Appendix A Updated Project description

A.1 Project description

A summary of the Project is detailed below, with all amendments highlighted in **bold red**.

A1.1 Project overview

The Project would include the following key built form features:

- BESS including battery enclosures, inverters, transformers, switchgear and control room
- Onsite substation including transformer switch bays and switchgear housed in portable substation containers
- Underground and / or overhead 132 kV transmission lines to connect the BESS to the Finley substation
- Finley substation upgrade works to facilitate connection with the BESS
- Permanent office, operation and maintenance (O&M) buildings, hardstands and Project signage
- Site access to the BESS from Broockmanns Road, internal site access tracks and parking
- **Intersection upgrade to the Riverina Highway / Canalla Road, Marantellis Road intersections**
- Landscaping
- Stormwater management infrastructure, lighting, fencing and security.

The Project will connect to the Finley substation via an overhead and / or underground 132 kV transmission line, that will run along the centre or southern boundary of Broockmanns Road reserve and potentially Canalla Road, before entering the TransGrid lot (B//961693). From the Transgrid lot boundary to the substation, the connection point is still under negotiation. As such, all of the southern side of Broockmanns Road and Canalla Road, road reserve and the area surrounding the Finley substation is being investigated as part of the Project Site. This is reflected in all mapping.

Site access from Broockmanns Road to the Project is required. **An intersection upgrade to the Riverina Highway / Canalla Road, Marantellis Road intersections is also required, to support turning vehicles**.

The Project Site boundary and Indicative Layout is provided Figure 2-4 of the EIS. The final Project Site that has been assessed in this EIS was informed by community and stakeholder consultation, and detailed environmental investigations.

Table 8-1 Key components of the Project

Feature	Description
Site details and land tenure	
Street address	384 Broockmanns Road
Involved Lands	• Lot 4 DP470920 (Primary Landowner) • Lot B DP961693 (Transgrid) • Brookmans Road (Council)

Feature	Description
	• **Riverina Highway (TfNSW)** • **Canalla Road (Berrigan Shire Council)** • **Marantellis Road (Berrigan Shire Council)**
Local Government Area (LGA) Zoning	Berrigan Shire
Catchment	Riverina Murray
Subdivisions and easements	• Subdivision may be required subject to utility provider requirements • An access and transmission easement will be created for the Project.
Infrastructure components	
Battery Energy Storage System (BESS)	• 80MW / 320MWh(4hr) • 88 Tesla Megapack 2XL • 22 4.6 MVA step-up transformers • 4 ring main units • 1 HV transformer
Substation and switch yard	• 33kV switch room • Auxiliary low-voltage transformer • 33/132kV Transformer
Transmission line connections	Approximately 900m of 132kV overhead (lines) or underground (cabling)
Existing Transgrid substation	• Preparation of an existing 132kV bay • Installation of associated secondary high-voltage equipment • Execution of any necessary civil works to support the bay construction or modification • Potential switchyard bench extension for new bay • The final design and scope of these works will be determined in coordination with TransGrid's technical and regulatory requirements.
Site access and intersection upgrades	• Access and upgrade from existing site access off Brookmanns Road • **Access to Transgrid substation from existing site access off Canalla Road** • **Upgrade to Canalla Road / Martenellis Road / Riverina Highway intersection**
Temporary works areas: Construction compound, and construction	• Construction compound • Construction laydown area • Storage • Bunding

Feature	Description
parking/laydown areas	• Drainage • Carpark
Water access	• Mulwala Canal
Permanent ancillary infrastructure	• Security fencing • Water tank • Pumpable sewage holding tank • Control room • Operations and maintenance building (O&M) • Onsite car parking • Internal access tracks • Noise wall (optional)
Development footprint	The Development Footprint (all areas that may be disturbed by the Project) covers a total area of **11.46ha**
Timing	
Staging	Site establishment, construction, operation, and decommissioning. With the construction occurring over 12-15 months (including site establishment) with no additional detailed staging breakdown.
Construction timing and hours	Construction hours will be limited to: • 7am to 6pm Monday to Friday • 8am to 3pm Saturday • No work on Sunday or public holidays. The delivery of materials requiring an escort and/or emergency works may occur outside of the above construction hours.
Operational life and hours	24hr/day Expected operation up to 20 years
Decommissioning and rehabilitation	When that lifespan is reached (see above), an upgrade of the BESS could be undertaken and consequently either request an extension or lodge a new DA with a more current technology. If the site is not repowered at the end of its useful life, then it would be decommissioned and the site rehabilitated.
Site context	
Existing land use	Grazing Agriculture
Receivers	12 non-associated receivers within 2km

