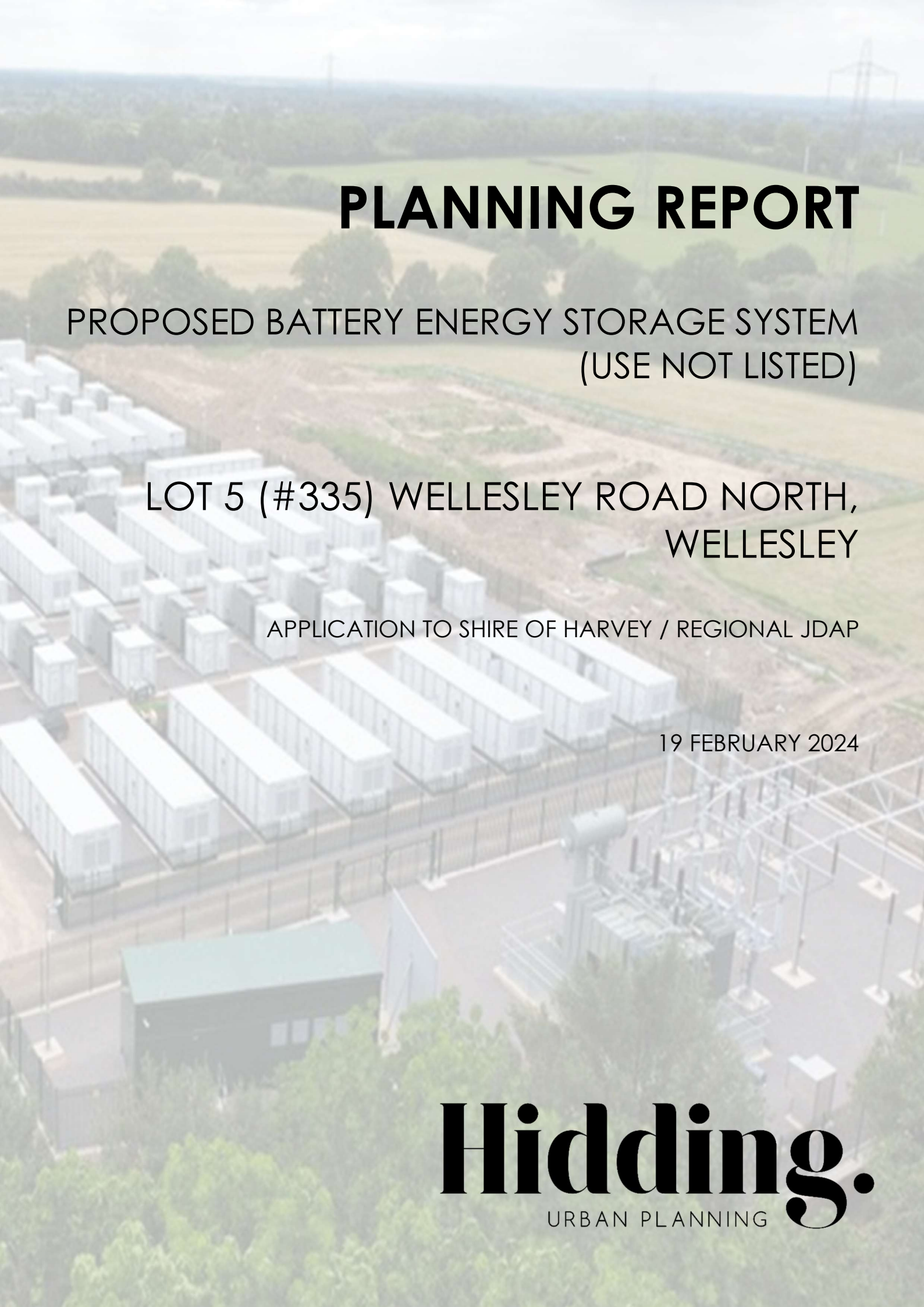

PLANNING REPORT

PROPOSED BATTERY ENERGY STORAGE SYSTEM (USE NOT LISTED)

LOT 5 (#335) WELLESLEY ROAD NORTH, WELLESLEY

APPLICATION TO SHIRE OF HARVEY / REGIONAL JDAP

19 FEBRUARY 2024

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This Planning Report has been prepared by **Hidding Urban Planning** for an Application for a Proposed Battery Energy Storage System (Use Not Listed) at Lot 5 (#335) Wellesley Road North, Wellesley.

