

June 2024

Swanbank Power Station (former) CMP

A preliminary Conservation Management Plan prepared for CleanCo Queensland Ltd for the Swanbank Clean Energy Hub

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Report Prepared by Susan Hill and Celmara Pocock with Beata Batorowicz, Zahra Gharineiat and Simon Young

Figure (front cover). Swanbank Power Station c1980s. (CleanCo)





We acknowledge the First Nations Peoples and their continuing connection to Country, lands and waterways. Swanbank Power Station is located on the unceded lands of the Jagera, Yuggera and Ugarapul Peoples. We pay respects to First Nations custodians of this land, and the lands on which we work, including the Jagera and Turrbal People, and the Jagera, Giabal and Jarowair Peoples of the broader Brisbane and Toowoomba region.





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1.0 Executive summary

1.1 Swanbank Clean Energy Hub

The former Swanbank Power Station site, now known as the Swanbank Clean Energy Hub is located on a >300ha site 10km southeast of Ipswich near the confluence of Bundamba and Oakey Creeks. The Traditional Custodians of this area — the lands and waterways (including a chain of lagoons) — are the Jagera, Yuggera and Ugarapul People (JYUP), from the Yuggera language group of the Ipswich and Swanbank area. Swanbank's history is one of change and transformation. In the 19th century the Swanbank lands were cleared for farming, followed by coal exploration and mining, which continued into the 20th century. The Swanbank site has housed power stations (historically predominantly coal-fired) and associated infrastructure since the 1960s — becoming the first co-location of a major power station and colliery in Queensland. The site is owned by CleanCo Queensland Limited, the State Government owned corporation responsible for the management of a number of green energy assets, including Swanbank, which is currently being redeveloped as the Swanbank Clean Energy Hub.

1.2 The report

This Conservation Management Plan (CMP) provides a preliminary high-level assessment of the heritage significance of the former Swanbank Power Station/Swanbank Clean Energy Hub site. The document forms part of a suite of reports intended to inform the current masterplanning. The CMP is focussed on assessing the historic heritage values of the site and its major elements. It sits as a companion to the 2023 preliminary assessment of First Nations cultural landscape values and to anticipated future work in that space.

The CMP is prepared in accordance with national and state standards, including the Australia ICOMOS Burra Charter, 2013 (the 'Burra Charter') and Queensland Department of Environment Science & Innovation heritage guidelines. The report includes:

- A short review of other reports prepared for the site related to the masterplanning process
- A brief illustrated history of the site mainly focussed on the Power Station era but also its pre-Power Station history to provide a context for understanding changes to the site over time. This section also briefly considers how the site is connected with the broader histories of electricity generation and coalmining in Ipswich and greater Queensland
- A description of the site as it is today, including its various areas/zones/ precincts and their major elements (broadly following the framework of the masterplanning process)
- A preliminary assessment of the heritage significance of the site (historic values) including a short discussion together with a Schedule of Elements, which considers each of the areas or precincts on the site and their major components and how these might relate to the various layers of story on the site
- Priority recommendations / conservation policies including consideration of the relationship of the draft Masterplan and potential heritage values developed within input from discussion and collaboration with Swanbank staff
- Scope of works for future CMP and heritage assessments, including possible research collaborations between CleanCo and the Centre for Heritage + Culture, UniSQ

1.3 Summary findings on significance

The former Swanbank Power Station is a multi-layered site—a combination of natural features (altered by 19th century farming and dramatically changed by coalmining from the late 19th century and the

construction and operation of the Power Station from the 1960s) and cultural features associated with coalmining and the Power Station.

The preliminary assessment of the historic values of the site is similarly multi-layered reflecting the multiplicity of stories on the site including the 'power' story (including the State's first major 'twinning' of coal and electricity generation) and the connections with the industrial city of Ipswich. Future work to more deeply consider First Nations values of the site will underscore this significance, as will the plans for continuing community engagement as the site continues to evolve.

In the historic realm, the masterplanning process has previously identified a number of areas on the site as important. These include:

- Swanbank Lake
- The former Mine Bath House (and Box Flat Memorial, albeit not located on the Swanbank site)
- The social and environmental potential of the Ash Dam (which includes Swanbank Lagoon)
- The Lookout
- The Railway Precinct

This report broadly supports those findings, but in more formally assessing the historic values of the site as a whole, has expanded the articulation of those values and considers new ones (notably in relation to the Power Station's original building precinct). The site has been considered as a whole, but also as a number of inter-related areas/zones/precincts, to broadly align with those used in the masterplanning.

Areas identified as having historic heritage values include:

- Swanbank Lagoon (historically a key waterway, also known as Logan's Lagoon), now part of the Ash Dam constructed for the Power Station from the 1960s
- Bundamba Creek (and Oakey Creek) (albeit both partly altered as part of the Power Station development)
- The Railway Precinct including the Railway Line, Station and Turnaround (c1881–c1970s) which predates the establishment of the Power Station and is associated with the development of the coal industry in the district from the late 19th century, and from c1975 (after Box Flat) transported coal to the Power Station (Note: The Railway Station is located on Council-controlled land)
- The former Box Flat Colliery site (part) including the former Mine Office (1959) and Mine Bath House (erected by 1963) located on the former No.7 mine site. Together with the Box Flat Memorial (not located on the Swanbank site) this area represents the close and integral connection of the Box Flat Colliery with the co-located Power Station. As the site of the 1972 mining disaster and now a graveyard, the colliery site has very high social values
- The original Power Station Precinct (dating from the 1960s/70s) including the Administration Building, Warehouse, former sites of Swanbank A & B (evidence of site planning only), B Fabrication Shop, Oil Store, Swanbank C, main entry, roads, and other landscaped areas
- Swanbank Lake and lakeside areas (which provided cooling water for the station but was also an important recreational facility (1960s-)
- The Lookout and other viewpoints, and views (both within the site and beyond)
- Various infrastructure including gas and water pipelines, electricity pylons, roads, and other infrastructure supporting the workings of the Power Station site over time (1960s–)

Areas assessed as not of historic heritage value:

• Rural residential blocks to west of Bundamba Creek (although identified by the Turnstone report as having some potential cultural/environmental values)

1.4 Summary recommendations

The assessment of heritage values on a working industrial site can present challenges. From a heritage perspective, the continued use (and evolution of a site in the face of substantial change) is fundamental to potentially conserving heritage values. The current masterplanning of the site, including future community uses presents opportunities to enhance and celebrate the history of the site.

Heritage significance and listing

- The former Swanbank Power Station/Swanbank Clean Energy Hub holds significant heritage values, and these values should be considered as part of the future management of the site
- The site is considered to threshold for local heritage listing, and potentially state heritage listing, and such should be investigated with the relevant agencies
- As a whole the site tells a remarkable story of adaptation and innovation into the 21st century

Future heritage assessments

- More detailed assessment of heritage values of the Colliery Precinct (including the Mine Bath House and Mine Office), the Power Station Building Precinct with the Administration Building, and the Railway Precinct should be undertaken as part of future decisions about changes to the site
- A detailed inventory and archive of the Swanbank company records
- Documentation of social significance of the site, including oral histories and story-based story-heritage assessments with past and present staff and community

Management of heritage assets

- The heritage values of the former Swanbank Power Station/Swanbank Clean Energy Hub be managed in accordance with the Burra Charter in association with the CMP
- The CMP should be made available to relevant parties, and included on the CleanCo and Ipswich City Council Picture Ipswich websites
- Heritage specialists should be engaged when works may impact on significant heritage elements

Interpretation and future use

 CleanCo should consider developing an interpretation plan for the site, to ensure consistency of message, protect heritage values and avoid duplication in implementing public access elements of the Masterplan

1.5 Implementation and UniSQ collaboration

The final section of the CMP recommends the establishment of a Memorandum of Understanding (MoU) between CleanCo and UniSQ to assist in the implementation of the CMP heritage recommendations. The MoU would enhance the relationship between parties to support and encourage research and interpretation projects that enhance the Masterplan.

Suggested research projects include short- and long-term projects, some of which require investment by CleanCo and others that can be completed as low/no cost student projects. An initial rollout would emphasise student research projects completed under the supervision of established UniSQ researchers.

2.0 Introduction

2.1 Background

The former Swanbank Power Station site, now known as the Swanbank Clean Energy Hub, is owned and managed by CleanCo Queensland Limited, a State Government owned corporation (GOC) established in 2018 to manage a portfolio of green energy assets, including Swanbank. The 300ha plus site located 10km southeast of Ipswich has housed power stations (historically predominantly coal-fired) and associated infrastructure since the 1960s. The current power station on the site is gas-fired. Development approval is also in place for the construction of a Battery Energy Storage System (BESS).

This (high level) Conservation Management Plan (CMP) is intended to inform masterplanning for the site as the precinct is developed as both a renewable energy hub supporting Queensland Government ambition towards 80% renewable energy by 2035 and a community and environmental resource for the growing populations of the nearby areas, most notably Ripley. The CMP is focussed on historic heritage and is intended as a companion to the preliminary assessment of First Nations cultural landscape values and to future assessments of First Nations values associated with the site.¹

2.2 This report

This CMP provides a preliminary high-level assessment of the heritage significance of the former Swanbank Power Station site and its major elements. The document forms part of a suite of reports intended to inform the future planning for the site. In particular, the CMP is intended to:

- Assist in understanding how heritage conservation can enhance and complement the draft Swanbank Masterplan (draft Masterplan), which has been developed through an extensive community co-design process (called 'Reimagine Swanbank')
- Outline a broad frame for heritage conservation needs for the site
- Scope future works required to implement a full CMP, staged as necessary, to support the implementation of the draft Masterplan
- Assist to prioritise conservation works on the site
- Identify opportunities for UniSQ research and student collaboration in future stages of the Masterplan implementation

2.3 Methodology

The Conservation Management Plan is prepared in accordance with the Australia ICOMOS Burra Charter, 2013 (the 'Burra Charter') and its associated Practice Notes together with *The Conservation Plan: a guide to the preparation of conservation plans for places of European Cultural Significance* and the Queensland Department of Environment Science & Innovation (DESI) guideline on the preparation of Conservation Management Plans. The assessment of significance also draws on the *Queensland Heritage Act 1992* and the DESI guidelines regarding assessing places of local heritage significance (2020) and assessing cultural heritage significance (2013).²

¹ Turnstone Archaeology (Nadia Arrighi & Michael Strong), Swanbank—Masterplan. Assessment of Cultural Landscape Values for CleanCo Qld, August 2023.

² The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance, 2013; James Semple Kerr, The Conservation Plan: a guide to the preparation of conservation plans for the places of European cultural significance. 7th edition. Australia ICOMOS, 2013. Both can be viewed at www.australia.icomos.org/publications/. The DESI Heritage Guidelines, Conservation Management Plans (2015), Assessing cultural heritage significance. Using the cultural heritage criteria. (2013) and Identifying and assessing places of local cultural heritage significance in Queensland (2020) can be viewed at https://www.qld.gov.au/environment/land/heritage/publications

Site visits were undertaken on 21 September & 6 December 2023 and 17 January 2024.

A desktop review was undertaken of the available sources including the following material supplied by CleanCo related to the site masterplanning:

- Arup, Swanbank future energy & hydrogen precinct. A 2050 vision, masterplan. Framework and options, 20 January 2023.
- Aurecon, Swanbank Building Condition Assessment. Swanbank Building Condition Report, July 2023.
- CleanCo Queensland Limited, Reimagine Swanbank. Community Engagement Report, March–May 2023
- Max Hardy Consulting, Swanbank Clean Energy Co-Design Panel Process Report. Report for CleanCo, 25 July 2023
- SMEC, Swanbank Clean Energy Hub—preliminary social assessment. December 2023
- Swanbank Co-design Panel Report (as written by the panel for CleanCo), 24 June 2023
- Swanbank future energy precinct. Overview, 2023. [including some historic aerial photos etc)
- Turnstone Archaeology (Nadia Arrighi & Michael Strong), Swanbank—Masterplan. Assessment of Cultural Landscape Values for CleanCo Qld, August 2023

Additional targeted research was also undertaken. A full list of references is contained in Section 10.

The project further adopted a collaborative approach to developing recommendations. A preliminary draft of the report was presented to CleanCo on 11 March 2024, and a final in April (version A 4 April; version B 17 April). This was followed by a Heritage Options Co-design Workshop led by Professor Celmara Pocock on 15 May. The workshop directly engaged a broad section of CleanCo staff to facilitate their input into the final recommendations. This was centred on a story-based approach to understanding significance, to ensure that the heritage recommendations in the final version of the report would align with company views and understanding of the site.³ This final report is submitted on 14 June 2024.

2.4 Limitations

The report is 'high level' in scope. It does not include:

- · Primary historical research except as outlined above
- · Detailed historical analysis
- · Archaeological assessment
- Assessment of First Nation values
- Community consultation or community-based assessment of heritage value beyond existing community consultation documentation
- Detailed description and analysis of elements within the place
- Condition assessment of elements (although the findings of the Aurecon Report are referred to)
- · Materials conservation schedules or schedules of works

2.5 The study area

The study area is the former Swanbank Power Station site, now known as the Swanbank Clean Energy Hub, located at 305 Swanbank Road, Swanbank. Located 10km southeast of Ipswich, the site comprises some 327ha, held across multiple titles. The site is described in more detail in Section 5.

³ C Pocock, D Collett & L Baulch, 'Assessing stories before sites: identifying the tangible from the intangible', International Journal of Heritage Studies, vol.21, no.10 (2015): 962–982.

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Figure 1: Swanbank Clean Energy Hub. Aerial view 2024. Ipswich to the northeast, Redbank Plains to the east, and Ripley to the south and southwest. (Google Maps 2024)



Figure 2: Swanbank Clean Energy Hub. A more detailed aerial view 2024. Neighbouring industrial sites to the east with residential Ripley visible to the southwest. (Google Maps 2024)





Figure 3 (a and b): Swanbank c2023. (top) View looking across the site to the south. (above) View to the north. (CleanCo)

2.6 Team

The team is led by Prof. Celmara Pocock, University of Southern Queensland (UniSQ). The report was prepared by Heritage Consultant Susan Hill and Celmara Pocock. The UniSQ research team included Prof. Simon Young, Assoc. Prof. Beata Batorowicz and Assoc. Prof. Zahra Gharineiat. A preliminary site visit was undertaken by Celmara, Beata and Zahra. A number of UniSQ researchers contributed to the discussions regarding the future possible partnership section—Simon Young, Beata Batorowicz, Zahra Gharineiat, Prof. Bryce Barker, Prof. Peter Cooke, Prof. John Dearnaley, Dr Catherine Dewhirst, Prof. Lara Lamb and Assoc. Prof. Jayne Persian.

2.7 Acknowledgements

We would like to thank the engaged and knowledgeable staff of CleanCo Queensland who helped in numerous ways throughout this project. In particular Natasha Shaw (Community Engagement & Partnerships Officer) who oversaw the project and Darryl Myers (Program Manager, Swanbank Precinct). Thanks, too, to Melanie Rippon (Community Performance Specialist), Rachel Grant (Project Communications Officer), Gavin Peut, and Trevor Turner for their contributions to the workshop. We'd also like to thank Trevor Turner, Matthew Maclean and others who assisted with site tours and to Kinsey McNamara (Administration Assistant) for facilitating a visit to the CleanCo library archive.

We'd like to thank Hugh Taylor and the Ipswich Historical Society Inc. for sharing knowledge and providing useful information.

For use of images, thanks to CleanCo Queensland, Ipswich City Council Library (Picture Ipswich), National Archives of Australia, and State Library of Queensland, and Queensland Places.

2.8 A note on copyright of images

Battery Energy Storage System

Sources of images reproduced in the report are acknowledged but in the case of any further use, any copyright requirements should be confirmed.

2.9 Abbreviations

BESS

CMP Conservation Management Plan DEH Department of Environment & Heritage (Qld) now DESI **DES** Department Environment & Science (Qld) now DESI **DESI** Department of Environment, Science & Innovation (Qld) (formerly DES) GOC Government owned corporation ICC **Ipswich City Council JYUP** Jagera, Yuggera and Ugarapul People MoU Memorandum of Understanding

QEC Queensland Electricity Commission (1985–1995; created from a merger of SECQ and Qld Electricity Generating Board)

QHA Queensland Heritage Act 1992

QHR Queensland Heritage Register

QSA Queensland State Archives

SEAQ Southern Electric Authority of Queensland (1961–1977)

SECQ State Electricity Commission of Queensland (1938–1984)

SEQEB South East Queensland Electricity Board (1977–1997)

SLQ State Library of Queensland

UniSQ University of Southern Queensland

2.10 Terminology

Article 1 of the Burra Charter includes the following definitions of a number of terms used in this report.

Place means a geographically defined area. It may include elements, objects, spaces and views. Place may have tangible and intangible dimensions. (Place has a broad scope and includes natural and cultural features. Place can be large or small: for example, a memorial, a tree, an individual building or group of buildings ...).

Cultural significance means aesthetic, historic, scientific, social or spiritual value for the past, present or future generations. Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects. Places may have a range of values for different individuals or groups.

Fabric means all the physical material of the place including elements, fixtures, contents, and objects.

Conservation means all the processes of looking after a place so as to retain its cultural significance.

Maintenance means the continuous protective care of a place, and its setting. Maintenance is distinguished from repair which involves restoration or reconstruction.

Preservation means maintaining a place in its existing state and retarding deterioration.

Restoration means returning a place to a known earlier state by removing accretions or by reassembling existing elements without the introduction of new material.

Reconstruction means returning a place to a known earlier state and is distinguished from restoration by the introduction of new material.

Adaptation means changing a place to suit the existing use or a proposed use.

Use means the functions of a place, including the activities and traditional and customary practices that may occur at the place or are dependent on the place.

Compatible use means a use which respects the cultural significance of a place. Such a use involves no, or minimal, impact on cultural significance.

Setting means the immediate and extended environment of a place that is part of or contributes to its cultural significance and distinctive character.

Related place means a place that contributes to the cultural significance of another place.

Associations means the connections that exist between people and a place.

Meanings denote what a place signifies, indicates, evokes or expresses to people.

Interpretation means all the ways of presenting the cultural significance of a place.

The concepts of 'integrity' and 'intactness' are also commonly used terms. The Department of Environment Science & Innovation Guideline on assessing the significance of local heritage places (2020) provides the following commentary:⁴

Intactness should not be confused with condition. A place may be substantially intact in the sense that most of the early fabric survives, but this fabric may be in a fragile condition.

A place usually possesses a reasonable degree of **integrity** if its past function or use or evolution of elements is readily understood visually. The greater the intactness of the fabric, the more easily the function or evolution of the place can be understood, and therefore the greater the integrity of the place.

⁴ Heritage Guideline: Identifying and assessing places of local cultural heritage significance in Queensland, 2020 p17.

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3.0 The draft Masterplan

3.1 The draft Masterplan (to date)

The current masterplanning was initiated following the State Government announcement in August 2021 that the former Swanbank Power Station site would be redeveloped as the Swanbank Future Energy and Hydrogen Precinct. In 2022/2023 Arup undertook the preparation of a masterplanning framework for the site—Swanbank Future Energy & Hydrogen Precinct. A 2050 vision, masterplan. Framework and options, 20 January 2023 (the Masterplanning Framework). The Masterplanning Framework was informed by a number of other studies (some of which are discussed below). Others have also followed (including this report). In 2023 CleanCo undertook a community co-design process called 'Reimagine Swanbank'. In December 2023 the CleanCo Board endorsed the Swanbank Clean Energy Hub Community Infrastructure Masterplan as well as a shortlist of energy generation and storage options for the site. Planning is ongoing with the next phase to be on 'developing a whole-of-site plan that integrates community infrastructure with energy generation and storage, taking into account current operational requirements'. The current draft Masterplan published on the Cleanco website 'Reimagine Swanbank' is a culmination of the process to date. It includes a number of the community-led ideas for community infrastructure on the site (including around Swanbank Lake and the Ash Dam) as well as marking out operational zones. Although not currently shown in the plan, the approved battery storage system (BESS) will be constructed on the former Swanbank B site adjoining the administrative hub.

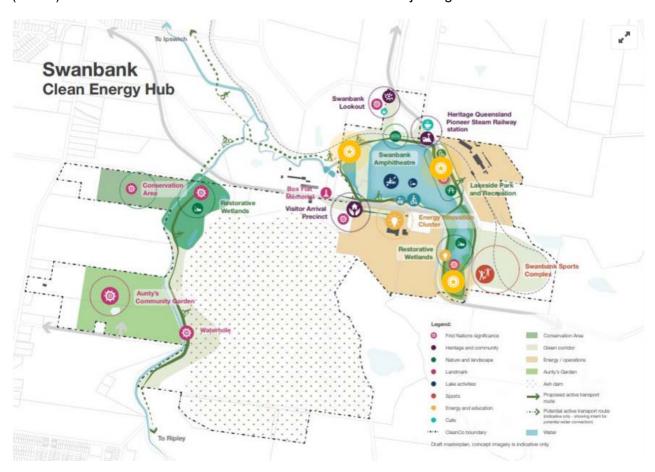


Figure 4: The current form of the draft Masterplan. (Reimagining Swanbank)

⁵ Reimagine Swanbank. www.engagement.cleancoqueensland.com.au accessed 7 March 2024.

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The following sections include a short summary and review of several of the reports commissioned by CleanCo as part of the masterplanning process for the site. Not all the studies prepared for CleanCo have been sighted, and not all that have, are considered here. The focus has been on those most relevant to the parameters of this study, and how this report might potentially speak to these earlier studies and their findings.

3.2 Masterplanning Framework (2023)

Arup, Swanbank Future Energy & Hydrogen Precinct. A 2050 vision, masterplan. Framework and options, 20 January 2023.

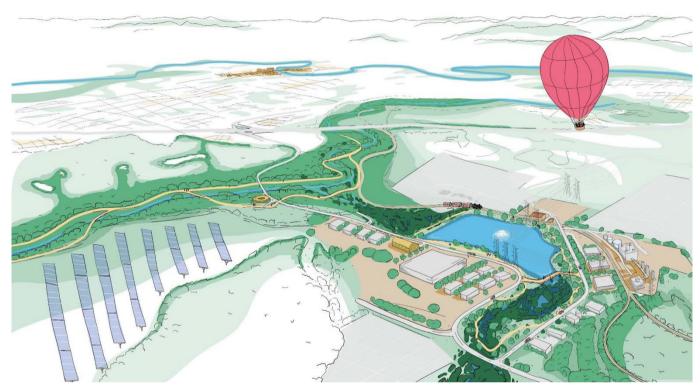


Figure 5: Swanbank as shown on the cover of the Masterplanning Framework. (Masterplanning Framework)

As noted above, the masterplanning process for the Swanbank site was initiated following the August 2021 Queensland Government announcement regarding the site's redevelopment as the Swanbank Future Energy and Hydrogen Precinct. The process is described in the Arup report as responding to 'existing site attributes' but also 'key policies and plans' of the three levels of government, including—

- Queensland Energy and Jobs Plan (2022) which 'promotes the importance of providing clean, reliable and affordable energy ... through the transformation from coal-fired power stations to clean energy hubs by 2035'
- Queensland Supergrid Infrastructure Blueprint (2022)
- Integrated Systems Plan (AEMO, 2022)
- Queensland State Planning Policy
- Shaping SEQ (2017)
- Ripley Valley Priority Development Area

The report considered a range of studies and technical assessments to identify key constraints and opportunities including—

• Social Impact Assessment (of likely impacts on the future development of the Swanbank precinct on the community) with nearby Ripley, considered one of the fastest growth areas in Australia,

characterised by a large number of young family households and higher income families compared to Ipswich LGA averages, and a smaller representation of First Nations people compared to the wider Ipswich LGA

- Flood assessment (the site is noted as generally not affected)
- Ecological assessment (Aurecon, 2022) identified land to the west of the Ash Dam and the Ash Dam as 'the most ecologically constrained' (habitat and vegetation). The site is also located upstream of one Wetland of International Importance (RAMSAR wetland)
- · Geotechnical assessment. Swanbank A & B generally not affected by underground mining

The Masterplanning Framework looked at a number of different issues, with 'site heritage' apparently included but not explored in any detail in the document.

