



# St John the Evangelist Church, Wallerawang

## Statement of Heritage Impact

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## Executive Summary

RPS has been instructed by Centennial Ivanhoe Pty Ltd to prepare a Statement of Heritage Impact which considers the visual and vibration impacts of proposed upgrading of Centennial Coal's Lidsdale Rail Siding on St John the Evangelist Church, Wallerawang ("St Johns Church"), an item listed on the NSW State Heritage Register. This report has been requested by the Director-General, Planning as part of a Project Approval under Section 75J of the *Environmental Planning & Assessment Act 1979*.

This investigation comprised reviewing the following documents:

- Visual Impact Assessment prepared by RPS (2012); and
- Environmental Noise Assessment prepared by Hatch Associates (2012).

The Visual Impact Assessment directly considered any visual impacts upon known heritage items in the vicinity, including St Johns Church. However, whilst the Noise Assessment did not specifically address vibration for St Johns Church, it did address a location known as Lot 2, Main Street, Wallerawang, opposite St Johns and slightly to the west and closer to the proposed activities. It also generally addressed proximity in relation to potential damage caused by vibration. The results of this report were then extrapolated and applied to St Johns Church.

In addition to the desktop assessment, a visual inspection of the external portions of the Church and the general locality was undertaken on 10 July 2013. Photographs were taken of the church and its locality. These are included in this report.

As a result of the desktop assessment and visual inspection, it is concluded that there will be no adverse visual impacts or adverse impacts as a result of vibration regarding this project. However, in order to assess any future claims of damage, the following precautions are recommended:

### **Recommendation 1 – Tree planting**

It is recommended that tree planting on the Lidsdale Siding site is retained and consideration given to supplemental plantings to maintain and improve a low visual impact.

### **Recommendation 2 – Baseline condition report**

It is recommended that Centennial give consideration to commissioning a structural engineer's report to provide a baseline model of the condition of St Johns Church. Alternatively, a 3D laser scan of St Johns Church should be undertaken to provide a three dimensional image of the church in its current condition in order to quantify any damage that may occur in the future. It is recommended that the adopted procedure be commenced prior to construction occurring and then not more than three months after construction. The results should then be compared to determine if any change has occurred due to vibration.

## 1.0 Introduction

RPS has been instructed by Centennial Ivanhoe Pty Ltd (Centennial) to prepare a Statement of Heritage Impact which considers the visual and vibration impacts of proposed upgrading of Centennial Coal's Lidsdale Rail Siding on St John the Evangelist Church, Wallerawang ("St Johns Church"). This report has been requested by the Director-General, Planning as part of a Project Approval under Section 75J of the *Environmental Planning & Assessment Act 1979*.

### 1.1 Study Area

St Johns Church is located on Main Street, Wallerawang, opposite Centennial Coal's Lidsdale Siding site office. It is described as Lot 1 in Deposited Plan 372255 in the Local Government Area (LGA) of Lithgow, with the property measuring approximately 4,000 m<sup>2</sup> (refer **Figure 1**).

### 1.2 Development Proposal

It is proposed that the current Lidsdale Siding coal loading railway and facility be upgraded to add an additional line and shunt, as well as various additions to the coal loading components. The project was approved by the Minister for Planning and Infrastructure under s75J of the *Environmental Planning & Assessment Act 1979* on 3 May 2013 with various conditions. In regard to heritage, the following condition was attached at Clause 24 of Schedule 3:

*"Within 12 months of the date of this approval, the Proponent shall, in consultation with the owners of the St John Evangelist Church, Main Street, Wallerawang, investigate and report on the likely visual and vibration impacts of the project on the Church building and its setting. These investigations must:*

- (a) Be prepared by suitably qualified and experienced persons approved by the Director-General;*
- (b) Provide recommendations to mitigate any impacts, other than those considered to be negligible;*
- (c) Summarise in a report provided to the Director-General along with the Proponent's response to the recommendations in (b) above, including a commitment and a timetable for their implementation."*

The following plans have been reviewed to inform the preparation of this Statement of Heritage Impact:

- RPS, 2012, Visual Impact Assessment, and;
- Hatch, 2012, Environmental Noise Impact Assessment.

