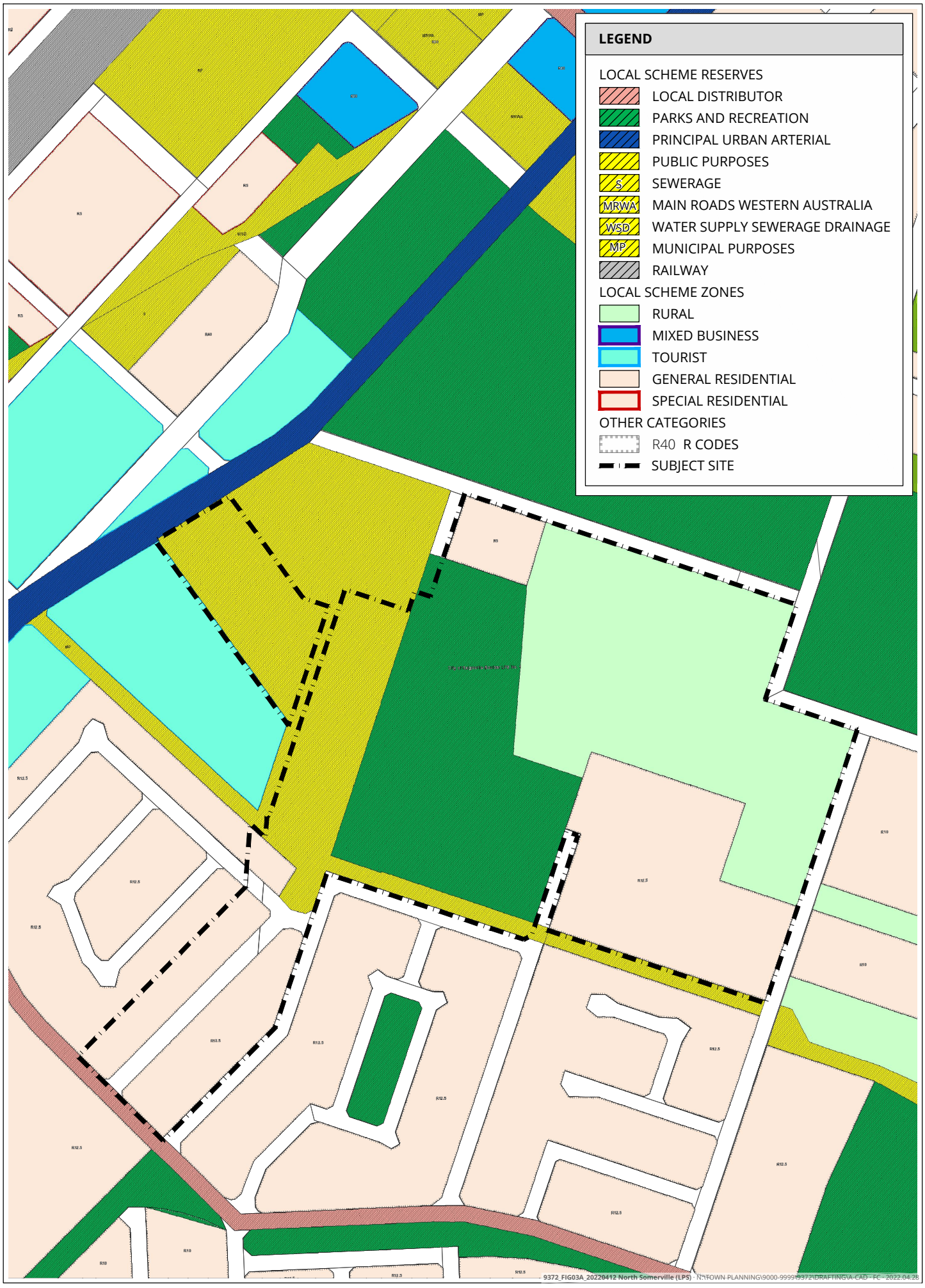

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FIGURE 3

CITY OF KALGOORLIE-BOULDER LOCAL PLANNING SHCEME NO. 1

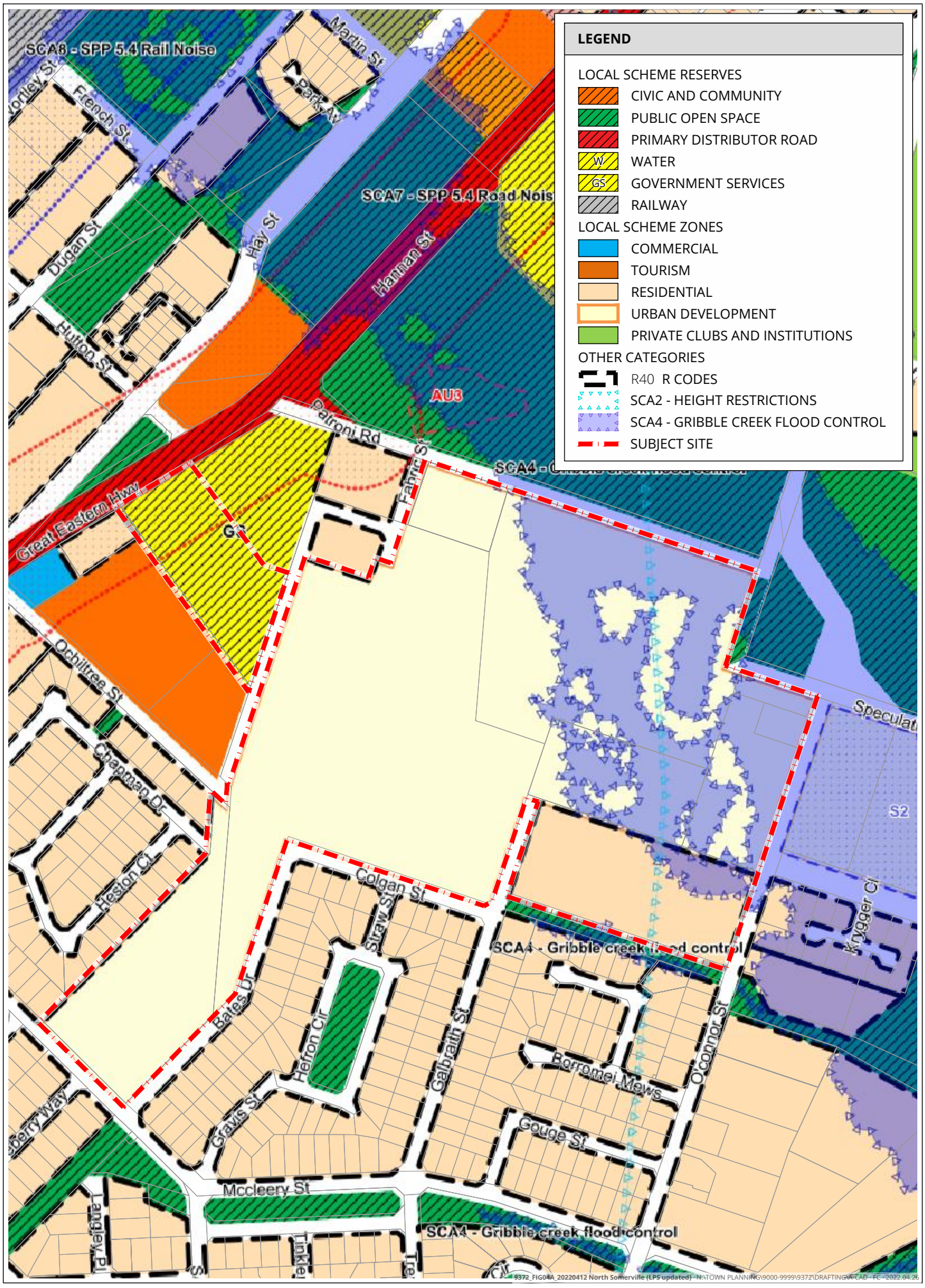

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FIGURE 4

DRAFT CITY OF KALGOORLIE-BOULDER LPS (PROPOSED ZONING PLAN)

2.3 LOCAL PLANNING STRATEGY 2013-2033

The Strategy outlines key considerations relating to the future housing requirements and associated amenities for the City. Part *2.1 Strategic Goals* of the Strategy identify specific goals relating to residential housing which include:

- Identify infrastructure needs and effectively integrate land use and infrastructure planning.
- Facilitate development to be of best management practice.
- Provide a variety of residential lifestyle opportunities.
- Encourage the revitalisation and beautification of existing urban areas.
- Ensure appropriate location of development to avoid land use conflicts.

The Strategy when prepared in 2013 indicated an additional 4,200 dwellings would be required within the region to accommodate the population by 2031, with the opportunity for a range of residential densities and dwelling types provided through infill development. The strategy has informed the preparation of Draft LPS2.

The strategy provides an action plan for the provision of residential land supply, primarily through an increase in residential densities within existing urban areas in proximity to community amenities and infrastructure. The strategy identifies the subject site as being suitable for urban development given it is well located within proximity and accessible to Great Eastern Highway.

The DSP addresses the elements identified within the Strategy, including:

- Public Open Space, its provision, location and ability to treat and convey stormwater runoff.
- Residential land supply and its cost-effective delivery to market contributes to the challenges in providing affordable housing sites within the locality.

The DSP is located within the *O'Conner Strategic Direction Planning Area.* The strategic direction for the area is identified as:

> *Primarily mixed density residential development, the O'Connor planning area has a number of vacant Greenfield sites suitable for future residential development. Additional commercial land will be required for this area as residential development increases. The longevity of the airport and its future expansion are key priorities for the City. Planning controls will be required to minimise the potential impact of any conflicting land uses to the surrounding residential development, in addition to facilitating land use for airport and 'air side access' supporting industry.*

Specifically, the site is identified within the LPS as having the opportunity to:

> *Increase residential density of properties fronting the Great Eastern Highway.*

The DSP proposal is in accordance with the objectives of the Local Planning Strategy.