The study identifies a number of key opportunities. Eleven key areas within the site are identified (as illustrated in Figure 11 from the Arup report (reproduced below as Figure 7):

- High value land (broadly the area containing the Administration Building, Swanbank A and B sites with the 'most immediate development potential')
- Swanbank Lake (currently operational; improvements in water quality could improve ecological values and potentially also for recreational uses)
- (Bundamba) Creek and green corridor
- Land adjacent to rail (heritage rail operations with capacity for future development)
- Constructed wetland (proposed wetland to treat site flows and improve water quality)
- Ash Dam (opportunities for remediation with complementary future use)
- Swanbank E Station site (currently in use with life to 2036; potential for new energy storage developments)
- · Central precinct for surrounding developments
- Land for potential development—rural residential blocks along Bundamba Creek
- Proposed connection to Centenary Highway and Redbank Plains Road
- Existing infrastructure and strategic grid location

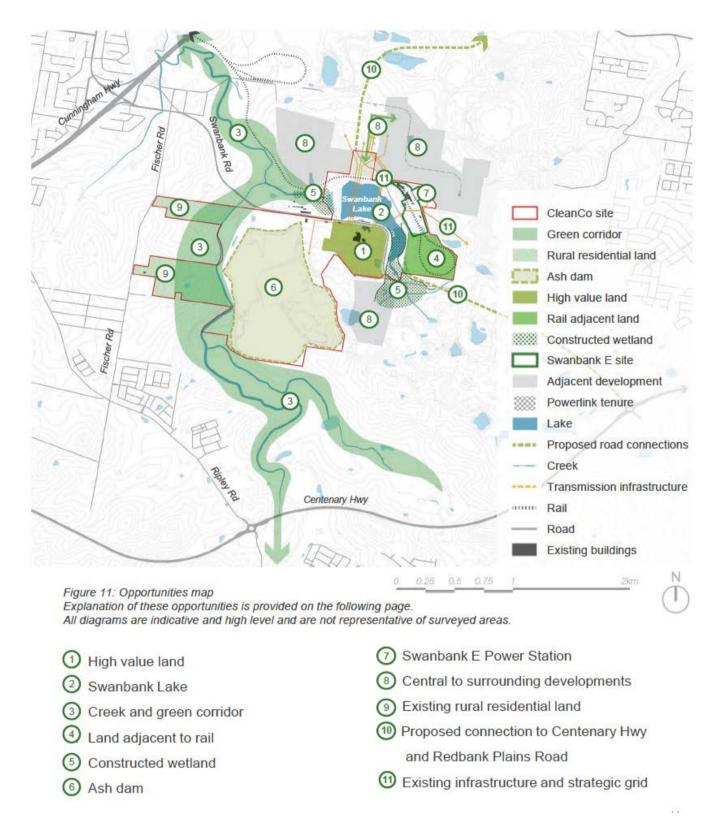


Figure 6: Key opportunities diagram from the Masterplanning Framework. The Arup report also notes that 'some site attributes are both potential opportunities and constraints'. (Masterplanning Framework)

Constraints (outlined in Figure 13 of the Arup report; see Figure 8 below) include:

- Swanbank Lake (water quality)
- Ash Dam (highly modified land; not operational as depository for 10 years; currently used as part of wastewater system)
- · Mining constrained areas
- Topography
- Easements
- Rail infrastructure
- Maintaining operational requirements (e.g. for Swanbank E)
- Transmission infrastructure

Other key constraints include:

- The high growth levels of the nearby residential community of Ripley with 'neighbouring land uses becoming increasingly sensitive to the continued development of the Swanbank precinct'
- Ipswich Planning Scheme (2006). Swanbank zoned within 'regional business and industry zone (and buffer)' intended to separate business and industry from e.g. residential development. Also a number of other overlays
- Need to maintain connectivity across Swanbank Road
- Social license for existing operations and future land uses

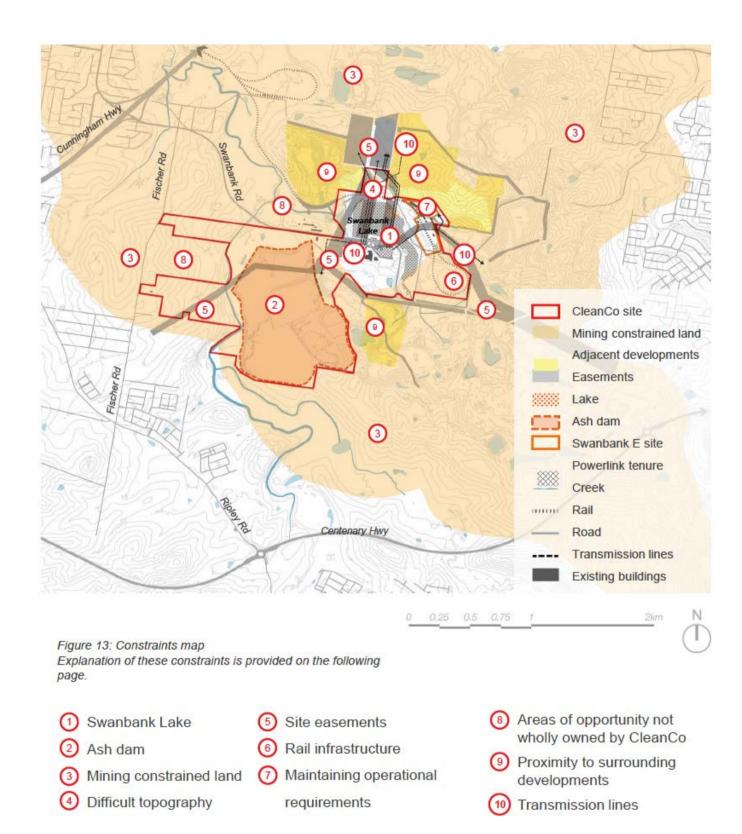


Figure 7: Constraints diagram from the Masterplanning Framework. (Masterplanning Framework)

Five key objectives were developed by the Framework:

- Play a key role in supporting Queensland's energy transformation to net zero
- Capitalise on the location and existing critical infrastructure for sustainable connection to the site, its surrounds and the region
- Deliver renewable energy solutions that support and attract industries of today and the future
- Give the community a precinct that celebrates the past, enhances the environment, and supports the ongoing prosperity for the region
- Demonstrate a flagship energy precinct that matches customer needs and outcomes

Three conceptual ecosystems were developed:

- Innovation
- Community
- Environment

The 'flexible masterplan framework' is also 'built around three layers':

- Open space
- Built form and
- Mobility

which the Framework contends enables 'a balanced response between the fixed-use areas of the site, and the areas for future development'.

Two masterplan options were developed to 'represent possible futures' for the site—one focussed on the Innovation Precinct, the other on combining that with recreational land uses—the Innovation and Recreation Precinct. (see Figures 9 & 10 below)

Key considerations and next steps identified by the Masterplanning Framework include:

- Community engagement including community co-design (The rapid growth of the Ipswich region, in particular nearby Ripley is identified as requiring 'a genuine and sustained community engagement program')
- Consultation with Yuggera, Jagera and Ugarapul peoples
- Further technical investigations
- Continuing requirement of a social licence (including from residential and industry neighbours) to expand current land uses
- Future energy mix and technology advancements
- State and local governments, industry developers
- Funding and investment
- Staging and sequencing

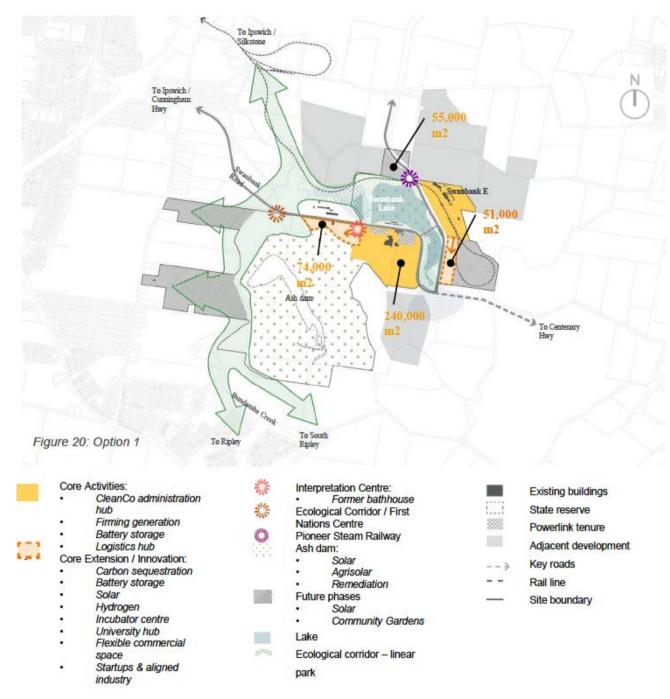


Figure 8: Innovation Precinct. Option 1 from the Masterplanning Framework. (Masterplanning Framework)

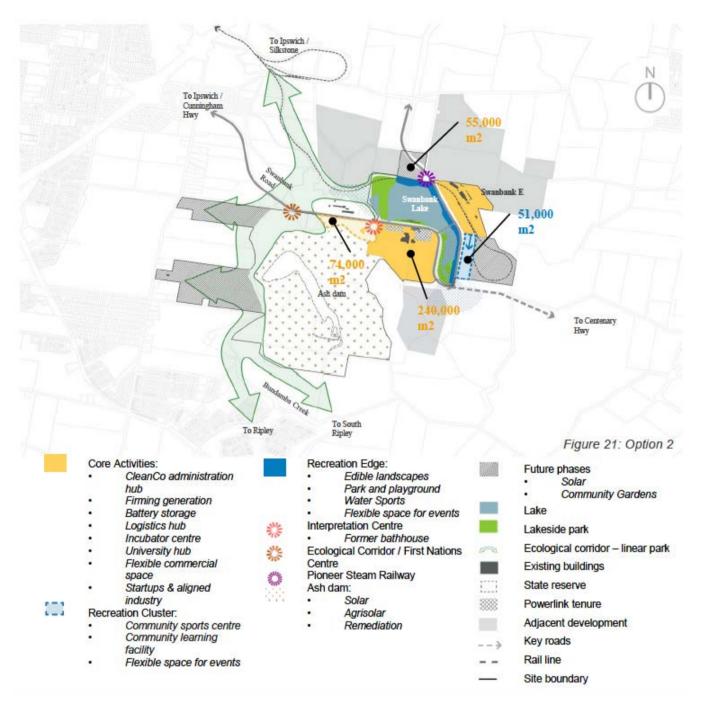


Figure 9: Innovation & Recreation Precinct. Option 2 from the Masterplanning Framework. (Masterplanning Framework)

3.3 Community Masterplan (2023)

Swanbank Co-design Panel Report (as written by the panel for CleanCo), 24 June 2023.

See also CleanCo Queensland Limited, *Reimagine Swanbank*. *Community Engagement Report*, March—May 2023; Max Hardy Consulting, *Swanbank Clean Energy Co-Design Panel Process Report*. *Report for CleanCo*, 25 July 2023; and Reimagine Swanbank website.

The Co-design Panel Report describes the Swanbank Community Co-Design Panel as comprised of 'a diverse range of curious community members from neighbouring landholders, local students, young professionals, First Nations peoples. Engineers, artists, conservationists, and a local historian' who met

over three weekends in May and June 2023. The 'remit for the panel' was 'how might the Swanbank Clean Energy Hub Masterplan maximise opportunities for the local community, and all of the Ipswich region, whilst delivering on Queensland's net zero energy commitments, the 2041 Community Vision and site constraints?'.

The co-design process was planned and facilitated by Max Hardy Consulting.

Key features of the Community Infrastructure Masterplan (refer Reimagine Swanbank website) are identified as including:

- Active transport including
 - Walking and bike paths around Swanbank Lake connecting to different areas
 - o Connecting Swanbank with Ipswich and Ripley
 - EV active transport hub
- First Nations perspectives (to be developed in partnership with Traditional Custodians) including:
 - Identifying areas of significance
 - Social History Museum
 - Bush tucker garden/yarning circle; bush regeneration and restoration
- Heritage and community including:
 - Visitor Arrival Precinct (including Social History Museum within the Bath House), picnic area, multipurpose community facility
 - Walkway (under Swanbank Road) linking precinct with Box Flat Memorial
 - Gathering places e.g. lakeside precinct, Visitor Arrival Precinct, Amphitheatre (near Pioneer Railway Station), Lookout (off Swanbank Coal Road)
- Natural environment including:
 - o Restoring wetlands, improving health of waterways
 - Conservation of existing bushland
 - o Enhancing usability of lake for community recreation
- Innovation and Education including facilitating learning re sustainability and clean energy

The Community Infrastructure Masterplan is summarised in Figure 11 below.

In many ways the Plan can be seen to build on Option 2 from the Masterplanning Framework (Innovation & Recreation Precinct) with the areas around the old Swanbank A & B sites and current E site retained for 'core [CleanCo] activities', but other areas, including the Visitor Arrival Precinct (centred around the Mine Bath House) and areas around the Lake and Ash Dam to have integrated community uses.

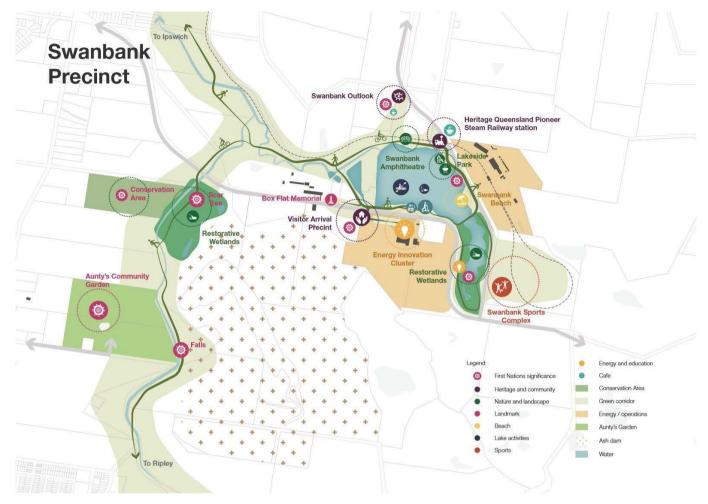


Figure 10: Swanbank Clean Energy Hub Community Infrastructure Masterplan. (Community Plan) NB This plan is slightly different from the 'draft masterplan' image shown at Figure 5, which is the updated plan.

3.4 Cultural Landscape (First Nations) Values Assessment (2023)

Turnstone Archaeology (Nadia Arrighi & Michael Strong), Swanbank—Masterplan. Assessment of Cultural Landscape Values for CleanCo Qld, August 2023.

The report was commissioned as part of the masterplanning for Swanbank to consider 'First Nation cultural heritage'. The report undertook 'a visual and desktop review of the potential [First Nations] cultural values of the old power station site'. The report notes however that 'this initial investigation ... in no way supplants or replaces a cultural heritage assessment process' but is rather intended to 'inform the needs and parameters of future cultural heritage assessments' (p8).

The report notes that various studies of the local area including of the White Rock Conservation Area, Ripley Valley and Springfield have demonstrated that 'Swanbank and Ripley Valley, watered by Bundamba Creek, are among the most significant cultural landscapes in southeast Queensland and the Ipswich area'.

The report includes:

- A brief history of the precinct (pp10–16)
- Discussion of the 'predictive landscape model' utilised in the assessment which considers a range of environmental and ecological indicators to look at the 'pre-industrial landscape of the Swanbank precinct' including the geology of the area, topography and hydrology, vegetation ecosystems (pp17– 23)

- A discussion re 'understanding the Swanbank Precinct cultural including the notion of 'Country' and known cultural heritage sites
- A visual assessment of cultural values based on archaeological and predictive strategies, combined
 with historical research. The report notes that the 'Swanbank Precinct is a very difficult site to
 understand, due to the complexity of previous modifications, including coal mines, coal and
 overburden dumps, ash dam, roads and rail tracks, ... several power stations. The complete
 eradication of most land features have had a huge impact on the pre-contact landscape.'

Figure 6 in the report (Figure 11, below) shows the 'results of the visual assessment' i.e. the areas of potential archaeological significance. The 'majority of the Swanbank Precinct is considered to have been heavily impacted' with 'little archaeological potential'. However, some areas of 'possible potential for sub surface heritage' are identified including:

- An 'area adjacent to the Lookout hill outside the precinct'
- 'Another narrow strip between the boundary and the ash dam that also retains remnant vegetation' (p26)
- An area to the west of Bundamba Creek
- o A 'small area in parkland ... on the eastern side of the modern Swanbank Lake' (pp26–28)



Figure 11: Areas of potential significance. Note—Red: High potential significance. Yellow: Medium to High. Purple: Unlikely. Green: Low to Non-existent. (Cultural Landscape Values Assessment, Figure 6)

Other particular areas noted are:

 Former Swanbank Lagoon (Logan's Lagoon; Josey's Lagoon) which is described as a 'major cultural feature of the pre-industrial landscape of Swanbank' which 'would have been the major

- cultural hub in the Swanbank Precinct, with camps around its bank, and an important source of food' (p29)
- Bundamba Creek and the Waterfall Waterhole. Although the creek has been heavily modified with the sandstone waterfall and waterhole artificially constructed as part of modification of the creek during the construction of 'large earth and rock wall to create the ash dam' in the 1960s (p30–33)

Figure 7 shows the former lagoon, the original course of Bundamba Creek and its current channel, and location of water hole. (see Figure 12 below)



Figure 12: 'Map showing the location of the former Swanbank (Logan's) Lagoon, the original course of the bend of the Bundamba Creek and its current channel. The waterhole is located in the bend and may have been modified or constructed during the deviation when building the ash dump dam wall'. (Cultural Landscape Values Assessment, Figure 7)

- Three areas to the west of Bundamba Creek (identified as containing 'largely intact vegetation, although logged' and some past clearing (p34)
- Hill/lookout off Swanbank Coal Road is identified as an important viewshed with the 'site significant and potentially useful for Traditional Custodians, because of the panorama south to the sacred mountains of the Grampian Range—Flinders Peak, Goolman, and Ivory's Rock'. The site is described as 'good ... for a lookout with JYUP interpretation' (p35)

- Hill in rail loop just east of present Swanbank Lagoon which may contain sub surface heritage (p36)
- Recommendations (pp37–39) include:
 - Establishing a working group representing JYUP and CleanCo
 - Fieldwork assessment by JYUP (of identified places)
 - Development of the Lookout Hill (including identifying key places such as Flinders Peak, White Rock, Bundamba Creek, former Oakey Creek, former Logan's Lagoon)
 - o Potentially a JWUP name for the Swanbank Precinct
 - JWUP naming the Waterfall Waterhole and Lookout
 - Signage for Swanbank Lagoon / Logan's Lagoon
 - o Revegetation along Bundamba Creek
 - o Possible test pit excavations at sites identified near Bundamba Creek and Rail Loop
 - Development of Bush Garden and Yarning Circle (potentially near Waterfall Waterhole subject to location of sub-surface heritage)

3.5 Preliminary Social Assessment (2023)

SMEC, Swanbank Clean Energy Hub—preliminary social assessment. December 2023

The assessment 'identifies, analyses and evaluates the significance of potential social impacts' of various aspects of the draft Masterplan and also 'recommends various measures to enhance positive impacts and mitigate negative impacts'. Particular aspects of the draft Masterplan considered are:

- Ash dam rehabilitation
- Lake area and broader Swanbank site rehabilitation
- Development of a Clean Energy Hub
- Community engagement
- BESS construction and operation

Recommended measures to mitigate, manage and monitor social impacts include:

- Public commitment to continue resourcing the Social Performance and Engagement function for at least the next 5 years
- Formally establish a Community Reference Group to maximise depth and breadth of representation
- Co-develop a Community and Stakeholder Engagement Plan that provides for ongoing dialogue and reporting on the Masterplan implementation, the ash dam capping process, Swanbank Lake and surrounding site rehabilitation, community use of facilities, clean energy initiatives, opportunities for involvement, and progress on BESS construction and operation
- Prepare a Recreation Facilities Plan, via a community-led process, and undertake relevant feasibility studies
- Co-develop a Land Rehabilitation Plan, with First Nations experts, local landcare groups, and interested community members
- Agree an Odour Management Strategy with neighbouring operators, with achievable measures aimed at eliminating the odour within three years
- Co-develop an Employment, Training, Business and Procurement Plan
- Integrate social performance items into the Construction (and Environmental) Management Plan for the BESS, for the ash dam, for Swanbank Lake and the surrounding site, and for any subsequent works
- Develop a provisional Monitoring Framework based on likely impacts and response measures identified in this report

Cultural heritage (both First Nations and non-Indigenous) is briefly discussed as part of 'Community Values'—one of the factors informing establishing a 'social baseline' for the study (see Section (3.8)). In terms of non-Indigenous or historic heritage the authors note that 'much of the communication regarding

the Swanbank Clean Energy Hub has included an acknowledgement of the precinct's 60-year history with the resource industry, including the Box Flat Memorial site'. It notes also that Swanbank Lake has 'been identified through CleanCo's stakeholder engagement processes as a place of historic cultural significance' for its historic recreational use (p39).

3.6 Building Condition Report (2023)

Aurecon, Swanbank Building Condition Assessment. Swanbank Building Condition Report, July 2023.

Aurecon's building condition assessment was intended 'to assist CleanCo with understanding the condition of ageing infrastructure at the Swanbank site'. The review was 'a discovery phase project to inform masterplanning for the Swanbank site ... which may include repurposing structures and buildings for new uses or demolish structures deemed beyond their useful life or of any sustainable future value'. Includes a condition and structural assessment of 'legacy buildings at the Swanbank power generation precinct' (visual inspection) and condition assessment of roadway, paths, security hut and fencing.