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APPLICATION DETAILS

Table 1: Application Details

Property Locations	Lot 5 (#335) Wellesley Road North, Wellesley
Applicant	Hidding Urban Planning
Proponent	Sunrise Energy Group
Landowner	Lyndon Mervyn Edwards
Local Government	Shire of Harvey
Determining Authority	Regional Joint Development Assessment Panel (Mandatory Application)
Planning Scheme	Shire of Harvey Local Planning Scheme No. 1
Shire of Harvey Zoning in LPS1	Kemerton Strategic Industry
Proposed Use	Battery Energy Storage System (Use Not Listed)
Estimated Construction Value	$200 million

1.0 INTRODUCTION

Hidding Urban Planning has prepared this Planning Report on behalf of Sunrise Energy Group to support an Application for Development Approval for a Proposed Battery Energy Storage System (**BESS**) at Lot 5 (#335) Wellesley Road North, Wellesley (**Subject Land**), located within the Shire of Harvey.

This report provides a detailed Town Planning assessment of the proposed development against the relevant State and local Planning framework. The information contained in this report confirms that the proposed BESS is appropriate for the site and is capable of approval.

Developing a battery facility at a utility scale in this locality is aimed to support greater energy security and environmental sustainability.

1.1 DEVELOPMENT ASSESSMENT PANEL (DAP) DETERMINATION

As the anticipated construction cost of the project is **$200 million**, this Application is being lodged as a Mandatory Joint Development Assessment Panel (**DAP**) application for determination by the Regional Joint Development Assessment Panel.

Accordingly, please find ***attached*** the completed Shire of Harvey Application for Development Approval Form, Greater Bunbury Region Scheme (GBRS) Form 1 and DAP Form 1, authorised by the landowner.

1.2 PRE-APPLICATION DISCUSSIONS

Sunrise Energy Group and its consultants has held prior discussions with the Shire of Harvey about the proposed Battery Energy Storage System development on the subject land.

2.0 SITE DETAILS

2.1 LEGAL DESCRIPTION OF LAND

This Development Application is made in respect of Lot 5 (#335) Wellesley Road North, Wellesley, the details of which are provided in **Table 2** below.

Table 2: Legal Description of Land

Lot	Plan	Vol/Folio	Address	Registered Proprietor
5	5888	1826/663	No street address on title (otherwise known as 335 Wellesley Road North, Wellesley)	Lyndon Mervyn Edwards

The Certificate of Title of the land is attached at **Annexure 1**.

2.2 SITE DETAILS

The subject land is located within the Kemerton Strategic Industry zone in Wellesley. Wellesley is a locality in the Bunbury region of Western Australia, located approximately 10km north-east of Australind. The main feature of the locality is the Kemerton Industrial Park.

The location of the site and the proposed development area is shown on the Aerial Photograph at **Figure 1** below.