2.4 LOCAL PLANNING POLICIES

a) *Gribble Creek Floodplain Management and Development Policy (LPP 06)*
This Policy aims to minimise the risk to development from the potential flooding of Gribble Creek. Recognising the subject site adjoins Gribble Creek and is impacted upon by the creek's floodplain, a District Water Management Strategy will be prepared for the site in support of the Structure Plan.

b) *Sewer Headworks Contributions (DS-DS-001)*
This policy ensures the equitable payment of sewer headworks charges as required for the upgrade of sewer services. Sewer Headworks charges will be required to be paid as a condition of subdivision.

c) *Public Open Space in Association with Subdivisions (SUB01)*
This Policy allows for the payment of cash in lieu for the provision of public open space. The subject site provides for areas of Public Open Space across multiple landholdings. Portion of the area identified as POS is included within the Gribble Creek flood fringe and floodway. An equitable distribution of POS derived through a cost sharing arrangement shall be implemented through the Local Structure Planning process.

2.5 PRE-LODGEMENT CONSULTATION

Pre lodgement consultation has been undertaken with the City of Kalgoorlie-Boulder and all landowners within the DSP area. Consultation included written and verbal communication. This DSP has been prepared with the acknowledgment and support of all landowners.

3. SITE CONDITIONS AND CONSTRAINTS

3.1 VEGETATION, FLORA AND FAUNA

The DSP area has been predominately cleared for historic land uses. Some stands of remnant trees are sporadically dispersed around the site, although an area of trees is located towards the centre and within the historic dam walls. The retention of trees shall be considered through the structure planning and subdivision process.

The DSP area does not contain any 'Bush Forever' sites, or areas of areas of natural environmental significance or sensitivity.

A review of the Department of Biodiversity, Conservation and Attraction's Nature Map indicates, given the location of the site and its surrounding, residential land uses, there are no fauna or flora of significance within the site.

3.2 LANDFORM AND SOILS

3.2.1 TOPOGRAPHY AND SOIL PROFILE

The topography slopes gently from 360m AHD in the west to 353m AHD in east with Great Eastern Highway and McCleery Street being the most elevated sections of the site.

The DSP area comprises predominately a valley plains and sediments of siliciclastic sedimentary rock and sandstone. Further geotechnical investigation will be required in future planning phases to confirm capability and requirements for residential development of the site.

3.2.2 EXISTING LAND USES

The DSP area is predominately cleared. A portion of the site has been developed for residential dwellings, including four dwellings which take access from Patroni Road along the northern boundary and two dwellings which interface with O'Conner Street to the east.

The northeast corner of the site is within the Gribble Creek flood plain which has influenced the sites historic uses and reflected in the landform, with the retention of several dams which were previously fed from Gribble Creek.

The site provides for several overland stormwater conveyancing channels, ultimately discharging into Gribble Creek. Ochiltree road extends from Great Eastern Highway and provides a dual function as vehicular access and overland drainage discharging into the east-west drain adjacent Colgan Street.

3.3 GROUNDWATER AND SURFACE WATER

The topography, impervious soil conditions and proximity to Gribble Creek require careful consideration in the treatment of stormwater runoff. A portion of the site is impacted by the Gribble Creek floodway and floodplain.

In support of this DSP, Hyd2o has been engaged to prepare District Water Management Strategy (DWMS). The strategy seeks to ensure a post-development water management regime which is consistent with the existing pre-development water management conditions. This is explained further in Part 2 - Section 5.5 of this report.

3.4 HERITAGE

3.4.1 ABORIGINAL HERITAGE

A search of the Aboriginal Heritage Inquiry System indicates the site does not contain any significant Aboriginal Heritage or Historic Heritage features.

3.4.2 EUROPEAN HERITAGE

A search of the State Heritage Office register has identified there are no State Heritage Sites within the site.

3.5 EXISTING INFRASTRUCTURE

3.5.1 SUBTERRANEAN INFRASTRUCTURE

The site maintains a network of existing subterranean service infrastructure which traverses through the land. This includes:

- Reticulated Sewer.
- Reticulated Water Supply.
- Greywater Effluent Pipes.

The existing subterranean infrastructure has been considered in the preparation of the spatial DSP layout to remain insitu and has been incorporated primarily within proposed road reserves and the extension of existing road reserves.

Refer Figure 5 - Existing Infrastructure

3.5.2 STORMWATER INFRASTRUCTURE

The DSP area incorporates overland drainage corridors within the southern portion which form an extension of Ochiltree Street. This corridor is required to receive stormwater from the existing residential area to the south and from development proposed by the DSP, to convey stormwater to the east which discharges into vacant land and ultimately into Gribble Creek.

Portions of the DSP area are within the Gribble Creek floodway and flood fringe. These have been considered and have informed the spatial layout of the DSP.