### 1.3 Methodology

This Statement of Heritage Impact has been prepared in accordance with *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance (Burra Charter)* and associated Guidelines as well as best practice standards set by the NSW Heritage Branch. Best practice guidance followed in this report includes *Assessing Heritage Significance* (Heritage Officer (former), 2001) and *Statements of Heritage Impact* (Heritage Office and Department of Urban Affairs & Planning (former), 1996, revised 2002).

The Environmental Assessment (RPS, 2012) submitted to the Department of Planning & Infrastructure has also been consulted where appropriate.

## I.4 Authorship

This report has been prepared by RPS Cultural Heritage Consultant, Deborah Farina and reviewed by RPS Senior Cultural Heritage Consultant, Erin Williams.

Assistance from the Friends of St Johns, Wallerawang, Elizabeth Roberts of the Heritage Branch Library, Parramatta and Rob Hunt of Centennial Ivanhoe is also gratefully acknowledged.





**WARNING**  
 No part of this plan should be used  
 for critical design dimensions.  
 Confirmation of critical positions  
 should be obtained from RPS Newcastle.

**Legend**

- Project Area
- Drainage
- Contours

**N**



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TITLE: FIGURE 1: LOCALITY MAP  
 WITH PROJECT AREA

LOCATION: WALLERAWANG

DATUM: (GDA 94)  
 PROJECTION: MGA ZONE 56

DATE: 8/08/2013  
 PURPOSE: HERITAGE

J:\08\Centennial\All Jobs\117929 St John's Church  
 LAYOUT REF:110 - Drafting\MapInfo\Workspace\Arch  
 VERSION (PLAN BY):A4 (DF -NW)

CLIENT: CENTENNIAL COAL  
 JOB REF: 117929

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## 2.0 Legislative & Statutory Planning Context

The following section identifies the principal legislation which governs the protection and management of non-Indigenous heritage and provides an outline of statutory obligations. The statutory planning context in the form of state and local level statutory planning documents and the heritage requirements set out within these documents are also explained.

### 2.1 *Heritage Act 1977*

Natural, cultural and built heritage is protected in NSW under the *Heritage Act 1977*. The Act is administered by the Heritage Branch (formerly called the Heritage Office), a State government agency within the Office of Environment and Heritage, Department of Premier and Cabinet.

The Act creates the State Heritage Register (SHR) which provides permanent protection for a heritage item or place. Items of State heritage significance are defined as a place, building, work, relic, moveable object or precinct which is of historical, scientific, cultural, social, archaeological or natural significance to the State (Section 4A(1) of the Act). The effect of listing is that a person cannot damage, destroy, alter or move an item, building or land without approval from the Heritage Council.

The Heritage Council of NSW, constituted under the Heritage Act 1977, is appointed by the Minister and responsible for heritage in NSW. The Council reflects a cross-section of community, government and conservation expertise with the NSW Heritage Branch being the operational arm of the Council.

The 2001 NSW Heritage Manual Update, published by the NSW Heritage Office (now 'Heritage Branch') provides guidelines for 'Assessing heritage significance'. The Manual includes specific criteria for assessing heritage significance and the significance assessment within this report has been completed in accordance with these guidelines.

### 2.2 *Environmental Planning & Assessment Act 1979 (EP&A Act)*

The EP&A Act provides the statutory framework for environmental planning and assessment for NSW. In determining land use planning proposals the Act requires that environmental impacts are considered, including the impact on cultural heritage.

Assessment documents prepared to meet the requirements of the EP&A Act including Reviews of Environmental Factors (REF), Environmental Impact Statements (EIS) and Environmental Impact Assessments (EIA), are required to consider cultural heritage amongst other matters.

Section 76A specifies development that requires development consent (as opposed to 'complying development' and 'exempt development'). Section 76A (6) (f) states that development cannot be classed as 'complying development' if the land to be developed is subject to an Interim Heritage Order (IHO) or listed on the SHR, or listed on an LEP heritage item schedule.

Statutory planning documents such as Local Environment Plans (LEP) and Regional Environmental Plans (REP) typically contain provisions for heritage where relevant.

