



**Planning &  
Infrastructure**

**MAJOR PROJECT ASSESSMENT:  
Sydney CityGrid Project  
Stage 2A(i) of the City East Zone Substation**



Director-General's  
Environmental Assessment Report  
Section 75I of the  
*Environmental Planning and Assessment Act 1979*  
April 2011

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Published April 2011  
NSW Department of Planning and Infrastructure  
[www.planning.nsw.gov.au](http://www.planning.nsw.gov.au)

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## EXECUTIVE SUMMARY

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Ausgrid (the Proponent), formerly Energy Australia, proposes to upgrade electricity supply to the Sydney Central Business District to meet future demand, ensure the continuation of a reliable supply to this area, and meet its N-2 Licence obligations imposed by the then Department of Water and Energy. This N-2 obligation is defined as the ability to meet peak electricity demand with two major network elements out of service. The project, known as Sydney CityGrid, includes new/upgraded/refurbished substations and the replacement of old high voltage cables. The project is subject to Part 3A of the *Environmental Planning and Assessment Act 1979* (the Act), by virtue of an Order made by the then Minister for Planning under section 75B of the Act on 11 February 2008. On 21 April 2008, the then Minister for Planning authorised the submission of a concept plan for the proposal. The Concept Plan includes the following components:

1. Stage 1A being the construction and operation of the Belmore Park Zone substation building and stub tunnel connection from the existing City South Cable Tunnel to the Belmore Park Zone substation;
2. Stage 1B being commercial/retail development on the corner of Pitt, Campbell and Hay Streets to be integrated with works comprising Stage 1A;
3. Stage 2A being the construction and operation of the City East Zone substation with potential commercial/retail development in the vicinity of Philip, Bent, Bligh and O'Connell Streets;
4. Stage 2B being refurbishment of the existing Dalley Street Zone substation, or construction of a new building adjacent to the existing site;
5. Stage 2C being the construction and operation of a sub-transmission switching station (STSS) at Riley Street;
6. Stage 2D being the City East Cable Tunnel (CECT) to be constructed between Riley Street STSS and the City North Zone substation, with connections to the proposed City East and existing Dalley Street Zone substations, and a potential services control room adjacent to the Riley Street STSS; and
7. Stage 2E being extension to the City South Cable Tunnel from Wade Place to Riley Street, Surry Hills.

Concept Plan Approval and Project Approval for Stage 1 were granted on 20 September 2009.

The Proponent now seeks project approval for Stage 2A (i) which relates to a site at 20-22 and 24-26 O'Connell Street and 33 Bligh Street, Sydney. Stage 2A as described in the concept plan approval includes the construction and operation of the City East Zone Substation. The Proponent has subsequently split stage 2A into two sub-stages, Stage 2A (i) and 2A (ii).

The Project Application for Stage 2A (i) originally included demolition of the existing building on the site, excavation, a building envelope for the substation and commercial tower, construction of a 150 metre long stub tunnel and bridging structure for the proposed Sydney Metro Tunnel. However, as outlined in the Preferred Project Report, Stage 2A (i) now comprises of site preparation and demolition of the existing Kindersley House building only, with other elements to be included in Stage 2A (ii).

The entire project has a capital cost of \$800 million, with Stage 2A(i) of the project having a capital cost of approximately \$81 million. The project would employ 20-30 sub-contractors to complete the project. Stage 2A (i) is estimated to take approximately 26 weeks to complete.

The Department considers that the demolition proposed works are necessary for the completion of the overall Sydney CityGrid project and would therefore be in the public interest as they would facilitate a required major upgrade to the electricity supply infrastructure over the next decade and would support the ongoing growth and economic importance of Australia's major city.

During the exhibition period of the Environmental Assessment, the Department received a total of twelve submissions. These comprised of eight responses from government agencies and four public submissions. The submissions raised concerns regarding the design of the sub-station and commercial tower, impacts on heritage buildings, noise, vibration and structural integrity of adjacent buildings.

Many of the issues raised in submissions related to design of the substation and commercial tower, which will be addressed in Stage 2A(ii). As the bulk excavation, building envelope, construction of the sub station and commercial tower are not part of Stage 2A (i) the Department is satisfied that the impacts of demolition during Stage 2A (i), including heritage, noise and vibration, traffic, air quality and waste management, would be minimal and can be appropriately managed.

The Department therefore recommends approval of the project, subject to conditions.



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## 1. BACKGROUND

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Ausgrid (the Proponent), formerly Energy Australia, proposes to upgrade electricity supply to the Sydney Central Business District (CBD) to meet future demand, ensure the continuation of a reliable supply to this area, and meet its N-2<sup>1</sup> Licence obligations imposed by the then Department of Water and Energy.

The Proponent developed the Sydney CityGrid Project as an integrated program of works to upgrade critical electricity infrastructure in Sydney's CBD in order to meet its licence requirements. The project includes new/upgraded/refurbished substations and the replacement of old high voltage cables.

The proposal is a project to which Part 3A of the *Environmental Planning and Assessment Act 1979 (the Act)* applies by virtue of an Order made by the then Minister for Planning under section 75B of the Act on 11 February 2008.

On 20 September 2009, the then Minister for Planning granted Concept Plan approval for the Sydney CityGrid Project and project approval for Stage 1A and 1B comprising the construction and operation of Belmore Park Zone Substation, which also involves the integration of a commercial development and stub tunnel connection from the existing City South Cable Tunnel to Belmore Park Zone substation. Project approvals are required for the remaining stages (stage 2A-2E).

Stage 2A, as described in the concept plan approval, includes the construction and operation of the City East Zone Substation and potential commercial/retail development. The Proponent has subsequently split stage 2A into two sub-stages, via a project application for Stage 2A (i) at 20-22 and 24-26 O'Connell Street and 33 Bligh Street initially comprising demolition of the existing Kindersley House building, bulk exaction, excavation of a 150 metre long stub tunnel connection under Bligh Street, bridging structure for the proposed Sydney Metro Tunnel and a building envelope for the proposed sub-station and commercial tower. Stage 2A (ii) includes the construction and operation of the substation and associated commercial tower. Staging was proposed in order to reduce the overall construction timeframe of the City East zone substation by 9-12 months, which the Proponent considers critical in ensuring a timely and reliable electricity supply to the CBD.

As outlined in the Preferred Project Report (PPR) for Stage 2A (i) the Proponent now proposes to limit Stage 2A (i) to the following:

- Site preparation including erection of hoardings, site amenities, dilapidation surveys, service disruptions and disconnections, scaffolding and site access; and
- Demolition of Kindersley House located at 33 Bligh Street. Demolition would include the removal of any identified hazardous materials, internal strip out, removal of plant and equipment, demolition would occur on a floor by floor basis.

Approval to excavate, construct and operate the substation and commercial tower would be sought as part of a separate project application, referred to as Stage 2A(ii).

### 1.1 Existing Site

The site has an area of 2,040 m<sup>3</sup> and is located at 20-22 and 24-26 O'Connell Street and 33 Bligh Street, Sydney (Lot 1, Deposited Plan 626651). The site is located within the northern part of the Sydney CBD. The existing development on the site consists of two commercial buildings, one 17 storey office building constructed in 1960 (20-22 O'Connell Street and 33-35 Bligh Street) and another 13 storey office building constructed in 1983 (24-26 O'Connell Street) merged with lower levels of the original building. These buildings are referred to as Kindersley House and were constructed with a concrete frame and glass infill wall structure and provide a total of 45 car spaces in the basement level car park accessible from O'Connell Street. Pedestrian access is available from both Bligh and O'Connell Streets. The site location and existing Kindersley House are shown in Figures 1 and 2.

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<sup>1</sup> The Minister for Energy added a condition to Energy Australia's operating licence in December 2007 to adopt 'N-2' reliability. The new licence requirement specifies that all city zone substations and transmission feeders must be able to supply the full electricity demand with any two transformers or feeders out of service. This is to be achieved by 2014.



## 1.2 Surrounding Land Use

The surrounding land uses are mainly commercial office towers with active street frontages, retail activities, hotels and eateries. The north of the site is bound by the former NSW Club House Building (Lowy Institute building), the Mulpha building and AFT House. The NSW Club House (Lowy Institute building) and AFT House are heritage listed. The NSW Club House is listed on the NSW State Heritage Register, Register of National Estate and by the National Trust of Australia. The AFT House is listed on the Register of National Estate and listed as a significant 20<sup>th</sup> century design by the Royal Australian Institute of Architects. To the south, Cigna House and a 13 storey office building at 50-58 Hunter Street sit adjacent to the site. The eastern boundary of the site is formed by Richard Johnson Square, a paved area comprising a historic monument, seating and a small kiosk. O'Connell Street lies to the west of the site.