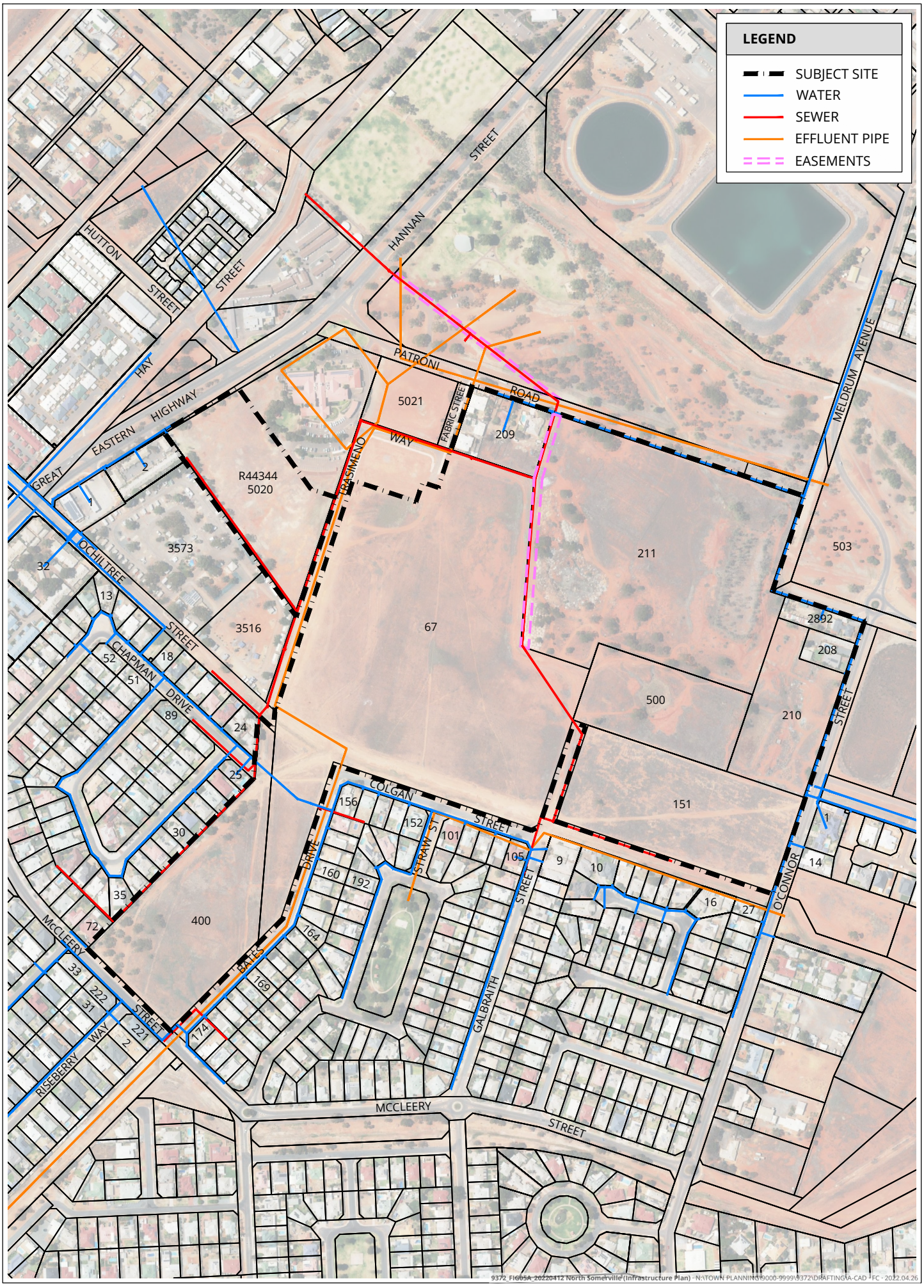

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FIGURE 5

EXISTING SERVICE INFRASTRUCTURE

4. DISTRICT STRUCTURE PLAN

4.1 DESIGN PHILOSOPHY

4.1.1 SITE RESPONSIVE DESIGN

The DSP layout has been designed to respond to the site's topography, water management requirements, the existing road network, landownership and the broader surrounding context.

The spatial layout allows for residential development to be staged sequentially and independently by individual landowners, corresponding with infrastructure alignments and access to Great Eastern Highway and the surrounding road network. The design response provides for a logical transition and interface of land uses and ensures the retention of areas of significant environmental and community value.

4.1.2 NEIGHBOURHOOD STRUCTURE

The neighbourhood structure is predicted on a modified grid layout which allows for a well-connected and integrated community, nestled within the inherent natural amenities of the DSP area and its surrounds. The urban layout provides pedestrian permeability which is legible and walkable, linking community facilities through safe and direct linear connections.

4.1.3 MOVEMENT NETWORK

The DSP is well serviced and accessed via the surrounding road network. It integrates with the existing road network and improves the legibility of both pedestrian and vehicular connections.

The movement network has been designed to incorporate existing roads, as an extension into the site and as an interface on the site's periphery. The integration of existing roads and proposed roads "complete" the road network and contribute to improved connectivity to the broader area.

The main north-south subdivision road forms an extension of Galbraith Street and follows the existing sewer alignment north to Patroni Road. Ochiltree Street extends from Great Eastern Highway to intersect with Colgan Street.