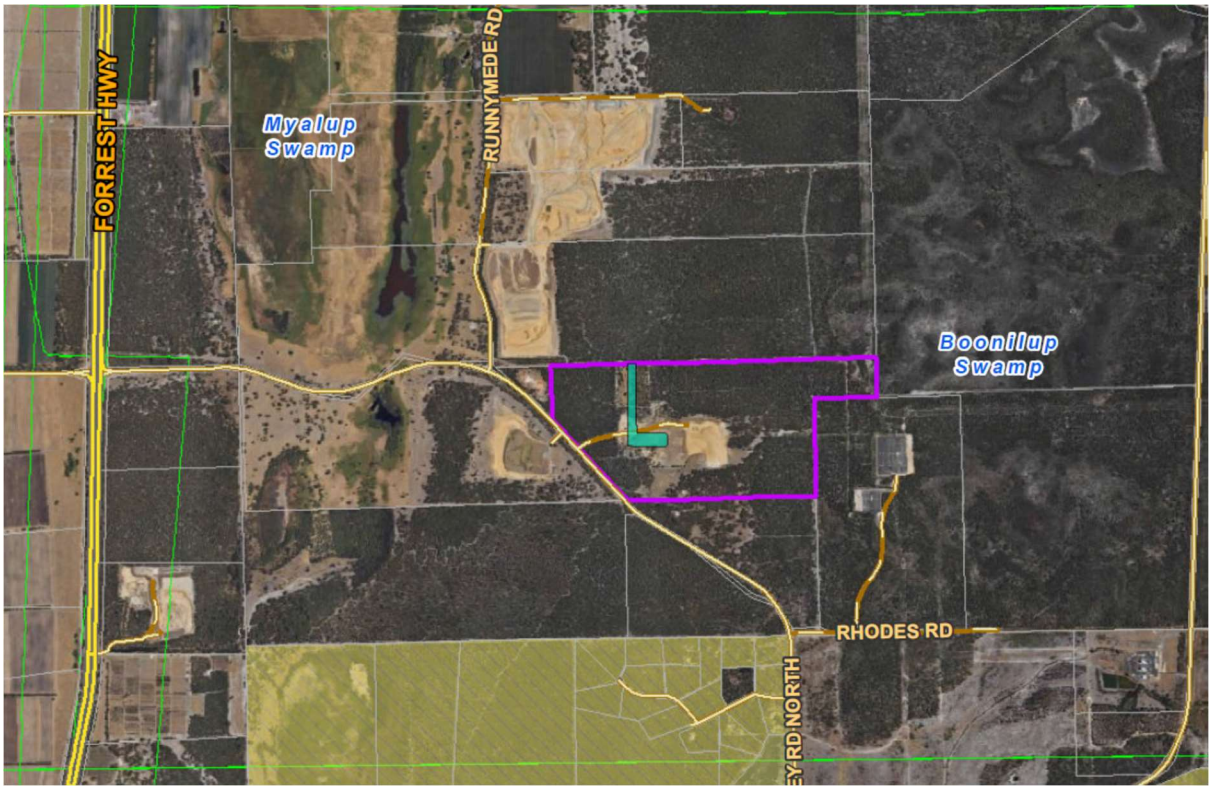

Figure 1: Aerial Photograph

The subject land is currently used for sand mining activities located in the middle of the site. The development site area to the west and north-west of the sand mine has previously been used partly for sand mining and partly cleared and used for tree plantation which has since been removed. It is within this cleared area that the BESS development is proposed.

Photographs of the development site are included below at **Photographs 1 - 3**:

Photograph 1: Development Site Area

Photograph 2: Development Site Area

Photograph 3: Development Site Area

3.0 THE PROPOSAL

3.1 SUPPORTING PLANS & REPORTS

Supporting plans and reporting information have been prepared to assist in the assessment of this application.

The reports and documentation which are provided in support of this application are detailed in **Table 3** below and are attached as **Annexures** to this Report.

Table 3: Supporting Plans & Reports

Consultant	Plan/Document	Annexure
Avora	Development Plans	**2**
Ecologia	Biological Survey	**3**
Bushfire Prone Planning	Bushfire Management Plan	**4**

3.2 PROJECT DETAILS

The proposal for the subject land is to develop a 100MW/400MWh Battery Energy Storage System (BESS) connected to the 132 KV network on the South-West Interconnected System (SWIS) providing services to the Wholesale Energy Market in WA. There is considerable potential for this project to address intermittencies in energy supply due to the ability for battery facilities to respond quickly to fluctuations in the grid and in particular, to support of intermittent wind and solar generation.

The development will consist of 32 x 4.2MVA battery inverters and 160 x 3MWh 20-foot lithium-ion battery containers connected to the SWIS via a HV sub-station located on the site. Access roads will be constructed between the battery containers and inverters.

The proposed development envelope is approximately 5ha.

The proposed BESS development is detailed on plans attached at **Annexure 2**.

The majority of the proposed development envelope has previously been cleared for sand mining and planting of a pine plantation (now removed). As a consequence, very little native vegetation remains within the proposed development envelope.

The battery development will be developed on 15-hectare parcel of land within the subject land. The location of the land is adjacent to the Western Power 132 KV substation and 330 KV terminal switch yard. The initial 15-hectare land parcel has the 132 KV overhead network traversing the land at one end. The land is appropriately zoned (Kemerton Strategic Industrial), is privately owned and has previously been cleared for sand mining and used to grow pine trees (since harvested and not replaced).