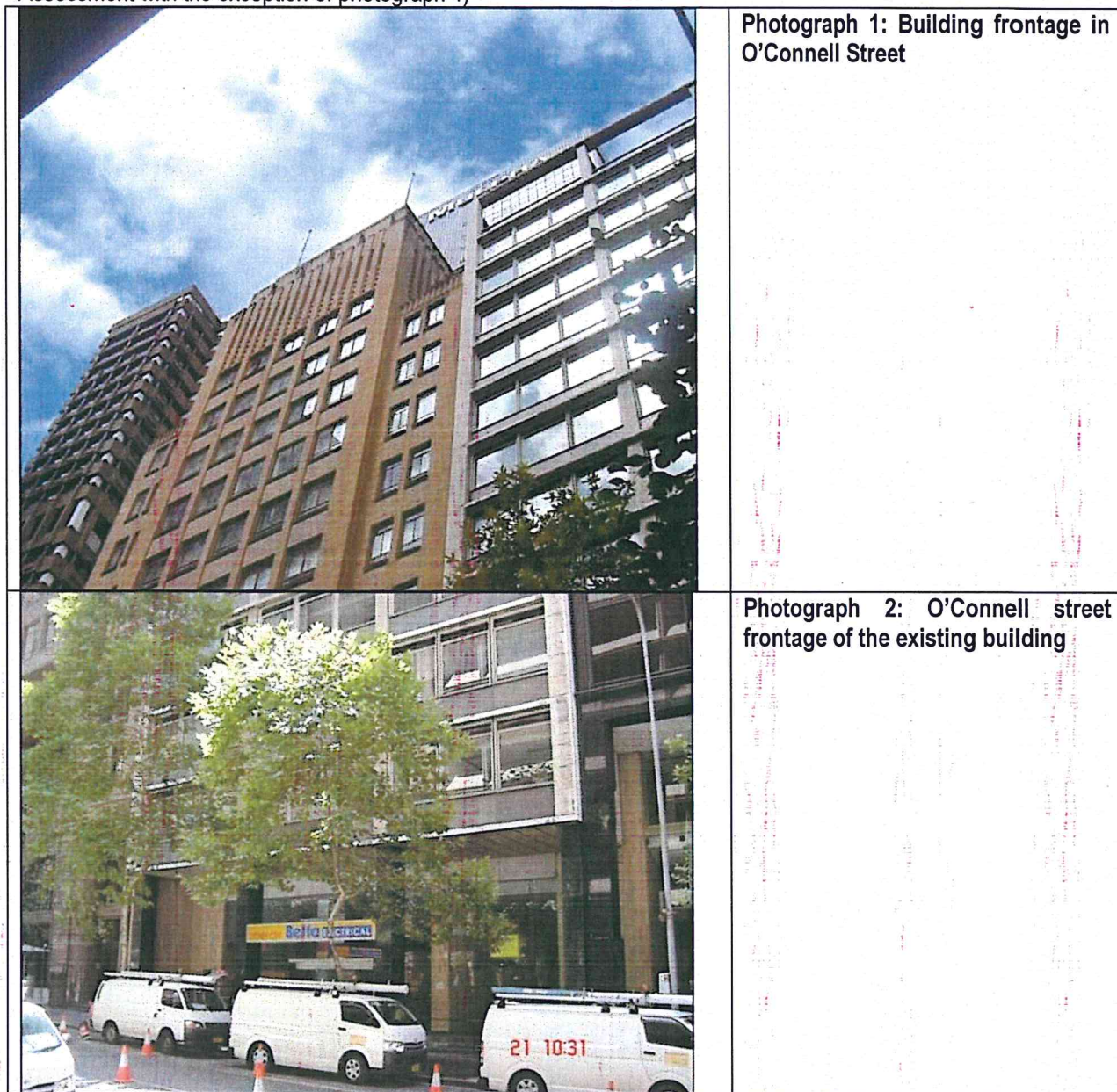


**Figure 1: Project Location** (reproduced from the Proponent's Environmental Assessment)





**Figure 2: Views of the proposed City East Zone Substation Site (reproduced from the Proponent's Environmental Assessment with the exception of photograph 4)**







**Photograph 3: View from Castlereagh street looking north**



**Photograph 4: View looking down Bligh Street. Lowy Institute building is located adjacent to the proposed site.**



## 2. PROPOSED DEVELOPMENT

### 2.1 Project Description

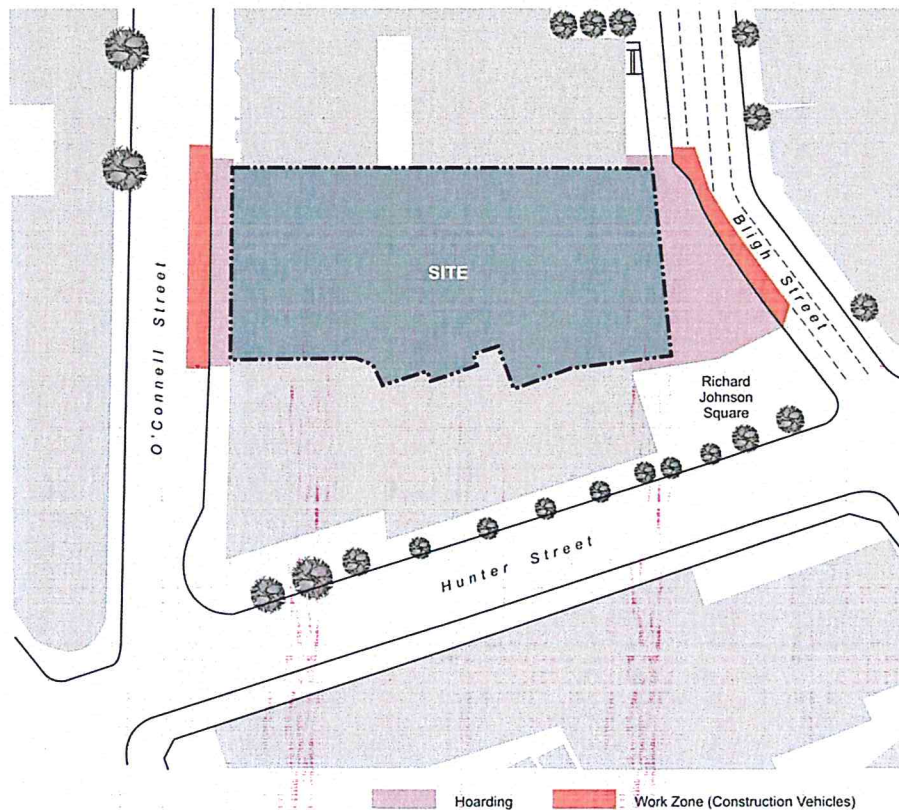
The Proponent is seeking project approval to develop Stage 2A(i) City East Zone Substation which is an essential component of the overall Sydney CityGrid Project. Table 1 describes the key features of the works proposed as part of the Proponent's project Application and as modified by the PPR. The demolition activities are expected to take approximately 26 weeks. The project layout is shown in Figures 3.

Table 1: Key Project Components

	<i>Description</i>
<b>Site Preparation</b>	Hoardings and site amenities (including first aid rooms, induction rooms, lunch sheds, change rooms) will be constructed. Work zones are proposed for construction vehicles along the full length of the Bligh and O'Connell Street frontages. Permanent services to Kindersley House such as gas, electricity, water, sewer and communications would be disconnected. Scaffolding would be erected around the external walls to protect adjacent buildings.
<b>Demolition of Kindersley House</b>	<p>The demolition of Kindersley House would be undertaken in the following stages:</p> <ol style="list-style-type: none"> <li>1. identification and removal of hazardous materials;</li> <li>2. removal of plant and equipment; and</li> <li>3. demolition of the structure on a floor by floor basis.</li> </ol> <p>Internal non-structural components would be removed first including walls, ceilings, services and finishings. Floor finishes including carpet and underlay, along with ceilings and services such as pipes and cables would be removed. This may involve the use of a bobcat. Partition and block walls would be demolished using an excavator. A mobile crane would be set up on the existing hardstand area and would be used to lift the bobcats and excavators to the floor being demolished. Material would be sorted into stockpiles on each floor. A bobcat or small excavator would be used to load material from the building into the existing lift shafts which would be used as a drop zone. A mist spray sprinkler would be established over the drop zone area to minimise dust during the dropping of material from the working floor. The upper floors and internal brick walls of the buildings would be demolished using equipment such as an excavator, bobcats, sledgehammers and jackhammers. When working near the perimeter boundaries of the site, workers would use the external scaffolding for access and would demolish the perimeter walls back inside the building. The lower two floors of the buildings would be demolished by a large excavator working from the ground with either a bucket or hydraulic hammer attachment. Scaffolding would be used around external walls to protect adjacent buildings from damage during demolition. The external walls would be removed last to reduce dust, noise and vibration transfer to neighbouring buildings.</p> <p>A hazardous materials audit of Kindersley House was undertaken and indicated the presence of the following hazardous materials:</p> <ul style="list-style-type: none"> <li>• Synthetic mineral fibres containing asbestos</li> <li>• Paint containing at least 1% lead was identified on a number of doors, door frames and walls</li> <li>• Polychlorinated biphenols in fluorescent light fittings</li> </ul>