The report considered the following site elements (i.e. not all site elements were included):

- Mine Bath House (in the CMP also called Box Flat Mine Bath House or Bath House)
- C Station Generator
- Administration Building
- Warehouse
- Oil Store
- B Station Fabrication Shop
- Carpark
- Lakeside Carpark
- L&D Centre (in the CMP also called Box Flat Mine Office or former Office)
- · Roadway, Paths and Fencing
- ESD

The report further considered two bridges (cooling water dam spillway bridge and cooling water pipe bridge and associated walkway) in a separate report (which has not been sighted).

The Security Hut at the main site entrance was also considered.

The report found that in general 'visual inspection did not identify any safety issues or structural conditions that required immediate action or rectification works. Any building condition issues that had the potential to present as a safety issue had been addressed by establishing exclusion zones and restricting access.

The structural assessment found that all the buildings inspected are in an acceptable structural condition (or the structure can be easily reinstated) such that they can continue to serve the intended function, including adaptive reuse. However, estimating the costs involving changing the use of the building were not undertaken as this would require preliminary design considerations'. This applied to the Mine Bath House and Diesel Generator Shed Buildings.

In relation to the Mine Bath House and C Station Diesel Generator the report identified that 'repurposing [was] unlikely to be financially viable'. The L&D Centre (the former Box Flat Mine Office) was recommended for demolition as was the Mine Bath House and Generator.

Note: This report pre-dates the Masterplanning Framework and the Community Masterplan which consider re-purposing the Mine Bath House.

4.0 A short history of the Swanbank site

This brief illustrated history is focussed on documenting the site since the 1960s power station developments, as well as some consideration of its earlier history. As outlined in Section 2, this history draws mostly on existing material with some targeted additional documentary research. It is recommended however, that more detailed investigations are undertaken including for example an interrogation of the archival material related to the Power Station and comprehensive searching of historic titles and mining leases to confirm historical ownership of all lots of land. Historically, the name Swanbank (and prior to that Logan's Lagoon) was used to describe the lagoon itself (now part of the Ash Dam), but also the dairy farm built around the lagoon, and the wider district. As a result, it is not always clear in some historical descriptions which of these is being discussed, however where possible, we've tried to make that meaning apparent in the context in which it's used.

4.1 Early Ipswich

The Traditional Custodians are the Jagera, Yuggera and Ugarapul People (JYUP), from the traditional Yuggera language group of the Ipswich and Swanbank area. 'Traditionally, the Ripley Valley is likely part of the territory of the Woogaroo clan recorded by Stephen Simpson in 1843 ... To the east was the Yerongpan clan, and to the west, centred on Ipswich to Rosewood, the Warpai clan'. As noted in the Turnstone report, First Nations occupation of this specific site has not to date been documented but given its connection to significant waterways (Bundamba Creek, Oakey Creek and Logan's/Josey's/Swanbank Lagoon) it is likely.⁶

The establishment of the Moreton Bay Penal Colony in 1824 marks a time of enormous social and environmental upheaval in what we now think of as South East Queensland. In 1827 a convict settlement was established on the Bremer River at The Limestone Hills to quarry lime. Also known as The Limestone Station and later simply Limestone, the town was renamed Ipswich in the 1840s.

Coal seams were discovered in the area from its early days, but the first coal mine was recorded in 1843 at Redbank. In the 1840s and 1850s Ipswich became an important river port for the Darling Downs. By the 1860s it was a major coal producing region. The construction of the railway (Ipswich to Toowoomba in the 1860s; Ipswich to Brisbane in 1870s) saw the importance of the port reduced but also supported the development of the district's increasing industrial base.

By the 1880s, there were 'a number of small villages' on 'the eastern outskirts of Ipswich. Although surrounded by agricultural land their economies were largely focussed on industrial enterprises, including coal mining, brickworks, food processing and woollen mills.' Later the villages would be absorbed as part of suburban Ipswich, while the city's industry continued to expand, including the ongoing development of new coalfields, particularly in the Bundamba and Swanbank areas.

4.2 Logan's Lagoon and the Bundambah Dairy

In the about the 1850s James England is reported to have purchased a large number of leases at Upper Bundamba and Upper Oxley Creek, which he called Bundamba Station. These included all the major waterholes including Bundamba (Daly's) Lagoon (south of the Swanbank site) and also Logan's Lagoon,

⁶ Turnstone Archaeology (Nadia Arrighi & Michael Strong), Swanbank—Masterplan. Assessment of Cultural Landscape Values for CleanCo Qld, August 2023 p6.

⁷ Turnstone (Arrighi & Strong), Swanbank—Assessment of Cultural Landscape Values p13

which became known as Swanbank Lagoon (now part of Swanbank's Ash Dam). In 1854 the 25,000 acre was apparently sold to James Ivory.⁸



Figure 13: This map from 1853 reproduced from the Turnstone Report (Figure 4) shows the proposed parish boundaries in the Ipswich area. Bundamba Creek is marked as is the distinctively shaped Logan's

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⁸ Turnstone (Arrighi & Strong), Assessment of Cultural Landscape Values p10 citing Pamela Lamb, In the shadow of Mt Flinders: stories of Ripley Valley, Bellbird Park: Agneau Press, 2015. From newspaper reports, early land sales at Logan's Lagoon were held in 1856. By 1858 both England and Ivory are recorded as owning land at Logan's Lagoon, although much smaller holdings. (Northern Australian, Ipswich & General Advertiser 4 March 1856 p1; Moreton Bay Courier 23 October 1858 p2)

Lagoon/Swanbank Lagoon (highlighted), now part of the Swanbank Ash Dam. Note the spelling at this time of 'Bundanba'. (Turnstone Figure 4, from Ipswich City Council)

By 1864 James Ivory's property, known as the 'Bundambah Dairy ... on Logan's Lagoon' was described by some as 'the most complete in the colony of Queensland' prompting a *Queensland Times* reporter to visit the property, providing the following description, and the earliest located description to date of the Swanbank site, which by this time is likely to have been substantially cleared of its original trees and other vegetation:

The distance of the dairy from town by the road, is something under four miles, leaving the racecourse to the left. Logan's Lagoon is a very extensive sheet of water, near Bundambah Creek, and is the resort of wild ducks innumerable, and occasionally of black swans and wild geese ... the owner absolutely forbids the firing of a gun on its borders ... As it is the birds are so tame that they will come up to within a few yards of the dairymen without exhibiting signs of fear. We reached the place in the evening in time to see "the kye come home", and most of the animals, about seventy in number, all with calves at their sides, did credit to the care and skill of the breeder ... The milking yard is furnished with a very large and substantial shed, containing four bails, and a roomy pen for the calves. The dairy itself is built of solid stone of great thickness, and appears to be about 38 feet by 20; the stone was obtained at the edge of the lagoon, at a few hundred yards distance ... The floor of the dairy is flagged, and broad stone tables, with brick supports, run round the walls-the whole being remarkably well finished ...The butter is, we believe, the best in the colony ... The head dairyman and his wife and family reside in a substantially-built stone dwelling, and three other men find constant employment on the establishment. The pasture lands which consist of several thousands of acres, are all securely fenced, and the cows, as they calve, are brought into them from the Bundambah head station.9

In 1880 Ivory offered his lands for sale. The newspaper advertisements provide another useful snapshot of Logan's Lagoon (Swanbank) and the surrounding lands. Ivory's extensive land holding (described as 'the eyes (so to speak) of the Upper Bundanba District') was broken into 24 large lots including 'Bundanbah Station' fronting 'Bundanba Creek'; another lot including 'Bundanba (Daley's) Lagoon', and lot 17 which included 'the beautiful and well-known Logan Lagoon in which is abundance of permanent water and which is a great resort of wild fowl'. The Logan Lagoon lot comprised some 612 acres (described as Portions 1, 2, 3, 6 & 7 Parish of Bundamba and Portions 171–177 Parish of Ipswich). It included the 'well-known Dairy Homestead consisting of a large and substantially-built stone dwelling house and stone dairy, a wood dwelling house, large stables and sheds, a first-class stockyard, two gardens & c'. The land was described as 'all fenced in and subdivided into a cultivation paddock and four other paddocks' with 'frontage to Bundamba Creek'. 10

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⁹ Queensland Times 2 August 1864 p30. Note this Queensland Times article uses the spelling 'Bundambah'. James Ivory 1820–1887 born Scotland, arrived Sydney 1840, owned Eskdale (Esk) 1843. By 1879 reported to own 18,000 acres at Bundamba. Ivory kept a diary of his squatter's life; portion from 1862–1883 survives, held Mitchell Library. (HJ Gibney, 'James Ivory', https://adb.anu.edu.au/biography/ivory-james-3842.) Transcribed copies of the diaries held at Picture Ipswich.

¹⁰ Queensland Times 10 April 1880 p4. Note the various spellings of Bundamba employed in the original documents. The government spelling by this time however appears to be 'Bundamba'. Later maps show the lot 17 lands all located on the southern side of Swanbank Road—Portions 1, 2, 3, 6 & 7 to the east of Bundamba Creek surrounding Logan/Swanbank Lagoon (i.e. much of what became the Power Station site); Portions 171–177 on the western side of the creek (i.e. including the rural subdivision blocks that were more recently were added to the Power Station site). The locations of the farm buildings described in 1864 and 1880 is not known. However further research may reveal more. At this stage there is no apparent evidence on the site of this earlier occupation and use.

MONDAY, APRIL 12,

TO FARMERS, GRAZIERS, DAIRYMEN, AND OTHERS.

GREAT SALE OF CHOICE FARMS NEAR IPSWICH.

HUGHES & CAMERON have received instructions from James Ivory, Esq., to Sell by Public Auction, at the Land Exchange, Ipswich, On MONDAY, the 12th April, at 12 o'clock sharp,

The following Choice and

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WELL-WATERED PROPERTIES, being the pick of the locality, situated from One to Nine Miles south-east of Ipswich.

Figure 14: Extract from the advertisement for the sale of James Ivory's 'choice and well-watered properties'. (Queensland Times 10 April 1880 p4).

PORTIONS 1, 2, 3, 6, and 7, Parish of Rundanba, and PORTIONS 171, 172, 173, 174, 175, 176, and 177, Parish of Ipswich, containing 612 Acres. On these Portions is situated the Well-known

DAIRY HOMESTEAD, consisting of a Large and Substantially-built STONE DWELLING-HOUSE and STONE DAIRY, a WOOD! N DWELLING-HOUSE, large STABLES and SHEDS, a First-class STOCK-YARD, Two GARDENS, &c., &c.

The LAND is all Ferced in and Subdivided into a Cultivation Paddock and four other Paddocks; trontage to Bundanba Creek. On this Property is situated the Beautiful and Well-known

I OGAN LAGOON, in which is Abundance of PERMANENT WATER, and which is a Great Resort of Wild Fowl.

Figure 15: Extract from the advertisement for the sale of James Ivory's 'choice and well-watered properties'. Lot 17 included the dairy farm centred on Logan's Lagoon. (Queensland Times 10 April 1880 p4)

4.3 The Swanbank Estate—dairying and coal exploration

Ipswich businessman and politician James Foote is believed to have purchased the Logan Lagoon lands about this time naming it Swanbank after the Scottish birthplace of his wife Catherine. Comprehensive historic searching of the land titles would confirm, but it appears that what became known as the Swanbank Estate comprised the 612 acres offered for sale by Ivory as Lot 17 together with additional lands of almost 200 acres, which may have included lots to the north of Swanbank Road to the north and south of Oakey Creek. In the same way that Logan's Lagoon referred to both the lagoon and the surrounding area, Swanbank was also used for the lagoon, the property, and the broader district. Foote apparently continued to operate a dairy from the property, which was sometimes known as 'Swanbank Dairy' or also simply 'The Dairy'.¹¹

By the early 1890s however, with a number of coal mines opened in the Bundamba field, coal exploration had also extended to the Swanbank district. In 1892 the Aberdare Colliery (three kilometres to the north of Foote's property) 'marked the southern limit of coalmining in the Ipswich area', but Foote was also recorded to be exploring at this time and had 'spent over £1,000 ... in sinking shafts and drilling holes in an endeavour to establish the presence of coal on his land'. 12

Some 'preliminary exploration work' had also been undertaken by Foote's neighbour to the west, Thomas Pickering, and it was here that visiting Welsh engineer Edmund Lloyd Owen established what became the Swanbank Colliery in partnership with Ellen Perkins with funding from Perkins' husband, businessman Patrick Perkins. Swanbank No.1 tunnel was located not far from the northern bank of Oakey Creek near the junction with Bundamba Creek. (see Figure 19) By the end of 1892, '200 tons ... of coal had been brought to the surface for evaluation' and a 'railway extension from West Moreton Colliery to Swanbank' had been surveyed with supporting government legislation prepared. Owen and Patrick Perkins were however in dispute. By this time Perkins had formed the company, Swanbank Collieries Limited. Although Owen was associated with the company, the mining leases over Pickering's lands were held personally by Owen, whereas Swanbank Collieries had purchased Foote's Swanbank estate (or part of it, including lands to the north and south of Oakey Creek; see Figures 18 & 19) with a mortgage to Perkins to fund establishing a mine on that land and building the railway. A long court case followed, after which the company went into liquidation.¹³

After further acrimony in dividing the assets, Owen floated another company, the New Swanbank Colliery Company Limited with the new company leasing 'the remaining mineral rights on Pickering's

¹¹ James Foote (b. England; arrived Moreton Bay 1850; d. Ipswich 1895) was a local businessman, Councillor and Mayor of Ipswich, and later a parliamentarian. He was a member of a well-known Ipswich family, including his brother JC Foote (of Cribb & Foote). (*Queensland Times* 5 September 1895 p5) It has not been possible at this time to confirm the full extent of Foote's Swanbank Estate. Future research should consider a full historical search of the land titles record for the Swanbank Clean Energy Hub to confirm details of historical ownership of the various lots. It appears however that the Swanbank Estate at this time included the lands offered for sale in 1880 as part of Lot 17 i.e. some 612 acres described as Portions 1, 2, 3, 6 & 7 Parish Bundamba (Logan/Swanbank Lagoon and the surrounding lots south of Swanbank Road and to the east of Bundamba Creek) and Portions 171–177 Parish of Ipswich (seven lots to the west of Bundamba Creek). Other documentary sources indicate that Foote's Swanbank Estate also included additional lands of nearly 200 acres, which may have included lots to the north of Swanbank Road with frontage to Oakey Creek. During Foote's ownership advertisements for sale of stock regularly referred to the farm's paddocks 'of 800 acres' (i.e. nearly 200 acres more than the lot advertised in 1880) which were 'well watered by the Logan's Lagoon, with abundance of grass'. (see for example *Queensland Times* 22 December 1892 p3) See also Footnote 12.

¹² RL Whitmore, *Coal in Queensland. The late 19th century 1875–1900.* St Lucia: UQ Press, 1985 p146. ¹³ Whitmore, *Coal in Queensland. The late 19th century 1875–1900 p148.* Again, historic title searching would confirm the extent of Swanbank Collieries acquisition from Foote. However, based on Whitmore's history (in particular the diagram reproduced at Figure 19) and the 1899 government map (see Figure 18) this appears to be Portions 4, 5, & 6 (to the south of Swanbank Road) and Portions 8, 9, 10 and part of 11 (to the north of Swanbank Road with frontage to Oakey Creek). These portions were later acquired by Patrick Perkins and known as 'Perkins Freehold'. The Swanbank Collieries/Perkins holding does not appear to have included all the blocks surrounding and including Swanbank Lagoon nor the blocks to the west of Bundamba Creek.

land from Owen' and also persuading the Queensland Parliament to pass 'a new act' to enable the construction of 'the railway extension'. In early 1895 the new company's tunnel mine 'which had been damaged by the 1893 floods' was reopened. In June 1895 a 'turning of the sod' ceremony was held for the New Swanbank Colliery Company's new branch railway. In the following year a new shaft was sunk 'some 160 yards northwest of the old tunnel' which was abandoned. Work was 'to be confined to the [new] shaft, where two workable seams of coal ... [had] been struck—one at a depth of 90ft from the surface, and the other at a depth of 170ft. The former ... [was] a thickness of 5ft and the latter 5ft3in'. The shaft measured 18ft by 6ft and was 'bricked from the surface to the stone-head—a depth of 13ft. Below that the walls ... [were] lined with substantial timber. Several hands ... [were] employed in excavating around the mouth of the shaft so as to give more room for vehicles to turn', and it was 'expected that in the course of a month everything ... [would] be in readiness to allow of a big quantity of coal being raised'. By March 1897 the New Swanbank Colliery was advertising for '50 good miners' with offers of transport by train ('Arrangements have been made for Miners to be conveyed to and from Swanbank and Bundamba by Train, which stops to pick up Miners at Intermediate Points'). 14



Figure 16: Coal from New Swanbank Colliery on display at the Brisbane Exhibition in 1895. (Queenslander 24 August 1895 p361 in Whitmore, Coal in Queensland. The late 19th century p150).

After the liquidation of the Swanbank Collieries Limited, the Swanbank Estate lands which the company had purchased from Foote were acquired by Patrick Perkins (shown on Figures 18 & 19) as 'Perkins Freehold'. The Freehold Mine was developed but 'there were difficulties in extending the Swanbank railway to the new mine' and 'the geology of the area was unknown' so 'in 1900 Perkins offered the whole operation for leasing on a royalty or tribute basis'. Although not taken up at this time, Whitmore records that 'the value of the site became increasingly obvious ... and in 1903 the Dobbie brothers bought it with the help of William Black, opening a new phase of development in the area'. ¹⁵

By 1902, with the expansion of coalmining particularly 'to the southward and eastward of Blackstone and Bundamba' a rail link between Swanbank and Redbank was under consideration. In 1904 the Swanbank Station (now part of the Swanbank Clean Energy Hub site) was erected. In 1906 the New Swanbank

¹⁴ Whitmore, *Coal in Queensland. The late 19th century 1875–1900 pp148, 149; Queensland Times* 4 June 1895 p5, 7 May 1896 p6, 23 March 1897 p1. Part of the Bundamba–Swanbank branch line is located on the Swanbank Clean Energy Hub site.

¹⁵ Whitmore, Coal in Queensland. The late 19th century 1875–1900 pp150, 151. See also Footnote 12.

^{33|} Swanbank Power Station (former) CMP

Colliery Company was 'working two pits' in 'Pickering's Paddock' described as the '168 acres, in which the company' had the mineral rights as well as a lease over at least part of the Swanbank Estate 'into which some of the workings' had 'been extended'. Ipswich coalmines at this time were worked almost 'entirely by hand'—a 'skilled miner, usually assisted by a boy' working eight hours a day 'could cut 2–3 tonnes of coal'.¹⁶

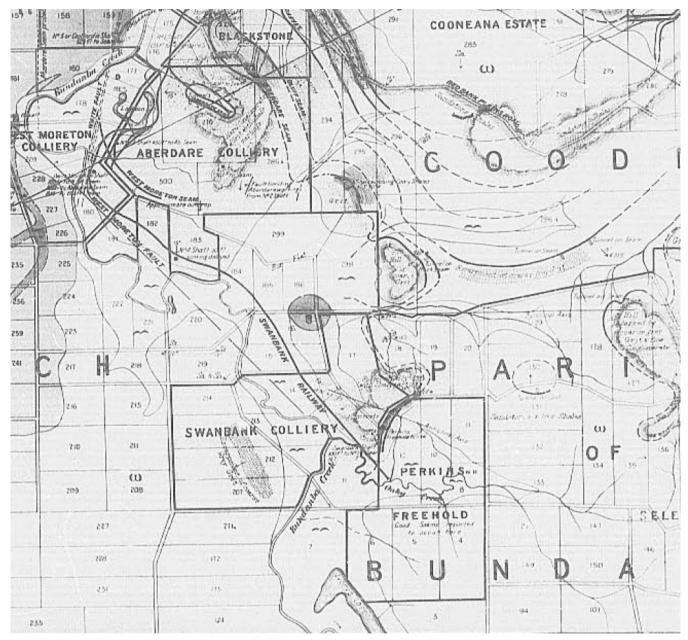


Figure 17: Detail from an 1899 survey of the Ipswich Coal Field marks out the lands of the New Swanbank Colliery and Perkins Freehold. Perkins Freehold, which is shown as including lands to the north and south of Oakey Creek as well as adjoining the northern section of the Swanbank Lagoon, was formerly Foote's Swanbank Estate (or part of it). The Swanbank Clean Energy Hub site encompasses parts of those holdings, plus additional lands around Swanbank Lagoon (only partially shown on this map) and to the west of Bundamba Creek. Note the railway line is also marked. (Map No.1 Geological Map of the Ipswich Coal Field 'to accompany report by Walter E Cameron BA Assistant Government Geologist, 1899', Qld Govt (GSQ Open Data Portal))

¹⁶ Queensland Times 20 July 1902 p9 & 27 January 1906 p29; Robyn Buchanan, 'lpswich Heritage Trail No.10: Blackstone', Ipswich City Council, 1995. The first mechanical cutters were not installed in an Ipswich mine until 1905.

^{34|} Swanbank Power Station (former) CMP

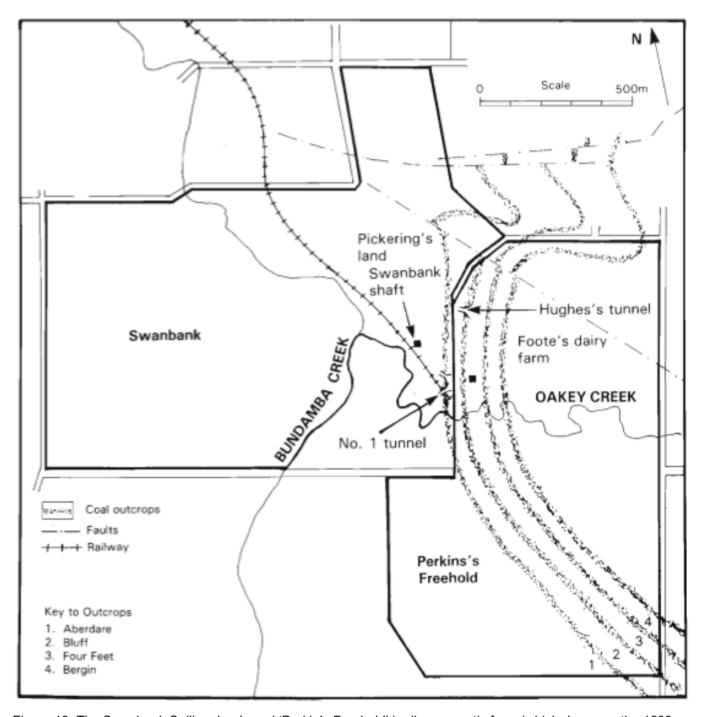


Figure 18: The Swanbank Colliery lands and 'Perkin's Freehold' in diagrammatic form (which draws on the 1899 map at Figure 17) shows the location of mining tunnels nearby Oakey Creek, the four coal outcrops, and the railway line. The northern tip of Swanbank Lagoon is not shown but sits at the southwest corner of Perkin's Freehold. (Whitmore, Coal in Queensland. The late 19th century p147).