Proposed local subdivision roads will be orientated predominately north-south to accord with preferred passive solar design principles providing for east-west lots. The indicative local road network has been aligned to terminate at areas of public open space, allowing for safe pedestrian access to areas of recreational amenity.

4.1.4 PUBLIC OPEN SPACE

Public Open Space ("POS") has been centrally located at a point of convergence to provide for active and passive recreation within a landscaped environment. The POS has been configured to retain as much of the remnant vegetation as possible and recognise the historic significance of the runoff dams from Gribble Creek. The POS seeks to enhance the natural environment and allow for pedestrian movement to the across the Site.

A portion of the POS allocation will provide a dual function through the conveyancing of stormwater in a rainfall event. The extension of Ochiltree Street and Chapman Drive will allow for stormwater to disperse through the existing open drains which will be formalised as POS under the DSP.

4.1.5 RESIDENTIAL DENSITY

The DSP area will contribute a range of housing types and lot sizes. Its infill location, in proximity to the City Centre and community facilities will allow for a variety of housing choices, including multiple dwellings and terrace homes. Single residential lots will contribute the majority of housing typologies.

4.2 DISTRICT STRUCTURE PLAN OBJECTIVES

- *Provide for residential infill development within a contemporary master-planned community,*
- *Provide a land use planning framework which integrates with the surrounding residential development to support the future growth and development of North Somerville,*
- *Integrate development to improve connectivity, legibility and support community cohesion,*
- *Provide a framework for urban development which may be implemented independently whilst contributing a holistic master planned outcome,*
- *Assist the City of Kalgoorlie-Boulder, WAPC and service infrastructure providers, including Water Corporation, Western Power and Main Roads to prioritise the provision of infrastructure extensions and upgrades to meet the future needs of the North Somerville community.*