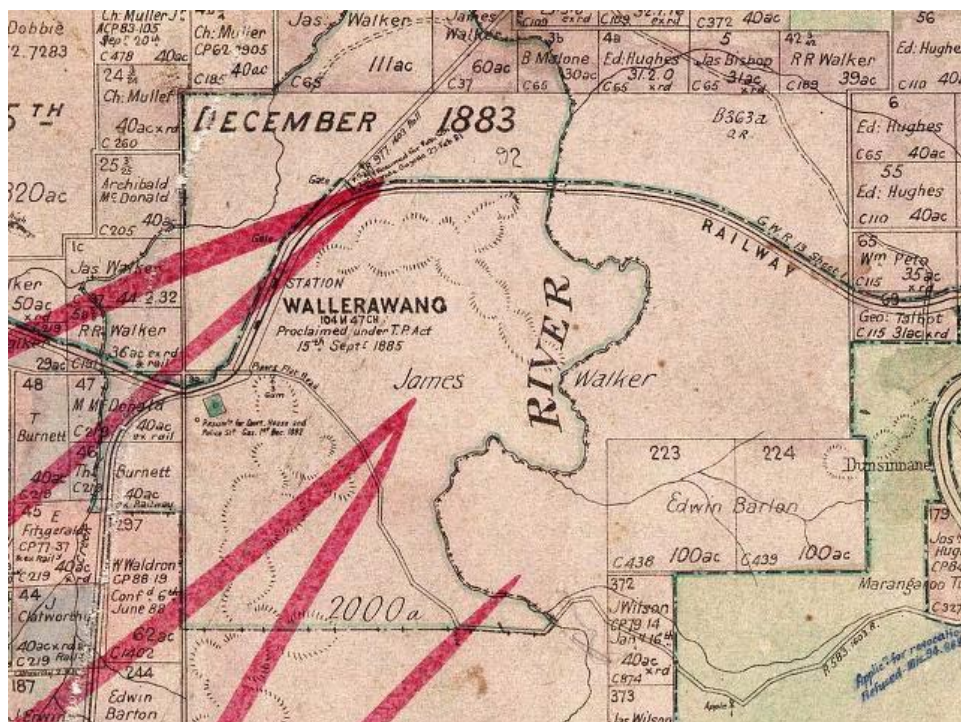
## 3.0 Historic Context

### 3.1 Historical development of the Wallerawang area

The Wallerawang area was initially surveyed in 1823 by James Blackman, after whom the nearby locality of Blackman's Flat is named. The name, "Wallerawang" was first mentioned in the log of Surveyor McBain, who noted that they crossed a stream of that name which flowed south-east with an open plan of sandy soil and good pasture on the south side of the rivulet (Conybeare & Morrison, 2006:13).

The first known non Aboriginal settler in the Wallerawang area was James Walker, a Scottish naval officer, who lived on 2,000 acres. It is probable that he squatted on the land from around 1824 prior to it being granted to him in 1839 (Parsons, 1967). He was also granted a retinue of convicts and grazed both sheep and cattle on the property. After the grant, he named the station "Wallerawang" (later becoming "Wallerawang), a Wiradjuri word meaning "place of plenty of water and wood" (Conybeare & Morrison, 2006:9, 13).

He returned to Scotland in 1834 to marry his cousin, Robina, and had four children, at least one of which was born at Wallerawang. His overseer, Andrew Brown, owned the adjoining property of Coerwull near Lithgow and was the patron of the Bowenfels National School. Brown also assisted Walker in finding properties in the area along the Castlereagh River (Conybeare & Morrison, 2006:9, 12).



**Figure 2: Detail from Lidsdale Parish Map of 1892 showing James Walker's holding at Wallerawang (Courtesy Department of Lands)**

Wallerawang Station became a major stopping place for travellers between Sydney and Mudgee. One of the most notable was Charles Darwin, who stayed at the station in 1836 and offered the following description in his journal:

*"...I left the high road and made a short detour to a farm called Wallerawang, to the superintendent of which I had a letter of introduction from the owner in Sydney. Mr Brown had the kindness to ask me to stay the ensuing day, which I had much pleasure in doing. This place offers an example of one of the large farming or rather sheep*