By this time James Foote's nephew, Henry Smart Cribb, appears to have acquired the Swanbank Estate. At least for some portion of Cribb's ownership the land (or part of it) was leased for agricultural purposes. A 1906 advertisement refers to the 'Dairy Paddock, Swanbank' as comprising some 758 acres including the 612 acres described in the 1880 advertisement (Portions 1, 2, 3, 6 & 7 Parish Bundamba i.e. the Swanbank Lagoon lots and Portions 171–177 Parish of Ipswich to the west of Bundamba Creek). It also included additional lands of nearly 150 acres, described as Portion 212, subs 1 & 2 of Portion 213

and sub.1 of portion 207, Parish of Ipswich, with frontage to both Bundamba and Oakey Creeks, which appear to be the lands mined by the Swanbank Colliery (see Figures 18 & 19).¹⁷

In 1907 the New Swanbank Colliery Company liquidated with its coalmining leases 'returned' to (what Whitmore refers to as) 'Henry Cribb's Swanbank estate'. At this time other Ipswich colliers, 'the Box Flat partners [including William McQueen and William Hardie] were able to buy 376 acres of the land' which Whitmore describes as 'to the south of Oakey Creek and east of Bundamba Creek'. (From later descriptions it appears the Box Flat lands acquired at this time were located to both the north and south of Swanbank Road and included at least part of what is now part of the Swanbank Clean Energy Hub site.) A coal seam had been located and William McQueen announced 'that a new mine (named Parkhead after his Scottish birthplace) capable of producing 400 tonnes of coal per day would be opened on the new site. The Railway Department laid a new siding across Oakey Creek, The new mine was however a 'great disappointment' although it was mined by others (William and James Dwyer) until 1917. In 1921 the mine was reopened by McQueen and renamed Box Flat Extended No.1 with Box Flat Extended No.2 also established (see Figure 20). The 1923 geological survey map of the area also records the Parkhead Colliery (Box Flat Extended) located on the southern side of Swanbank Road on Portion 6. As Whitmore notes, in time other tunnels 'were to tap the deeper seams which were ultimately of greater value than the famous Aberdare Seam for which McQueen and his partners had originally bought the land at Swanbank'.18

The Swanbank Dairy was advertised as closing at the end of 1907 and by early 1908, Cribb was reported to have sold a further 500 acres from 'the old Swanbank Estate'. The land was acquired by local investors—Messrs Thomas Glassey & Co (including the well-known Glassey, a former colonial and federal politician (now widely regarded to be Australia's first Labour Member of Parliament) and experienced local coalminer James Hare). Soon after however it appears that the land (or possibly a portion of it) was purchased by the Queensland Coal and Coke Company Limited, a subsidiary of Howard Smith Company Limited. Described as 'a valuable coal property ... bordering on Bundamba Creek', later maps and descriptions suggest it included the lands around Swanbank Lagoon and at least some lots on the other side of Bundamba Creek. According to newspaper reports work was to be 'commenced immediately at a site across the creek from the old dairy house'. The 1923 geological survey map of the area records three bore sites (see Figure 21) but it appears no mining was undertaken at this time. ¹⁹

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¹⁷ Queensland Times 20 January 1906 p2 & 6 January 1909 p4. The 1909 article refers to Cribb purchasing the estate following Foote's death in 1895. Businessman Henry Smart Cribb (1864–1944), son of Benjamin Cribb, founder of Cribb & Foote, with which Henry Cribb was associated until 1927 was also known as a breeder and exhibitor of Jersey cattle and horses as well as fox terriers, greyhounds and homing pigeons. (Margaret Bridson Cribb, 'Cribb Brothers', *Australian Dictionary of Biography*, https://adb.anu.edu.au/biography/cribb-james-clarke-6331

¹⁸ RL Whitmore, *Coal in Queensland. From federation to the twenties*. St Lucia: UQ Press, 1991 pp93, 94, 95.
¹⁹ *Queensland Times* 30 November 1907 p12, 31 March 1908 p9, 6 January 1909 p4, 21 September 1934 p6;
Whitmore, *Coal in Queensland. From Federation to the Twenties* p104) Prof. Whitmore seems to suggest that only a small portion of the 500 acres acquired by the Glassey consortium passed to Howard Smith, however other documentary sources suggest otherwise. It may be that Glassey & Co retained some of the land purchased from Cribb. Their New Aberdare Colliery was located to the west of Bundamba Creek on Portion 215 (see Figure 21).
This may have formed part of the former Swanbank Estate, but it does not appear to be part the Swanbank Clean Energy Hub site. In 1934 Howard Smith Ltd was apparently intending to offer its lands for sale and applied for a mining lease over the Swanbank Lagoon property. This was objected to by the adjoining collier (Robert Brown McQueen and others of the Parkhead Colliery) on the basis that part of the Swanbank Lagoon lands were already being worked by him and that the lagoon presented issues to mining. (*Queensland Times* 21 September 1934 p6)

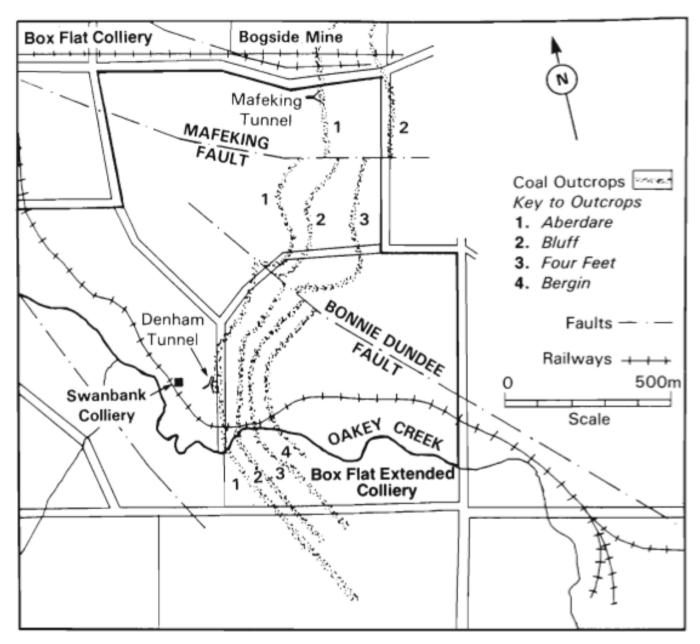


Figure 19: Diagram from Prof. Whitmore's history showing the workings along Oakey Creek in the first decades of the 20th century, including the establishment of the Box Flat Extended Colliery. (Whitmore, Coal in Queensland. From federation to the twenties p108).

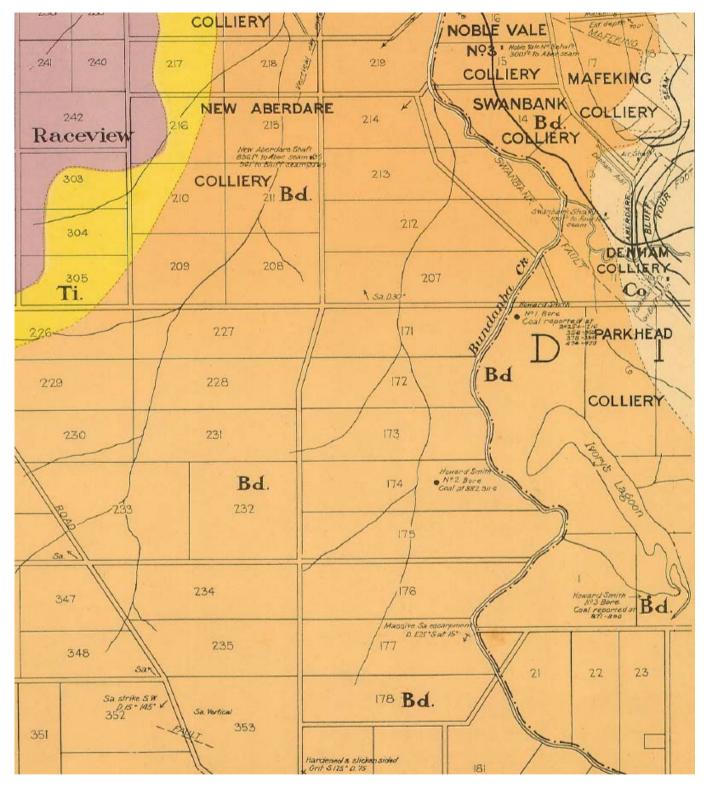


Figure 20: Detail from 1923 map of the Ipswich Coalfields shows part of the Swanbank Clean Energy Hub site at right of map including Swanbank Lagoon (marked as Ivory's Lagoon). Exploration by the Howard Smith Company is recorded near the southern tip of the Iagoon (on Portion 2), to the north of the Iagoon near Bundamba Creek (on Portion 7) and on Portion 174 to the west of the Creek. The Parkhead Colliery (later called Box Flat Extended) is marked to the north of the Iagoon on Portion 6. Across Swanbank Road, the New Swanbank Company's collieries (including the Denham Colliery near Oakey Creek) are marked. Glassey's New Aberdare mine is shown near top of image at Portions 215 & 216. (Ipswich Coalfield, Map No.2, Sheet 5, Geological Survey of Queensland, Qld Government—GSQ Open Data Portal)

4.4 Post-war developments

Following an inquiry, the Queensland 'Coal Mining Acts Amendments Bill was passed in 1947' bringing some improvements to 'health, safety, ventilation and amenities'. Over time the size of collieries would increase as would mechanisation. Coal production for the Ipswich region had also grown 'to more than 50% of the state total immediately after the war, peaking in 1950.' In 1951, the Joint Coal Board Chairman was quoted as saying that 'Australia would need a 50 percent increase in coal production within four years'. The same article referred to the 'big area of coal found' in the Bundamba area 'with 17 bores to depths from 635ft to 1462ft ... drilled in the Ivory's or Swanbank Lagoon area ... Coal reserves totalling 2,191,206 tons had been found in an area of 63 acres covered by the first six bores. It was estimated that local reserves in the neighbourhood would be many times greater ... A new mechanical coal mine with "a substantial daily output" is expected to be established in the Bundamba area'. In the following year it was reported that work was 'to start soon' on the new 40 million ton coal deposit located in the Swanbank Lagoon area.²⁰

Coalmining and the coal market were however changing. For many years, the State's railways were the largest consistent customer for Queensland coal. The decision made after World War II to convert from steam to diesel electric power had considerable impact on the local coal market. Mechanisation was also changing the way coal was mined and there were a number of 'staydown' strikes in response to reduced orders and increased mechanisation. New power stations took up some of the slack, including Abermain Power Station at Tivoli, believed to be the first power station in Queensland built on a coalfield.²¹



Figure 21: Abermain Power Station, Tivoli was located next to the Haighmoor Colliery. (Ipswich Historical Society photograph 1950s in No Easy Field).

²⁰ Robyn Buchanan, *Ipswich in the 20th century*, Ipswich: Ipswich City Council, 2004 pp131–132; *Courier-Mail* 14 November 1951 p3. See also *Queensland Times* 14 November 1951 p1 & 23 April 1952 p2; *Courier-Mail* 23 April 1952 p1.

²¹ Buchanan, *Ipswich in the 20th century* p132.

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Figure 22: Newspaper articles from 1951 spruiking the new coal reserves located at Swanbank by the Government survey. Page 1 in the local Queensland Times. (Courier-Mail 14 November 1951 p3 and Queensland Times 14 November 1951 p1).

NEW MINE LIKELY TO RESULT FROM TEST BORES ON BUNDAMBA FIELD

BRISBANE, November 13.—Test bores put down by the Mines Department on the Bundamba coalfield clearly indicate an area on which a new colliery could be opened up.

Announcing this to-day the Minister for Mines (Mr. W. Power) said that when the final results are available in the near future the reserves of proved coal should be sufficient to warrant expenditure to an extent necessary to provide an up-to-date mine with a substantial daily output.

Services Ltd. to the Premier in July, 1949 the Mines De-partment had commenced a drilling campaign on the Bundamba field the followng February.

The purpose was to prospect and delineate coal-bearing areas containing sufficient tonnages of workable coal to form new mine area. To date 17 bores had been drilled, totalling 17,400 feet, depths varying from 635 to 1662 feet.

These bores had been put wn in the Ivory's or Swandown in the Ivory's or Swan-bank Lagoon ares, the principal objective being the continuation of the Bluff coal seam in No's. I. 2, and 3 mine areas as outlined by Powell Duffryn Technical Services Luffryn Technical Services Luffryn Technical Services Luffryn Technical Services had intersected not only the Bluff seam, but also the The drilling, however, intersected not only the seam, but also the mother of the Governor-Genser below the Bluff, and two coal (Sir William McKell), Mrs. earlier question by Mr. Shand the Bluff, and two coal (Sir William McKell), Mrs. earlier question by Mr. Shand the Bluff, which been named Wright's been named Wright's seam of the lasoon seam.

Analyses of the coal cores obtained in the drilling of the bores, had been completed in a limited number of cases, and an interim report of the results of the drilling cam-paign to date had been received.

2.191.200 To...

This interim report established that within an area of acres, encompassed by bores drilled, ome 63 acres, encompass he first six bores d stimated coal re estimated coal reserves amounted to 2,191,200 tons, of which 194,700 tons (within 18 acres only) were contained in Wright's seam, and 225,500 tons (within 18 acres only) in

The Minister explained tons containing 20.3 per cent. She first report of commendations in the first report of commendations in the first report of commendations. The same of the balance of the total Victoria. He said it tonnage ranged from 24.5 to the Description of the containing 20.3 per cent. The witness of the balance of the total Victoria. He said it tonnage ranged from 24.5 to the Description of the containing 20.3 per cent.

Analyses of the coal between bores, but also between the eastern line of bores and the existing line faces or seam outcrops, remained to be done for the presentation of a full report on this area of the Bundamba coalifield.

SYDNEY, Nov. 12 .- A witness told the Lavery Bayall Commission to-day had heard Proderick Linesis McDermott and a Manel waman named Plerrie Mamp discuss Lavers' death, He said that McDermott and Humpton were very drunk at if

Victoria. He said be hed lies McDermott say in a camp Griffith something about "the

The commission is inquis-into the conviction of bloc mott in 1947 for Lavers' mus-in 1936.

Mr. G. Shand, E.C. (for Mo Dermott) read to Holland a passage from a statement Roll and made to the police.

for the preport on this a...

Bundamba coalfield.

It was expected that considered the favore has been a full report would be several ed. and on each occasion has gone mad and said. I know not the only one, Scott his him on the head. I halped to cut film up and bury him in the sheep yards at Grentell."

Holland told Mr. Shi That is absolutely wrong.

ALLAN MARKET MA PEPEERE PRACE

Figure 23: Newspaper articles from 1951 spruiking the new coal reserves located at Swanbank by the Government survey. Page 1 in the local Queensland Times. (Courier-Mail 14 November 1951 p3 and Queensland Times 14 November 1951 p1).

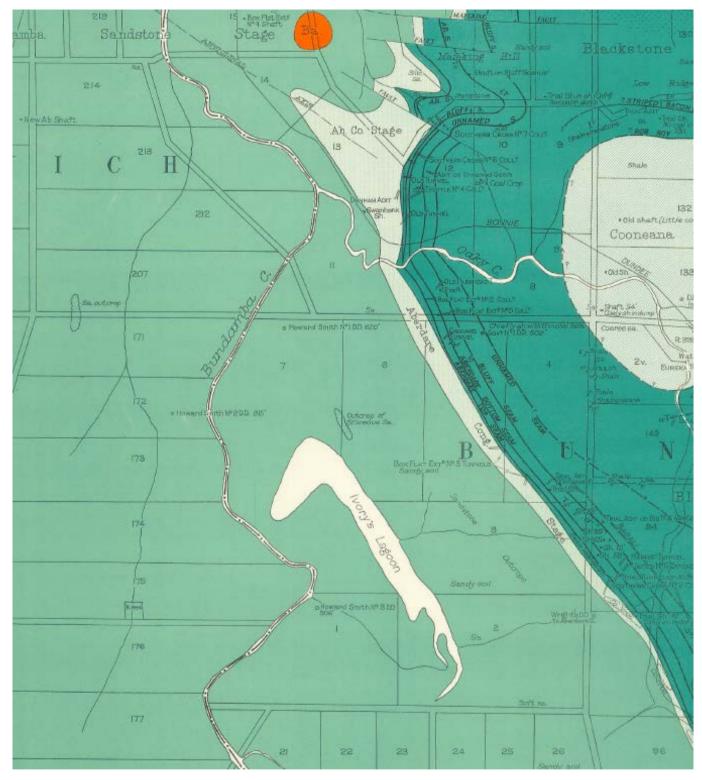


Figure 24: Detail from 1954 geological survey map of the Bundamba—Dinmore Mining District. The tunnels of Box Flat Extended No.3 are marked to the east of the lagoon on Portions 5 & 6 with Box Flat Extended Nos. 2 & 5 Collieries shown on the Portion 8 between Swanbank Road and Oakey Creek. In the dark green portion of the map the great seams of coal, which would later feed the Swanbank Power Stations, are marked over what is now the Swanbank Clean Energy Hub site. (Ipswich Coalfield Bundamba—Dinmore Mining District, Sheet 3, first edition, 1954, Geology Survey of Queensland map, Qld Government—GSQ Open Data Portal).



Figure 25: Aerial view of Swanbank 1 October 1956. The distinctively shaped Swanbank Lagoon at centre of the image with cleared area to the north and what appears to be evidence of coalmining infrastructure to the northeast. (Qlmagery QAP0798136).

4.5 Swanbank Power Station & Box Flat Colliery

By the 1960s the Bundamba coalfield was still the leading producer of coal in Queensland producing some 43% of Queensland's coal although it would soon be rivalled by the open cut coalmines of the Bowen Basin. Against this backdrop, a decision was made to build South East Queensland's new power station next to a coal mine.

The 1960s marked a change within the State's electricity industry. The previous two decades (1938–63) were a time of putting regional networks in place to generate and distribute electricity, with the next phase looking to establish a statewide network. Swanbank would be one of a number of large power stations constructed across the State as part of this expansion. In common with the Callide Power Station (1965) and the Collinsville Power Station (1968), Swanbank was constructed next to its source of coal, the very productive Box Flat Colliery. The Box Flat partners had operated the Parkhead Colliery at the corner of Patrick and Ella Streets. They first purchased land at Swanbank in 1907 with a mine

opened at this time, but later operated by others. In the 1920s, William McQueen returned to Swanbank operating Box Flat Extended Nos.1 & 2 located on the northern side of Swanbank Road between the road and Oakey Creek. By the 1960s, the complex included Box Flat Extended no.5 Colliery on the northern side of Swanbank Road and no.7 on the southern side, where the newly constructed Mine Office (later the Power Station L&D Building) was also located, together with the Miners Bath House.

Photographs from the 1960s show the Box Flat Colliery site and the massive, cleared site for the Power Station, which immediately adjoined Box Flat Extended no.7 Colliery. (see Figures 21 & 22)



Figure 26: Aerial view of Swanbank site under construction 1 November 1963. The buildings of the Box Flat Mine on both the north and south sides of Swanbank Road are circled. Swanbank Lagoon lies just to the south of the Box Flat site (bottom left-hand corner of image). The scale of the interference in the landscape for the construction of the Power Station is very evident. (QImagery QAP1639002).



Figure 27: View (1963) looking across Box Flat Extended No.5 mine (located on the northern side of Swanbank Road) looking east towards the recently cleared Swanbank Power Station site. Visible at centre right on the southern side of Swanbank Road are the buildings associated with Box Flat Extended No.7 mine including the Mine Bath House (highlighted) located near the boundary of the Power Station site. (Picture Ipswich).

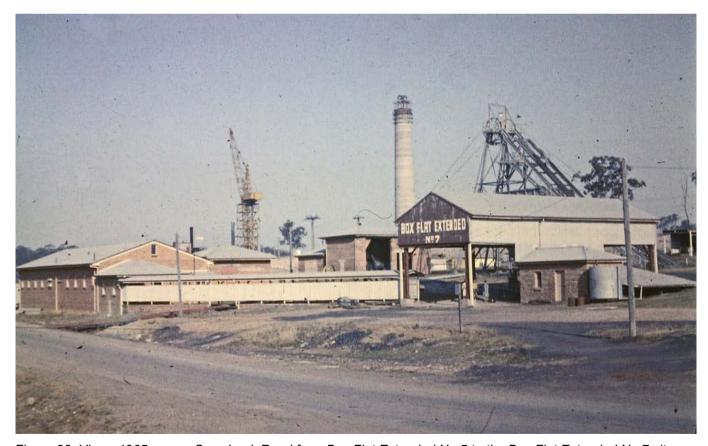


Figure 28: View c1965 across Swanbank Road from Box Flat Extended No.5 to the Box Flat Extended No.7 site. The Mine Bath House is visible at left; the crane used in the construction of Swanbank A in the background. Most of the mine buildings shown were destroyed by the 1972 explosion. (Picture Ipswich).



Figure 29: Another earlier view of part of Box Flat Extended No.7. This photo from 1959 shows the newly constructed Mine Office at right (more recently known as the Power Station L&D Building) sitting at the top of the rise overlooking No.7. (Picture Ipswich).

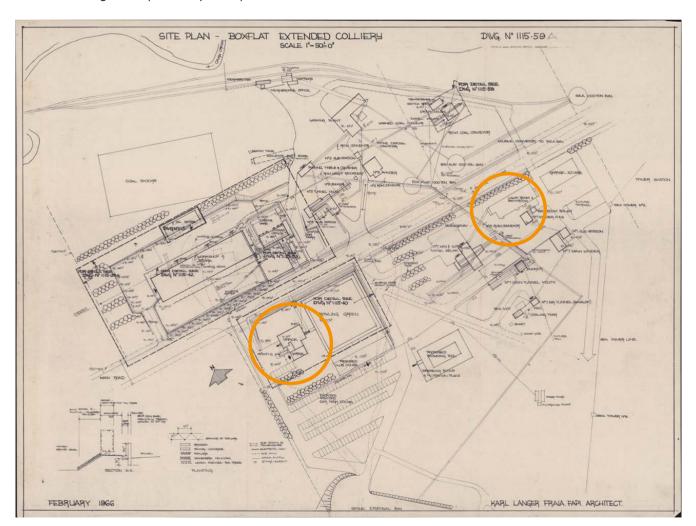


Figure 30: The Box Flat Colliery. Site plan from 1966. Note some elements are shown as proposed including a club room and pool between the Mine Office and the Mine Bath House on the southern side of Swanbank Road. The Office and Bath House are highlighted. (Karl Langer architect, UQFL 158).

The first phase of construction at the new power station site included Swanbank A, followed by the Administration Building, Workshop and Store. Photographs show Swanbank A rising from the site. It was commissioned progressively from 1966 by the Southern Electric Authority of Queensland (SEAQ) to a total of 6 X 66MW sets supplying power to 110kV high voltage network in South East Queensland. The Administration Building, Workshop and Store are believed to be the work of engineers Macdonald, Wagner & Priddle and architect HS Macdonald. Drawings were prepared c1964, but the buildings were not apparently completed until c1967.²²



Figure 31 (a-c): (left) Swanbank A under construction 1965 and (centre & right) 1965 & c1966. (Picture Ipswich).