**Figure 3: Project Layout**



## 2.2 Project Need and Justification

Concept approval for the Sydney CityGrid project has been granted. The Stage 2A(i) City East Zone Substation is part of the Sydney CityGrid Project. The Proponent states that in order to provide a reliable and secure supply of energy in Sydney's CBD the existing infrastructure requires refurbishment, replacement and augmentation which complies with its "n-2" licensing requirement. The licence requirement specifies that all city zone substations and transmission feeders must achieve "n-2" capacity by 2014. This means they must be able to provide electricity at peak demand with two transformers or feeders offline. The Proponent has found that this increased level of security cannot be applied to existing 33/11 kV zone substations without reducing their ratings. As such, it is necessary to change the design and operating arrangements of the Sydney CBD supply network in order to provide additional capacity to meet the imposed n-2 security criteria.

The main electricity supply to the Sydney CBD is derived from five zone substations (City North, City East, Dalley Street, City South and New City Central), which range in age from three years to more than 50 years old. The Proponent states that the reliability performance of its equipment and infrastructure is managed through maintenance and replacement of that infrastructure. The Proponent's decision to replace infrastructure is based on an assessment of equipment condition and consideration of the strategic replacement needs of the electricity supply network. This Project encompasses the Proponent's long term strategy to replace and/or refurbish its infrastructure. It takes into account the need to ensure that security of supply is maintained to the Sydney CBD, while equipment is removed from service for refurbishment or replacement.

The current total capacity of the zone substations in the Sydney CBD is 664MVA, however the Proponent's city load forecast has shown that the demand will reach existing capacity by the year 2012. The forecast indicates an expected average annual growth rate of 1.6 per cent (11 MVA) up to the year 2020, with an upper limit of 2.2 per cent (15MVA) per annum. Therefore, the Proponent has stated that the modification of the electricity supply and operating arrangements of the existing zone substations and sub-transmission feeders is required to provide additional capacity, to meet its obligations under the n-2 licence criteria.

The new City East Zone Substation (Stage 2A) is required to allow for the connection of the 132kV feeders from Riley Street sub-transmission switching station (STSS) to the City North Zone Substation and potentially to the Dalley Street Zone Substation. Feeders would link the City East Zone Substation to various parts of the Sydney CBD. Failure to construct the City East Zone Substation would compromise the ability to achieve the objectives of the overall project in terms of the provision of a secure and reliable electricity supply to the CBD. The concept approval specifically permits construction and operation of the new City East Zone Substation in the vicinity of Philip, Bligh, Bent and O'Connell Streets, Sydney.

Stage 2A as described in the approved Concept Plan includes the construction and operation of the City East Zone Substation and potential commercial/retail development. The Proponent has subsequently split stage 2A into two sub-stages, to enable site works (Stage 2A(i)) to commence while approval is sought for the subsequent building (Stage 2A(ii)) on the site. The Proponent has argued that this would reduce the overall City East Zone Substation construction timeframe by approximately 9 months and that this is a significant consideration given the critical importance of providing a reliable electricity supply to the CBD.

The Department notes that demolition of Kindersley House is an essential element of the overall Stage 2A development. Failure to demolish the building would mean failure to complete the City East Zone Substation and the overall Sydney CityGrid project. The consequences of this would be inadequate electricity supply to the CBD with resultant significant economic and social impacts. The Department therefore considers that the proposed demolition works are necessary and would be in the best interest of the State.

The Department also considers that the Project is consistent with the Priorities and Targets in the State Plan of 'achiev[ing] electricity reliability for NSW of 99.98% by 2016'. The Project is also consistent with the State Plan target to 'maintain and invest in infrastructure'.

The Department also notes that overall project benefits such as an increase the capacity of electricity distribution in the Sydney region would mean that adequate power supply can be maintained and improved in circumstances where new commercial and residential developments are approved, in furtherance of housing and employment targets contained in the Metropolitan Strategy and the draft Sydney City Subregional Strategy.



### 3. STATUTORY CONTEXT

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#### 3.1 Major Project

The proposal is a project to which Part 3A of the *Environmental Planning and Assessment Act 1979* (the Act) applies by virtue of a specific Order made by the then Minister for Planning under section 75B of the Act on 11 February 2008.

#### 3.2 Concept Plan, Project Approval and Modification

Concept approval for the Sydney CityGrid Project and project approval for Stage 1 being the Belmore Park Zone Substation were granted by the Minister for Planning under Part 3A of the *Environmental Planning and Assessment Act 1979* on 20 September 2009.

A modification was approved on the 4 November 2010 by the Director of Infrastructure Projects, as delegate of the Minister for Planning, which amended condition 3.2 of the concept plan approval so that the design review process only applies to project applications for building envelope(s) or built form and does not apply to project applications that only include development for the purpose of early works, demolition, excavation or site preparation.

A subsequent modification has been approved by the Director-General, as a delegate of the Minister, which amends condition 3.2 of the concept plan approval so that design principles apply to the design review process for projects applications which include building envelope(s) or built form.

#### 3.3 Minister's Approval Power

The Proponent submitted an Environmental Assessment to the Director-General in May 2010. The concept plan approval includes environmental assessment requirements issued in accordance with section 75P(1)(a) that must be addressed by subsequent project applications which includes Stage 2A(i).

The draft City East Zone Substation Environmental Assessment – Stage 2A(i) submitted to the Department 24 May 2010 was found to be inadequate by the Department on 15 June 2010. The reasons for the inadequacy related to consultation with public authorities, construction noise impacts and inadequate assessment of potential groundwater issues. The City East Zone Substation Environmental Assessment – Stage 2A(i), with the inclusion of the revised sections, dated 25 June 2010 was found to be adequate pursuant to section 75H of the Act on 1 July 2010.

The environmental assessment was placed on public exhibition from 22 July 2010 until 23 August 2010 and submissions invited in accordance with Section 75H of the Act. The Environmental Assessment was also made publicly available on the Department's website.

Following the exhibition period, the Director-General directed the Proponent to respond to the issues raised in submissions. The Submissions Response and PPR (see Appendix C) prepared by the Proponent was subsequently made publicly available on the Department's website on the 23 March 2011.

The Department has met all its legal obligations so that the Minister can make a determination regarding the project.

#### 3.4 Permissibility

The proposed development is located wholly within the City of Sydney Local Government Area, within the Sydney Central Business District. The proposed project is permissible without development consent as clause 41 of the *State Environmental Planning Policy (Infrastructure) 2007* (Infrastructure SEPP) provides that development for the purpose of an electricity transmission or distribution network may be carried out by or on behalf of an electricity supply authority or public authority without development consent on any land. The Proponent is a statutory state-owned corporation owned by the NSW Government and is an electricity distributor.

#### 3.5 Environmental Planning Instruments

There are no environmental planning instruments that substantially govern the carrying out of the proposal.