Feature	Description
Employment	Construction: Up to 60 Operation: 2 full-time equivalent.
Estimated development cost (EDC)	$135,000,000

A.2 Permanent infrastructure

A2.1 Layout and specification of components

An indicative Infrastructure Layout is provided in Figure 2-4 of the EIS. The final design would be subject to commercial tendering and procurement processes that would ensure the Project is optimised in terms of constructability and efficiency, within the parameters of the approval. Submission of the final detailed design to DPHI *prior to construction* is a standard feature of approved State Significant Development consent conditions. This provides the final check that the detailed design is consistent with the EIS's assumptions.

It is noted that battery technology is developing rapidly. The final specifications and location of infrastructure will likely be subject to change during detailed design. As such upper limit quantities and power level estimates are provided. The aim, to ensure the assessment and any subsequent approval maintains flexibility essential to the project, and that will be required in the detailed design stage, post approval. BESS capacity may also be affected by these changes.

While an indicative Infrastructure Layout provides a clearer understanding of what would be constructed, the delineation of a broader Development Footprint at this stage provides the assessment and approval some resilience to minor layout changes in the final design. Together this 'upper limit' or 'worst case' approach ensures that all impacts of construction, as well as operation and decommissioning are captured in the environmental assessment section of this EIS and that any recommendations and mitigation

This approach will over-estimate impacts and over-scope mitigation strategies and is therefore considered conservative. It is underpinned by the Project's commitment to capture this higher level of Project-specific detail in consultation with affected stakeholders, within environmental management plans, developed in tandem with the final detailed design.

This approach is consistent with the State significant development guidelines – preparing an environmental impact statement (DPHI, 2022) which states:

> ***… with some large, complex projects this flexibility is often essential as it is difficult, if not impossible, to deal with all aspects of the design of these projects at the EIS stage.***

The key features of the Project are summarised in Section A1.1 and detailed below.

A2.2 Batteries and inverters

The BESS would comprise of multiple modular segment units arranged in rows (see Figure A-1) consisting of (refer Figure A-2)

- 88 Tesla Megapack 2XL units measuring approximately 8.8m x 1.7 x 2.8m. Each Megapack unit can house up to 24 battery modules and inverter modules

- Each unit contains integrated Inverter Modules (also known as Power Conversion Systems (PCS)) Each PCS is a Bi-directional power conversion system that couples each Megapack with the power grid (AC power)
- Thermal system which provides active cooling and heating to the Megapack components
- System controller
- 22 Generator Step Up transformer
- 4 33 kV ring main units.

Each battery module is made up of prismatic LFP battery cells. Battery modules are connected in parallel to Megapack's internal AC bus (which converts the DC energy into AC energy), each with an AC power and communications output connection. An example of a battery module and inverter configuration is shown in Figure A-2.

Figure A-1 Indicative Tesla Pack configuration (source Tesla.com)

Figure A-2 Battery module and inverter example (source Tesla.com)

A2.3 Transmission lines and connections

Connection to substation

Electrical connection from the BESS to the Transgrid Finley Substation would be via an approximately 900m, 132 kV transmission cable. It is expected that the connection would be underground on the southern side of Broockmanns Road, with the easement confined to the Broockmanns Road and Canalla Road corridors. Some sections may of the final connection route may be overhead, particularly within and near the Finley substation. Both above and below ground options are proposed as part of this DA and EIS.

The approximate location of the transmission line has been identified but would be subject to detailed design considerations in consultation with Transgrid. For this reason, flexibility for development within the entirety of the Transgrid substation Project Site is required, providing no increase in development footprint is proposed.

Transmission line crossings of the Murray Irrigation managed Mulwala No 19b channel, Essential Energy 66kV easement, and drainage easement within freehold property would be undertaken in accordance with the relevant utility authority requirements (such as the Murray Irrigation Works Policy and the EE Encroachment Process), and subject to detailed design planning and consultation.

Agency consultation with Transgrid, Murray Irrigation and Essential energy is summarised in Section 5.4.

Further detail of the connection options as they progress will be provided in the project response to submission phase.

Transgrid substation works

The existing Finley substation may require some minor augmentation to accommodate the BESS infrastructure. The new feeder connection to the existing Finley substation is expected to comprise a single dedicated feeder bay and suitable transmission cable to which the required throughout meets Transgrid standards.