Figure 32: Aerial view of the Swanbank site 30 June 1967. Swanbank A operational. The Administration Building and Warehouse behind visible. The site for Swanbank B has been cleared. The lake has been formed with the site now occupied by Swanbank E apparently cleared. The Ash Dam appears to be at least partially formed with the 'head' of Swanbank Lagoon visible at bottom of image. Note the connections with Box Flat and the clearing for transmission towers. On the northern side of the lake, the turnaround not yet formed. (QImagery QAP2380150).

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²² Judith Nissen & Brian Becconsall, 'Central and North Ipswich Engineering Heritage: a walk/drive tour, 2022' (Engineering Heritage Queensland) p25; Macdonald, Wagner & Priddle and HS Macdonald, 'Specification for ... the erection and completion of an administration building, workshop and store at Swanbank Power Station', c1964. (held SLQ) SEAQ was formed in 1961. From 1977–1997, it became the South East Queensland Electricity Board (SEQEB), and later, Energex.

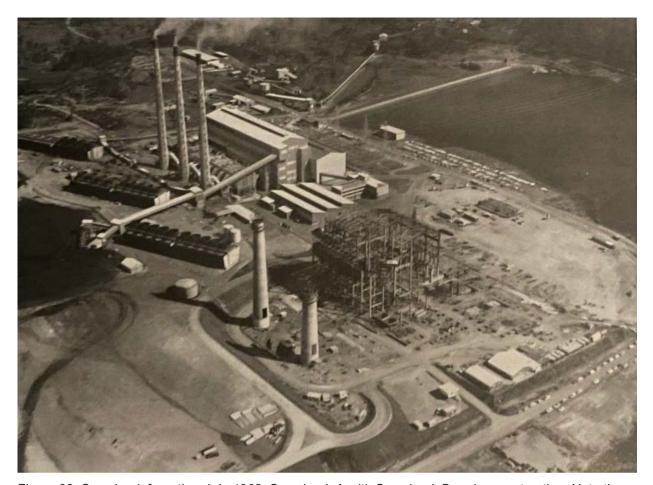


Figure 33: Swanbank from the air in 1968. Swanbank A with Swanbank B under construction. Note the Administration Building and behind the saw-toothed roofed Warehouse. The buildings of the Box Flat Colliery at top of image. Note also the other ancillary buildings on the site (since removed). (Thomis p104).

The complex also included the construction of Swanbank Lake, which provided cooling water for the Power Station's main condensers. Water for the lake was 'pumped 7km from Berry's Lagoon on the Bremer River' with the water level maintained by supply from Moogerah Dam. Cooling towers were constructed next to the lake (now the site of Swanbank E). To the southwest of the main buildings, Swanbank Lagoon and adjacent lands were reshaped to form what became the Ash Dam.²³

In 1969 the 30MW open cycle gas turbine plant Swanbank C was commissioned by SEAQ 'to provide quick starting peaking power and emergency black start power into the existing 110kV grid'. Together with Middle Ridge near Toowoomba, this was the earliest of the gas turbine peak supply stations built in Queensland.²⁴

By 1970 the 'main station buildings' were 'virtually complete'. Swanbank B (also coal fired) with two 137m high smokestacks was under construction by 1968 and commissioned by SEAQ 1970–3. It comprised 4 X 120MW units, 'then the largest generating units in the state' and supplied power to the new 275kV transmission grid in South East Queensland 'predominantly burning black coal mined locally (including Oakleigh, Jeebropilly and Acland)'. ²⁵

²³ Buchanan, 'Ipswich Heritage Trail No.10: Blackstone', 1995. Work on the 'ash water reclaim system' was 'well advanced' by mid-1970. (SECQ Annual Report 1970 p29)

²⁴ Nissen & Becconsall, 'Central and North Ipswich Engineering Heritage' p25. Swanbank C was decommissioned by CS Energy and removed in 1997.

²⁵ SECQ Annual Report 1970 p29; Nissen & Becconsall p25. Swanbank B was decommissioned 2010–2012 and demolished by 2015. The full commissioning of B in May 1973 marked the 'completion of the Swanbank coalfields

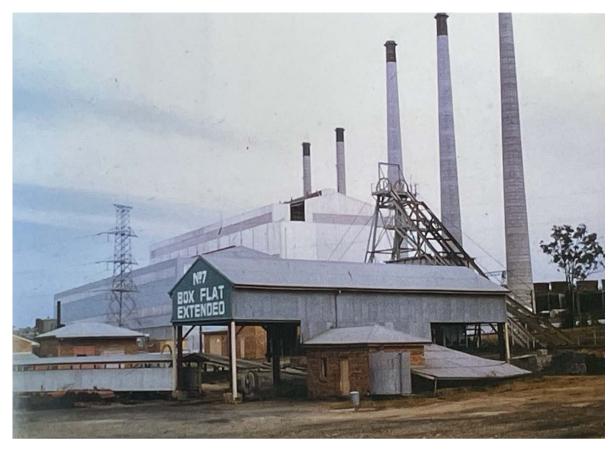


Figure 34: Pithead and deputy's cabin at Box Flat Extended No.7 c1970 with Swanbank A behind. The two chimneys of Swanbank B visible. (Picture Ipswich in No Easy Field).



Figure 35: Aerial view of Swanbank site 17 May 1970. Swanbank B constructed. (QImagery QAP2143018).

powerhouse complex' with a ceremony held on 20 July 1973 'at which the Premier, the Hon. J Bjelke-Peterson, MLA, unveiled a commemorative plaque' erected near the entrance to the Administration Building. (SECQ Annual Report 1973 p28)

Picnic areas were developed along the northern edge of Swanbank Lake and both the lake and lakeside became a well-used and much loved local recreational area which was often photographed by the *Queensland Times*.



Figure 36: The newly completed Swanbank B dominated the Swanbank site. View from across the lake. The Administration Building at right, Swanbank A far right. (Picture Ipswich).



Figure 37: Swimming in Swanbank Lake c1970s. Swanbank A at top left. (Queensland Times). 50| Swanbank Power Station (former) CMP

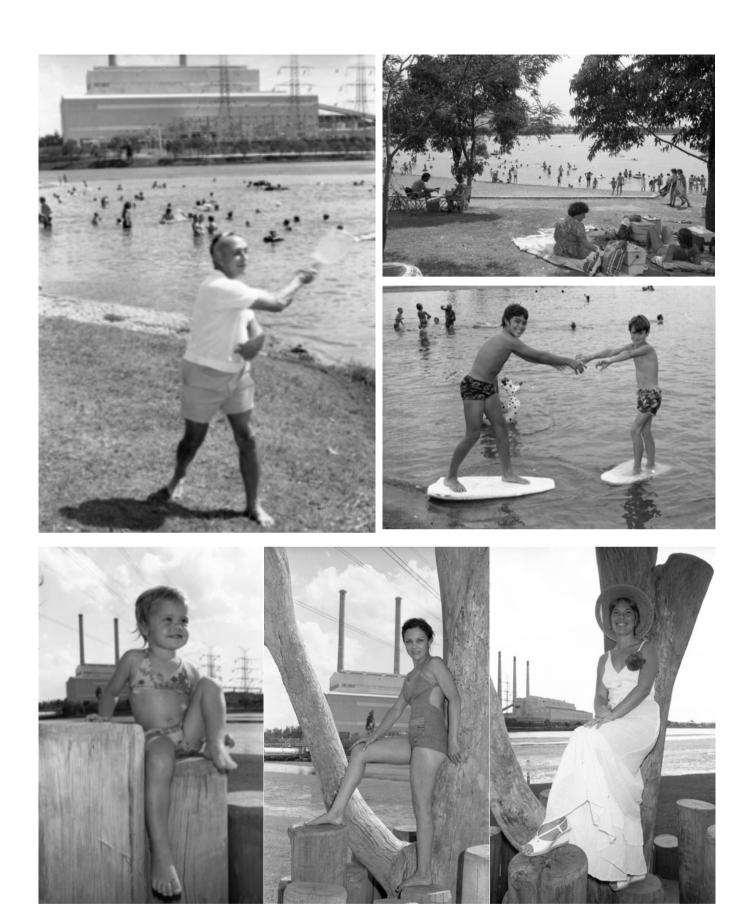


Figure 38 (a–f): Swanbank Lake. (Picture Ipswich from Queensland Times) By the 1990s the lake was stocked with fish and the lakeside was described as 'home to ... pelicans, black swans, rainbow lorikeets, scarlet honey eaters, Australian kestrels, and whistling kites' with about 130 bird species identified in the area. (Buchanan, Ipswich Heritage Trail No.10, 1995).

4.6 Box Flat 31 July 1972

On 31 July 1972 disaster struck the complex. A 'series of explosions ripped through Box Flat No.5 and Box Flat No.7 colliery workings' leaving 17 dead and another to later die of injuries. A number of others were seriously injured. The explosions 'shook homes throughout Ipswich' and were heard 'as far away as Rosewood ... Warrill View and Marburg' and in the western suburbs of Brisbane. 'The bodies of 14 men (mine workers and members of the local Miners Rescue Brigade) were entombed in the tunnels of Box Flat Extended No.5 and No.7.²⁶





Figure 39 (a–c): Box Flat 31 July 1972. (Picture Ipswich) From the account published in the Queensland Government Mining Journal (reprinted in Common Cause October–November 2002 and in No Easy Field p289): 'Thick, black smoke, intense heat and escaping gas prevented rescue squads from entering the mine after the explosion ... As soon as the decision to seal the mine was made, bulldozers, scoops and other heavy machinery swung into action ... pouring earth filling into the tunnel entrances. Two ventilator shafts were also sealed. Work on sealing the mine to choke the oxygen supply and put out the fire halted for about three minutes at 10.15am, for a service on the rise overlooking the pithead for the 14 entombed men. The brief but moving service was held against a backdrop of thick black smoke which blotted out the morning sun.'

²⁶Alan Murray, *No Easy Field. Ipswich Coalmining 1920–2000.* St Lucia: University of Queensland Press, 2010 pp285, 287–289.

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Photographs show the destruction to the Colliery. Above ground, a number of structures were destroyed at both No.5 and No.7, although at No.7 the Mine Bath House survived (but with the roof 'torn aside'). At Swanbank A windows on the western elevation of the building were damaged. Mining accidents and deaths were not uncommon in the local industry, but the Box Flat disaster was of another order and scale. The mine was later closed. A memorial sculpture was erected at the Mine Office. This was later relocated to the small memorial park established on part of the former No.5 site.²⁷

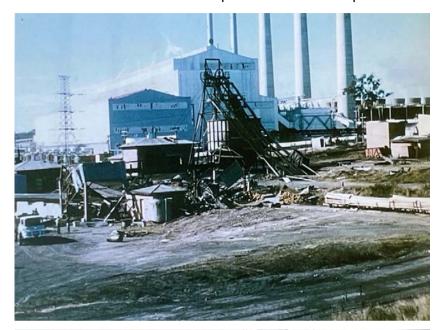




Figure 40: (top) The damaged and destroyed buildings of Box Flat No.7 with Swanbank A behind. (Picture Ipswich in No Easy Field).

Figure 41: (above) Shattered windows in the western wall of Swanbank A after the Box Flat disaster. (Allan Berlin photo in No Easy Field).

²⁷Murray, *No Easy Field.* pp285, 287–289.

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After this time, coal for Swanbank was shipped from other mines including Southern Cross, Oakleigh, Jeebropilly and Acland. Circa 1974 the rail line from Box Flat to Swanbank was rebuilt to enable coal to be brought in from Central Queensland. Sometime after 1972 the Box Flat lands on the southern side of Swanbank Road (the former No.7 site containing the Mine Office and Bath House) became part of the Swanbank site at this time.²⁸

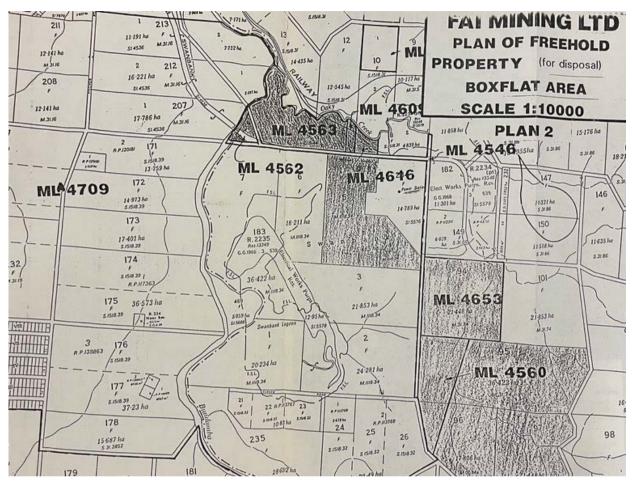


Figure 42: FAI Mining Ltd. Plan of freehold property (for disposal). 'Boxflat area'. Undated plan c1970s (base map appears to be 1974 Qld government map) shows the various mining leases. Note also Swanbank Lagoon marked as 'reserve for Electrical Works Purposes' and the Power Station marked (at centre of image). ML4562 over Portions 6 & 7 would appear to be Box Flat No.7 and ML 4563 Box Flat No.5. Box Flat No.6 is located on ML4616. Note also the original alignments of Bundamba and Oakey Creeks. (Copy held Ipswich Historical Society).

4.7 Power politics

Although local collieries 'had geared up to maintain a supply for Swanbank ... they were told in 1975' that when the new Gladstone Power Station was connected to the grid, 'the demand for coal for Swanbank would decrease'. However, with Gladstone delayed, 1977 was 'a record year'. In the following year a group of local Ipswich 'companies signed a deal with the Queensland Electricity Generating Board' guaranteeing coal 'sales to Swanbank for the following 15 years'. After this time, however 'it was intended that Swanbank would be phased out'. Although Swanbank's closure didn't come to pass at that time, with the increasing development of Bowen Basin coal (enthusiastically supported by State government policies), times were changing for the Moreton collieries and coal and power generation would become intertwined as hyper-political twins.²⁹

²⁸ Picture Ipswich; Nissen & Becconsall p25.

²⁹ Buchanan, *Ipswich in the 20th century* p143.

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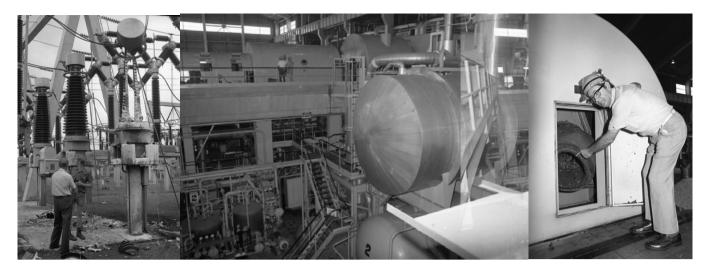


Figure 43 (a–c): Photographs from the Queensland Times showing the interior of one of the power stations after the electrical explosion on 15 November 1977. Other interior (and exterior) photos are believed to be held by Queensland State Archives. (Queensland Times, Picture Ipswich).



Figure 44: Aerial view of the site c1980s looking southwest. At the bottom of the image, near the lake are the cooling towers (now the site of Swanbank E). (Framed image held CleanCo).

In his history of Queensland published in 2007, Raymond Evans lays out some of the intertwining themes and how Swanbank came to be centre stage during the infamous South East Queensland Electricity Board (SEQEB) dispute of the mid-1980s. The 1970s and 80s, saw Queensland's mineral wealth (including coal) increase 'tenfold in value'. Much of it was however foreign owned—by the 1980s Evans records that 'transnational capital controlled almost 90% of the state's mineral wealth'. By late 1984 'Queensland was sliding into recession', with unemployment and job vacancy figures the highest in the country. Meanwhile 'industrial relations continued their confrontationist path' under Queensland Premier Joh Bjelke-Petersen. Against this background, the electricity industry (a 'state instrumentality') became a 'central pivot'. 'Strikes by power-house workers at Swanbank, Collinsville and Gladstone led to the sudden passage of the *Essential Services Act* in the early hours of 25 October 1979' considered 'a dangerous intensification of already draconic State of Emergency powers. Strikes were effectively banned in 10 defined service industries, including electricity generation³⁰³¹

'In February 1984 the South East Queensland Electricity Board (SEQEB) appointed a new general manager' who 'soon promised a 10% workforce cut and the introduction of contract labour to "increase efficiency" and undermine the power of the Electrical Trade Union (ETU)'. Simultaneously, the government 'introduced severe anti-picketing legislation':

After a series of union bans and worker stand-downs from September, potentially fruitful negotiations were thwarted by SEQEB and Cabinet intransigence. The subsequent strike, beginning on 7 February 1985, was to be a calculated test of strength. Immediately declaring yet another State of Emergency ... a series of Orders in Council virtually outlawed the strikers, exposing picketers to aggressive policing. As a severe power crisis ensued, 920 linesmen were sacked en masse for refusing to repair damaged lines ...

By mid-February, as more unions joined the struggle, Brisbane was in chaos with food shortages and blackouts ...

For a fortnight from February to March 1985, 17,000 homes in South East Queensland were without power on a rotating scheme with many industries forced to shut. In March, the *Electricity (Continuation of Supply) Act* was passed allowing 'arrest without warrant' and giving 'police free rein to smash picket lines' with many subsequently arrested at rallies and protests held against the Government actions. What became known as the 'SEQEB affair' was 'prolonged ... trailing enduring clouds of acrimony'. The government's re-election the following year marked Premier Bjelke-Petersen's 'zenith as a political leader', but the SEQEB dispute was nevertheless a sign that 'hairline cracks were beginning to appear', which would soon become a major political fault line in the State's cultural history.³²

³¹ Raymond Evans, *A history of Queensland*. Port Melbourne: Cambridge University Press, 2007 pp237 & 238. Significantly this period was also 'the first time' in Queensland that 'coal, bauxite, silver, lead, copper, zinc and uranium ... outstripped pastoral production as export earners'.

³² Evans, A history of Queensland pp239, 240, 241.

1984/85 Energy Balance

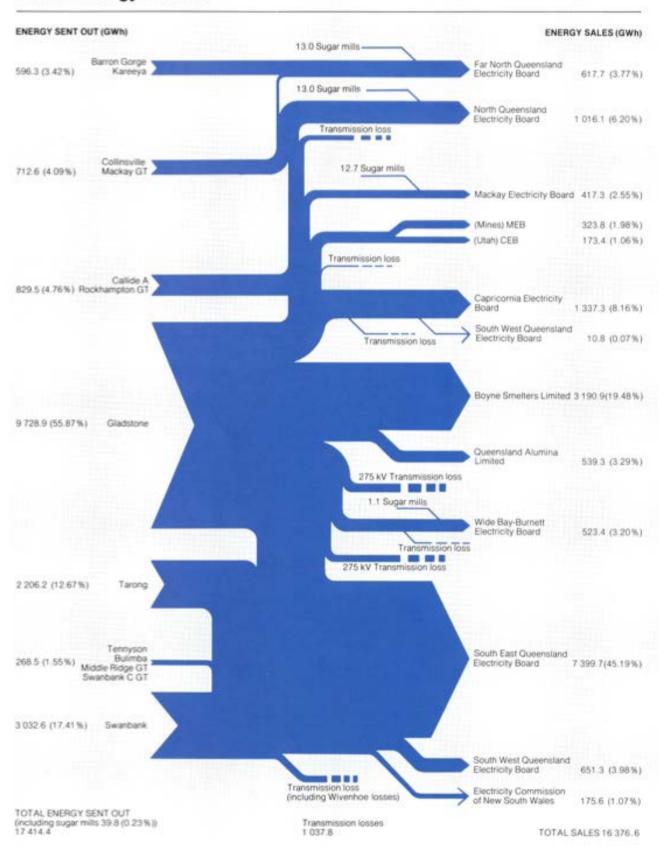


Figure 45: Queensland's 'energy balance' 1984/85. Swanbank at bottom left producing 17.41% of energy into the grid, second after Gladstone which produces 55.87%. The gas-fired Swanbank C is included with Middle Ridge, Tennyson and Bulimba. (QEC Annual Report 1985).

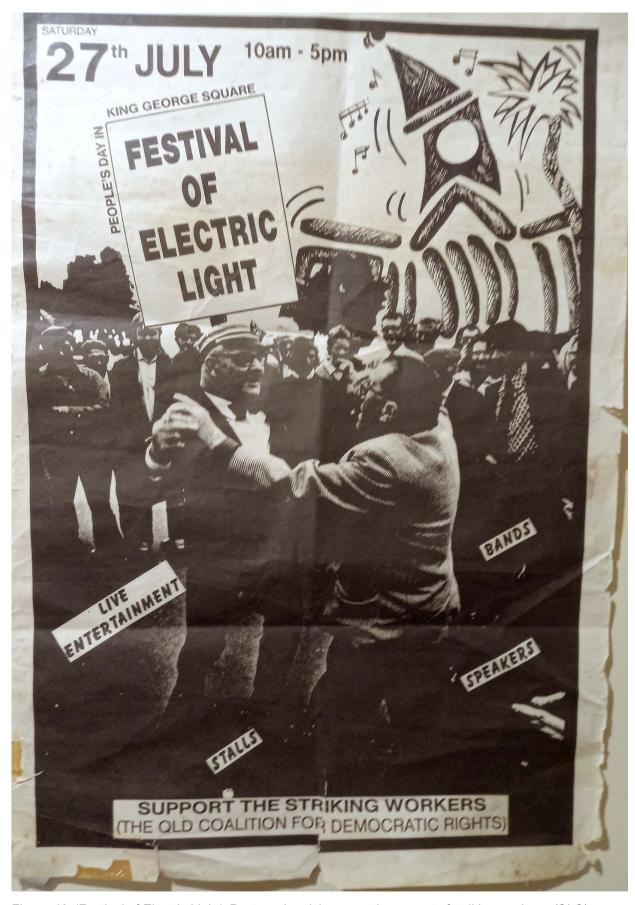


Figure 46: 'Festival of Electric Light'. Poster advertising event in support of striking workers. (SLQ).



Figure 47: Aerial view of the Swanbank site 21 February 1986. Note the green of Swanbank Lake and the Ash Dam (now considerably expanded). (Qlmagery QAP4448056).



Figure 48: Aerial view of Swanbank site 1 June 1990. (Qlmagery QAP4855061).

59| Swanbank Power Station (former) CMP

4.8 Changes

In the early 1990s Swanbank A and B were refurbished with 'state-of-the-art operating systems' installed. The Power Station hosted school excursions and by 1995 more than 'one million tonnes of coal' were 'stockpiled at Swanbank' with the boilers in Swanbank B using 50 tonnes of pulverised coal per hour. Local coal reserves were however depleted and by this time 'the New Haenke Mine at Redbank Plains was the only adjacent mine supplying coal to Swanbank.' Originally designed to 'burn the softer coals from the Ipswich measures', from 1990 the Power Station would also be supplied with Walloon series coal. By 2004, historian Robyn Buchanan records that Swanbank was using only Walloon coal (supplied by New Hope).³³

In 1997, in preparation for the implementation of the National Electricity Market, the electricity sector was restructured with Queensland connected to the national grid. In the same year Swanbank C was decommissioned and removed.