*grazing establishments of the colony. Cattle and horse are however in the case, rather more numerous than usual, owing to some of the valleys being swampy and producing coarse pasture. The sheep were 15,000 in number, of which the greater part were feeding under the care of different shepherds in unoccupied ground, at a distance of more than 100 miles beyond the limits of the colony... Two or three flat pieces of ground near the house were cleared and cultivated with corn, but no more wheat is sown than sufficient for the annual support of the labourers employed on the establishment. The usual number of assigned servants here is about 40, but at the present time there are rather more. Although the farm was well stocked with every requisite, there was an apparent lack of comfort and not even a single woman resided here” (Darwin, 1839).*

Darwin’s description paints a common picture of large farming establishments of the time. The owner did not always live on the property; it was mainly housed by servants. Conditions were rough with the sole purpose of the property being to raise and graze stock for market. A monument commemorating Darwin’s visit now stands on Barton Avenue, near Lake Wallace, at Wallerawang (see **Figure 2**).



**Figure 3: Memorial to Charles Darwin, commemorating his visit to Wallerawang in 1833 (Courtesy, State Library of NSW)**

After Walker’s death in 1856, the property reverted to his wife, who then held the licences for 16 stations totalling 4,700,000 acres. James and Robina’s youngest daughter, Georgina, married a neighbour, Edwin Barton, who was the surveyor for the Western Railway. Among other accomplishments, Barton oversaw the construction of the Zig Zag Railway at nearby Clarence. Following Robina’s death in 1867, Edwin and Georgina took over the running of the Wallerawang Estate and changed the name to Barton Park.

The Barton Park estate remained in the Barton family until around 1948, when two of the three remaining Barton descendants were murdered at the property by a disgruntled employee. It was sold by the last surviving family member. It passed through several hands, including the Joint Coal Board in 1949 and various sheep farmers until the pollution from the Wallerawang Power station began affecting the stock in the late 1950s and early 1960s. When the needs of the power station required the flooding of the Cox’s River in the 1980s, the original Wallerawang House/Barton Park House was demolished to create Lake Wallace. The stones from the original house were utilised in the creation of the Wallerawang Sailing Club clubhouse and a display room at nearby Eskbank House (Conybeare Morrison, 2006:16).

The settlement of the village of Wallerawang, however, did not occur until the construction of the railway through Wallerawang in 1870, bringing with it railway workers and settlers. The small settlement was centred around the railway station, where travellers to Bathurst had to alight at Wallerawang to join Cobb & Co coaches. In 1859, Robina Walker had provided a sandstone building to be used as a school for the residents of the area, which became only the second National school west of the Blue Mountains. It still stands today, opposite St Johns church. In 1879 the new township of Wallerawang was described as follows:



*“Wallerawang has a small street with a few houses – Anglican, Roman Catholic, Presbyterian and Wesleyan places of worship – and a public school.”*

These facilities were shortly joined by at least three hotels – the Royal Hotel, the Commercial Hotel and the Railway Inn, which doubled as the Cobb & Co stopover.



**Figure 4: Wallerawang Station, 1871 (courtesy National Library of Australia)**

However, the area experienced greater growth following the establishment of the shale oil industry and coal industry in the 1930s. This growth accelerated following the Second World War and the increased demand for coal. The NSW Housing Commission built 100 houses in 1951 to meet the demand for housing.

### **3.2 Historical Development of St John the Evangelist Church, Wallerawang**

Following the death of her first husband, Edwin Barton, in 1876 and her parents in 1856 and 1867, Georgina Walker-Barton-Abbott set about establishing St John the Evangelist Church as a memorial to them. She commissioned renowned colonial architect, Edmund Blacket, to design the church, which was built by Lithgow builder, George Donald. Mr Donald had built many stone buildings in and around Lithgow, including Coerwull Academy and St Marys Church in Lithgow. He went on to become the first Mayor of Lithgow and a Member of the Legislative Assembly. The foundation stone for St Johns was laid in 1880, with Georgina financing almost the entire construction. Georgina died in 1906 and is buried in the Churchyard. A window dedicated to her memory was installed in the church in 1910.