As such, to support the South Coree BESS, Transgrid require the following (but not limited to):

- Preparation of an existing 132kV bay to facilitate the integration of the BESS with the substation infrastructure, including 132kV high-voltage switchgear
- Installation of associated secondary high-voltage equipment required for the selected connection option, ensuring compliance with TransGrid's technical and operational standards
- Execution of any necessary civil works to support the bay construction or modification, including foundation works, trenching, and structural reinforcements as required
- Potential extension to switchyard bench to accommodate a new bay.

The final design and scope of these works will be determined in coordination with TransGrid's technical and regulatory requirements.

BESS underground cabling

Underground cabling would be required throughout the BESS and would be located within the Development Footprint. The cables would be installed in trenches at a depth that adheres to Australian Standards for the design and specification of each cable, which may also be protected by conduits. A marking tape would be

provided to reduce the possibility of accidental damage and ground markers would be provided to identify the cable routes.

Underground cabling on the site would be designed in accordance with Australian and International Standards and the cable routes would be designed to minimise ground disturbance. Underground cabling would be required for, but not limited to:

- Connection of battery units to each PCS via DC cabling
- A 33 kV reticulation system will link the transformers to the BESS substation via the switch room
- Provision of auxiliary power, data services, and communication facilities.

Copper conductors would be used wherever necessary to electrically bond the metal structures to earth to protect personnel and equipment in the event of lightning strikes and electrical faults.

A2.4 Substation, switch room and control building

The substation is generally comprised of a high voltage switchyard, one or more large transformers, auxiliary services equipment, any required power quality components.

The substation would be built on a specialized hardstand area called a bench; this is surrounded by security fencing as required by the relevant electrical safety regulations. One transformer would be installed on a large concrete bund. This bund is designed to retain the contents of the transformer and cooling system (insulating oil) in the event of failure. An oil water separator is likely to be installed in the bund as an environmental protection measure and would be subject to regular inspection and maintenance.

The substation would comprise of:

- 1 high voltage switch bay (132/33kV transformer)
- Switch room and control room
- Diesel Generator.

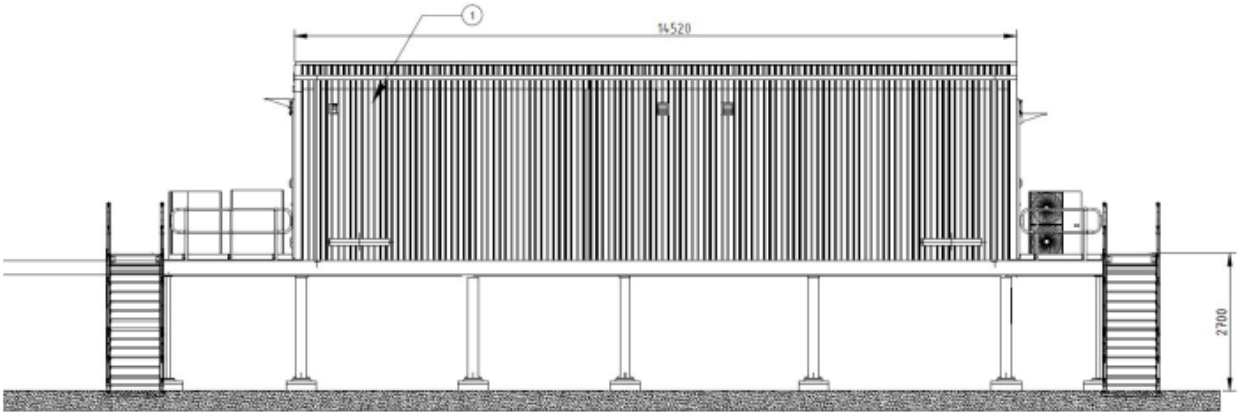

Figure A-1 Example of switch room infrastructure

A2.5 Operation and maintenance buildings

The O&M facility is proposed in the south-western section of the Development Footprint. The facility would house the service team providing them with office facilities and amenities. These include parking areas (for site team, contractors, and visitors), stores warehouse, and workshop building/shed, waste skips, and trailer

parking area. The O&M facility would require power and water supply as well as communications. There would likely be one primary O&M facility, where the site service team would be based during the operational life of the Project. Water tanks would store some rainfall captured from the facility roofs for non-potable use. Potable water would be delivered to site. Amenities on site would need to be managed through an on-site sewerage system (e.g. septic, composting or other appropriate system). The system would be designed by an appropriate service provider and installed in accordance with local requirements. Electricity on site would be supplied from the local electricity network (Transgrid). An example of the O&M buildings design is shown in Figure A-2.