### 3.6 Objects of the EP&A Act

Decisions made under the EP&A Act must have regard to the objects of the Act, as set out in Section 5 of the Act. The relevant objects are:

- (a) *to encourage:*
  - (i) *the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,*
  - (ii) *the promotion and co-ordination of the orderly and economic use and development of land,*
  - (iii) *the protection, provision and co-ordination of communication and utility services,*
  - (iv) *the provision of land for public purposes,*
  - (v) *the provision and co-ordination of community services and facilities, and*
  - (vi) *the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats, and*
  - (vii) *ecologically sustainable development, and*
  - (viii) *the provision and maintenance of affordable housing, and*
- (b) *to promote the sharing of the responsibility for environmental planning between the different levels of government in the State, and*
- (c) *to provide increased opportunity for public involvement and participation in environmental planning and assessment.*

It is important to recognise that while the EP&A Act requires that the principles of ecologically sustainable development be encouraged, it provides other objects that must be equally included in the decision-making process for the subject proposal. The Department's assessment has given due consideration to relevant objects of the Act in its assessment including:

- the proper management and development of cities for the purpose of promoting the social and economic welfare of the community and a better environment – the Department's assessment of the need for the project (Section 2.2) has considered the need for ensuring reliable electricity supply to facilitate the ongoing efficient functioning, development and social and economic welfare of the Sydney CBD resident population and workforce;
- the protection, provision and co-ordination of communication and utility services and provision of land for public purposes – has been considered in the Department's assessment of the need for the project (Section 2.2) which has considered the need for public utility infrastructure; and
- the need to encourage the principles of ecologically sustainable development –
  - the Department's assessment of the need for the project (Section 2.2) has considered the need to ensure secure and reliable electricity supply to meet the needs of existing and future demand consistent with the principles of inter-generational equity;
  - the Department's assessment of non- indigenous heritage, noise and vibration impacts, traffic management, waste and air quality (sections 5.1-5.6) has considered all reasonable and feasible measures to minimise impacts consistent with the principles of appropriate valuation and pricing mechanisms;
  - the Department is satisfied that the project would not pose any significant risks to the conservation of biological diversity and ecological integrity as the project would be undertaken on an already developed site, within an already built up area with little ecological value.

In addition to the above, the agency and community consultation undertaken as part of the assessment process (see Section 4 of this report), address objects 5(b) and (c) of the Act.

### 3.7 Statement of Compliance

In accordance with section 75I of the EP&A Act, the Department is satisfied that the Director-General's environmental assessment requirements have been complied with.



## 4. CONSULTATION AND SUBMISSIONS

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### 4.1 Exhibition

The City East Zone Substation - Stage 2A(i) Environmental Assessment was placed on public exhibition from 22 July 2010 to 23 August 2010. The Department invited submissions in accordance with Section 75H of the Act. The exhibition locations were:

- Department of Planning's head office in Sydney;
- City of Sydney Council; and the
- Nature Conservation Council.

The Environmental Assessment was also provided for download on the Department's website. Notification of the exhibition period was made through three separate advertisements in the *Sydney Central Courier*, *Daily Telegraph* and the *Sydney Morning Herald* on 21 July 2010.

### 4.2 Submissions from Public Authorities

Eight submissions were received from public authorities: NSW Office of Water, Heritage Branch of the Department of Planning, Sydney Water, Sydney City Council, NSW Transport, RailCorp, Department of Environment, Climate Change and Water and Department of Industry and Investment.

None of the agencies objected to the proposal, however raised issues for the Department's consideration.

#### NSW Office of Water (NOW)

- In order to assess the need for a water licence the extent of dewatering, including pumping volumes, flow rates and water quality need to be known. Pending further information on the magnitude of groundwater inflows a licence under Part 5 of the *Water Act 1972* may be required. NOW requested to be provided with a copy of the Water Quality Management Sub-Plan.
- NOW recommended that the following issues be incorporated into the Statement of Commitments:
  - The Proponent shall provide NOW with a copy of the Water Quality Management Sub-Plan and results.
  - The Proponent shall provide NOW with a copy of the results of the geotechnical investigations and analysis relating to groundwater.

#### Heritage Branch (Department of Planning)

- Concurs with the archaeological assessment that the likelihood of intact archaeology at the site is minimal.
- Considers the views to and from the State Heritage listed NSW Club Building (Lowy Institute building), located next door to the proposed site of the City East Zone Substation, to be of considerable significance. The Heritage Branch supported the following findings in the Environmental Assessment:
  - The O'Connell Street elevation requires greater modulation than is apparent in the massing studies and could be achieved through the use of a variety of materials, articulation and modulation of the podium. This would be considered during Stage 2A (ii) of the City East Zone Substation.
  - The south-eastern corner to Bligh Street is a critical corner and presentation to Richard Johnson Square and Hunter Street. During Stage 2A (ii), care should be taken in the articulation of this corner to the substation.
- Noted the Statement of Commitments includes a design review process to be undertaken for Stage 2A(ii).

#### Sydney Water

- Requires the structural integrity of critical water and wastewater mains and the State Heritage listed Bennelong Stormwater Channel be maintained and requested a more detailed structural assessment and geotechnical assessment of potential vibration impacts of the proposed construction works on Sydney Water's infrastructure.
- Requested a condition of approval to include a detailed condition assessment (dilapidation survey) of the Bennelong Stormwater System. The condition assessment should be undertaken by physical traverse.
- The Proponent will need to get building plan approval from Sydney Water and possibly a works deed with Sydney Water.



#### City of Sydney Council (Council)

- Recommended design excellence, contribution to public domain and upgrade of Richard Johnson Square.
- Concerned with lack of activation to both Bligh Street and O'Connell Street frontages. Particularly the projected height of 40-50m of the podium. Considers the height of the podium and the lack of street set back of the tower will erode the character of the precinct which comprises a high portion of State significant heritage items listed in the Sydney LEP and on the State Heritage Register in particular the former NSW Club and the AFT House.
- Considered the proposed development to have detrimental impact upon the values represented in surrounding heritage items particularly the former NSW Club, 31 Bligh Street and AFT House.
- Further detail and articulation of the proposed façade. Investigate integration of engaging public art. Proposed double driveway arrangement will result in further erosion of the O'Connell Street character and queried why two driveways were required.
- Requested the Traffic Management Plan (TMP) to be approved by Sydney City Council. All vehicles are to enter and exit the site in a forward direction.
- Requested bicycle parking be provided.
- Conditions of approval recommended in relation to design, heritage, conservation works, photographic archival work, archaeological monitoring, vehicle footway crossing, public domain, temporary ground anchors, temporary shoring and permanent basement/retaining walls affecting the road reserve, street tree protection, footpath damage bank guarantee, noise and vibration and traffic.

#### NSW Transport

- Concerns about impacts of the proposed development on future construction, operation and maintenance of the Sydney Metro Network as the proposed works are located above the proposed alignment for the Sydney Metro Network Stage 1 (SMN Stage 1).
- Requested that the Proponent enters into an agreement with NSW Transport to ensure the proposal is designed, excavated and constructed in a manner that does not impact on the future structural integrity and operations of SMN Stage 1.

#### Department of Environment, Climate Change and Water (DECCW)

- Notes that the predicted noise levels from tunnelling works are not expected to exceed the ground borne noise objectives. Therefore evening and night time ground borne noise objectives are recommended for tunnelling works. The below ground tunnelling works may be conducted 24 hours per day.
- Recommended conditions of approval including a detailed Construction Noise and Vibration Management Plan (CNVMP).
- Conditions of approval recommended in relation to noise and vibration including reduced hours for rock breaking activities from 9am to 12pm Monday to Saturday and between 2pm to 5pm Monday to Friday and no time on Sundays and public holidays. All other construction work other than below ground tunnelling works and noise intensive activities such as rock breaking may be conducted between 7am and 7pm Monday to Friday and between 7am and 5pm Saturdays.
- Specified noise criteria to be included in the conditions of approval. Vibration is to be assessed against the guideline contained in the DECCW publication "Environmental Noise Management – Assessing Vibration: a technical guideline" and in accordance with the CNVMP.

#### RailCorp

- Recommended conditions of approval in relation to impacts on rail infrastructure. Requires the Proponent to enter into an agreement with RailCorp prior to construction and notify the Director General of such an agreement.

#### Department of Industry and Investment

- Did not raise any issues of concern.

### 4.3 Public Submissions

Four submissions were received from the public (one whom did not wish to be named). This included submissions from the following organisations:

- Lowy Institute;
- Radisson Plaza Hotel; and
- ACE Insurance Limited.

Of these, one (Lowy Institute) objected to the project. The remainder did not specifically state a position although raised issues for consideration in the Department's assessment. The key issues identified in public submissions are summarised in Table 1.