Figure 49: Aerial view of Swanbank site 10 September 2001. (QImagery QAP5900032).

In 2000 Swanbank D was commissioned but decommissioned soon after in 2003. That same year the gas-fired Swanbank E was commissioned. The highly efficient, low-emission, 385 MW combined cycle gas turbine was mothballed in 2014 but returned to service 2018 and is currently the only operating asset on site. In 2005 Swanbank A was decommissioned. Its three smokestacks were demolished on 19 August 2006; A was fully removed from site by 2007. In July 2008, Swanbank was the site of a Green Peace occupation.

³³ Buchanan, 'Ipswich Heritage Trail No.10: Blackstone', 1995; Buchanan, *Ipswich in the 20th century* p147.

^{60|} Swanbank Power Station (former) CMP



Figure 50 (a & b): Greenpeace activists at Swanbank B, July 2008. (left) 'GO SOLAR' and (right) 'RENEWABLES NOT COAL'. (Greenpeace, YouTube & Dave Hunt photo, AAP on abc.net.au/news).

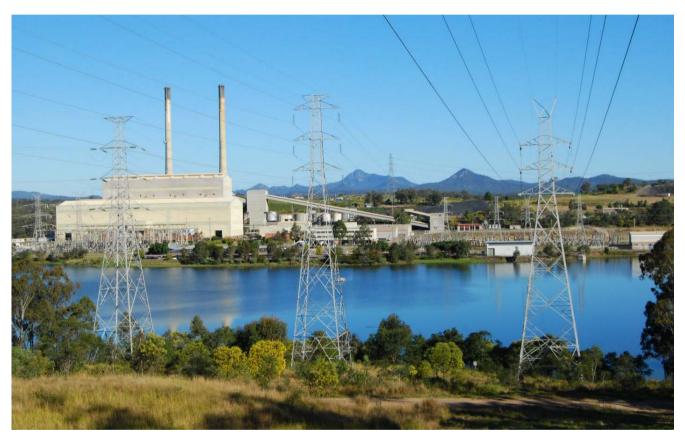


Figure 51: Swanbank in 2009 prior to the demolition of Swanbank B. (CM Dalgleish, Wikimedia Commons).

In 2010, two units of Swanbank B were closed, with a third in 2011. It was finally decommissioned by CS Energy in 2012. Most of the structures were demolished by 2015 (including its 137m high smokestacks), leaving some workshops and stores associated with Swanbank B.³⁴

4.9 Swanbank Clean Energy Hub

CleanCo Queensland Limited assumed control of the Swanbank Power Station site in 2019. Masterplanning for what is now known as the Swanbank Clean Energy Hub is underway. The gas-fired Swanbank E is currently the only operating asset on site. Construction of the BESS is about to begin.³⁵

³⁴ Nissen & Becconsall p25.

³⁵ Refer discussion of masterplanning in Section 3.

5.0 The site and its major elements

5.1 Location

The former Swanbank Power Station site, now known as the Swanbank Clean Energy Hub, is located at 305 Swanbank Road, Swanbank. The site lies some 10km southeast of Ipswich with Redbank Plains to the northeast and Ripley to the south.

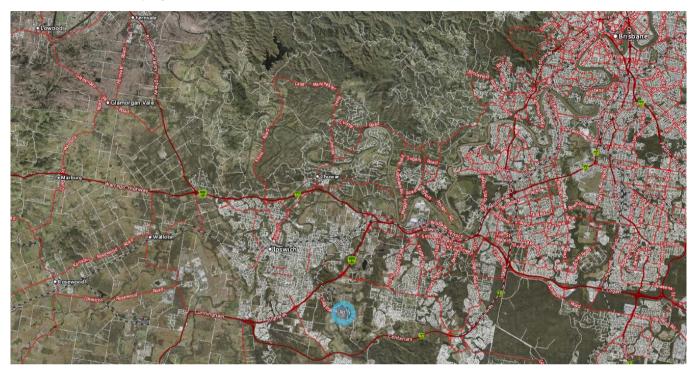


Figure 52: Swanbank is located just 10km southeast of Ipswich with Redbank Plans to the northeast and Ripley to the south. (CleanCo).

5.2 The site and setting

The 327ha site (held across multiple titles) has frontage to Swanbank Road and Swanbank Coal Road, as well as to Bundamba Creek and the former Oakey Creek (now part of Swanbank Lake). Much of the land has been considerably altered including the creeks, Swanbank Lagoon (now part of the Ash Dam), and the area around the Ash Dam itself. Other parts of the site are known to have had underground mining carried out including in the south-western section of the site (part of the former Box Flat Mine).

The site contains areas of operational and non-operational land. There is extensive infrastructure including gas, electricity, water and telecommunications. Current land uses include Swanbank E Power Station (operational gas-fired station), administration and warehousing buildings, Ash Dam (operational for sewage management purposes), heritage railway loop (operational; linked to station located on Council-controlled land), and rural residential lots (which are currently leased). There are large areas of green space, including publicly accessible green spaces around Swanbank Lake (the Cooling Water). Much of the former Box Flat No.7 site (including the former Mine Office and Mine Bath House) is currently unused.

Near neighbours include several industrial sites, but also residential areas with rural residential lots adjoining the site on the western side and nearby to the south and west the growing suburb of Ripley.

The site has important views, particularly to and from the north and south, including dramatic views to the mountains to the south. Internally views across Swanbank Lake are important, but also across the

Ash Dam (the former Swanbank Lagoon), and from the former Mine Office (located on a gentle rise). Historically the chimneys of Swanbank could be seen from Ipswich.



Figure 53: The Swanbank Clean Energy Hub site. (Google 2024).



Figure 54: View from behind Swanbank E looking southwest across the lake to the Administration Building and the sites of the former A & B and beyond to the ranges. (CleanCo).

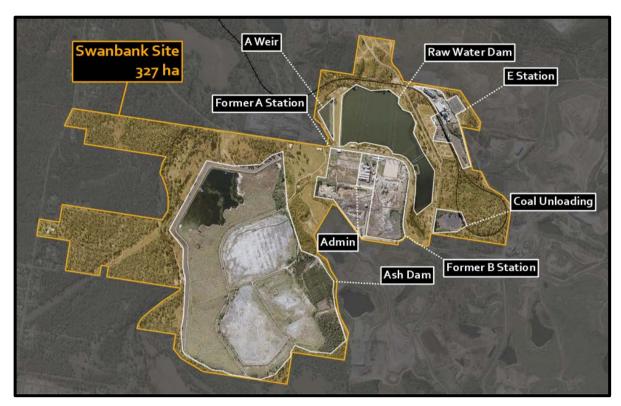


Figure 55: The site is oddly shaped reflecting its multiple titles acquired over time. Some of the sites major elements are marked. (CleanCo).



Figure 56: The site is comprised of numerous lots of land apparently acquired over time. The rural residential lots to the west of Bundamba Creek were acquired more recently as a buffer. The Box Flat lands (marked as the 36ha and 18ha lots to the north of the outline of the original Swanbank Lagoon) are believed to have been acquired after 1972. Most of the remainder is believed to have been acquired in the 1960s as part of the initial development of the Power Station site. (CleanCo).



Figure 57: Major pipelines and other infrastructure are an important part of the site. (CleanCo).

5.3 The major elements of the site

The major elements of the site are described in more detail in Section 6, but include:

- Swanbank Lagoon (historically a key waterway), now part of the Ash Dam constructed for the Power Station from the 1960s
- Bundamba Creek (and Oakey Creek) (both partly altered as part of the Power Station development)
- The Railway Precinct including the Railway Line, Station (Note: The Station is included as part of this
 precinct but is located on Council-controlled land) and Turnaround (c1881–c1970s) which pre-dates
 the establishment of the Power Station is associated with the development of the coal industry in the
 district from the late 19th century, and from c1975 (after Box Flat) transported coal to the Power
 Station
- The former Box Flat Colliery site (part) including the former Mine Office (1959) and Mine Bath House (erected by 1963) located on the former No.7 mine site (Note: The Box Flat Memorial is not located on the Swanbank site but is also considered in this report as an important component closely connected to the site)
- The original Power Station Precinct including the Administration Building, Warehouse, site of Power Station A, site of Power Station B, B Fabrication Shop, Oil Store, Power Station C, main entry, roads, and other landscaped areas (1960s/70s)
- Swanbank Lake and lakeside (cooling water for the station but also an important recreational facility (1960s–)
- Rural residential blocks to west of Bundamba Creek
- The Lookout and other viewpoints, and views (both within the site and beyond)
- Various infrastructure including gas and water pipelines, electricity pylons, roads, and other infrastructure supporting the workings of the Power Station site over time (1960s–)

6.0 The significance of Swanbank

6.1 Introduction

Cultural significance (sometimes called cultural heritage significance or cultural heritage value) is essentially the term used to describe what is important about a place. It is formally defined in Section 4 of the *Queensland Heritage Act 1992*:

Cultural heritage significance, of a place or feature of a place means its aesthetic, architectural, historical, scientific, social, technological or other significance to present generations or past or future generations.

The 'aesthetic significance', of a place, is defined to include its 'visual merit or interest'.

Article 1.2 of the Burra Charter has a similar definition of 'significance', but with some expansion:

Cultural significance means aesthetic, historic, scientific, social or spiritual value for the past, present or future generations. Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects. Places may have a range of values for different individuals or groups.

A full list of the definitions from the Burra Charter is included in Section 2, however definitions from the Charter, which are useful when considering significance include:

'Place' means a geographically defined area. It may include elements, objects, spaces and views. Place may have tangible and intangible dimensions ...

'Fabric' means all the physical material of the place including elements, fixtures, contents, and objects.

'Use' means the functions of a place, including the activities and traditional and customary practices that may occur at the place or are dependent on the place.

'Setting' means the immediate and extended environment of a place that is part of or contributes to its cultural significance and distinctive character.

'Associations' means the connections that exist between people and a place.

'Meanings' denote what a place signifies, indicates, evokes or expresses to people.

Heritage organisations and bodies also use a system of heritage criteria for determining the significance of places when considering their inclusion in heritage registers. In Queensland, the criteria adopted for places of local significance (or potentially of local significance) are set out in the DESI Heritage Guideline (*Identifying and assessing places of local cultural heritage significance in Queensland* (2020)). These are the criteria used by Ipswich City Council and are also used in this report. These criteria are:

- Historical significance (The place makes a significant contribution to our understanding of local history)
- Scientific significance (The place has potential to yield information that may make a significant contribution to our understanding of local history)
- Typological (aesthetic, architectural, historical, or other) significance (The place demonstrates the key characteristics of a type or class of place that makes a significant contribution to our understanding of local history)
- Aesthetic significance (The place has aesthetic qualities that contribute to its cultural heritage significance)
- Social and spiritual significance (The place has a strong or special association with a local community or local cultural group for social, cultural, or spiritual reasons)

These criteria are further explored in the DESI Heritage Guideline. Table 2 below sets out a summary of the main criteria.

LOCAL CULTURAL HERITAGE CRITERION

SIGNIFICANCE INDICATORS*

*Specific to the local government area



1. Historical

The place makes a significant contribution to our understanding of local history.

The place:

- 1.1 is associated with an event, phase, movement, activity, way of life, custom, process, function or land use that has made a notable or influential contribution to local history;
- 1.2 exemplifies a way of life, custom, process, function or land use that once was common but is now rare or uncommon or that has always been uncommon:
- 1.3 shows creative or technical achievement at a particular period in local history; or
- 1.4 has a special association with a person, group of people or organisation who or which has made a notable or influential contribution to local history.



2. Scientific

The place has potential to yield information that may make a significant contribution to our understanding of local history.

The place has potential to contribute:

- 2.1 knowledge that may lead to a greater understanding of an aspect of local history; or
- 2.2 knowledge that may aid in comparative analysis of similar places.



Typological: Aesthetic,
 Architectural, Historical, Other
 The place demonstrates the key characteristics of a type or class of place that makes a significant contribution to our understanding of local history.

The place exemplifies or illustrates in the surviving fabric:

- 3.1 a way of life or custom, function, process or land use, that has made a notable contribution to local history;
- 3.2 the impact of an ideology, value or philosophy on the local built environment (including cultural landscapes);
- 3.3 the work of a designer who has made a notable or influential contribution to the local built environment (including cultural landscapes);
- 3.4 a form that has made a notable contribution to the local built environment (including cultural landscapes);
- 3.5 an architectural style that has made a notable contribution to the local built environment (including cultural landscapes);
- 3.6 a construction technique or specific use of materials that has made a conspicuous or early contribution to the local built environment (including cultural landscapes);
- 3.7 the evolution or development of the key characteristics of a type of class of place; or
- 3.8 a design or form that once was common but is now rare or uncommon or that has always been uncommon.

³⁶ Department of Environment and Science Heritage Guideline: Identifying and assessing places of local cultural heritage significance in Queensland 2020, pp6–7.

LOCAL CULTURAL HERITAGE CRITERION

SIGNIFICANCE INDICATORS*

*Specific to the local government area



4. Aesthetic

The place has aesthetic qualities that contribute to its cultural heritage significance.

The place possesses or displays:

- 4.1 beautiful attributes;
- 4.2 natural aesthetic quality:
- 4.3 picturesque or evocative attributes;
- 4.4 expressive attributes;
- 4.5 landmark quality;
- 4.6 streetscape contribution;
- 4.7 symbolic meaning;
- 4.8 artistic value;
- 4.9 design merit (including in architectural design, landscape design, technological design or construction technique); or
- 4.10 a high level of craftsmanship.



5. Social and Spiritual

The place has a strong or special association with a local community or local cultural group, for social, cultural or spiritual reasons.

The place:

- 5.1 is important to a local community as a landmark, marker or signature;
- 5.2 offers a valued customary experience;
- 5.3 is a popular meeting or gathering place;
- 5.4 is associated with events having a profound effect on a local community or cultural group;
- 5.5 is a venue for ritual or ceremony;
- 5.6 symbolically represents the past in the present; or
- 5.7 has an essential community function leading to special attachment.

6.2 The significance of Swanbank—previous assessments

There have been a number of previous assessments related to potential First Nations values. These have not been sighted but are referenced in the 2023 Turnstone (Arrighi & Strong), report regarding the assessment of cultural landscape (First Nations) values at Swanbank. The Turnstone report identifies several areas of potential significance. Areas identified as of potentially high significance are—

- The area near the (c1960s) Waterfall Waterhole on Bundamba Creek (marked red on Figure 70 below reproduced from the Turnstone report)
- The Lookout area in the northern part of the site (marked red)
- The former Logan's/Swanbank Lagoon (now part of the Ash Dam)

Other potential areas of significance (including the rural residential blocks to the west of Bundamba Creek) are considered to have some potential cultural/environmental values (marked yellow).



Figure 6: Areas of potential significance.

RED: High

YELLOW: Medium

to High

PURPLE: Unlikely

GREEN: LOW TO NON-EXISTENT

Figure 58: Areas of potential significance. (Cultural Landscape Values Assessment, Figure 6).

The site is not currently listed on the Ipswich Heritage Register or Queensland Heritage Register.

As far as is known, no previous formal assessments of the historic values of the site have been undertaken, although the site (or parts of it) has been recognised by its inclusion in a number of publications (including a number of Ipswich City Council heritage publications and the Engineering Heritage Queensland Walk/Drive).

Recent work associated with the masterplanning, while not providing formal assessments of significance, has made some direct connections particularly to social significance, historical significance, and aesthetic significance.

The preliminary Social Assessment notes that 'much of the communication regarding the Swanbank Clean Energy Hub has included an acknowledgement of the precinct's 60-year history with the resource industry, including the Box Flat Memorial site'. It notes also that Swanbank Lake has 'been identified through Cleanco's stakeholder engagement processes as a place of historic cultural significance' for its historic recreational use. (p39)

The Community Masterplan identifies a number of elements on the site as of importance to the community. These include:

- Swanbank Lake including the lake itself and associate picnic areas
- Mine Bath House
- Box Flat Memorial (albeit not within the site boundary, but historically closely associated with the Swanbank site)
- Lookout
- The natural 'amphitheatre' near the railway station
- Green spaces e.g. potentially the Ash Dam and other parts of the site

The Community Masterplan also identifies a number of community uses of various parts of the site as important including areas to recognise Traditional Custodians, gathering places, and active pathways.

The Masterplanning Framework preserved the Mine Bath House for interpretative purposes and retained the Railway Station and line. Many of the 'greener' parts of the site including those much altered as part of the Power Station use (including Swanbank Lake and the Ash Dam) were identified for potential community use in Option 2.

A number of the site's buildings are considered in the Condition Report. Whilst not commenting on cultural heritage significance, the report concludes that the buildings considered (including the Administration Building, Warehouse, B Station Fabrication Workshop) are broadly in good useable condition. The Mine Office, Mine Bath House and Diesel Generator Shed Building are identified as likely to be costly to adaptively reuse and are recommended for demolition.

6.3 The significance of Swanbank—some preliminary thoughts

Swanbank—part of the Queensland power story

Swanbank was one of a group of large power stations erected in Queensland in the 1960s and 1970s. It was an important and very visible part of the post-WWII development in Queensland in particular the strategic development of the electricity grid as it was transferred from local to state administration, and from the early 1960s the development of a state-wide electricity network. The co-location of the Power Station next to the Box Flat Colliery was similarly strategic and duplicated in the Central Queensland coalfields at the Callide Power Station (1965) and Collinsville Power Station (1968).

Although many significant elements have been removed from the site (including the early Power Stations, particularly A & B and their dramatic chimneys), the site remains quite readable as a Power Station site. This includes—

- The ongoing association with power generation
- The early core of buildings associated with Swanbank A & B and the early development of the site in the 1960s and 1970s, including the Administration Building, Workshop, B Fabrication Workshop, and their landscape setting including the main entry and forecourt. Although no physical evidence of Swanbank A of B remains, the original site planning with A to the west of the Administration building and B to the east remains quite legible
- Other areas associated with the early development of the Power Station including the major incursions into the environment—Swanbank Lake and the Ash Dam
- The original, key but ultimately tragic association with the adjoining Box Flat Colliery, and the raison d'etre for the location of the Power Station remains vivid in the landscape and the imagination in the former Mine Office and the remarkable Mine Bath House. The connection with the Memorial on the northern side of Swanbank Road is important, particularly given that the former Box Flat No.7 lands which now form part of the Swanbank lands, contain the remains of miners who died in 1972

A very real 'coal connection' is maintained by the existence of the Railway Station, loop line, and turn around on the northern side of Swanbank Lake.

Power generation, like dams and other infrastructure, was seen as important State business with projects promoted as evidence of the development and increasing wealth of the State. As at Swanbank, many such places were developed as places of recreation and scenic beauty. Conversely, as part of the 'power play' of the State narrative, Swanbank would also be an important site of political power wrangling in the 1980s.

Swanbank and the Ipswich connection

The city and district have a long and proud association with industry, with coal at its heart, but overlaid by the story of the railways, manufacturing, power generation and other industries. At Swanbank, these threads are part of the story of the site from the 19th century (with coal mined in the valley and transported to the main line via the Swanbank railway), followed by the pairing of the coalfields and the Power Station from the 1960s.

Industry in Ipswich was also typically a very visible part of the city. In the case of Swanbank, this was particularly so. Although located just outside the city, Swanbank's dramatic chimneys were an important local landmark, a part of the skyline and the view south to the mountains for several decades, and from the highway, particularly at night, the brightly lit complex marked that home was near.

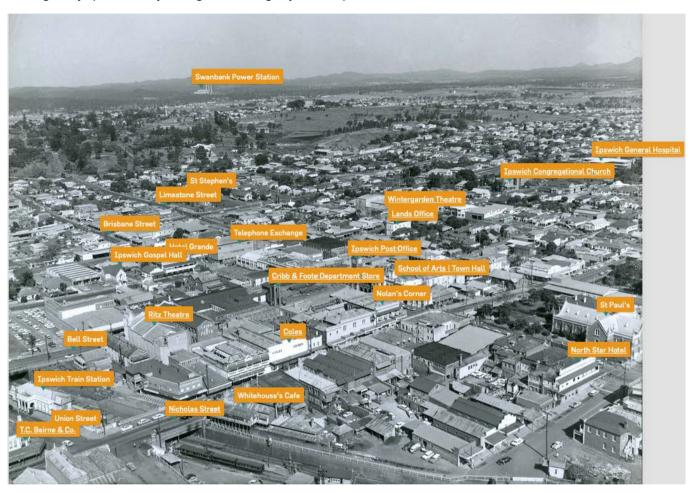


Figure 59: Circa 1960 panorama from Ipswich CBD looking towards Swanbank Power Station and the ranges. The photo held in the Council collection signposts a number of the local landmarks within the CBD and also, beyond the city proper, the Swanbank Power Station is highlighted, and clearly shown as a very visible element within the greater Ipswich townscape. (Whitehead & Sons, Picture Ipswich).

The 1972 Box Flat disaster has also meant the community retains very particular ties to the site. Its very proximity to the city meant that many in the local community saw, heard and felt the explosions on 31 July.



Figure 60: The Box Flat Memorial. 25th anniversary service, 31 July 1997. (Picture Ipswich).

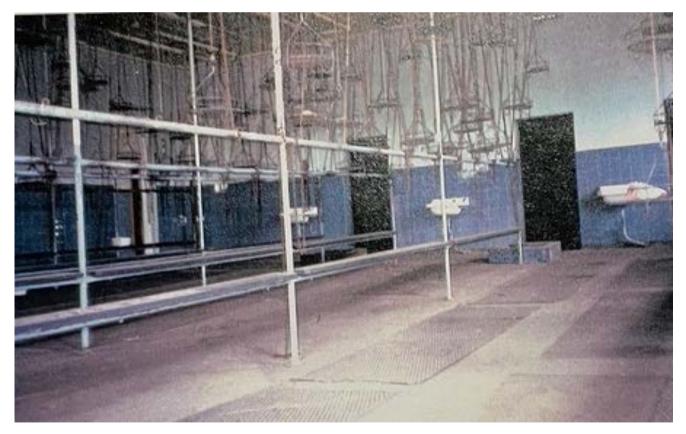


Figure 61: The Mine Bath House (interior photographed c1993) survives as part of Box Flat No.7. (Feasibility Study for the Ipswich Regional Mining Museum and Heritage Centre, c1993, copy held Ipswich Historical Society).

The recreational use of the lake and lakeside facilities, particularly in the earlier decades of the life of the Power Station has meant that Swanbank has an important place in the cultural memory of Ipswich (see for example stories from the Community Masterplanning).