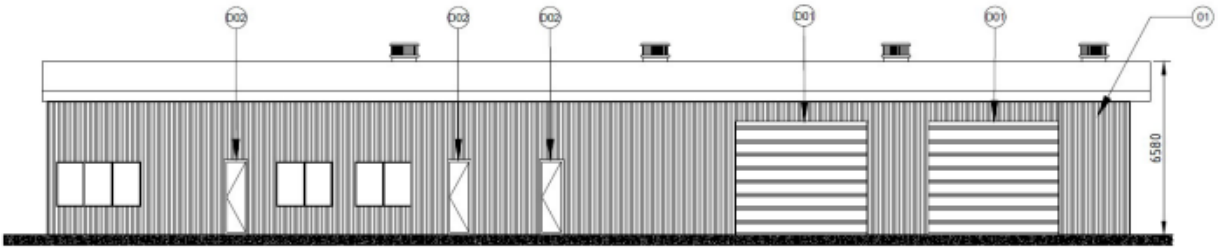

Figure A-2 Example of the operations and maintenance facility

A2.6 Noise wall

A noise wall on the northern and part of the eastern sides of the BESS would be installed to minimise noise emissions to the associated landholder.

The height and design specification of the noise wall while not finalised may be up to 7m in height, and will depend on final detailed design and elevations, confirmation of battery specifications and landowner preferences in accordance with landowner agreement. It will take into consideration flooding and overland flow through design mitigation such as flap panels to allow water flow.

A2.7 Landscaping

Landscaping while not critical for visual mitigation would be included along the southern and eastern side of the Project. This would soften the view to the BESS infrastructure and is responsive to community concerns about the changing visual amenity of the area. The landscaping would include native vegetation endemic to the local area, in keeping with the existing landscape features.

The proposed landscaping will have a 3m buffer from the security fence. The planting would be a minimum of 5m in width and contain a combination of trees and shrubs. With a density of 1 shrub every 5 square meters and 1 tree every 40 square meters.

The vegetation screening would be comprised of native vegetation species and is designed to soften not block the views of the development.

An Artists impression is provided below in Figure A-3.

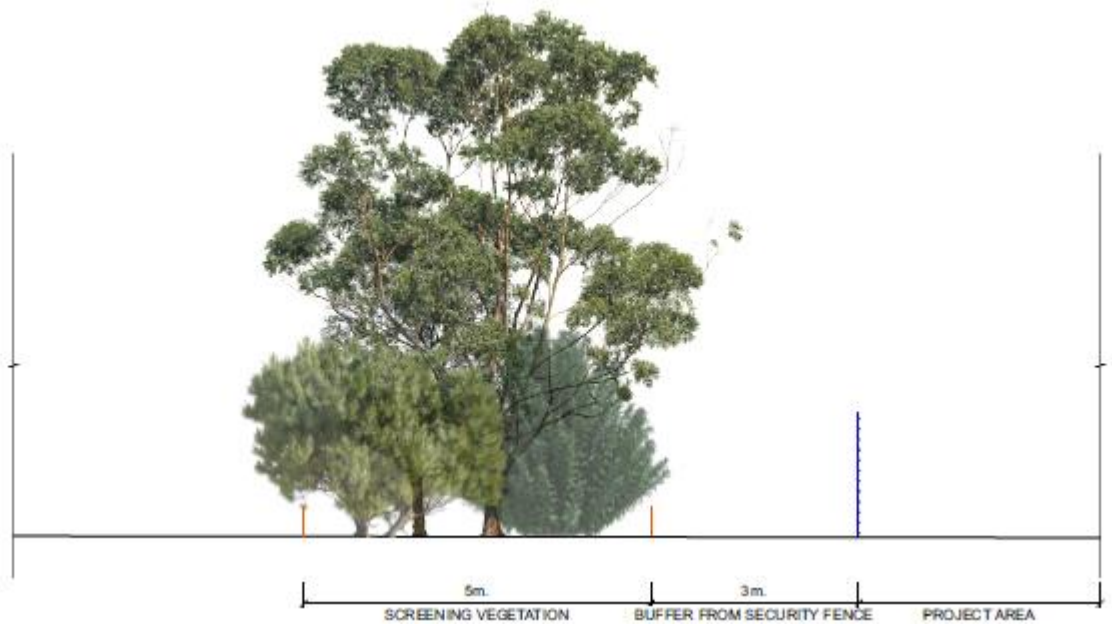

Figure A-3 Artist impression of the proposed vegetative screening

A2.8 Security measures

Fencing

The onsite substation area would be enclosed by a security fence in accordance with applicable Australian Standards. This is expected to be a steel security fence approximately 3m high chain link fence topped with three rows of barbed wire. Access would be via security access gates.