The church is constructed in the Victorian Gothic style, with a rectangular body and a high, square belltower at its western end. Windows are pointed arched, some with stained glass. The belltower is topped by battlements and pinnacles, with various gargoyle faces decorating the corners. A large, ornate glass window is located at the eastern end of the church, at the sanctuary. An entrance porch is located on the Main Street side of the church; however this is possibly a later addition. The stone construction is a combination of stone quoins and bush-hammered stone (NSW Heritage Register).



From its beginning, the church was used for both Church of England and Presbyterian Services in memory of Georgina Barton-Abbott's Presbyterian parents (James and Robina Walker) and her first husband, Edwin Barton (Church of England). Services commenced at the Church in 1881 as the "Wallerawang Estate private chapel" before being granted in perpetuity to be a Parish Church for both Presbyterians and Anglicans by Georgina (NSW Heritage Office, online). In 1952, both the Anglican and Presbyterian denominations were granted the Church and its land.

Anglican services continued at St Johns until the 1980s, with the Church selling its 50% share to the Friends of St John in 2006 (Sydney Diocese Secretariat, 2006). In 2001, an Engineer's report found that the Church tower was in dire need of repair, with a large crack being noted as potential to cause the tower to fall and injure anyone nearby. The Church's insurance company ordered the Church to be locked and fenced.

The Church was in danger of being demolished following its advertisement for sale in 2001. The Friends of St John was formed in order to prevent the churches destruction and following a lengthy restoration process, including the development of a Conservation Management Plan, the Church was once again reopened for all denominations with a Thanksgiving service on 14 May 2006 (NSW Heritage Office).

### 3.3 Significance

The significance of the site was assessed as being of State significance and was registered on the State Heritage Register in 2004. The following table contains a summary of how the item fulfils the State significance criteria. This is required in order to establish the heritage values of the site and assess any visual impacts and those caused by vibration.

**Table 1 Significance criteria and assessment of St Johns Church (as shown on State Heritage Register, online)**

State Heritage Significance Criteria	Assessment
(a) Historical significance	St John the Evangelist is one of the last major churches in the State built entirely by private philanthropy and is possibly the only example of a "union" or public dual-denomination church identified to date in the Central West region.
(b) Associative significance	St John the Evangelist is associated with a number of prominent people and families including the architect Edmund Blacket and his firm Blacket and Sons, as well as the Walker-Barton families.
(c) Aesthetic significance	St John the Evangelist Church is a fine example of the work of architect, Edmund Blacket. It has the attributes of Victorian Gothic style. Materials and workmanship used throughout the Church are of high quality, including many stained glass windows, detailed carving to the sandstone and timberwork. The Church occupies a prominent site at the northern entrance to Main Street, Wallerawang.
(d) Social significance	St John the Evangelist Church has been the focus of Presbyterian and Anglican activities in the Wallerawang area for over 100 years. The Church contains a number of memorials commemorating local people and is valued by the community as a place of religious significance.
(f) Rarity	St John the Evangelist Church is one of the last major churches in NSW built entirely on private philanthropy and is possibly the only example of a "union" or public dual-denomination church identified to date in the Central West Region.
Integrity/Intactness	Largely intact, including interior designed by Blacket.

### 3.4 Conclusion

St John's Church is an intrinsic part of the history of Wallerawang and its early settlers and has been recognised as such with its inclusion on the State Heritage Register. Its rarity and historical significance as a church built by private philanthropy as a "union" church and its connection with Edmund Blacket and the Walker/Barton families are recurring themes in its assessment, as well as its prominent physical location as one of the first constructions viewed when entering Main Street from the Castlereagh Highway. Any impacts to these values will be the focus of the following impact assessment.

## 4.0 Heritage Impact Assessment – Visual Impact & Vibration

The following section assesses the likely heritage impacts of the proposed development on the heritage significance of St John's Church in terms of visual impact and vibration from the proposed works before, during and after construction.

### 4.1 Description of Development

Centennial operates the Lidsdale siding rail loading facility, located approximately 12 kilometres northwest from the city of Lithgow, south of the western coalfields of NSW. Lidsdale Siding is situated approximately 150 kilometres west of Sydney, adjacent to the township of Wallerawang. The principal components of the existing Lidsdale Siding are a rail siding, an overland conveyor which delivers coal from the Centennial Coal Western Coal Services site, coal stockpiles, workshop, office and pollution control dams.