Figure 62 (a & b): 'Many Ipswich residents have fond memories of socialising at the Swanbank Lake in the 70s and 80s' (Reimagining Swanbank). The Queensland Times appeared to visit there often, with a large number of photographs of people frolicking in and around the lake held in the Picture Ipswich collection. (above right) The ceremonial cutting of the cakes (in swimming togs) with the Power Station Cooling Towers behind. (above left) In the 1970s Swanbank also featured as a Murray Views postcard. This view looking from the lakeside carpark to Swanbank B & Swanbank A. (Murray Views; Queensland Places).

The more distant cultural memory also recalls the 19th and early 20th century connections with the early development of Ipswich, including James Ivory's Bundambah Dairy on Logan's Lagoon and later James Foote's Swanbank Dairy on Swanbank Lagoon. Physical evidence of those connections on the site (apart from the ghost of the lagoon) appears to have been erased by the 1960s works (if not before), but is evident in the historical record, including via Picture Ipswich (which includes for example transcribed copies of Ivory's diaries) and Trove (where newspaper and other reports chronicle the dairy).

Swanbank Lagoon & Bundamba Creek

The natural environment has been much changed. Originally cleared for dairying, the combination of coalmining and Power Station use has wreaked havoc, particularly on waterways. Nevertheless, the Swanbank Lagoon (now part of the Ash Dam) and Bundamba Creek remain of high historical, social and scientific significance.

Aesthetic values

The industrialised landscape has its own aesthetic. In some cases, this is the dramatic march of the electricity pylons across the site or up a hillside, or the scale of buildings, or even the uncompromising interference in the landscape. These are all present at Swanbank and are an important feature of this site, but also of much of the broader industrialised landscape of lpswich.

There are several key panoramic views from the site, most notably across the site to the mountains to the south. There are also several important views within the site, including from across the lake to the station proper, from the former Mine Office east to the station buildings, from the Administration Building across the lake, from the former Swanbank B site across the lake, and from the Ash Dam across the site and to the south.

6.4 The significance of the major elements of the site—a preliminary assessment

This section considers the significance of the major elements of the site including how particular elements (built and landscape elements, views etc.) might demonstrate the story of Swanbank (or part of it) or other particular value. As before this section breaks the site down into several key areas/zones/ precincts and within those, into a number of individual 'elements'. This broadly reflects previous descriptions of the site in other masterplanning documents. Many if not all of the elements need to be read in relation to one another, within their precincts and beyond—particularly so on an industrial site such as at Swanbank where the historical process of the production of electricity made the site a conglomeration of intersecting assembly lines.

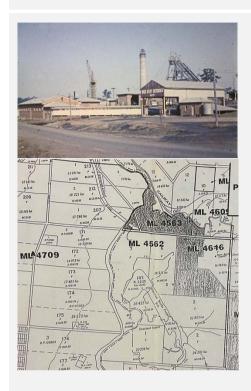
Table 2: Inventory of site elements

Image	Name of element	Comment
THE SITE		
	Swanbank Road & Swanbank Coal Road	The site comprises some 337ha. Made up of a number of different lots apparently acquired over time from c1960s (full history of acquisition of site not known (for future study)). Eastern part of site believed to have been acquired c1960s. Part of the lands to the east of Bundamba Creek originally formed part of the Box Flat Colliery site (including sites of former Mine Office and Bath House). Swanbank Lagoon (see below) is now part of the Ash Dam. The rural residential lots were more recently acquired and whilst providing an important buffer, are not historically part of the Swanbank site and are not considered as significant as the remainder of the site. Refer separate elements below
Correct channel of the control of th	The original Swanbank Lagoon	Originally a naturally formed lagoon. Also known as Logan's Lagoon and Josey's Lagoon. The area became known as Swanbank after James Foote acquired land in the area in the late 19 th century and named it after his wife's birthplace in Scotland. The lagoon now forms part of the Ash Dam; see below (Refer CleanCo image with distinctive shape of the lagoon

Image	Name of element	Comment
		marked; see also Swanbank Heritage Trail, Ipswich City Council) Although now part of the Ash Dam, the lagoon remains of high historical significance
	Bundamba Creek (and Oakey Creek)	Bundamba Creek wraps what is now the western edge of the Ash Dam. Rural residential lots more recently acquired by Swanbank located along western edge of creek. Part of alignment of creek altered including formation of sandstone weir (see photo). On the northern side of Swanbank Road, Oakey Creek was altered as part of the forming of the 'lake' Although altered Bundamba and Oakey Creeks remain key elements of the site
	Swanbank Road	Not known when surveyed. Refer also Old Swanbank Road. Requires further investigation
	Swanbank Coal Road	Not known when surveyed. Requires further investigation
THE RAILWAY PRECINCT		
500	Bundamba–Swanbank Colliery rail line	First leg of line built c1881 for mine owner Lewis Thomas from the main line at Bundamba to his coal mine at Blackleg Gully; 1km extension to West Moreton Colliery at Swanbank in 1886; extended 3km to New Swanbank Colliery in 1895. Line purchased by Qld Govt Railways on 1 Jan 1897. (QPSR website)
		Line extended 5km in 1975 (after Box Flat mine no longer supplying coal) to supply power station, 'although [the site's] conversion to natural gas meant the line saw little coal traffic in later years' (Nissen & Becconsall)

Name of element Comment **Image** Now regularly used for special (steam) rail services operated between Swanbank and Racecourse Stations by Qld Pioneer Steam Railway Railway line an integral part of the coal/rail story of the site both prior to and during Power Station life (Diagram from Steam to Swanbank (1995))Swanbank Railway Station constructed 1903 (Nissen & Station Becconsall) although not clear if this is the original location (or was (Swanbank Coal Road) moved as part of the 1975 (Note: Located on extension?); now home to QPSR Council-controlled land) and terminus for QPSR services (QPSR website) An important part of the coal/rail story of the site both prior to and during Power Station life Railway turnaround Large turnaround off Swanbank Coal Road. Believed constructed as (off Swanbank Coal Road) part of 1975 extension of rail to accommodate transporting of coal from Central Qld to Power Station (post Box Flat Colliery explosion; see above) An important part of the coal/rail story of the site and significant 'amphitheatre' element in the landscape

BOX FLAT COLLIERY PRECINCT



Former site of Box Flat Colliery

Swanbank Road

Swanbank A was the first major power station in SEQ to be located next to a coal field supply. Box Flat Colliery (which occupied sites either side of Swanbank Road, parts of which now form part of the Swanbank site) provided coal directly to the adjacent Swanbank Power Station until the 1972 disaster (Nissen & Becconsall) after which the mine was closed and sealed. The Colliery originally opened in 1897 at Parkhead, Patrick & Ella Streets. Swanbank. What was known as Box Flat Extended No.5 & No.7 Colliery commenced at Swanbank Road in 1940. Part of the colliery site (No.7) now forms part of the Swanbank site (including the former Mine Manager's Office and Bath House; see below)

Site of very high social and historical significance. The colocation of the Power Station and the Colliery was integral and this part of the site retains important evidence of that coal connection. The connection with the 1972 tragedy is also important. Although the memorial is located on part of the site of the former No.5 across Swanbank Road, the site of former No.7 is also a burial ground and of very high significance

(Photo c1965 Picture Ipswich; detail from map c1970s FAI Mining Ltd Boxflat freehold lots for disposal shaded; Ipswich Historical Society Collection)

Name of element

Comment



Box Flat Memorial 252–254 Swanbank Road (located on former No.5 site; not formally within Swanbank site) The memorial honours the 18 men who died as a result of the massive underground explosion at the mine on 31 July 1972. 17 men were killed, including 8 Rescue Brigade members; another later died of his injuries. The mine was later closed and tunnel entrances sealed with the 14 men killed underground entombed. (Nissen & Becconsall) After underground mining ceased, a small park was formally set aside as a memorial. The sandstone sculpture by local artist Tom Farrell was originally located on the former Mine Office, but later relocated to the park. (Swanbank Heritage Trail, Ipswich CC)

The site now includes memorial plaques of the widows next to their husbands

A site of very high social significance; see also Community Masterplan

(Photo Picture Ipswich)



Former Box Flat Colliery Office (including carport and garden setting) Swanbank Road 1959 Single storey brick building with garage attached erected 1959 as the office for the Box Flat Colliery. (Picture Ipswich, Whitehead Studios) Located on southern side of Swanbank Road opposite the memorial. Later addition to north. Site plan 1966 (Karl Langer, UQFL) shows the office with bowling green to the east and proposed club house and swimming pool to SE. Together with the memorial and Bath House remains as evidence of the key colliery association and of the 1972 mine disaster

Refer also Aurecon report re proposed demolition

(Photo 1959, Picture Ipswich)

Name of element

Comment



Former Box Flat Colliery Bath House (Mine Bath House)

Erected by 1963





Erected between 1940 and 1963 (see Picture Ipswich photo 1963). Marked on 1966 site plan as 'Lamp Room and Bathroom'. Appears to have been located in proximity to the entrances to No.7 mine located between the Mine Office and Bath House

Aurecon report: brick structure with steel trussed roof and 'super 6' roof sheeting with concrete floor. 2 more recent additions to southern side

Exterior of building been painted an unfortunate colour

Recommended for demolition by Aurecon but together with the Box Flat Memorial and former Office, forms important evidence of key Box Flat connection, including the co-location of the mine and Power Station, but also of the miners themselves including those who died in 1972

As a building type, the Bath House is also highly interesting in itself and quite possibly rare. C/f for example with Quarantine Station bath houses. Although some fittings have been removed, it is otherwise remarkably intact and legible.
Asbestos at least to ceilings? Photo from c1993 report (copy held Ipswich Hist.Soc.) shows large central room before removal of fittings (metal framing and baskets on pulleys from the ceiling)

Remarkable and poignant

C/F Masterplan potential Interpretation Centre (MP Options 1 & 2)

Image	Name of element	Comment
ORIGINAL POWER STATION BUILDING PRECINCT		The Masterplan broadly envisages this precinct as continuing a 'power use'
	Swanbank A (former site of) Swanbank Road	Swanbank A was the first major power station in SEQ to be located next to a coal field supply (Box Flat) and the first outside Brisbane. Commissioned progressively from 1966 by SEAQ to total of 6 x 66MW sets supplying power to 110kV high voltage network in SEQ. Decommissioned 2005; 3 x 133m high concrete smokestacks demolished 2006; fully removed from site by 2007. (Nissen & Becconsall; Ipswich CC Heritage Trail) Although no physical evidence of A itself remains, the original site planning with A to the west of the Administration building and B to the east remains legible Photo 1968 shows A at top of image, B under construction. (Thomis p104)
	Administration building Swanbank Road c1964; c1970	Erected c1964 as part of the early development of the site. Includes some very intact, original utilitarian interiors (including stairwell, large cafeteria, bathrooms etc). Possible addition c1970 (Aurecon suggests was built in two stages; early photographic evidence suggests not; but see Specification c1970 by Macdonald Wagner & Priddle (engineers) and HS Macdonald (held SLQ) who also appear to have undertaken the first stage Building located between stations A & B forming the 'heart' of the Power Station with the main entry from Swanbank Road on axis with the building. Original sweeping landscape planning appears to be

Name of element

Comment



very intact. (See for example 1968 photo Thomis p104) Large cafeteria space was presumably an important social hub within the 24-hour complex. Very charming 'museum' at ground floor entry

See Aurecon report and recent plans for refurbishment

Building and setting an important part of the early development of Power Station site, particularly given the loss of Swanbank A & B



Warehouse / Offices Swanbank Road c1964

Substantial steel framed brick and corrugated iron building with sawtooth roofed. Located to rear to Administration building. Large industrial scaled volumes. Part of early development of site (i.e. apparently associated with A). Refer Specification c1964 by Macdonald Wagner & Priddle (engineers) and HS Macdonald (held SLQ). Shown in 1968 photo with B under construction. (Thomis p104)

Appears quite intact including fittings. Also some early machinery and other equipment apparently stored here (requires specialist assessment)

Building forms an important part of the early development of Power Station site, particularly given the loss of Swanbank A & B



Swanbank B (former site of)

Swanbank Road



Swanbank B (also coal fired) was under construction by 1968 and commissioned by SEAQ 1971–3. Comprised 4 x 120MW units, 'then the largest generating units in the state'; supplied power to new 275kV transmission grid in SEQ, 'predominantly burning black coal mined locally (including Oakleigh, Jeebropilly and Acland)'. 2 units closed 2010; 3rd unit closed 2011;

Name of element Comment **Image** finally decommissioned 2012 by CS Energy; most of structures etc. demolished by 2015 (including its 137m high smokestacks), leaving some workshops and stores (see below) (Nissen & Becconsall) B located to east of Admin. building, with site sitting above level of A and Admin. building. Slab remains. Proposed battery site (BESS) Photo 1970s with B centre, A at right (Picture Ipswich). 2009 view (Dalgleish) shows B after A demolished Although no physical evidence of B itself remains, the original site planning with A to the west of the Administration building and B to the east remains legible. Construction of BESS an important continuing use and evolution of the site **B** Station Fabrication Substantial industrial building Shop (Boilermaker located on same (upper) level as former B. Large single volume with Workshop) some machinery and equipment in Swanbank Road situ. Kitchen, locker room and toilets intact Refer also Aurecon Report



toilets intact
Refer also Aurecon Report
Building forms an important part of
the early development of Power
Station site, particularly given the
loss of Swanbank A & B

Image	Name of element	Comment
	Oil Store	Located on upper level near B Station Fabrication Shop. Not inspected internally. Aurecon describes as reinforced concrete block structure, steel roof beams, metal roofing, external brick walls Believed part of the early development of Power Station site
	C Station Diesel Generator Swanbank Road	Located to E of Bath House. 30MW open cycle gas turbine plant commissioned 1969 by SEAQ 'to provide quick starting peaking power and emergency black start power into the existing 110kV grid'. Decommissioned by CS Energy (Nissen & Becconsall) Photo 1972 (Flickr)
	Swanbank Power Station site D (former site)	37MW open cycle gas turbine commissioned by CS Energy in 2000 as peaking plant. Operated until 2003; then decommissioned and removed (Nissen & Becconsall)
	Swanbank Power Station E 116 Swanbank Coal Road	Gas-fired power station commissioned 2002, mothballed 2014, returned to service 2018. Low-emission, 385 MW combined cycle gas turbine. Only operating asset currently on site. Important as part of continuing use and evolution of the site. Site includes some original water coolers (Cleanco image)
	Main entry from Swanbank Road	Fences, gates etc appear recent, but location of entry on axis with the Administration Building is important. Sweeping landscape from entry to front of Administration Building an important formal element (which was replicated, albeit in simpler form, on other parts of the site)

Image	Name of element	Comment
	Gatehouse	Part of the early phase of development of the Power Station site
	Ancillary structures	Historic photographs indicate a number of ancillary buildings (large and small) have also been removed from the site. Some smaller ancillary buildings remain including at the entry to the B precinct and within the precinct
	Carpark	Several low, metal framed, covered structures provide carparking to the east of the main entry and on the north side of Swanbank Road. According to Aurecon erected c1985

REVERSE PARKING ONLY

Name of element

Comment



Landscaping c1960s

Landscaping including gently curving formed roads (with curbing) and paths with large, grassed areas to the front and some plantings (including oleanders) along other internal roads. Industrial sites such as Swanbank often included landscaping of at least the 'front of house' portions of a site. Some evidence indicates architects Bligh Jessup Brentnall designed a scheme in 1972. Note also road signs and early lighting to the front forecourt and centrally located specimen tree. A picnic area is located to the northeast of the Administration Building

The change of level to the B precinct is accommodated by a gently sloping curved road, with pedestrian access by a stair





THE ASH DAM

Ash Dam

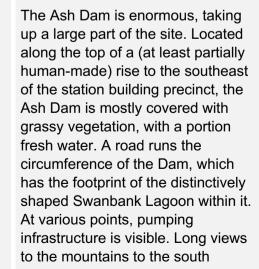




Image	Name of element	Comment
		Although the dam presents major environmental challenges, community masterplanning clearly identified the 'green' potential of this area See also entry on Swanbank Lagoon
SWANBANK LAKE PRECINCT		
	Swanbank Lake / Cooling Waters	For a number of years Swanbank's cooling waters lake was used as a regular place of recreation by the Ipswich community. The Queensland Times regularly photographed swimmers and picnickers in the 1970s and 80s. The lake formed part of the water infrastructure for the power stations with water pumped 7km from Berry's Lagoon, the level maintained by water from Moogerah Dam. Cooling water was used for the station's main condensors, reported in the 1995 as using up to 20 million litres/day. (Swanbank Heritage Trail, Ipswich CC) The lake is now closed for swimming but the lakeside areas (including grassed picnicking areas with carparking) remain open to the public (see below) Identified as of high social significance by Community Masterplan
	Lakeside recreation & picnic areas	'The attractive picnic area and swimming reserve' was described as 'an unusual oasis among the dominating industrial landscape'. (Swanbank Heritage Trail, Ipswich City Council). Refer Community Masterplan. With the lake, identified as of high social significance.

as of high social significance

Image	Name of element	Comment
RURAL RESIDENTIAL LOTS		
	Rural residential lots to west of creek	More recent additions to the Swanbank lands, the lots are identified in the Turnstone report as having some potential environmental values. Whilst providing an important buffer, based on current information no significant historic values have been identified
VIEW POINTS		
	The Lookout off Swanbank Coal Road	Magnificent views across the Power Station site (including the march of the pylons) and beyond to the ranges. High social values; see Community Masterplan Also high cultural values; see Turnstone report (CleanCo photo)
	Other views	Other important views from and of the site include from other sections of 'Lookout' ridge, from the Ash Dam, from the elevated B site, from the former Box Flat Mine Office, from Swanbank Road including from the main entry, from Swanbank Coal Road across the lake, from the upper levels of the Administration Building to other parts of the site including across the lake (Panoramas c2023, CleanCo)

Image	Name of element	Comment
OTHER INFRASTRUCTURE		
	Electricity pylons	The often large and very visible infrastructure provides important evidence of the working nature of the former Power Station site and the movement of energy and materials both within the site and beyond
	Gas pipelines etc.	
	Water pipelines and other infrastructure	These include massive pipelines such as Berry's Lagoon Pipeline and SEQ recycled pipeline as well as smaller infrastructure on the site

6.5 The significance of Swanbank—in summary

The former Swanbank Power Station site is comprised of a number of inter-related constituent parts. It combines environmental, historical and social components from ancient times to 19th century dispossession of lands, and the building of farms around Logan's/Swanbank Lagoon, through to the rich social history of coalmining from the 1960s, with the Swanbank Power Station fed by the adjoining Box Flat Colliery. The most recent exit of coal, historically so integral to the site itself and the surrounding district, brings Swanbank into a new future facing phase as the Swanbank Clean Energy Hub.

On the face of the current investigations, Swanbank is a site of considerable significance (social, historical, typological and aesthetic significance, and scientific potential (i.e. could yield information that may make a significant contribution to our understanding of local history)). It may well threshold as a place of State significance, although more work would need to be done to make a proper determination. Further investigations are recommended. Future work to more deeply consider First Nations values of the site will underpin all layers of the story, as will the greater plans for continuing community engagement as the site continues to evolve.

7.0 Heritage Recommendations

7.1 Introduction

The Swanbank Clean Energy Hub is a working industrial site, currently undergoing significant transformation in a long history of innovation and change. While looking to continue its industrial use (within the new green energy parameters), CleanCo's masterplanning for the former Swanbank Power Station site also looks to provide for new uses including a number of community facilities and increased community access.

The masterplanning identified significant cultural values on the site that were further explored through this CMP, which also identified additional historic values and layers of story associated with the site. Preliminary recommendations for future management of these values is a critical element of the CMP. To ensure that these are meaningful and informed by CleanCo vision and masterplanning, draft preliminary recommendations were developed and circulated in an earlier Draft of this report, and subsequently workshopped with CleanCo staff.

7.2 Workshopping recommendations with Swanbank/CleanCo staff

CleanCo has adopted a co-design approach to many aspects of its Masterplan, and the development of this CMP therefore sought to build on this inclusive approach by holding a workshop to explore some of the Heritage Options for the site. This workshop was held with CleanCo staff on 15 May 2024. The aim was to refine, identify and prioritise the previously circulated Heritage Recommendations for the CMP.

As discussed earlier in the report, the masterplanning process identified several elements on the Swanbank site has holding significant cultural values for the community (see in particular Community Masterplan, Masterplanning Framework and Landscape Values (First Nations) Report), in particular:

- Swanbank Lake (and associated picnic areas)
- Mine Bath House
- Box Flat Memorial (albeit this is not located on the Swanbank site)
- Ash Dam (Swanbank Lagoon)
- The Lookout
- Railway Precinct (noting the Station is located on Council-controlled land)
- Bundamba Creek

The CMP's preliminary heritage assessments (outlined in the previous section) broadly agreed with those earlier findings, but in more formally assessing the historic values of the site as a whole, has expanded the articulation of those values and considers new ones (notably in relation to the Power Station's original building precinct). The site has been considered as a whole, but also as a number of inter-related areas/zones/precincts, to broadly align with those used in the masterplanning. The following were identified in the CMP as holding historic heritage values:

- The Swanbank site itself including Swanbank Road, Swanbank Coal Road, Swanbank Lagoon (now part of the Ash Dam), Bundamba Creek, Oakey Creek (now part of Swanbank Lake)
- The Railway Precinct including the Bundamba–Swanbank Colliery Railway Line, Swanbank Railway Station (Note: The Station is included as part of this precinct but is located on Council-controlled land) and Railway Turnaround (c1881–c1970s)
- The Box Flat Colliery Precinct including the former Mine Office (1959) and Mine Bath House (erected by 1963) located on the former No.7 mine site, and the Box Flat Memorial (albeit this is not located on the Swanbank site)
- The original Power Station Building Precinct including the site of Swanbank A, Administration Building, Warehouse, site of Swanbank B, B Fabrication Shop, Oil Store, Power Station C, main entry, roads, and other landscaped areas (1960s/70s)
- The Ash Dam (including the Swanbank Lagoon)

- Swanbank Lake Precinct including the lake and lakeside recreation and picnic areas (1960s-)
- Rural residential blocks to west of Bundamba Creek
- The Lookout and other viewpoints, and views (both within the site and beyond)
- Various infrastructure including electricity pylons, gas and water pipelines, roads, and other infrastructure supporting the workings of the Power Station site over time (1960s–)

To gain a deeper understanding of the significance of these site elements, the Workshop aimed to connect these site elements with key narratives. The draft CMP had already identified some key historical themes, notably:

- Coal mining
- Coal power
- Power politics and protests
- Box Flat disaster
- Community recreation
- Renewable futures

The Workshop more specifically sought to identify the community stories and attachments that motivate interest in looking after the site for the future. It looked at identifying which parts of the site can best illustrate and help to conserve those stories. To deepen this understanding of associated values, the Workshop adopted a story-based approach ³⁷ to identify how Swanbank/CleanCo staff perceive and understand the site and its elements. The workshop asked staff to identify:

- The stories about Swanbank they feel are most important
- Those parts of the site they feel best illustrate or represent those stories
- How these elements might be considered in decisions about future site use and adaptation, to ensure that the stories can still be told

In working through these questions, we also asked CleanCo staff to think about whether some stories were more important than others, and whether there are important stories that had not been represented through the identified heritage elements. Staff were asked to suggest whether they thought some parts of the site were more able to tell the stories of the sites than others, and which of those site elements would be important to keep. And finally, they were asked whether the stories they identified as most important could be told through individual site elements, or whether there was an overarching story at Swanbank that might need to be told through the site as a whole.