Refer Figure 6 – Indicative District Structure Plan Concept

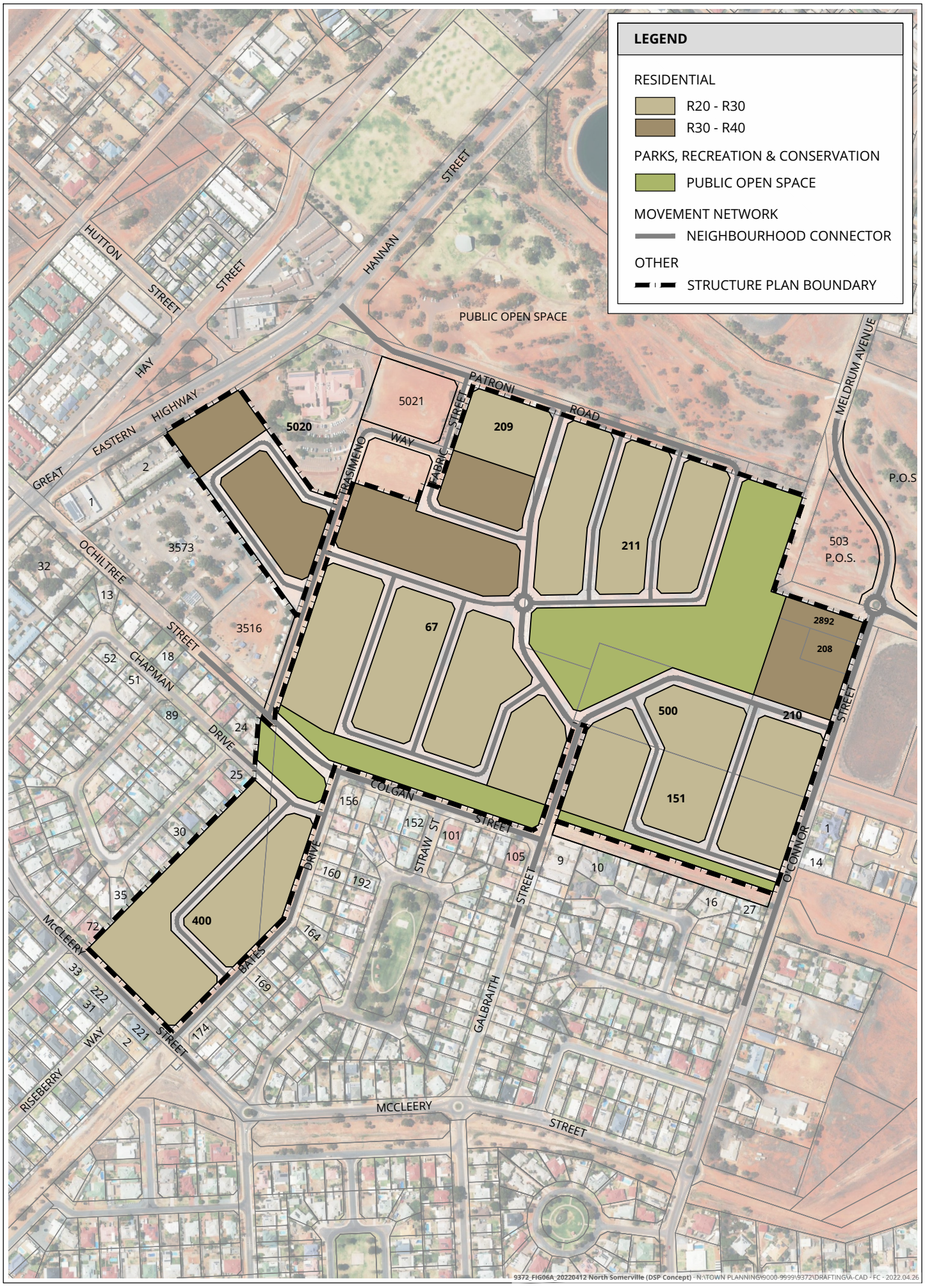

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FIGURE 6

INDICATIVE DISTRICT STRUCTURE PLAN CONCEPT

5. LAND USE AND SUBDIVISION REQUIREMENTS

5.1 LAND USE

The DSP sets out high level land use zoning, open space, vehicle movements and servicing requirements which are to be further refined at the Local Structure Planning stage. The DSP proposes residential development and supporting land uses.

A summary of the key land use areas is provided in the table below:

LAND USE	
Total area covered by the District Structure Plan	35.49 hectares
Net Residential	23.20 hectares
Public Open Space and Drainage	5.85 hectares
Road Reserve	6.44 hectares

5.2 RESIDENTIAL

The DSP identifies 35.49 hectares of land for urban development purposes. The DSP identifies a range of residential density codes (R-Codes) which have been distributed to provide a range of lot sizes. The DSP proposes predominately single residential lots within the density range of R20 – R40 which anticipates approximate lot sizes between 600sqm and 250sqm.

The spatial layout allows for north-south roads which maintain a strong relationship and vista to areas of POS amenity at the termination of streets. This layout allows for lots which are on the preferred axis for solar orientation being east-west.

Based on a gross urban density of 15 dwellings per hectare, the DSP has the potential to provide for approximately 600 dwellings, accommodating a population increase of approximately 1620 people (based on an average household size of 2.7 persons). The extent of residential land will be further refined through subsequent local structure planning over each of the two (2) precinct areas.

Local Structure Plans will be required to provide further detail with regard to the distribution of density to ensure the density targets outlined in the WAPC's *Liveable Neighbourhoods* can be achieved.

5.2.1 RESIDENTIAL DENSITY LOCATIONAL CRITERIA

R20-R30

The R20-R30 density code shall be applied predominately to provide an appropriate interface with the existing adjoining residential areas and a transition into the proposed development.

R30-R40

The R30-R40 density code shall be applied areas with the amenity to support the density, including having direct frontage to POS and being in proximity to Hannan Street.

The DSP provides for residential lot densities in accordance with Western Australian planning Commission guidelines under Liveable Neighbourhoods which achieves.

- 16 dwellings per gross urban hectare, and
- 26 dwellings per residential hectare.

5.3 PUBLIC OPEN SPACE

POS is provided in accordance with WAPC guidelines and policies. The distribution of POS is strategically located to provide for multiple functions through the conveyance of stormwater, retention of trees where possible and recreational amenity.

The site provides 5.84 hectares (16% of the site area) of POS across the DSP area and has been equitably distributed, where possible, across multiple land holdings whilst meeting the broader objectives of the DSP.

The POS has been located centrally to the DSP area and in consideration of the site's drainage requirements and existing drainage infrastructure.

Refer **Figure 7 - Public Open Space**

Whilst a significant portion of the POS is allocated for the purpose of stormwater management, it is recognised, the POS will be intermittently inundated during significant storm events allowing for the POS to be used for recreation purposes for most of the time. Additionally, the DSP area is located adjacent the Gribble Creek reserve and Centennial Park which contributes a large area of open space for recreation.

It is considered the POS allocated within the site is fit for purpose and shall be refined through the a more detailed Local water Management Strategy.

The table below identifies the POS allocation across the landholdings comprising this DSP. It is subject to refinement and confirmation to rationalise the useable POS areas and drainage requirements through the local structure plan process..

PUBLIC OPEN SPACEE ALLOCATION					
LOT NUMBER	**LOT AREA**	**POS AREA**	**% OF LOT**	**% OF POS ALLOCATION**	**LAND TENURE**
67 (Portion)	12.4825ha	1.5545ha	12%	26%	City of Kalgoorlie-Boulder
151	3.4793ha	0.3467ha	10%	6%	Private
208	0.2400ha	0	0%	0%	Private
209	0.8670ha	0	0%	0%	Private
210	1.7843ha	0	0%	0%	Private
211	8.3478ha	3.3398ha	40%	57%	Private
400	3.5429ha	0.1023ha	3%	2%	State of Western Australia
500	2.0234ha	0.4400ha	22%	9%	State of Western Australia
2892	0.2770ha	0	0%	0%	Private
Lot 5020 (Reserve 44344)	2.4178ha	0	0%	0%	State of Western Australia

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FIGURE 7

PUBLIC OPEN SPACE

5.4 MOVEMENT NETWORK

The following provides a summary of the existing, planned and proposed movement network for the DSP area. A Transport Impact Assessment ("TIA") has been prepared in support of the DSP. The TIA confirms the proposed development of the site does not negatively impact the surrounding traffic movements and does not require intersection upgrades. The TIA indicates the existing road network has the capacity to extend and integrate with the proposed development.