Site access will be via the existing private access road which has provided access to the existing sand mine, connecting with Wellesley Road North. The site access road is in good condition and will support construction vehicles and permanent materials delivery.

A photograph of the site access road connecting with Wellesley Road North is shown below at **Photograph 4**.

Photograph 4: Existing site access crossover to Wellesley Road North (June 2023)

An example of a battery energy storage system is provided below at **Photograph 5**, demonstrating how such a project is arranged and visually, how it may look.

Photograph 5: Example of BESS project

Credit renewablesnow.com – Minety battery, Wiltshire, South-West England. Image by RES Group.

Construction will commence once all approvals have been secured and following completion of any pre-construction conditions. It is anticipated that construction will take between 12-18 months. During this period there will be up to 20 personnel on site.

The BESS will operate 24/7 and will typically charge during the day whilst there is excess renewable generation and discharging during peak periods.

Local operational staff is expected to be 2-4 personnel at most during standard business hours Monday to Friday. Operational staff would undertake monitoring, cleaning and general maintenance of the infrastructure. Periodically, major maintenance that might be required may include replacement of infrastructure or equipment including battery modules, inverters, switchgears, transformers or other infrastructure as may be required. During these major maintenance periods, a larger number of personnel will be required to attend the site, but for a limited period of time.

3.3 ASSESSMENT OF RELEVANT IMPACTS

3.3.1 Environmental

Given that the proposed BESS and associated infrastructure will be located in existing cleared land and no major vegetation clearing is proposed, it is considered that the overall environmental impact is acceptable.

Ecologia was commissioned to undertake a biological survey of the site.

A supporting letter from Ecologia is attached at **Annexure 3**.

3.3.2 Visual Amenity

The visual impact of the proposed development is not considered to be adverse or detrimental to the surrounding area given the location of the development and because the proposed height of the battery storage infrastructure mean that this infrastructure will maintain a low profile. Adjacent vegetation will screen the infrastructure ensuring no visual impact from the public realm.

3.3.3 Noise

Possible noise impacts from the development are mainly limited to noise from the battery modules, inverters and transformers and the construction phases of the overall development.

The inverters are the plant items that have the potential to generate noise during operation. The cooling fans within the inverters and the air conditioning units on the Battery Energy Storage Systems are the controlling noise emission components. The most stringent assigned noise level is the nighttime period. As the nighttime period is when temperatures are expected to be the lowest, the cooling fans are unlikely to cause a major noise issue.

In any event, the proponent must comply with the requirements of the *Environmental Protection Act 1986* and the *Environmental Protection (Noise) Regulations 1997* in regard to noise for both the construction and operational phases of the proposed facility, and this can be imposed as a condition of development approval.

3.3.4 Bushfire

The proposed BESS project is considered a "high-risk" land use under State Planning Policy 3.7.

Potential fire and bushfire hazards can include:

- A bushfire impacting on the BESS infrastructure, including potential loss of life, injury or destroyed/damaged infrastructure assets.
- A fire at the BESS spreading to surrounding areas.

To address the requirements of SPP3.7, a Bushfire Management Plan (BMP) has been prepared by Bushfire Prone Planning, an accredited Level 3 Bushfire Planning and Design (BPAD) practitioner.

The BMP is provided at **Annexure 4**.

3.3.5 Traffic & Access

As there is very little in the way of operational traffic for the proposed development, a Transport Impact Statement (TIS) is not required to be submitted to the local government under the *WAPC Transport Impact Assessment Guidelines Vol. 4 0 – Individual Developments.*

As advised previously, access will be derived from the existing crossover and site access road from Wellesley Road North which has been used for access to the existing sand mine on the subject land.

3.3.6 Construction

The development is likely to be constructed over a period of 12-18 months. During construction, additional vehicles, construction equipment and construction personnel will be on-site. All access for the construction phases of the project will occur through the existing site access from Wellesley Road North. Internal access roads will be constructed to the development envelopes.

Construction work will be carried out between 0700 hours and 1900 hours Monday to Saturday.

During construction there may be 10-20 vehicles per week visiting the site. The peak construction period is anticipated to require up to 20 personnel, with a likely average of 5 people throughout the construction phase.