The BESS facility itself would also be enclosed by a security fence in accordance with applicable Australian Standards.

CCTV

The CCTV cameras would be mounted on up to 3.0m poles complete with sensors or infrared security lighting, which would be installed at the access road/gate, the control room and transformer/switchyard. A security company would be contracted for monitoring outside of business hours.

Lighting

There would be no permanent night lighting within the BESS area. Lighting would be included in each inverter for night-time maintenance or emergency purposes only. Motion sensor or infrared security lighting would be installed at sensitive boundary locations and around the substation, battery storage facility, O&M facilities, and office areas.

All external operational lighting would be designed to reduce disturbance to neighbouring properties, as such it would be low intensity lighting (except where required for safety or emergency purposes) and would not shine above the horizontal. The external operational lighting would be used only when there are staff on site,

as part of night works (where required), site security or during emergency situations including through remote operation to allow improved camera visibility.

External lighting would be installed to comply with relevant standards.

A2.9 Site access, tracks and vehicle movements

The site would be accessed from Brookmanns Road via a new driveway constructed on the western side of the Project. A small network of tracks would be included from the site intersection to the BESS and inside the perimeter fence line of the BESS. These tracks would be approximately 8m in width around the access gate and O&M buildings and approximately 6m around the HV switchyard and BESS infrastructure and composed of grave or other suitable all-weather substrate.

Works for the Finley substation will be accessed via an existing driveway off Canalla Road. The existing intersection suitably accommodates the largest project vehicle, and as such no upgrades are required.

Intersection upgrade

The intersection of the Riverina Highway and Canalla Road already has Basic Left Turn (BAL) and Basic Right Turn (BAR) treatments. Bus bays are also provided on the departure side of each local road. To comply with the Austroads Guide, the intersection will require an upgrade due to the requirement for B-Double vehicles to use Canalla Road to access the site.

An upgraded BAR/BAL concept design has been provided allowing the B-Double design vehicle to store to undertake a right turn allowing other road users to navigate around in the left lane. Consideration of the Martenellis Road has also been considered as part of the design. The BAR/BAL design demonstrates that intended road users of each local road can safely enter/exit the state road network.

Haulage route

All specialist plant and BESS components are expected to be delivered to Port of Melbourne or Port of Geelong, Victoria and then transported along approved transport routes. The Port of Melbourne and the Port of Geelong have been assessed as the ports where the BESS plant components will be imported.

A route assessment is included in Section 6.3 and Appendix F.3 of the EIS.

Vehicle movements

Vehicle movements are most relevant to the construction period, as during the operational period traffic numbers would be significantly reduced to the site operations and service team and associated subcontractors on a periodic basis. During construction, vehicles would range from light cars to heavy vehicles and OSOM vehicles. An assessment of vehicle movements is included in Section 6.3 and Appendix F.3 of the EIS. Table 8-2 provides a high-level breakdown of main vehicle movements during the construction period, as well as a concept design for access intersection upgrade.

Vehicle type		Average vehicle movements per day (Construction period)		Peak vehicle movements per day (Construction period)	
		Daily (vpd)	Peak hour (vph)	Daily (vpd)	Peak hour (vph)
Light Vehicles **(car and shuttles)**		**28**	**14**	**58**	**29**
Heavy Vehicles	Rigid Trucks	12	1	12	1
	Truck and dog	16	1	24	2
	Semitrailer	4	0	8	1
	B-Double	4	0	8	0
	Non High Risk OSOM	4	0	8	0
	Special Purpose Vehicles	4	0	4	0
	HV subtotal	44	2	64	4
Total		**72**	**16**	**122**	**33**

Table 8-2 Vehicle movements during construction

A.3 Temporary facilities

Temporary facilities required during the construction phase only would be wholly within the approved Development Footprint marked as the Project laydown area (Figure 2-4 of the EIS), and would include:

- Material laydown areas
- Temporary construction site offices
- Temporary parking for construction worker transportation. When the construction work is completed, a small car park would be retained for maintenance staff and occasional visitors
- Water supply for construction, primarily sourced from the Mulwala Canal
- Temporary staff amenities.

Laydown requirements are limited, as most bulk equipment deliveries would be unloaded into place rather than into designated laydown areas. Some small laydowns would be required for cable drums and other auxiliary equipment, to be wholly contained within the balance of the Development Footprint not required for permanent infrastructure.