For further information, refer **Appendix 1 - Transport Impact Assessment**

5.4.1 EXISTING ROAD NETWORK

The DSP area interfaces, connects with, and forms an extension of multiple roads. These roads, their hierarchy and relation to the site are summarised below:

- Hannan Street – forms an extension of Great Eastern Highway and access to the town centre.
- Galbraith Street – provides the major connection from McCleery Street and extends through the site to connect to Patroni Road.
- Patroni Road – connects the site to Hannan Street and the town centre.
- McCleery Street – is an east-west connecting neighbourhood connector south of the site joining to Great Eastern Highway.
- O'Conner Street - is a north-south connecting neighbourhood connector east of the site.
- Ochiltree Street – extends into the site and connects to Colgan Street.
- Fabric Street – a local road extending into the site.
- Trasimeno Way - an internal local access street.
- Chapman Drive – an existing adjoining residential street.
- Bates Drive – provides an interface to the southern portion of the site.
- Colgan Street – becomes the extension of Ochiltree Street, forms the southern boundary.

The consideration of the existing road network plays a critical role in the proposed movement network within the DSP area and is further explained below.

5.4.2 PROPOSED ROAD NETWORK

The proposed road network has been considered to integrate and connect with the existing surrounding roads and their extension into the site. The proposed development allows for the rationalisation of the existing road network to provide logical extensions and links to complete the road network and provide legible and direct vehicular connections.

The extension of Galbraith Street forms the major north - south access through the site, connecting to Patroni Road. The road has been aligned to protect and retain the existing sewer which traverses the site. The alignment of this road assists in dispersing traffic to external destinations.

The extension of Ochiltree Street to Colgan Street provides for an additional connection to Great Eastern Highway. Similarly, the development is well connected to O'Conner Street and the broader Kalgoorlie district.

The TIA indicates, the majority of traffic movements which will access and exit the site will be to Hannan Street via Patroni Road and Great Eastern Highway via Ochiltree Street. Traffic movements along Great Eastern Highway and Hannan Street will be a spilt of approximately 45% heading to/from the south and 55% heading to/from the north and the town centre.

The local access streets are aligned in a predominately north-south, rectilinear configuration to provide for the most direct links to drainage corridors and areas of open space.

The proposed road network is intended to rationalise the disjointed road terminations on the site's periphery, improving vehicle connections and legibility within the site and its surrounds.

Road reserve widths are proposed to be predominately 20m where they form the north-south access street and interface with POS, and 16m within the local residential streets.

5.4.3 PUBLIC TRANSPORT

The nearest bus stop is located approximately 150m from the site on Hannan Street. Bus Route 863 forms a circular route which connects the site to the town centre and the south eastern suburbs of the broader District.

5.4.4 PEDESTRIAN AND CYCLE NETWORKS

The proposed DSP area is well connected to the broader pedestrian and cycling network. The sites proposed development will improve the connectivity and legibility to human movement networks.