**Table 1: Issues Raised by Public Submissions**

Issue		Number of submissions
Planning Approval Process	<ul style="list-style-type: none"> <li>• unlawful splitting of the environmental assessment and determination of Stage 2A into two sub-stages; and</li> <li>• location of substation was not detailed within concept approval.</li> </ul>	1
Heritage	<ul style="list-style-type: none"> <li>• concerns regarding the impact on adjacent heritage buildings Lowy Institute Building and AFT House (State and locally listed);</li> <li>• new building should assist in re-establishing the original street alignment;</li> </ul>	2
Noise	<ul style="list-style-type: none"> <li>• inadequate noise mitigation measures;</li> <li>• concern regarding the construction working hours in particular the hours suggested by the Proponent for rock breaking activities;</li> <li>• noise factors such as loading trucks with rubble and waste material not considered in the environmental assessment;</li> <li>• more information requested on discharge chute for demolished materials including noise impacts associated with the chute; and</li> <li>• affect on the number of guests that stay at Radisson Plaza Hotel due to the proposed development.</li> </ul>	3
Vibration	<ul style="list-style-type: none"> <li>• additional assessment of vibration impacts requested;</li> <li>• concerns regarding vibration impacts on the Lowy Institute Building and Radisson Plaza Hotel; and</li> <li>• concerns relating to structural integrity of adjacent buildings.</li> </ul>	3
Landuse	<ul style="list-style-type: none"> <li>• cleaning of adjacent buildings requested; and</li> <li>• more information requested on the position of hoardings.</li> </ul>	1
Design	<ul style="list-style-type: none"> <li>• inadequate competitive design review process for the building envelope;</li> <li>• concerns regarding façade treatment and the lack of detail provided in the environmental assessment;</li> <li>• concerns with the internal design of the proposed substation (particularly the layout of the 5 transformers in a line); and</li> <li>• concerns regarding the proposed design (podium with little street activation).</li> </ul>	2
Air Quality	<ul style="list-style-type: none"> <li>• potential health impacts from changes to air quality;</li> <li>• concerns about dust produced from loading trucks; and</li> <li>• request to review air quality assessment.</li> </ul>	2
Traffic Management	<ul style="list-style-type: none"> <li>• impacts on valet parking, taxi availability, leased car spaces and bus drop down at Radisson Hotel;</li> <li>• impacts on parking not adequately addressed;</li> <li>• inadequate information on traffic management including truck parking;</li> <li>• information requested on use of easement at 28-34 O'Connell Street;</li> </ul>	2



Issue		Number of submissions
	<ul style="list-style-type: none"> <li>more information requested on crane locations and oversail; and</li> <li>concerns with the hours of deliveries.</li> </ul>	
Structure	<ul style="list-style-type: none"> <li>concern regarding the impacts on the structural integrity of adjacent buildings;</li> <li>request for schedule of conditions for 28-34 O'Connell Street; and</li> <li>environmental assessment does not discuss ground anchors, adjacent land holders requested to be involved in discussions on the placement of ground anchors.</li> </ul>	2
Electromagnetic fields	<ul style="list-style-type: none"> <li>electromagnetic fields from the proposed substation and affects on human health.</li> </ul>	1
Consultation	<ul style="list-style-type: none"> <li>inadequate consultation process regarding design</li> <li>consultation requested during the design phase; and</li> </ul>	1

The Department has considered the issues raised in submissions in its assessment of the project.

#### 4.4 Proponent's Response to Submissions

The Proponent provided a response to the issues raised in submissions (see Appendix C). The response included a PPR which removed the bulk excavation, building envelope and construction of a 150m stub tunnel from the project application such that approval is only sought for the demolition works as part of stage 2A (i). The effect of this change is that approval is no longer sought for excavation or a building envelope for the substation and commercial tower, which will be subject to the proposed Stage 2A (ii) project application. Accordingly, many of the issues raised in both agency and public submissions in relation to both design and excavation impacts are no longer relevant to the Stage 2A(i) project application and will be considered as part of Stage 2A(ii). The Proponent amended a number of commitments in response to submissions received.

The Proponent's response to submissions was made publicly available on the Department's website on the 24 March 2011 and also forwarded to Council for comment. The following submissions were in response to the Proponent's Submissions Response and PPR:

##### Council

- Requested a stand alone Community Consultation Plan and complaints handling procedure within the "Noise and Vibration" condition; and
- Provided a further noise and vibration management condition.

##### *Department's Consideration*

The Department has recommended conditions of project approval requiring the Community Information Plan required under the concept approval to be updated in relation to Stage 2A(i) and for community consultation to be detailed in both the Noise and Vibration Management Plan and Traffic Management Plan.

##### Lowy Institute

Lowy Institute made a further submission in response to the PPR. Issues raised by Lowy Institute and the Department's response are summarised below:

##### *Issue*

Notes that Sydney LEP 2005 does not allow demolition unless relevant development application also proposes comprehensive redevelopment of the site. Concerned that approval for demolition would mean agreement to future development on the site without design issues and impacts on adjoining Lowy Institute building being resolved.

##### *Department's Consideration*

Whilst the Department notes the provisions of the LEP, the Department notes that concept approval for the Sydney CityGrid project has already been granted. This approval covers the City East zone substation and integrated commercial/retail development that is now proposed on the subject site. Any approval of demolition on the site at this time does not pre-empt or compromise achieving an acceptable design outcomes for the future development of the site,



as such issues will still be required to be subject to a full merit assessment as part of a future project application. In this regard, the Department also notes that the concept approval requires this future development to be subject to a design review process in accordance with the Sydney LEP and the design principles (based on those submitted by Lowy Institute) which have now been incorporated (via modification) into the concept approval.

*Issue*

The staging of development on this site fails to address significant issues relevant to this constrained development site. The subject site is constrained by its size, location, proximity to heritage items and Sydney Metro tunnel alignment.

*Department's Consideration*

The Department considers that the proposed staging of the project is justified in facilitating the timely achievement of the overall CityGrid project objective (of securing a reliable electricity supply to the CBD and complying with the "n-2" licensing requirement by 2014) and would not compromise the ultimate built form outcome on the site. Whilst the Department acknowledges the site's constraints, it notes that such constraints are not unique in a CBD context and can be appropriately addressed through the future project application for built form (substation and commercial tower) on the site. As noted above, the design principles now included as concept approval requirements are based on those submitted by Lowy Institute and specifically relate to matters such as the relationship to and conservation of adjacent heritage items and streetscapes. Given the design review process and design principles established in the concept approval, it is considered that such matters do not need to be resolved prior to the commencement of demolition activity on the site.

*Issue*

Considers that the project should be sent to the Central Sydney Planning Committee (CSPC) for determination.

*Department's Consideration*

The subject application has been lawfully made and can be lawfully determined under Part 3A of the EP&A Act. It has also been subject to a thorough merit assessment by the Department.

*Issue*

Suggested various matters to be included in any conditions of approval, including:

- Establishment of a Construction Liaison Committee involving relevant authorities and adjoining property owners;
- Traffic Management Plan should be prepared in consultation with adjoining premises with full consideration given to issues raised by Lowy Institute;
- Dilapidation Reports should be prepared in consultation with adjoining landowners including the Lowy Institute.

*Department's Consideration*

The Department has amended its recommended conditions in response to these suggestions, specifically:

- A Community Information Plan is now a requirement and community consultation is to be detailed in both the Noise Management Plan and Traffic Management Plan; and
- Copies of the the pre-construction dilapidation plan and post construction dilapidation plan shall be provided to Lowy Institute.

#### 4.5 Department's Consideration

The Department's consideration of issues raised in public and agency submissions is summarised in Table 2.

**Table 2: Department's consideration of issues raised in Submissions**

Issue	Department's Consideration
Non-indigenous Heritage Impacts	Section 5.1
Noise and Vibration (including structural integrity)	Section 5.2
Traffic Management	Section 5.3
Waste Management	Section 5.4



Electromagnetic fields	<p>The Proponent has committed to incorporating electromagnetic fields into the design of stage 2A (ii) and to design its infrastructure to comply with national and international guidelines and standards on electric and magnetic fields.</p> <p>It is noted that the concept approval has been modified (MP08_0075 Modification 1) to require the consideration of magnetic fields in the design and assessment of the proposed future substation at the site.</p>
Design	<p>The Proponent originally included the bulk excavation and building envelope as part of the Stage 2A(i) application. These elements have now been removed from the Stage 2A (i) application. The building envelope which was removed included a podium and integrated commercial tower that delineates the uses of the substation and office tower. The City East Zone Substation is proposed to be located in the basement and podium of the building. A number of submissions raised concern regarding the building envelope and proposed layout of the substation and lack of a competitive design review process. The building envelope and built form will be included in a subsequent application for the site. The Department notes that the Proponent has now commenced a competitive design process as part of Stage 2A (ii).</p> <p>A modification was approved on the 4 November 2010 which amended condition 3.2 of the concept plan approval so that the design review process only applies to project applications for building envelope(s) or built form and does not apply to project applications that only include development for the purpose of early works, demolition, excavation or site preparation.</p> <p>A subsequent modification has been approved which amends condition 3.2 of the Concept Plan Approval so that design principles apply to the design review process for projects applications which include building envelope(s) or built form.</p>
Groundwater/Water Quality	<p>As bulk excavation is no longer part of the project application groundwater management is no longer an issue for this application. The Department is satisfied that water quality can be managed appropriately through the Demolition Management Plan (DMP) and conditions of approval.</p>
Interaction with Sydney Metro Line 1	<p>As the project application does not include bulk excavation the interaction with Sydney Metro Line 1 is not able to be assessed at this stage.</p> <p>The Department understands the importance of retaining the rail corridors for rail infrastructure and the Sydney Metro Stage 1 and will assess this during subsequent project stages.</p>
Landuse	<p>The Department has recommended a condition of approval requiring a site management plan to manage public safety, ensure visual amenity, monitor and minimise soil erosion and the discharge of sediment and other pollutants and manage surface run-off.</p> <p>The Department is satisfied that these matters have been adequately addressed in the Conditions of Approval, Proponent's Submissions Report and / or Statement of Commitments.</p>
Consultation	<p>The Department is satisfied that these matters have been adequately addressed in the Proponent's Submissions Report and / or Statement of Commitments.</p>

All other issues are considered to be adequately addressed by the Proponent's Statement of Commitments.