The staff amenities would be designed to cater for the peak number construction staff expected to be onsite and would include:

- Sanitary modules with water flush systems connected to holding tanks
- Water tanks

- Changing rooms
- Lunchrooms
- Administrative offices
- Covered walkways
- Emergency muster point
- Generator – if required
- Electrical, data and water reticulation.

A.4 Resource requirements

A4.1 Material requirements

With the exception to the battery units, PCS, transformers, and prefabricated buildings most general construction materials would be sourced from the local region. The main construction materials would include:

- Aggregates, road base and concrete
- Fencing materials
- Cables, conduits, junction boxes
- Timber and fixtures for building fit-out
- Water for dust suppression, vehicle washdown and drinking (discussed in Section 6.7.3 of the EIS).

Table 8-3 provides a general estimate of materials volumes for the Project. However, are subject to detailed design and further geotechnical investigation.

Table 8-3 Estimated materials volumes

Material	Quantity*
Aggregates / engineered fill.	To be determined during detailed design following geotechnical investigations and civil design.
Steel security fencing materials	Approximately 580m
Concrete foundations.	To be determined during detailed design following geotechnical investigations and civil design.
Power cabling, and conduit.	Approximately 834m of 33kV rated cabling for internal BESS reticulation (between step up transformers, ring main units and HV switch room) Excluding other cables such as earthing, communication / data cable, auxiliary cable, etc.
Timber and fixtures for building fit-out.	TBC following detailed design.

*Indicative only. These values are subject to change following detailed design.

A4.2 Earthworks

Earthworks are expected to be minimal given the flat nature of the site, however, would be required to:

- Form a suitable substrate for the installation of the BESS, access roads and buildings
- Install 33kV reticulation cables in trenches (expected up to 1.2m deep)
- Undertake piling to support BESS infrastructure (dependent on geological conditions)
- Install 132kV transmission line to Finley substation
- Establish construction laydown areas, temporary staff amenities and security fencing.

These earthworks would require removal of vegetation cover and soil disturbance in some areas. Accurate topographic and cadastre surveys would be undertaken as detailed design commences. This would provide accurate cut and fill quantities that would be required.

Ground cover would be maintained where possible during the pre-construction and construction stages of the Project and would be rehabilitated upon decommissioning.

A4.3 Water demand and supply

Potable water source would be required for workforce consumption (drinking water), fire suppression water and concreting. Water consumption demand is estimated to be up to 600L per day (based on 10L per person/day).

Non-potable water requirements are anticipated to total approximately 2ML for the construction phase, primarily for dust suppression. Dust suppression is assumed to occur on days with no rain (20 days/year on average). Active disturbed areas will be minimised through construction staging and erosion and sediment control planning, including consideration of chemical suppressants to reduce dust generation and associated water demands.

Two 50kL fire water tank would also be located onsite, which would be filled by water tankers and retained for emergency use only during construction. During operations, water levels will also be maintained by water tankers trucks.

An in-principal water supply agreement with Murray Irrigation (MI) could provide the required water quantities for the Project. Water would ultimately, be sourced by the construction contractor.

Consultation with MI suggests a simple hose and pump arrangement from the canal would be suitable for construction. The hose could be directly pumped into a water truck, or connected to a standpipe.

No trenching or ground disturbance would be required for the water source, and no compaction is expected. The infrastructure must be readily relocatable due to available water supply.

The operational water supply would be maintained through O&M building runoff or delivered to site but is expected to be minimal for ongoing water tank supply and potable water to the operations building

A4.4 Labour, machinery and equipment

It is anticipated that an average of 60 construction staff comprising of supervisors, tradesmen and labourers would be engaged to complete the work during the peak construction phase. Every effort would be made to hire labour, machinery and equipment locally. Staff would be accommodated in Finley or nearby surrounding areas. Plant to be used during construction could include:

- Crane
- Drum roller
- Padfoot roller
- Wheeled loader
- Dump truck
- 30t excavator
- Grader
- Chain trencher
- Water truck
- Telehandler
- Forklift.

A.5 Phases and timing of the Project

A5.1 Phases

Staging of the Project is not proposed.

The project delivery post approval can be separated into four key phases: Site establishment, construction, operation, and decommissioning.