Refer **Figure 8 – Movement Network**

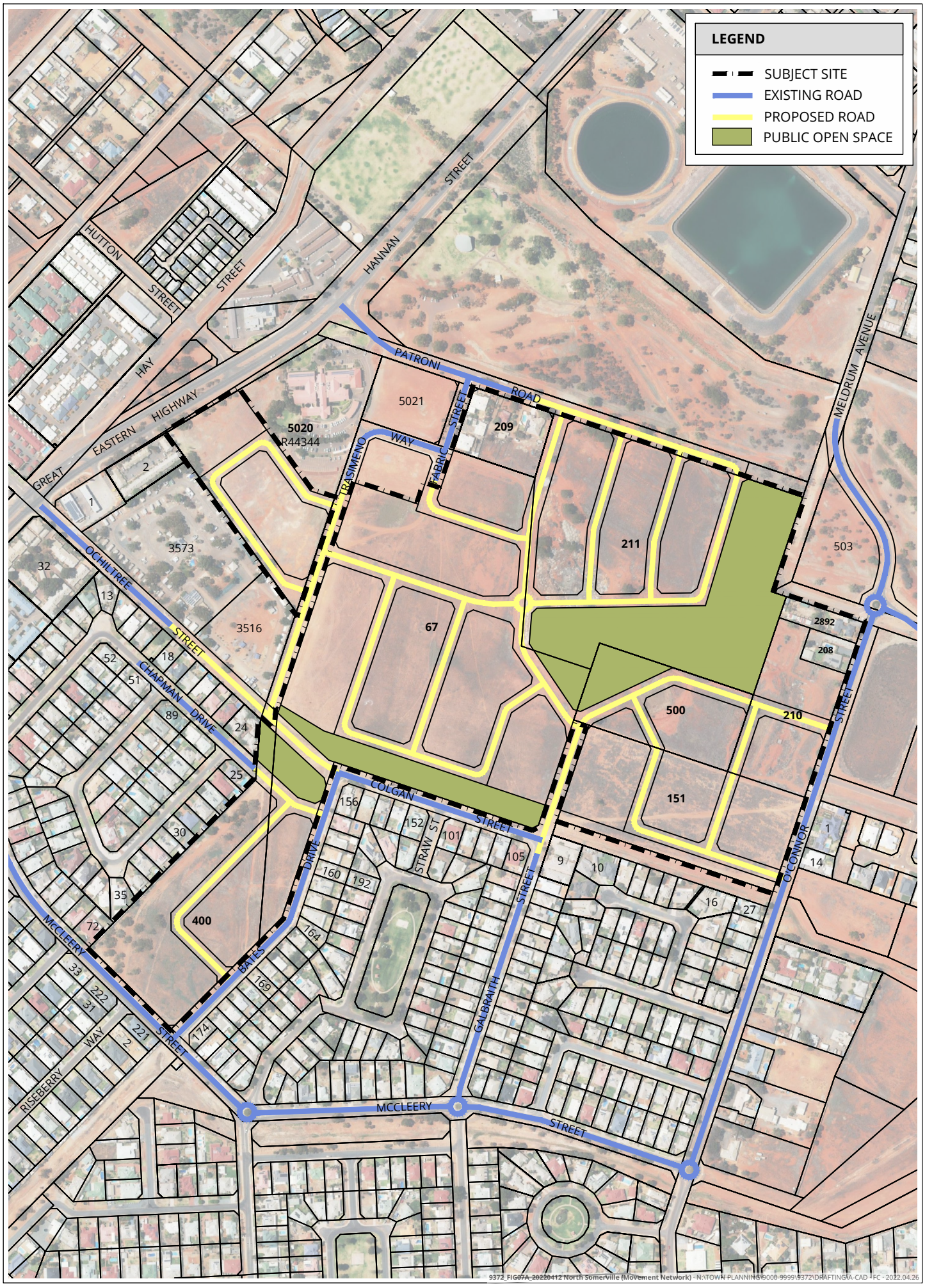

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FIGURE 8

MOVEMENT NETWORK

5.5 WATER MANAGEMENT

5.5.1 GROUNDWATER

The site maintains a clearance to groundwater of more than 30 metres. Subsequently, clearance to groundwater is not required to be considered.

5.5.2 SURFACE WATER

The site is located immediately adjacent the Gribble Creek reserve which is the major overland drainage corridor within the Kalgoorlie-Boulder City. A portion of the site falls within the Gribble Creek floodway and floodplain.

Given the geological conditions, the topography, surrounding land uses along with the DSP areas interface with its surrounds and the potential impact of the adjacent Gribble Creek, the management of surface water is a major consideration for the site and its proposed development for residential dwellings.

The intrinsic imperviable soil types and the sites gentle slope require consideration to ensure stormwater runoff is appropriately directed through a well-considered methodology which allows for sufficient drainage flow and prevents localised flooding.

Several constructed and natural water courses are located within the site and on its periphery, which will be considered within the DWMS to direct stormwater generated upstream and which directly impacts the site, along with stormwater runoff generated by the proposed development of the site.

Existing water courses/basins to be considered include:

- Gribble Creek Floodway and Floodplain.
- Dams within the site.

Hyd2o has been engaged to prepare a DWMS to inform this DSP. The strategy seeks to ensure a post-development water management regime which is consistent the with the existing pre-development water management.

Previous water management studies have been undertaken by Advisian (2017) and GHD (2019) which have informed this DWMS. Whilst previous studies were focussed on Gribble Creek, this DWMS provides an opportunity for a holistic approach to the water management within the site and its impact upon the creek and downstream flows. The development of the DSP area provides the opportunity to improve the management of stormwater within the site and control its discharge downstream. The con

The DWMS indicates works are required within the Gribble Creek reserve external to the site to mitigate the risk of flooding to the DSP area. This includes the widening of the creek channel and the construction of an earth bund to deflect runoff from entering the DSP area.

Predevelopment runoff from the site is identified as being 38,000m^3. It is proposed, the equivalent storage will be provided within the allocated POS (34,500m^3) and adjoining POS to the northwest of the site (3,500m^3) to accommodate flood storage. The DSP provides for a high-level water management strategy to be refined through a Local Water Management Strategy in support of further Local Structure Planning.

Refer **Appendix 2 – District Water Management Strategy**

5.6 INFRASTRUCTURE COORDINATION, SERVICING AND STAGING

The coordination of infrastructure and the staging of development will be required to be addressed through future Local Structure Planning and subsequent subdivision applications. An Engineering Servicing Report will be required to confirm there is capacity within the existing services network to support additional development of the DSP area.

APPENDIX 1

TRANSPORT IMPACT ASSESSMENT

ROWE GROUP DESIGN

APPENDIX 2

DISTRICT WATER MANAGEMENT STRATEGY

ROWE GROUP DESIGN