A construction laydown area will be developed adjacent to the development envelope to store construction equipment, portable amenities and car parking areas.

The main impact during construction will be air quality through the generation of dust. Mitigation measures are likely to be necessary and could include the watering down of construction areas during earthworks and monitoring forecast wind levels. A Dust Management Plan can be required as a condition of development approval, or otherwise, it can be a component of an overall Construction Management Plan.

Other relevant information concerning constructability is as follows:

1. Civil landform – the development site dips towards the planned substation location, so some water management or diversion will be required to keep water / sand away from substation and blue metal base.
2. The bottom section of site dips to the south and will require either earthworks to flatten the decline or potentially a bench / retaining wall to step down to a lower level to allow for the installation of drainage and soak wells.
3. Sandy site is good for drainage and construction of foundations but will require road base to form up access roads within the development. The overall the soil condition appears to be good for supporting construction activities.

Civil designs can be developed at the subsequent stage and subject to a condition of development approval.

4.0 STATE PLANNING FRAMEWORK

4.1 STATE PLANNING STRATEGY 2050

The *State Planning Strategy 2050* (**SPS 2050**) provides the overarching context, principles, goals and strategic direction for land use planning in WA. The uptake of renewable energy generation and technology is an important component of the Strategy and is specifically discussed under strategic goals for global competitiveness, and strategic directions for physical infrastructure and environment.

The SPS 2050 makes specific reference to the need to improve the State's electricity network infrastructure to manage the increased generation and use of renewable energy.

The proposed BESS Project is consistent with and supports the implementation of the goals and strategic directions of the SPS 2050.

4.2 GREATER BUNBURY REGION SCHEME

The Greater Bunbury Region Scheme (**GBRS**) is a statutory region scheme administered by the WAPC. The proposal is subject to the overarching provisions of the GBRS.

The subject land is predominantly zoned "Industrial" in the GBRS, with the proposed development area completely within the "Industrial" zone (refer to **Figure 2**: GBRS Map Extract).

Being an "Industrial" zone, the land is considered to be appropriately zoned for the proposed development.

Figure 2 – Greater Bunbury Region Scheme (GBRS) Map Extract

4.3 STATE PLANNING POLICY 3.7 - PLANNING IN BUSHFIRE PRONE AREAS

The proposed BESS project is considered a "high-risk" land use under *State Planning Policy 3.7 – Planning in Bushfire Prone Areas* (**SPP3.7**).

The proposed development envelope is located on land which is partially within a Bushfire Prone Area (refer to **Figure 3**: DFES Maps of Bushfire Prone Areas). Approximately half of the BESS development actually sits within an area of the site that is not within a bushfire prone area (the central part of the subject land), as can be seen in Figure 3 also.

Figure 3 DFES Maps of Bushfire Prone Areas

Potential fire and bushfire hazards can include:

- A bushfire impacting on the BESS infrastructure, including potential loss of life, injury or destroyed/damaged infrastructure assets.
- A fire at the BESS spreading to surrounding areas.

To address the requirements of SPP3.7, a Bushfire Management Plan (**BMP**) has been prepared by Bushfire Prone Planning, an accredited Level 3 Bushfire Planning and Design (BPAD) practitioner. The BMP is provided at **Annexure 4**. A Bushfire Risk Management Plan (**BRMP**) is also being prepared and will be submitted at a later date.

4.4 POSITION STATEMENT: RENEWABLE ENERGY FACILITIES (WAPC, 2020)

The WAPC *Position Statement: Renewable Energy Facilities (March 2020)* (**Position Statement**) provides guidance to local governments on introducing renewable energy facilities into their local planning frameworks.

The Position Statement aims to support appropriate development of renewable energy facilities and associated infrastructure by encouraging the consideration and assessment of such development using a standardised framework including:

- The Position Statement describes that relevant provisions should be made in state and local planning instruments (local planning schemes, policies and strategies) to guide decision making regarding renewable energy facility proposals.
- The Position Statement lists the factors that should be considered during the assessment of such proposals, including community consultation, environmental impact, visual amenity, safety, heritage and construction impacts.
- The Position Statement seeks to maximise energy production and operational efficiency, and minimise potential impacts to environment, natural landscape and urban areas.