## 5. ASSESSMENT OF ENVIRONMENTAL IMPACTS

After consideration of the Environmental Assessment, submissions, Submissions Report/Preferred Project Report and Statement of Commitments the Departments has identified the following key environmental issues associated with the proposal:

- Heritage;
- Noise and Vibration;
- Traffic;
- Air Quality/Dust; and
- Waste

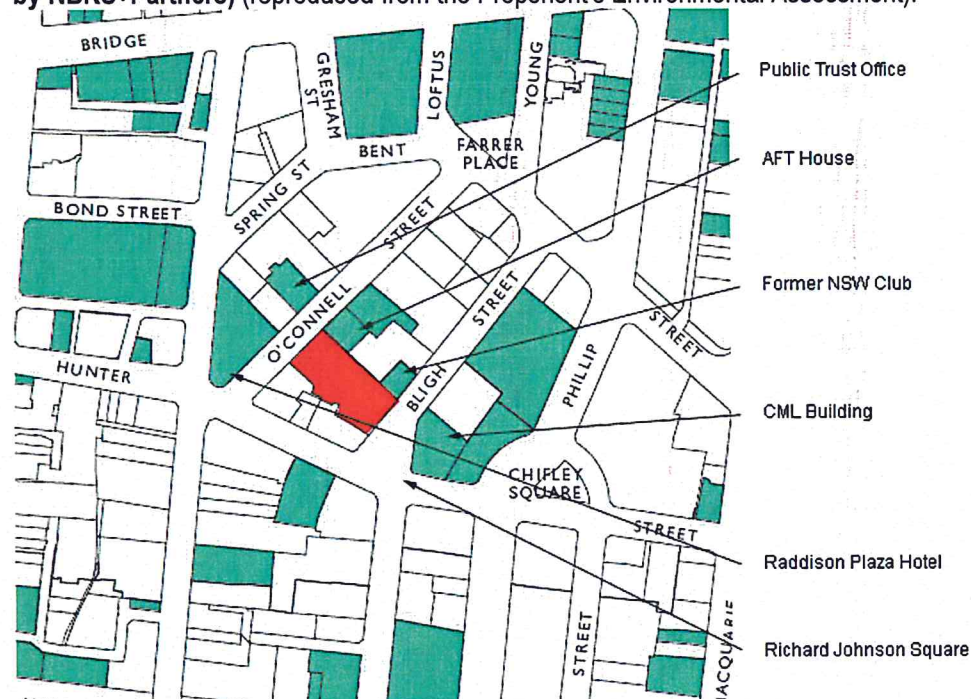
The project application has been assessed for site preparation and demolition of Kindersley House. Many of the issues raised in submissions related to design and impacts from excavation. These issues will be assessed in the Stage 2A(ii) project application.

### 5.1 Non-indigenous Heritage Impacts

#### Issue

The site is surrounded by a number of heritage listed items. Figure 5 shows the location of the heritage buildings in respect to the proposed City East Zone Substation site.

**Figure 5 - Part Heritage Map, Sydney LEP 2005 showing heritage items in the vicinity of the subject site shown in green with identifying markers. The subject site is shaded in red (Source: City of Sydney LEP 2005 annotated by NBRSP+Partners) (reproduced from the Proponent's Environmental Assessment).**





The former NSW Club building and the AFT house are situated directly adjacent to the site and Richard Johnson Square forms the eastern frontage of the site.

The former NSW Club building (Lowy Institute Building) was designed in the Victorian Academic Classical style and built between 1884 and 1887. The building is a fine sandstone city building featuring classical decoration, an ashlar sandstone plinth and slate mansard roof with detailed gable windows. The building is listed on the NSW State Heritage Register under the provisions of the NSW Heritage Act 1977. It is also listed as an item on the Register of the National Estate and is listed by the National Trust of Australia.

The AFT house building was designed in the Inter-War Art Deco style and built between 1939 and 1940. The building was originally a banking chamber and features stylised and geometric semiabstract decoration. The building is an item on the Register of the National Estate and is listed as a significant 20<sup>th</sup> century design by the Royal Australian Institute of Architects.

Richard Johnson Square commemorates the first Christian Worship Service held in the Colony of NSW and the erection of the first Church in 1793 by the colony's first Chaplain, Reverend Richard Johnson. The project would use part of Richard Johnson Square as a construction zone, however the Proponent has stated the existing monument would not be affected.

The potential impacts of the proposed works to heritage items include structural and physical damage resulting in reduced heritage value. The Proponent has stated that it would complete a dilapidation survey prior to and after construction to assess the impacts on the heritage items.

### **Consideration**

The Department acknowledges the heritage significance of the adjacent heritage items and has therefore recommended specific conditions which require the Proponent to ensure the structural integrity of adjacent buildings. The recommended Demolition Management Plan (DMP) must detail the processes and equipment used in demolition and impacts and mitigation measures for nearby buildings and facades, particularly on nearby heritage items. The DMP must also demonstrate how the structural integrity of adjacent buildings will be maintained through demolition. The removal of excavation from the project application would reduce potential impacts on adjoining heritage items (with excavation impacts to be considered as part of the future Stage 2A(ii) project application). The Department believes physical damage of heritage items can therefore be avoided through the implementation of mitigation measures outlined in the DMP.

The concept plan approval specifies that a competitive design process must be completed as part of Stage 2A(ii). Design principles will also be required to be addressed in the project application for Stage 2A (ii). These principles include:

- Design Principle 1 – generate a high quality design for the site and introduce a building form that respects and integrates well with its immediate context, including heritage significance of the surrounding buildings and space, and provides a distinctive architectural contribution to the area and the city skyline.
- Design Principle 2 – improve the quality and significance of the public domain of the site and the precinct (in relation to Stage 2A – specifically Richard Johnson Square).
- Design Principle 3 – conserve and respect existing heritage items and archaeological items and streetscapes within and adjacent to the site.
- Design Principle 4 – provide a high level of pedestrian amenity, with street level activation through public art work or other appropriate activity and connection to the precinct (in relation to Stage 2A – specifically Richard Johnson Square).
- Design Principle 5 – ensure that the design proposals are compatible with other approved development and the city's planning framework.

The Department considers that these design principles will ensure that the design relationship of the new building on the site to both the Lowy Institute building and Richard Johnson Square are adequately addressed at the appropriate stage.



## 5.2 Noise and Vibration

The Proponent conducted a noise and vibration assessment in accordance with the Interim Construction Noise Guideline (DECC, July 2009) and Assessing Vibration: A Technical Guideline for Construction Noise (DEC February 2006). The Proponent identified four sensitive receiving areas surrounding the proposed site (Table 3).

**Table 3: Surrounding receiver areas**

Description	Location
Radisson Hotel – O'Connell Street	Immediately to the west of the site a distance of 20m
Sofitel Wentworth Hotel – backing on to Bligh Street	To the north east of the site at a distance of 65m
Commercial properties	Immediately to the north and south of the site
Heritage listed building – Lowy Institute	Immediately to the north of the site

Land uses surrounding the site consist of commercial office towers with active street frontages, retail, hotels, restaurants and cafes. Noise sources in the area are typical of a city environment.

The Proponent identified intensive noise activities would be undertaken from 7am to 7pm Monday to Friday and 7am to 5pm on Saturday with no work on Sunday or Public Holidays. Demolition of the existing building would take approximately 26 weeks.

Rating Background Levels (RBLs) were determined by the Proponent through long term monitoring at Bligh Street and O'Connell Street. These RBLs were then used in determining background noise levels.