The proposed development is to upgrade the Lidsdale Siding facility to improve its operational efficiency and increase its throughput capacity to approximately 6.3 million tonnes per annum. The train loading process would be automated by establishing a coal stockpile with underground reclaimers feeding a conveyor leading to a train loading bin.

### 4.2 St Johns Wallerawang Conservation Management Plan

As part of the restoration process of St Johns, a Conservation Management Plan (CMP) was drawn up by Integrated Design Associates in 2005, outlining the history of the site as well as proposals and policies for its future management. One of the important conservation measures raised is the preservation of the view shed between the church and the church school, approximately 240 m to the north east of the Church property, and the preservation of the rural setting of the Church (Integrated Design Associates, 2005:63).

In respect of the view shed, it is required that the area between the Church and the church school be kept as open space. This extends to having no built structure or mature tree plantings being placed between the Church and church school (Integrated Design Associates, 2005:63).

In respect of the rural setting, it is a further requirement that properties within 100 m of the boundaries of the church property should also be subject to the preservation of the rural setting. Any development immediately outside of the view shed and setting for St Johns should be reviewed "under heritage provisions for its impact on the setting of St Johns" (Integrated Design Associates, 2005:63).

It should be noted that the proposed development by Centennial falls outside of the view shed and the prescribed 100 metre rural setting boundary.

### 4.3 Current condition of St Johns

St Johns was closed in 2001 having been deemed unsafe for public access due to significant loose stones and bowing of the upper belltower walls. It was theorised at the time that this damage had been caused by early mine blasting in the 1940s (Integrated Design Associates, 2005:58).

An Engineer's Report from Hughes Trueman was undertaken in 2002, which listed a number of structural faults with St Johns Church (Hughes Trueman, 2002:2). Among them were:

- Moderate wall movement in the main body of the church;
- Major wall movement at high level in the tower;
- Movement in east wall and western tower leading to cracking over doors and arches into the transepts;

- A general tendency to outward tilt in all walls, particularly the north wall, which had rotated outwards by 40mm over its height;
- Eastward tilt in eastern wall causing some pull out of timber purlins;
- Severe outward bulge in parapet and upper walls of tower causing exposure of the perpend joints to weather and leading to a separation of the flashing from the box gutter, causing seepage;
- Deterioration of ornate, carved stonework of the tower.

Hughes Trueman listed 13 items that needed to be repaired, which came at a predicted cost of \$122,800. They also listed five essential items requiring repair (totalling \$109,200) and six items recommended to be carried out (totalling \$13,600). Two further items (a photographic record and bed joint reinforcing) were not included as they were not essential or recommended (Hughes Trueman, 2002:5).

The repairs to St Johns Church assessed as being essential were:

- Repair of gutters;
- Stone joint repairs;
- Bracing frames;
- Tower stone repairs;
- Repair of capping stones.

Given that the church was re-opened in 2006, it is assumed that for the purpose of this report all the above and necessary structural repairs were undertaken.

## 4.4 Summary of Prior Visual and Vibration Assessments

### 4.4.1 Visual Assessment

RPS conducted a visual assessment for the proposed development in May, 2012 (RPS, 2012). Generally, the assessment found that the new facilities would be visually prominent, particularly the elongated conical stockpile with additional conveyor section, and the rail bin and associated elevated conveyor. It is anticipated that the conical stockpile at maximum capacity would be approximately 28 m tall, with the rail bin reaching approximately 30 m from ground level. Upgraded directional lighting may be seen from various surrounding areas, however, would not be intrusive as these lights are proposed to only be operated as required in the event of night train loading (RPS, 2012:9).

According to that assessment, St Johns Church currently falls within the view catchment of both the shed and the conveyor of the existing Lidsdale Siding facility and is likely to have views of some of the new facilities. Specifically, the findings of the visual assessment make the following comment regarding impact on St Johns Church:

*“There would be views of the stockpile from St Johns Church, however, as seen from **Plate 2**, the existing facilities, including conveyors and stockpiles are currently visible. The existing vegetation would provide some visual screening.”* (RPS, 2012:10).