In response to the Position Statement, studies have been completed in relation to bushfire risk and environmental impact to ensure any potential impacts have been considered and addressed.

Further, the project has been designed on a site where there will be minimal visual impact to the public realm due to the location of the site and exiting vegetation. The site has also been selected to be located nearby to existing electrical infrastructure to maximise operational efficiency.

5.0 LOCAL PLANNING FRAMEWORK

5.1 SHIRE OF HARVEY LOCAL PLANNING SCHEME NO. 1

5.1.1 Zoning & Land Use

The subject land is predominantly zoned "Kemerton Strategic Industry" pursuant to the Shire of Harvey *Local Planning Scheme No. 1* (**LPS 1**) (refer **Figure 4**: LPS1 Zoning Map). A small portion of the land at the western end is zoned "Kemerton Industry Buffer". The proposed development area is completely within the "Kemerton Strategic Industry" zone.

Figure 4 Zoning Map

The proposed Battery Energy Storage System (BESS) is not a clearly defined land use in the Shire's LPS1. Preliminary discussions with the Shire confirm that the proposed BESS project will be considered as a "Use Not Listed".

Accordingly, the proposal is required to be assessed in accordance with clause 4.2.5 of LPS 1, which is described as follows:

> *4.2.5 If the use of land for a particular purpose is not specifically mentioned in the Zoning Table and cannot reasonably be determined as falling within the interpretation of one of the land use categories the local government may:-*
>
> *(a) determine that the use is not consistent with the objectives and purposes of the particular zone and is therefore not permitted; or*
>
> *(b) determine by absolute majority that the proposed use may be consistent with the objectives and purpose of the zone and thereafter follow the advertising procedures of Clause 64 of the Deemed Provisions in considering an application consent. In*

approving such an application the local government may apply any conditions or development standards it deems necessary.

Therefore, the proposed Battery Energy Storage System as a Use Not Listed is capable of approval having regard for the objectives and purpose of the "Kemerton Strategic Industry" zone.

Tables 20 & 21 of LPS1 is the Zoning and Development Standards for the "Kemerton Strategic Industry" zone and includes the following Policy Statement (considered to the Objective and Purpose) for the "Kemerton Strategic Industry" zone.

"Policy Statement: The area is to be developed as a strategic industrial estate within the Bunbury Region. The objective is to establish a strategic industrial park within which all industrial development adheres to an appropriate level of environmental and operational criteria, buffered by large areas of natural parkland and vegetated areas."

The proposed development is considered to be an appropriate industrial activity which is buffered by existing natural vegetated areas within the subject land. Therefore, it is considered that the proposed use may be consistent with the Objective of the zone and can be considered following advertising in accordance with clause 64 of the Deemed Provisions.

Further, Clause 4.8 – Development within the Kemerton Strategic Industrial Area of LPS1 states the following more specific objectives:

4.8.1 The Kemerton Strategic Industrial Area is made up of the land zoned Kemerton Strategic Industry, Kemerton Ancillary Industry, and Kemerton Industry Buffer. The objectives of the Kemerton Strategic Industrial Area are to:

(a) accommodate resource processing industries and associated supporting activity in order to fulfill its designated role as a strategic industrial area for the South-West region;

(b) provide industrial development areas that:

i. are identified for subdivision and Strategic and Ancillary development;

ii. are sufficiently flexible to accommodate the varying needs of future proposals including the need for flexible servicing arrangements for industry within the Kemerton Strategic Industry zone;

iii. achieve beneficial economic, environmental and community outcomes;

iv. encourage synergic interactions between business activities consistent with the principles of industrial ecology;

v. are protected from the encroachment of incompatible uses;

vi. respect visual management considerations;

vii. enable environmental protection and management arrangements that minimise impact on the natural environment; and

viii. respect sites of Aboriginal heritage significance.

4.8.2 When considering development applications with respect to land wholly or partly within the Kemerton Strategic Industry zone, the Kemerton Industry Buffer zone or the Kemerton Ancillary Industry zone the Local Government shall refer the proposal to the relevant State Government Agencies for comment to ensure the proposal does not conflict with the strategic intentions for industry and infrastructure development in the zone.