The Proponent established a benchmark Sound Power Level ( $L_{A15}$ ) for each plant item likely to be used on site. The Proponent determined the Sound Power Levels by measuring existing plant machinery in good working order in use in the State, and as such considers them to be readily achievable. The noise modelling was based on the assumption that all nominated plant equipment for that phase of the work was operating at the nominated sound power level at the same time. This is a worst case scenario as it is unlikely that all plant would be operating at that level at the same time.

Equipment which has the potential to generate noise during demolition includes bobcats, jackhammers, dump truck (10 tonnes), concrete saws and excavators.

Traffic noise would also be generated from the works. The Proponent stated that residences in the vicinity of the site may be potentially affected by traffic noise as the existing traffic noise exceeds the noise criteria.

An assessment of likely noise at surrounding commercial and residential receivers has been assessed for demolition. Table 4 summarises the predicted demolition noise levels at residential receivers and commercial premises. The Proponent has estimated no exceedances during demolition. The predicted noise levels are based on equipment noise levels, distance to attenuation and shielding from existing building structures.

**Table 4 shows the predicted noise levels for demolition at receivers.**

Location	Predicted		Day		Saturday (extended)		
	Noise dBA	Criteria dBA	Exceedance dBA	Compliance	Criteria dBA	Exceedance dBA	Compliance
Sofitel Wentworth	45	68	-	Yes	63	-	Yes
Radisson Hotel	66	75	-	Yes	70	-	Yes
Lowy Institute	67	70	-	Yes	70	-	Yes
Southern Commercial	70	70	-	Yes	70	-	Yes
Commercial across Bligh Street	68	70	-	Yes	70	-	Yes



Nearby landholders raised issues concerning construction hours. There are a number of hotels in the area and the proposed construction hours could potentially disturb guests and potentially deter business to these hotels. Lowy Institute has also indicated that it has a number of events which would be greatly affected by noise.

The Proponent stated in its PPR that a Community Information Plan would detail the community relations program to keep the potentially affected community consulted and informed. Close liaison would be maintained with the communities and stakeholders surrounding the site, including Lowy Institute to understand its events program and to identify specific issues that need to be considered such as respite during major functions.

### **Vibration**

The Proponent has stated in the PPR that vibration levels in the EA were predicted for the use of heavy rock breakers during bulk excavation only and vibration impacts associated with demolition were not assessed quantitatively because this activity was expected to generate low levels of vibration relative to excavation of the basement. As excavation is no longer part of the project application, vibration impacts from demolition are expected to be minimal. The Proponent has stated that vibration would be managed by implementing the measures described in the Statement Of Commitments and the DMP.

### **Consideration**

The Department has recommended a general demolition noise management condition, which requires the Proponent to minimise noise emission from plant and equipment operated on the site for construction, by installing and maintaining efficient silencers, low-noise mufflers (residential standard), screening of worksites and replacement of reversing alarms on vehicles with alternative silent measures.

Consistent with the DECCW's advice, the Department has also recommended a condition which requires a Noise and Vibration Management Sub Plan to be included as part of the required DMP for the project, prior to construction commencing and for the approval of the Director-General. This sub plan is required to include identification of all potentially affected sensitive receptors (as the Proponent noted other more distant receptors, apart from the closest receptors already identified may be impacted) and all activities to be carried out at the project site (as the Proponent focused its assessment on the noisiest activities). Where the noise objectives are predicted to be exceeded, the sub-plan must include an analysis of feasible and reasonable mitigation measures that can be implemented to reduce construction noise impacts.

Where noise and vibration objectives cannot be met, then the Proponent must develop additional measures including considering reducing the hours of construction, the provision of respite from noisy and/or vibration intensive activities and alternative methods or other negotiated outcomes with the affected community. The Department considers that should the Proponent develop this Noise and Vibration Management Sub Plan, the potential for significant noise levels which cause adverse impact to human amenity would be reduced and any residual noise impacts could be managed appropriately.

## **5.3 Traffic Management**

### **Issues**

The construction activities are expected to take approximately 26 weeks. Traffic volumes would be dependent on the activities. The construction phases include site preparation and demolition of Kindersley House.

The Proponent has stated in its Statement of Commitments that a Traffic Management Plan (TMP) would be developed prior to construction.

Access to the site would be provided via O'Connell Street and Bligh Street. The works would result in a change in traffic conditions. Existing parking spaces on O'Connell and Bligh Streets would be utilised and there may be a requirement to restrict parking to manage traffic flows on the eastern lane of Bligh Street. Trucks entering the site would require footpath crossings. Public safety would be protected through the use of traffic controllers during peak periods which would include lunch time. The Proponent is proposing to modify the kerbs on Bligh and O'Connell Street to enable access for construction vehicles. The resultant short term loss of parking is considered to have minimal impact.

Heavy vehicles would be required for the removal of spoil and waste, delivery of construction materials, delivery and removal of construction equipment and machinery. Light vehicles would be used for personnel (staff and visitors). Heavy



vehicle movements would be generated by activities associated with spoil and demolition waste removal. Table 9 demonstrates the anticipated heavy vehicle movements associated with demolition.

**Table 9: Anticipated heavy vehicle movements (Taken from Proponent's PPR)**

Construction/activity source	Expected volume <sup>4</sup>	Duration (Days) <sup>1</sup>	Truck Trips per day <sup>2</sup>	Maximum truck movements per hour <sup>3</sup>
Demolition of Kindersley House	29, 300 m <sup>3</sup>	130	90	9

<sup>1</sup> Based on construction occurring 5 days per week

<sup>2</sup> Number of truck trips per day estimated on the basis of 5m<sup>3</sup> per single unit dump truck and each trip generating one inbound trip and one outbound trip

<sup>3</sup> Maximum truck trips per hour is based on a 10 hour work day or maximum throughout of one truck movement every 5 minutes

The truck movements are based on a 10 hour working day.

Traffic flows for the site would be primarily south, east and west via the Eastern Distributor and the rest north via the Cahill Expressway and inner west through the Western Distributor.

The Proponent has stated that partial and temporary road closures along Bligh and O'Connell Street may be required. These closures may impact on commuters. Road closures are to be scheduled and appropriate notification given to minimise disruption to road users. Detour routes are to be identified in the TMP. Construction work zones would be required along Bligh and O'Connell Street frontages which would utilise the existing parking lane. A work zone for construction vehicles would be required for the full length of O'Connell Street. Parking may be impacted by the work zones and the Proponent has identified that parking restrictions may be necessary. The creation of work zones would impact on the operation of both Bligh and O'Connell Street.

There is potential for short term pedestrian delays along Bligh and O'Connell Streets during vehicle access/egress to the site. The work zone would include a portion of Richard Johnson Square which would alter pedestrian paths. Hoarding would be installed around the construction zone to allow for pedestrian access. The Proponent has stated the DMP will include a pedestrian management plan. A detour for cyclists would need to be detailed in the DMP.

The nearest bus routes are on Bent Street and Hunter Street. The project is not expected to impact on nearby bus services.

Depending on when construction starts there is a possibility of cumulative impacts with other construction sites, in particular No 1 Bligh Street which is currently being constructed and is due for completion in May 2011. Consultation with the manager of nearby construction sites would need to be undertaken to manage cumulative impacts.

The Proponent has stated that where possible trucks would enter and exit the site in a forward direction. Some oversize vehicle movements would be required for the project.

Signage and site access arrangements are to be detailed within the DMP. The Proponent would finalise, from the outcomes of its consultation with the appointed contractor, specific safeguards for the safe movement and parking of vehicles for demolition. This information is to be included within the Traffic Management Plan.

Submissions raised issues regarding loss of parking, management of heavy vehicles, location of driveways and location of cranes and their oversail.

#### Consideration

The Department notes that the traffic impacts associated with the project would be short term (26 weeks) and considers that they can be managed to acceptable levels, such that there are no significant or long term impacts on both immediately surrounding streets and the broader CBD traffic network.

The Department has recommended a condition that requires the Proponent to prepare, in consultation with the RTA, Council and NSW Transport, a TMP which must be approved by the Director-General, which is to be included in the required DMP. This Plan is to be submitted for the approval of the Director-General no later than one month prior to the commencement of any construction works associated with the Project (or within such a period otherwise agreed by the Director-General). This Plan must include information on all roads nominated for use during construction, the measures



to be taken to allow for heavy vehicle generation to be minimised and how the use of local roads by the heavy vehicles will be monitored to ensure safe vehicle movement. This TMP must also include information on the scheduling of works to minimise traffic disruption, development and management of parking spaces and safe pedestrian and cyclist movement and details of how heavy vehicles will enter and exit the site.