Table 8-4 Indicative timeline

Phase	Approximate commencement	Approximate duration
Project Approval	**June 2026**	N/A
Commercialisation	**October** 2026	Approx. 6-12 months
Site-establishment	Jan 2027	Approx. 2 months
Construction	March 2027	Approx. 12 months
Operation	March 2028	Approx. 35 years
Decommissioning	TBC	TBC

A5.2 Site-establishment

The Project may include physical works ahead of the main construction phase including site access and track upgrades, installation of fencing, vegetative screening, artefact salvage if required, geotechnical drilling and/or surveying and preparation of construction compounds and site facilities.

Where permitted by the approval, certain early works may proceed subject to any further or secondary approvals, for works such as:

- Local road and intersection upgrades may be implemented to facilitate the safe commencement of on-site works without local traffic conflicts.

- An initial small work force would develop site entries, limited access tracks and a construction compound. Scale up activities at the compound would occur as the workforce increases.
- Site establishment by the civil and/or electrical balance of plant contractor.

A5.3 Construction

During the construction phase of the BESS, work would be undertaken during the following hours:

- Monday – Friday: 7am – 6pm
- Saturday: 8am – 3pm
- No work on Sunday or public holidays.

Certain activities may be required outside of the standard construction hours. Key stakeholders would be informed prior to out of hours activities. These activities potentially include:

- Delivery of plant and equipment for safety reasons (e.g. OSOM vehicles)
- Commissioning and testing activities that must align with demands on the grid
- Emergency work to avoid damage to persons or property and/or to prevent environmental harm
- Construction works where it can be demonstrated and justified that these works are required to be undertaken outside of standard construction hours.

Example activities include cable termination, system assembly and testing, script testing (on computer), Supervisory Control and Data Acquisition (SCADA) testing. The performance of the BESS would be monitored through this SCADA system that would report to staff both on and offsite. The system would be capable of notifying staff of system issues and failures.

Any construction outside of these standard construction hours, if required, would be minimised and would only be undertaken with prior approval from relevant authorities.

Construction activities would be carried out over an estimated 12 to 15-month period and include the following works:

- Installation of environmental controls, earthworks and any drainage requirements, construction of concrete hardstands, and civil works. Summarised as follows:
    - Earth works (cut and fill, grading and compacting)
    - Establishment of external access road
    - Removal of existing fences
    - Cleaning and levelling the ground for buildings and structures
    - Excavating cable trenches.
- Delivery of BESS infrastructure
- Installation of BESS infrastructure (containerised units, harmonic filters, transformer, switch room, control room and O&M) and electrical works
- BESS testing works.

During construction, the Project is anticipated to contribute to the employment of up to 60 personnel.

A5.4 Operation

The Project would be operational 24 hours, seven days a week. The Project would generally be managed and monitored remotely apart from periodic site maintenance and optimisation which would require maintenance staff to access the site.

During operation, activities on-site would generally comprise:

- Storage of electricity and provision to the broader electricity grid as required to meet the strategic objectives of the Project
- Routine inspections
- Repair and maintenance of the Project ancillary infrastructure including fencing, roads, water infrastructure and environmental controls.
- Management of vegetation and pests
- Repair and maintenance of Project infrastructure such as battery enclosures, inverters, transformers and cables (including replacement of BESS components)
- Ongoing security monitoring.

It is estimated that two full-time staff would be employed onsite during operation, with an additional influx of staff required for refurbishment works. The BESS would primarily be operated remotely, which would require further remote full-time staff. Additional contractors local to the Finley and Berrigan region would also be required for ongoing jobs, such as weed and pest control.

Any planned noise producing work would be undertaken during the standard working hours of:

- Monday – Friday: 7am – 6pm
- Saturday: 8am – 1pm.

Work would only be undertaken outside of these hours in an emergency and would be kept to a minimum.

A5.5 Decommissioning and rehabilitation

The South Coree BESS refurbishment would be required at approximately 20 years of operation. It is envisaged that some individual components, such as battery modules and inverter units, may need to be replaced before the end of this term due to unforeseen faults or general wear and tear. However, it is recognised that the technology utilised for the Project has a finite life span. When that lifespan is reached, an upgrade of the South Coree BESS could be undertaken.

If the site is not repowered at the end of its useful life, then it would be decommissioned. The decommissioning phase would involve removal of all above ground infrastructure (including concrete slabs and footing) and below ground infrastructure where possible and return of the site to its existing land condition. Any substation infrastructure that has transferred ownership to Transgrid would be managed by them.

A.6 Proposed subdivision and land acquisition

Subdivision may be proposed for the Project substation if required by the utility operator (Transgrid). If this is required, it would be completed in accordance with the *Real Property Act* 1990.