4.8.3 When considering development applications with respect to land wholly or partly within the Kemerton Industry Buffer zone, applicants are required to satisfy the provisions of Part 5 – Division 3 – Kemerton Industrial Zone Buffer Area and Part 7 – Applications for Planning Approval of the Greater Bunbury Region Scheme.

The proposed development and use of the land is considered to align with the Objectives of the Kemerton Strategic Industry zone as set out in Clause 4.8 of LPS1. Therefore, it is considered that the proposed use may be consistent with the Objectives of the zone and can be considered following advertising in accordance with clause 64 of the Deemed Provisions.

5.1.2 Development Standards

In addition to the proposed development complying with the general objectives of the "Kemerton Strategy Industry" zone, the development is designed to ensure it complies with the relevant site and development requirements for the "Kemerton Strategic Industry" zone, as prescribed at Table 20 of LPS 1.

Although the proposal is for a Use Not Listed, Table 20 describes a series of Development Standards that apply to the Zone more generally (as there is a Note in the Table that states: *"Unless otherwise specified against a particular use below, the above standards will apply to this Zone".*

Table 4 below provides a response to the development standards of Table 20 of LPS1.

Table 4: Compliance with the Development Requirements of LPS1

Requirements	LPS 1	Proposal
Minimum Lot Areas	5ha	Lot 5 - >100ha
Minimum Effective Frontage	80m	Lot 5 has a frontage to Wellesley Road North of approx 600m
Minimum Boundary Setbacks		
Front	20m	All setbacks far exceeded

Requirements	LPS 1	Proposal
Rear	30m	
Sides	10m each side	
Minimum Car Parking Spaces	1 per 2 employees on site	Plenty of space for vehicle parking

Accordingly, all of the relevant development standards have been met.

Clause 6.3 of LPS1 advises that land within the Kemerton Strategic Industry zone is identified as an area requiring a Structure Plan to be prepared prior to any future subdivision or development.

The Kemerton Strategic Industrial Area Structure Plan was developed to advance industrial development of the locality. The following section provides the Structure Plan details.

5.2 KEMERTON STRATEGIC INDUSTRIAL AREA STRUCTURE PLAN

The subject land is located within the Kemerton Strategic Industrial Area Structure Plan (2017) and is within the "Kemerton Strategic Industry" zone (refer **Figure 5**: Structure Plan Map Extract).