Overall, although the new facilities were assessed as being visually prominent, it was also assessed that the visual absorption capacity of the area was high, owing to the presence of many other coal conveyors, stockpiles and train movements in the area.



#### 4.4.2 Noise and Vibration Assessment

An Environmental Noise Impact Assessment was conducted by Hatch Associates in August 2012 in connection with this project.

The assessment concluded that the proposed upgrade would be operated within the recommended noise criteria and will have a low potential for noise annoyance. In regard to vibration, some vibration sources, including earthmoving equipment, may be used in the construction of the project. It is assessed that cosmetic damage to buildings would not occur unless the building was within 25 m of the vibration source. St Johns Church is in excess of 100 metres from Lidsdale Siding operations. It therefore concluded that there were no constraints to the project with respect to vibration (Hatch, 2012:35).

### 4.5 Impact of development on physical fabric, attributes and setting

#### 4.5.1 Visual impact

It is not expected that the construction of the new facilities will have significant additional visual impact on the rural setting of St John's Church. Whilst there may be some impact on the northerly aspect of the church, particularly the new stock pile and conveyor, as noted in the earlier Visual Assessment (RPS, 2012), existing facilities from Lidsdale Siding are already visible from this aspect and despite the Church's prominence at the entrance to the town from the Castlereagh Highway, it is largely already overshadowed by the cooling towers of the adjacent Wallerawang power station (**Plate 3**).

St Johns Church is located directly opposite the existing facility at Lidsdale Siding. Views of the facility from the Church are largely screened by tree plantings (**Plate 6**). The visual impact of the current facility is ameliorated somewhat by the existing plantings located approximately 100 m north of the church's northern boundary, and it is expected that the new facilities, whilst being slightly taller in height, will be largely obscured by proposed additional plantings.

#### 4.5.2 Vibration Impact

According to Hatch (2012), the only additional source of vibration will occur during the construction stage of the new facilities. This is likely to occur over a period of nine to twelve months, with an average of four truck movements and 20 light vehicles per day over a twelve month period, with a peak of 200 truck movements per day for four weeks (Hatch, 2012:7).

The major source of vibration will come from earthmoving equipment for foundation work, stockpile construction, truck access and turning for dumping and loading, drainage and water storage, general site profiling and trenching for pipes and cable. These activities will be performed by bulldozers, scrapers, vibratory rollers, front-end loaders, back-hoes, trenching machines, tip-trucks and similar machines. Most of these will not have any vibration impact on the Church. However, it is possible that hydraulic picks and vibration rollers may be needed, depending on the type of rocks encountered during construction; these will cause vibration at the Lidsdale Siding site, however, as these machines are proposed to be used at a considerable distance from Church, the resultant vibration is unlikely to cause any damage (Hatch, 2012:35).

Hatch states that the safe working distance for no cosmetic damage to buildings resulting from the vibration of these types of machines is 25 metres, and less than 100 metres for human response. As St Johns Church is located in excess of 100 metres from the nearest of the construction activities, it is unlikely that the vibration will cause any impact to the Church. In addition, construction is planned to take place between Monday and Friday and is therefore unlikely to interfere with Church usage.

#### 4.6 Summary of Heritage Impact

Following an assessment of the visual and vibration impacts upon St Johns, it is assessed that there will be no additional adverse impacts.

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## 5.0 Conclusion and Recommendations

### 5.1 Conclusion

This report has considered the significance of St Johns Church and the nature and scale of likely heritage impacts as a result of the development proposal with regard to visual impact and vibration.

It is assessed that there will be no adverse impacts on the basis of visual impact or vibration.

### 5.2 Recommendations

The following general management procedures have been formulated with consideration of all available information in accordance with relevant legislation:

#### **Recommendation 1 – Tree planting**

It is recommended that tree planting on the Lidsdale Siding site be retained and consideration given to supplemental plantings to maintain and improve a low visual impact.

#### **Recommendation 2 – Baseline condition report**

It is recommended that Centennial give consideration to commissioning a structural engineer's report to provide a baseline model of the condition of St Johns Church. Alternatively, a 3D laser scan of St Johns Church should be undertaken to provide a three dimensional image of the church in its current condition in order to quantify any damage that may occur in the future. It is recommended that the adopted procedure be commenced prior to construction occurring and then not more than three months after construction. The results should then be compared to determine if any change has occurred due to vibration.