Workshop outcomes

The workshop held with CleanCo staff revealed a depth of knowledge and significant pride in the history of the site among employees. Participants contributed views about values of the site that strongly aligned with the historical heritage assessment, and further enhanced appreciation and understanding of the associated values. It is clear that the history of the site is important to CleanCo, and that the story that should be maintained and celebrated is one that recognises the innovation, transition and transformation of the site in a way that respects both the history of Swanbank and the aspirations of CleanCo for the 21st century. This establishes a very strong foundation for adaptive reuse and interpretation at the site, which is consistent with the aspirations of the CMP.

The workshop participants recognise the value of core elements of the site especially the Swanbank Lake and its picnic areas, the Mine Bath House, Box Flat Memorial, the Ash Dam, Bundamba Creek and the Railway Precinct. Among the strongest narratives to emerge were:

 Dispossession and displacement of First Nations peoples and a desire to rebuild trust especially around the Swanbank Lagoon

³⁷ Pocock, Collett & Baulch, 'Assessing stories before sites: identifying the tangible from the intangible', 2015.

^{90|} Swanbank Power Station (former) CMP

- Community connections to the site, including Swanbank as an intergenerational employer of local people
- **Danger** associated with the industry including Box Flat Disaster, but also a number of other deaths and injuries
- **Innovation** at Swanbank including Story of electrification and new technologies, and a shift to environmental stewardship
- Workers rights, including introduction of safety legislation and codes that followed the Box Flat Disaster, fluctuations in employment and the role of the unions
- Reliability Keeping the power on during floods Swanbank provided power for Brisbane
- Recreation—at the lake and the open cut mine

In terms of telling these stories CleanCo staff recognised the way in which some heritage elements could really convey parts of these stories, such as how the Bath House emphasises both the physical nature of work, the number of employees and the rhythm of shift work; the importance of respecting both the Box Flat Memorial and the area where people remain interred since the disaster; and technical operations of the mine and power production.

What was less obvious to CleanCo staff was the value of the administrative buildings and associated structures at the centre of the site. These parts of the site are still used, and in many ways are regarded as somewhat outdated facilities rather than heritage. This is a common challenge for conserving future heritage. By and large heritage professionals and the public more readily recognise value in places that have the appearance of being historic. In the United Kingdom, for instance, heritage is even defined as being more than 30 years old. This poses a major problem because many significant sites currently in use, or taken for granted, can be neglected or destroyed before they 'come of age' or their significance is fully realised. This is particularly risky for sites that are undergoing radical transformation, as is the case of Swanbank. The case of the chimneys at Swanbank is a good example; once they were no longer in use, a rational decision was made to demolish them. But the significance of these chimneys as a marker of the Swanbank Power Station in the landscape, and more broadly as a measure of proximity to home for travelling Ipswich residents has been lost. Similarly, the well-worn everyday buildings that remain on the Swanbank site, may seem insignificant or not of heritage interest. While this was the starting point for the workshop participants, a brief discussion quickly led to a realisation that these remaining functional parts of the site have additional and complementary stories to tell about the site and how it has changed.

The Administration Building provides a good example of how heritage values can be recognised through stories. The building houses a large, now disused, cafeteria that makes apparent the scale of the earlier operation and its large workforce, compared with the small number of people now working on site. Significantly too, in sharing their knowledge of the cafeteria and the building more broadly, it became apparent that the Administration Building was one of the few parts of the site where women were employed or even accessed the site. While buildings like the Bath House were highly—and likely exclusively— masculine spaces, the Administration Building and some of the stores were much more likely to have been spaces that women occupied and ran. The canteen workers and administrative or clerical staff were much more likely to be women. In other words, it was women who fed and paid the workforce of men. Significantly, too with so much change to the site, these buildings remain a visible element of earlier significant phase of the Power Station. Their physicality demonstrates the scale of earlier operations that is not as effectively conveyed simply by recording and writing of histories.

The kinds of insights that emerge from engaging with both long- term and newer members of staff at CleanCo enrich and add to this strong history of innovation and transformation. Ensuring that these kinds of conversations are explored before decisions are made about future use of any of the site elements will be a critical element of achieving good outcomes from the CMP.

³⁸ While, A, 'The state and the controversial demands of cultural built heritage: modernism, dirty concrete, and postwar listing in England', 2007

^{91|} Swanbank Power Station (former) CMP

7.3 Recommendations

Heritage significance and listing

Although preliminary in nature, this report has identified that the former Swanbank Power Station/Swanbank Clean Energy Hub holds significant heritage values. It is recommended that those values be considered as part of the future management of the site, including future masterplanning.

The site is not currently listed in either the Ipswich City Council Local Heritage Register or in the Queensland Heritage Register. However, the site is considered to threshold for local heritage listing, and potentially state heritage listing. In the longer term this should be investigated with the relevant agencies.

It is further recommended that the site be considered as a whole, to tell the remarkable story of adaptation and innovation into the 21st century, rather than nominating individual and potentially fragmented heritage elements.

Future detailed assessments

Given the high-level nature of this CMP, more detailed assessment of the site and its major elements should be considered in the future to further refine the understandings of the site. In particular, consider more detailed assessments of the:

- Colliery Precinct including the Mine Bath House and Mine Office
- Power Station Building Precinct in particular the Administration Building
- Railway Precinct

More detailed documentary investigations are recommended to investigate and scope records held at Swanbank (particularly W drive, but also the library/archive), as well as records held at Queensland State Archives. In the case of the former Colliery site and associated buildings, the company archive should also be investigated for relevant material.

Although the site has been much altered by the combination of Power Station, Colliery, and agricultural use, future work should consider a more detailed investigation of potential evidence of First Nations occupation and use of the site, particularly around Bundamba Creek.

In addition to identifying the documentary evidence and detailed assessment of physical heritage, the site holds substantial social significance. Involving present and former CleanCo staff and other invested community members in story-based discussions will be an invaluable part of identifying significance of the sites.

Management of heritage assets

Given the identified values of the site, it is recommended that

- The CMP be made available to all relevant parties, including adding the report to CleanCo website
 and providing it to Ipswich City Council for inclusion in Picture Ipswich
- The heritage values of the former Swanbank Power Station be managed in accordance with the Burra Charter and its associated practice notes³⁹, in association with the CMP
- Heritage specialists are engaged to provide advice when works are planned for site elements identified as holding particular value

³⁹ The Australia ICOMOS (the Australia National Committee of the International Council on Monuments and Sites) Charter is the established national best practice for the management of places of cultural significance. The Charter, known as the Burra Charter, sets out the principles and processes of conservation, with an emphasis on a logical and disciplined approach to the conservation of places. The full Charter can be viewed at www.australia.icomos.org/publications/

Interpretation and future use

The masterplanning indicates that the future of the site will provide for community access and use, and identifies the need for interpretation including proposals for museums or information centres.

An interpretation plan for the entire site, will ensure consistency of message, protect heritage values and avoid unnecessary duplication.

Recommendations for other CleanCo Energy sites

For other Power Station and related sites managed by CleanCo, future masterplanning should ideally consider heritage values (First Nations and non-Indigenous) from the earliest stages of masterplanning. As these sites have all been in long government ownership (although often with changing management structures), relevant records are likely held on site (including in old drives such as W drive at Swanbank), but also within Queensland State Archives. An early scoping of these records is recommended.

8.0 Implementation and UniSQ collaboration

A formal partnership between CleanCo and UniSQ could offer a means through which to deliver many aspects of the CMP, and contribute more broadly to the documentation, recording and interpretation of Swanbank history and heritage.

It is envisaged that this might be achieved through a suite of research activities and projects that contribute to various aspects of the Masterplan. There are benefits to both CleanCo and UniSQ in developing such collaborations, and the establishment of a Memorandum of Understanding (MoU) could assist the implementation plan.

The CMP project, including workshops with UniSQ researchers and CleanCo staff, have identified a number of projects that can deliver elements of the CMP and contribute to the Masterplan. This recognises a range of projects from undergraduate activities that could be implemented immediately at little or no cost, through to multidisciplinary research projects that would require direct funding or funding in partnership with grant bodies.

8.1 Suggested research projects

The CMP has revealed the significance of Swanbank Power Station in an Australian history of energy generation and electrification, workers rights and the shift to a carbon neutral futures. It also has a rich history of community connection, and recreational use. These histories should be better documented and more widely recognised. A CleanCo–UniSQ research partnership could achieve this through projects that investigate:

- Cultural and social histories of Power Generation in Queensland and/or Australia
- Infrastructure in the landscape: impacts and attraction of postwar 'progress'

In addition to these broad national histories, there is significant scope to develop substantial research projects that focus more directly on the site and which draw on diverse disciplinary expertise at UniSQ. This includes,

- An oral history of the Box Flat Mine Disaster
- An environmental history of the coal-fired power station
- · Cataloguing of company archives to underpin other historical research
- An environmental anthropology of resource use and relationship with the community
- Creative oral history and archives: visual art and experiential place-making
- Environmental Law projects on water quality, contaminated land, compliance
- · Creation of digital twin of the site, including its heritage assets, to aid site maintenance and monitoring

Some smaller scale research projects could also contribute directly to CleanCo's Masterplan, particularly with regard to interpretation of the site:

- · Archaeological survey of First Nations sites
- · History of First Nations workers
- Challenges of conserving large-scale industrial heritage
- Historical research and/ or detailed heritage assessment of individual site elements including:
 - Bath House
 - Administration Building
 - Colliery Precinct including the Mine Bath House and Mine Office
 - o Power Station Building Precinct in particular the Administration Building
 - Railway Precinct

8.2 Resourcing research

A partnership with UniSQ can provide access to a broad suite of research specialist staff and student researchers.

Funded research

Large scale research projects of 2 to 5 years in duration would typically be undertaken by established research teams with support of external funding. These projects could be undertaken in partnership with Swanbank. There is an opportunity to apply for Australian Research Council (ARC) Linkage Project Funding with CleanCo as the industry partner. This would require some cash and in-kind contributions from CleanCo, but with significant additional research funding coming from the Commonwealth Government.

CleanCo might also directly sponsor some more discreet research projects, including specialist studies, such as the creation of a digital twin of the Swanbank site using drone survey and 3D modelling.

Focused in-depth projects can also be undertaken by postgraduate researchers, sometimes in association with larger projects, supervised by established researchers. Postgraduate research projects typically run as 2 or 4 years full-time, for Masters or PhD, respectively, and offer highly cost-effective means of achieving detailed quality research. A stipend for selected Masters or PhD projects is costed at about \$40k per year for three to four years, and might be funded entirely or in part by CleanCo, depending on alignment with priorities.

Some of the smaller projects could be undertaken as part of undergraduate programs including independent studies (usually a trimester of 11 weeks) or Honours research projects (9 months). Offering a small award or scholarship (somewhere between \$1,000 and \$10,000) could incentivise students to work on projects that CleanCo wants to prioritise.

Initial no/low cost partnerships

In the first instance, to build these relationships, UniSQ undergraduate students could be supervised jointly between UniSQ and CleanCo to work on discreet small scale, low risk⁴⁰ and low cost⁴¹ projects that connect with existing course content and assessment. These include:

- Heritage significance assessments for site elements
- Developing parts of the interpretation plan (e.g. exhibition planning)
- Recording oral histories (e.g. with former workers)⁴²
- Writing blog content for the CleanCo Website
- Conducting drone survey or 3D modelling of site elements
- Developing creative works to record, interpret and communicate significant elements of the site, and using art as a catalyst for community engagement (e.g. photography, installations and performance).

⁴⁰ Safety on site is a major consideration. If it is not possible to facilitate direct site access for students, especially while the site remains in development, it may be possible for some activities to be completed off site e.g. from adjacent public land.

⁴¹ Students may require site access and possibly transport from UniSQ campuses (Toowoomba, Springfield and Ipswich) to Swanbank which will incur a small cost.

⁴² To minimise physical and social risk, student projects will be managed through existing courses. This will ensure that research with human subjects has ethics approval and that the selection of interviewees is appropriate to student projects. For example, a project with workers or recreational users would be relatively low risk interviews, but interviews with bereaved families associated with the Box Flat disaster would require a more experienced researcher team.

8.3 Initial projects

Low/no cost student projects

- Visual arts students to photograph and/or draw parts of the site. If site access is not possible, they
 may be able to produce artworks from viewing sites such as the picnic areas near the lake or the
 lookout. Some assistance with transport to the site may be required, and transport/guidance on the
 site if this can be facilitated
- History students to record oral histories with current and former workers. These could be undertaken
 in person or via video and recorded. It would be helpful if CleanCo could identify prospective
 interviewees
- Initial archival audit of community records: a small grant would allow payment of a student to work with a UniSQ archive researcher to develop an initial framework for cataloguing and access to company records

Research Student projects:

- Box Flat Disaster Oral History Project—Honours and/or Master project with small amount of funding to support student research
- A funded PhD project on the social history of Swanbank with a focus on the transformation and innovation of Power Generation

10.0 References

AUSTRALIA ICOMOS,

The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance 2013 (the 'Burra Charter'); see http://australia.icomos.org/wp-content/uploads/The-Burra-Charter-2013-Adopted-31.10.2013.pdf

'Practice Notes—Understanding and assessing cultural significance'; 'Developing Policy'; 'Preparing studies and reports – contractual and ethical issues'; see

https://australia.icomos.org/publications/burra-charter-practice-notes/#bc

www.australia.icomos.com.au

Birds of a feather: a guide to the beauty and variety of birdlife found in the environs of Swanbank Power Station. Queensland Electricity Commission with the assistance of the Queensland Ornithological Society, c1991.

BLIGH JESSUP BRENTALL & PARTNERS, 'Specification of work to be done and materials to be used for the Landscape Development Stage 2 at Swanbank Power Station for the Southern Electric Authority of Queensland, Brisbane', 1972. (held SLQ)

Material from CLEANCO Queensland.

Arup, Swanbank future energy & hydrogen precinct. A 2050 vision, masterplan. Framework and options, 20 January 2023.

Aurceon, Swanbank Building Condition Assessment. Swanbank Building Condition Report, July 2023.

CleanCo Queensland Limited, Reimagine Swanbank. Community Engagement Report, March–May 2023.

Max Hardy Consulting, Swanbank Clean Energy Co-Design Panel Process Report. Report for CleanCo, 25 July 2023.

SMEC, Swanbank Clean Energy Hub-preliminary social assessment. December 2023.

Swanbank Co-design Panel Report (as written by the panel for CleanCo), 24 June 2023.

Swanbank future energy precinct. Overview, 2023. [including some historic aerial photos etc)

'Swanbank. Geology and sub-surface profile'.

Swanbank. Site maps.

Turnstone Archaeology (Nadia Arrighi & Michael Strong), Swanbank—Masterplan. Assessment of Cultural Landscape Values for CleanCo Qld, August 2023.

Material from CLEANCO Queensland website.

https://cleancoqueensland.com.au

including 'Swanbank E Power Station', 'Swanbank celebrates 50 years of power generation and charges towards a clean energy future', Annual Reports including 2023.

Material from CLEANCO REIMAGINE SWANBANK website,

https://engagement.cleancoqueensland.com.au

including 'Reimagine Swanbank. Community Engagement Report March–May 2023'; 'Preparing for the co-design process'.

Maree CUNNINGTON, 'Inside the Power Station: Allegory and the dance of represented ideas', PhD by creative works, QUT, 2004.

DEPARTMENT OF ENVIRONMENT SCIENCE & INNOVATION (Queensland).

See generally www.qld.gov.au/environment/land/heritage

Heritage Guideline. Assessing cultural heritage significance. Using the cultural heritage criteria. Brisbane: Department Environment & Heritage Protection, 2013.

https://www.qld.gov.au/ data/assets/pdf file/0030/66693/using-the-criteria.pdf

Heritage Guideline. Conservation management plans. Brisbane: Department of Environment & Heritage, 2015. https://www.qld.gov.au/_data/assets/pdf_file/0023/68018/gl-conservation-management-plans.pdf

Heritage Guideline. Developing Heritage Places. Using the development criteria. Brisbane: Department of Environment & Heritage Protection, 2013.

https://www.qld.gov.au/ data/assets/pdf_file/0019/67114/gl-heritage-development.pdf

Heritage Guideline. Identifying and assessing places of local cultural heritage significance in Queensland, 2020.

https://www.qld.gov.au/__data/assets/pdf_file/0024/129804/gl-places-local-cultural-heritage-significance-qld.pdf

Raymond EVANS, *A history of Queensland*. Port of Melbourne: Cambridge University Press, 2007. IPSWICH CITY COUNCIL,

Buchanan Architects, Expanded Ipswich Heritage Study. Ipswich City Council. 1997.

'Coal Mining Then & Now. Heritage Trail', 2019.

Ipswich Heritage Study Consultancy Team, University of Queensland, *Ipswich Heritage Study*. Ipswich City Council, 1992.

Robyn Buchanan, Ipswich Heritage Trails no.9 (1994) & no.10 Blackstone (1995).

Robyn Buchanan, *Ipswich in the 20th century*. Ipswich: Ipswich City Council, 2004.

Picture Ipswich including photographs, the transcribed diaries of James Ivory 1862–1883 (held Mitchell Library) and other material. https://www.pictureipswich.com.au

Material held by IPSWICH HISTORICAL SOCIETY,

FAI Mining Ltd, 'Plan of freehold property (for disposal) Boxflat Area, Plan 2'.

Ipswich Development Corporation & John Farrington, Feasibility Study for the Ipswich Regional Mining Museum and Heritage Centre, c1993.

James Semple KERR, *The Conservation Plan: a guide to the preparation of conservation plans for the places of European cultural significance*. 7th edition. Australia ICOMOS, 2013.

John KERR,

'The Redbank–Bundamba Loop Line', *Bulletin of the Australian Railway Historical Society*, vol.19 no.368 (June 1968): 129–147.

'Coal mines served by the Brisbane-Ipswich Railway', *Bulletin of the Australian Railway Historical Society*, vol.21 no.391 (May 1970): 94–103.

MACDONALD, WAGNER & PRIDDLE (Chartered Engineers) and HS MACDONALD,

'Specification or works and services to be done and materials required in and about the erection and completion of an administration building, workshop and store at Swanbank Power Station for the Southern Electric Authority of Queensland; contract no. 64/22', c1964. (held SLQ)

'Specification or works and services to be done and materials required in and about the erection and completion of an extension to the administration block at Swanbank Power Station for the Southern Electric Authority of Queensland; contract no. 70/20', c1970. (held SLQ)

Peter MARQUIS-KYLE & Meredith WALKER, *The Illustrated Burra Charter, Good Practice for Heritage Places*. Australia ICOMOS LTD. 2004.

Alan MURRAY, *No Easy Field. Ipswich Coalmining 1920–2000* edited by JB Murray. St Lucia: University of Queensland Press. 2010.

NEWSPAPERS including The Queensland Times, Courier-Mail, Moreton Bay Courier.

Judith NISSEN & Brian BECCONSALL, 'Central and North Ipswich Engineering Heritage: A walk/drive tour', (Engineering Heritage Queensland), 2022.

C POCOCK, D COLLETT & L BAULCH, 'Assessing stories before sites: identifying the tangible from the intangible', *International Journal of Heritage Studies*, vol.21, no.10 (2015): 962–982.

QUEENSLAND GOVERNMENT, Geological Survey of Queensland—accessed via GSQ Open Data Portal www.geoscience.data.qld.gov.au in particular

Map No.1 Geological Map of the Ipswich Coal Field 'to accompany report by Walter E Cameron BA Assistant Government Geologist, 1899', Qld Govt (GSQ publication No.147, Map No.1).

'Ipswich Coalfield Map 2 Sheet 5', 20 chains to an inch Geology Map, first edition, (GSQ publication No.271, Map 2, Sheet 5).

Ipswich Coalfield Bundamba–Dinmore Mining District Sheet 3, 10 chains to an inch, Geology Map, first edition, 1954 (GSQ publication No.279, Sheet 3).

QIMAGERY (Queensland Government), Photographic Collection.

https://qimagery.information.qld.gov.au

QUEENSLAND HERITAGE REGISTER (Department Environment Science & Innovation). https://apps.des.gld.gov.au/heritage-register/

QUEENSLAND PIONEER STEAM RAILWAY website. https://www.qpsr.org

QUEENSLAND PLACES. https://www.queenslandplaces.com.au/places

QUEENSLAND STATE ARCHIVES.

Swanbank Power Station interior and exterior (part of series Power Stations and Personnel; photographic proofs and prints (S103).

Swanbank construction dispute information 1965–1970 (2 parts).

Swanbank Power Station B.

Engagement of labour (Swanbank Powerhouse Project) Mitchell Engineering Limited Award; Metal Trades Employers' Association (State) (application for award), 1965.

STATE LIBRARY of QUEENSLAND,

Blogs including—

'Edward Gustavus Campbell Barton, Electricity Pioneer', 19 April 2016.

https://www.slq.qld.gov.au/blog/edward-gustavus-campbell-barton-electricity-pioneer

R Hillier, 'La Fetts—"SEQEB Scabs", 17 March 2017.

https://www.slq.qld.gov.au/blog/la-fetts-seqeb-scabs

Simon Miller, 'Electricity city: trams and power in Brisbane', 21 July 2014.

https://www.slq.qld.gov.au/blog/electric-city-trams-and-power-brisbane

Henry Reed, 'Researching the history of electricity in the State Library collections', March 2022.

https://www.slq.qld.gov.au/blog/researching-history-electricity-state-library-collections

'The coming of the Electric Light to Queensland', 28 April 2017.

https://www.slq.qld.gov.au/blog/coming-electric-light-queensland

Other material including—

Electricity ephemera collection (including Swanbank and other power stations).

'Magnificent Makers', exhibition December 2017-June 2018.

Photographic Collection.

Queensland Energy Museum Collection (previously part of The Queensland Electricity Museum).

Malcolm THOMIS, A history of the electricity supply industry in Queensland. Brisbane: Boolarong, 1985.

TROVE. www.trove.nla.gov.au/

Aidan WHILE, 'The state and the controversial demands of cultural built heritage: modernism, dirty concrete, and postwar listing in England', *Environment and Planning B: Planning and Design*, vol. 34, no. 4, pp. 645–63.

RL WHITMORE,

Coal in Queensland: The first 50 years: A history of early coal mining in Queensland. St Lucia: University of Queensland Press, 1981.

Coal in Queensland: The late 19th century. 1875 to 1900. St Lucia: University of Queensland Press, 1985.

Coal in Queensland: From federation to the twenties. St Lucia: University of Queensland Press, 1991.



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info@unisq.edu.au