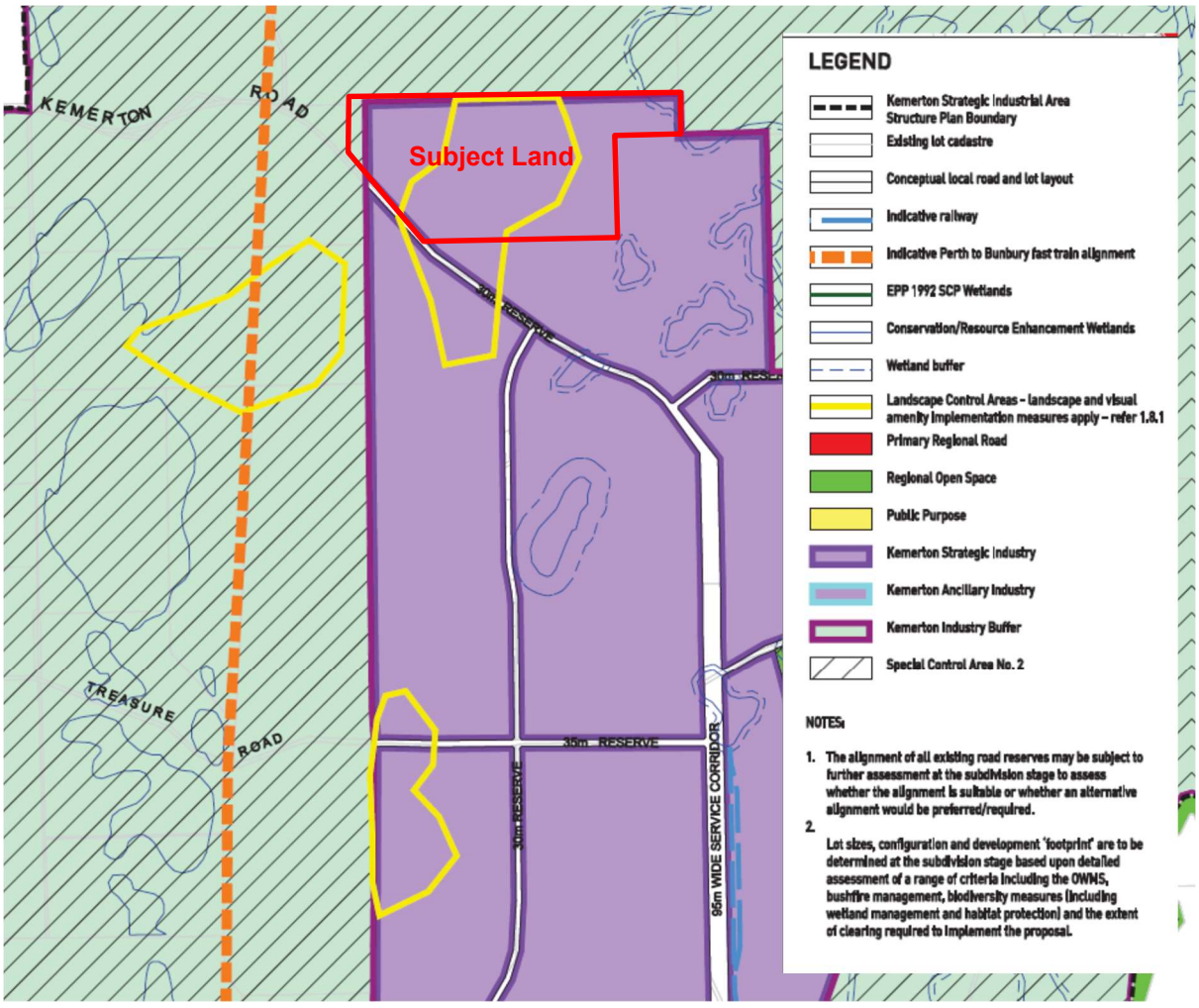

Figure 5: Structure Plan Map Extract

The development area sits partially inside the Landscape Control Area, however, as this area has been previously cleared and used for sand mining activities, it is considered not to detract further from the Landscape Control Area intentions.

The Structure Plan states that land uses are to be consistent with the land use requirements in LPS1, and therefore, the proposed use is capable of approval, as previously outlined under Part 5.1 of this Report.

The Objectives of the Structure Plan are the same as the Objectives of the "Kemerton Strategic Industry" zone set out in at Clause 4.8 of the Shire's LPS1, and the proposed development/use is consistent with those Objectives.

Accordingly, the proposed development and use of the land is considered to accord with the requirements of the Structure Plan and can be approved.

6.0 CONCLUSION

Hidding Urban Planning seeks Development Approval for a Proposed Battery Energy Storage System (BESS) at Lot 5 (#335) Wellesley Road North, Wellesley, on behalf of Sunrise Energy Group.

The project has an anticipated construction value of $200m, and therefore, the application is required to be determined the Regional Joint Development Assessment Panel as a 'Mandatory Application'.

The proposed BESS is required to be considered as a Use Not Listed under the provisions of the Shire of Harvey Local Planning Scheme No. 1.

In summary, the proposal warrants Development Approval for the following reasons:

- The proposed development accords with the State Planning Framework.
- The proposed development is compliant with the development standards and requirements of the Shire of Harvey Local Planning Scheme No. 1.
- The proposed use is capable of approval in the "Kemerton Strategic Industry" zone as a Use Not Listed and aligns with the Objectives of the Kemerton Strategic Industry zone, which provides the decision-maker with the discretion to approve to the proposal.
- The proposed use will enhance the reliability of electricity in the region.

Having regard to the above, the proposed Battery Energy Storage System should be supported and approved.

For these reasons, and in-light of the assessment contained within this report, we respectfully request that the Shire of Harvey have regard to the merits and broader benefits of the proposal when undertaking its assessment of the application, and to recommend approval to the Regional JDAP, subject to reasonable conditions.

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ANNEXURES

ANNEXURE 1

CERTIFICATE OF TITLE

ANNEXURE 2
DEVELOPMENT PLANS

ANNEXURE 3

ECOLOGIA LETTER

ANNEXURE 4

BUSHFIRE MANAGEMENT PLAN