For the purpose of the Development Application, consent for subdivision is sought. Refer to the proposed subdivision plan below (Figure A-1). The proposed configuration would be as follows, including estimated areas to be subdivided:

- **Lot A of 68.6 ha comprising of the residual agricultural landholding, and the BESS and ancillary infrastructure to remain in the current ownership. The lot would be smaller than the prescribed minimum lot size. However, the existing lot is already below minimum lot size. And as such, remains consistent with existing conditions.**
- **Lot B of 0.1ha comprising the internal substation assets that may be required to be transferred to Transgrid ownership.**

The balance of the BESS Development Footprint would be leased for the life of the Project, registered on the lot as a long-term lease under the *Real Property Act* 1900.

Whilst the proposed subdivision would cause fragmentation, it would not give rise to any additional rural dwellings. The BESS would be decommissioned in future and the land returned to agricultural activity. It is considered the impacts of subdivision would be minor and temporary.

As broadly discussed in the EIS (Section 2.2.3 of the EIS), the Project will be generally compatible with the aims of the LEP. The Project would contribute to the achievement of the RU1 zone and minimum lot size clause objectives. As electricity generating works are a permitted land use, the Project will meet the objective to encourage diversity and to allow for non-agricultural land uses that will not restrict the use of other land in the locality for agricultural purposes. The Project will provide employment opportunities and support development that has regard to the economic and social needs of the community and the principles of ecologically sustainable development.

Figure A-1 Proposed subdivision

A.7 Estimated development cost (EDC)

The Estimated development cost of the South Coree BESS is approximately $135 million.

A.8 Flexibility in development

As detailed within the State Significant Development Guidelines Appendix B – preparing and environmental impact statement (DPHI, 2022):

'The Department accepts that in some circumstances applicants may need to build some flexibility into the project description to allow the design of certain components of the project to be refined or changed over time within clear limits set by the project description, and without requiring amendments to the development application or modifications to the development consent of the project if it is approved.'

The Applicant seeks flexibility for the following aspects of the Project.

A8.1 OEM supplier

The final design would be subject to commercial tendering and procurement processes that would ensure the Project is optimised in terms of constructability and efficiency, within the parameters of the approval. This would include confirmation of the Original Equipment Manufacturer.

It is noted that battery technology is developing rapidly. The final number, specifications and location of infrastructure will likely be subject to change during detailed design.

A8.2 Transmission connection

Flexibility for connection of the Project to the Finley Substation via overhead or underground transmission lines is required. This is due to considerations required from both Berrigan Shire Council, MI, local roads authority and neighbouring landholders.

The entirety of the southern side of Broockmanns Road has been included in the Development Footprint to account for both options. In addition, all impact assessment has considered above-ground infrastructure as a worst-case scenario.

In addition, the connection route alignment within the Transgrid substation lot have been considered but not finalised. This is due to ongoing consultation with Transgrid and uncertainty of how other developers may connect.

~~A8.3 Development Footprint~~

~~7.28ha of the Transgrid substation lot (i.e. the Project Site) was surveyed for biodiversity and heritage impacts. The Plant Community Type (PCT) and Vegetation Integrity (VI) score was consistent throughout the Project Site within the substation lot, and no artefacts were found.~~

~~3.76ha of the substation lot has been marked as Development Footprint, assessed for both direct and indirect impacts as a result of the Project.~~

~~As discussed above, the connection route alignment within the Transgrid substation is ongoing in discussion with Transgrid and flexibility is required due to uncertainty of how other developers may connect. As such, flexibility for development within the entirety of the Transgrid substation Project Site is required, provided there is no net area increase in the development footprint. That is, the development footprint may change, provided it is within the Project Site and there is no net area increase in clearing.~~

A8.4 Water extraction

As detailed above in Section 3.4.3 of the EIS, water will be sourced by the construction contractor. An in-principal water supply arrangement has been agreed with MI for extraction of up to 2ML of water from MI owned canal infrastructure.

Murray Irrigation noted on 27 September 2024 that the Mulwala Canal may be drained between May – August most years for maintenance. As such, the location for water extraction has not been agreed with MI and will be subject to further negotiations and consultation.

~~A8.5 Noise Wall~~

~~Subject to landowner preferences, a noise wall on the northern and part of the eastern sides of the BESS would be installed to minimise noise emissions to the associated landholder.~~

~~The height and design specification of the noise wall are not finalised, and will depend on final detailed design and elevations, confirmation of battery specifications and landowner preferences in accordance with landowner agreement. It will take into consideration flooding and overland flow through design mitigation such as flap panels to allow water flow.~~