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## References

Brown, J W , 1989. Bent Backs: An Illustrated Social and Technological History of the Western Coalfields. Industrial Printing Co., Lithgow.

Conybeare & Morrison, 2006. *Wolgan Valley Homestead Complex – Conservation Management Plan*. Unpublished report to Emirates Hotels (Australia) Pty Ltd.

Darwin, C, 1839. The Voyage of the Beagle. Retrieved on 3 July 2013 from <http://www.gutenberg.org/cache/epub/944/pg944.html>.

Hughes Trueman, 2002. "St John's Church, Wallerawang". Unpublished letter report to NSW Heritage Office 25 November 2002.

Integrated Design Associates, 2006. St John's Wallerawang Conservation Management Plan. Sydney.

Parsons, V, 1967. "Walker, William (1787-1854)". Australian Dictionary of Biography, National Centre of Biography, Australian National University. Retrieved on 8 July 2013 from <http://adb.anu.edu.au/biography/walker-william-2767/text3931>.

Sydney Diocese Secretariat (SDS), 2006. Report of the Standing Committee Meeting Held on 26 May 2006. Retrieved on 15 July 2013 from <http://www.sds.asn.au/Site/103326.asp?a=a&ph=cl>.

Sydney Morning Herald, 1906. "Personal: Vice Regal". Published on Thursday 31 May, 1906 and retrieved on 3 July 2013 from <http://trove.nla.gov.au/ndp/del/article/14776001>.



## Plates



**Plate 1: St John the Evangelist, Wallerawang, looking south. Part of Wallerawang Power Station can be seen at far left.**



**Plate 2: St Johns, looking south west.**



Plate 3: Eastern end of St Johns with Wallerawang Power Station in background.

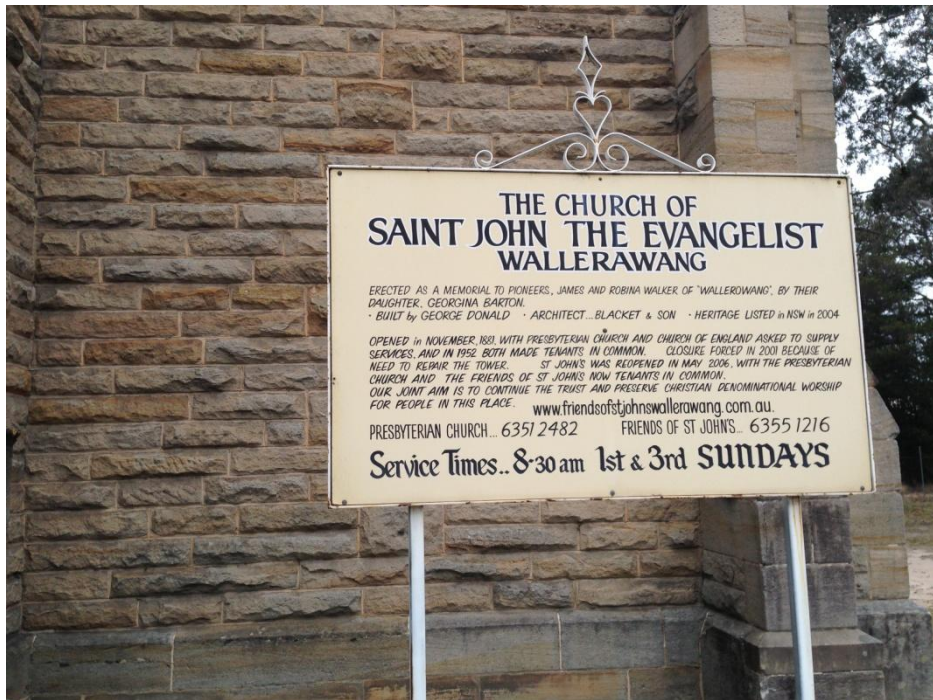


Plate 4: Information sign





**Plate 5: Western doorway of St Johns (at right) looking north across the road towards Lidsdale Siding facility**



**Plate 6: Lidsdale Siding facility viewed from St John's, looking north.**