The Proponent is also required, as part of a recommended condition, both prior to the commencement of construction and after construction is complete, to commission road dilapidation reports for all roads nominated in the required TMP that are likely to be used by construction traffic.

The Proponent will need to provide copies of the reports to the Council and the RTA. Any road or footpath damage, aside from that resulting from normal wear and tear, must be repaired to a standard at least equivalent to that existing prior to damage.

In order to ensure that trucks transporting the spoil do not pose a hazard to other vehicles and pedestrians, the Department has recommended a condition that requires the identification and designation of heavy vehicle routes, including spoil trucks. This information is required to be included in the TMP.

The Department is satisfied that the recommended conditions of approval would provide the necessary measures for managing the impacts of construction traffic to an acceptable level.

#### **5.4 Air Quality/Dust Management**

Dust would be generated during demolition of Kindersley House, truck movements and material handling. There is a risk that dust generated would impact on the amenity of the surrounding areas if appropriate controls are not implemented. The Proponent has stated that scaffolding with shade cloth would be installed to encapsulate dust. Truck loads would be covered.

##### Consideration

The Department is satisfied that dust can be managed appropriately through the DMP and conditions of approval. The Department has recommended in the conditions that the Proponent provides mitigation measures to reduce dust from demolition, stockpiles and other exposed surfaces and a reactive management programme detailing how and when operations are to be modified to minimise the potential for dust emissions, should there be significant emissions

#### **5.5 Waste Management**

Waste would be generated throughout the duration of the project. The bulk of the waste would be generated from demolition. Synthetic mineral fibres containing asbestos have been identified in internal walls at the site. Loose and flaking lead paint has been identified on structures. Fluorescent light fittings containing polycyclic biphenols (PCBs) are contained within the existing building. Hazardous materials are to be removed prior to the internal strip out of the building prior to demolition and disposed of appropriately. Waste would be organised into stockpiles on each floor. The Proponent has stated that most of the waste material generated from structural demolition would be able to be recycled where possible; the material would be stockpiled separately and sent off site for recycling at licensed facilities. Table 10 provides an estimation of demolition waste quantities. A total of approximately 23,000 tonnes (29,300 m<sup>3</sup>) of various materials would require management through reuse/recycling or disposal.

**Table 10: Estimated demolition waste quantities**

Material	Estimated quantity (tonnes)
Wood	4,800
Dryall/Gyprock	2,300
Metals	1,600
Concrete	12,200
Plastics	700
Other	1,400
Total	23,000

Consideration

The Department considers that the Proponent's proposed measures would ensure demolished material can be adequately assessed and disposed of appropriately.

The Department has recommended a condition that requires all asbestos material to be removed from the building prior to demolition where reasonably practical.

The condition also requires that any asbestos wastes recovered from the project must be managed in accordance with the *Protection of the Environment Operations (Waste) Regulation 2005* and *Occupational Health and Safety Regulation 2001*.



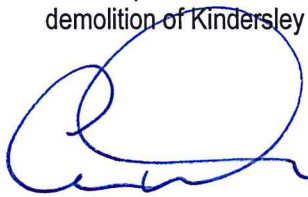
## 6. CONCLUSIONS AND RECOMMENDATIONS

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The Department considers the project to be an essential component of the overall Sydney CityGrid Project as it is required to facilitate the construction of the City East Zone Substation. Failure to construct the City East Zone Substation would mean failure to complete the overall Sydney CityGrid Project, which is necessary to provide a reliable and secure supply of energy in Sydney's CBD.

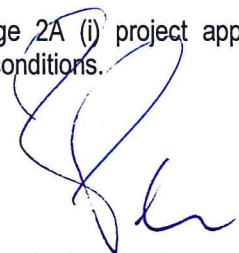
The Department has assessed the Environmental Assessment, Statement of Commitments, submissions received and the Submissions Report and PPR, and is satisfied that the impacts associated with the demolition of Kindersley House, can be mitigated and/ or managed to ensure an acceptable level of environmental performance. To ensure significant impacts are mitigated and other impacts are managed to an acceptable standard, the Department has recommended specific conditions as part of the Project Approval. The Department also considers that the splitting of the development of the site into a demolition phase and subsequent excavation would not compromise the ultimate design outcome on the site and its surrounds, given that the concept approval requirements include a design review process and design principles to be applied to the future project application.

The Department therefore recommends that the Stage 2A (i) project application for site preparation and demolition of Kindersley House be approved, subject to conditions.



8.5.11

Executive Director  
Major Project Assessments



15/5/11

Deputy Director-General  
Development Assessment & Systems Performance



Director-General

13/7/2011

## APPENDIX A – ENVIRONMENTAL ASSESSMENT

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See the Department's website at [http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=3939](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=3939)



## APPENDIX B – SUBMISSIONS

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See the Department's website at [http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=3939](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=3939)

## **APPENDIX C – PROPONENT’S RESPONSE TO SUBMISSIONS AND PREFERRED PROJECT REPORT**

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See the Department's website at [http://majorprojects.planning.nsw.gov.au/index.pl?action=view\\_job&job\\_id=3939](http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=3939)



## APPENDIX D – RECOMMENDED CONDTIONS OF APPROVAL

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# Project Approval

## Section 75J of the *Environmental Planning & Assessment Act 1979*

As delegate of the Minister for Planning under delegation executed on 25 January 2010, I approve the project application referred to in Schedule 1, subject to the conditions in Schedule 2.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the project.



Sam Haddad  
Director-General

Sydney

12th July

2011

### SCHEDULE 1

**Application No.:**

10\_0071

**Proponent:**

Ausgrid (formerly Energy Australia)

**Approval Authority:**

Minister for Planning and Infrastructure

**Land:**

The integrated development site (City East Zone Substation and Commercial Tower) on land owned by Energy Australia with frontages to 33 Bligh and 20-22 and 24-26 O'Connell Street, Sydney (Lot 1 DP 626651).

**Project:**

Stage 2A(i) of the Sydney CityGrid Project, being the site preparation and demolition of Kindersley House.



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## SCHEDULE 2

<b>Act, the</b>	<i>Environmental Planning and Assessment Act, 1979.</i>
<b>Conditions of Approval</b>	The Minister's conditions of approval for the project.
<b>Council</b>	City of Sydney Council
<b>Demolition</b>	Demolition includes all works related to Stage 2A(i) including site preparation.
<b>Department, the</b>	Department of Planning and Infrastructure
<b>Director-General, the</b>	Director-General of the Department of Planning and Infrastructure (or delegate).
<b>Director-General's Approval</b>	A written approval from the Director-General (or delegate) where the Director-General's Approval is required under a condition. The Director-General may ask for additional information if the approval request is considered incomplete.
<b>Director-General's Report</b>	The report provided to the Minister by the Director-General of the Department under section 75I of the EP&A Act.
<b>Dust</b>	any solid material that may become suspended in air or deposited
<b>EA</b>	<i>Sydney CityGrid Project Environmental Assessment for Stage 2A(i) of the City East Zone Substation</i> prepared by Energy Australia and GHD and dated July 2010.
<b>EPL</b>	Environment Protection Licence issued under the <i>Protection of the Environment Operations Act, 1997</i>
<b>Minister, the</b>	Minister for Planning and Infrastructure
<b>Project</b>	Stage 2A(i) of the Sydney CityGrid Project, being the site preparation and demolition of Kindersley House.
<b>Proponent</b>	Ausgrid
<b>Publicly Available</b>	Available for inspection by a member of the general public (for example available on an internet site or at a display centre).
<b>Site</b>	Land to which Major Projects Application 10_0071 applies.
<b>Preferred Project Report</b>	Stage 2A (i) of the Sydney CityGrid Project Submissions Response and Preferred Project Report prepared by GHD March 2011.



## Part A - ADMINISTRATIVE CONDITIONS

### Terms of Approval

- A1. The Proponent shall carry out the project generally in accordance with the:
- a) Major Project Application 10\_0071;
  - b) *Sydney CityGrid Project Environmental Assessment for Stage 2A(i) of the City East Zone Substation* prepared by Energy Australia and GHD and dated July 2010.
  - c) Stage 2A (i) of the Sydney CityGrid Project Submissions Response and Preferred Project Report prepared by GHD March 2011.
  - d) the concept plan approval granted for Sydney CityGrid (08\_0075); and
  - e) the conditions of this approval.
- A2. Nothing in this approval authorises any site excavation work or stub tunnel demolition.
- A3. In the event of an inconsistency between:
- a) the conditions of this approval and any document listed from condition A1a) to A1c) inclusive, the conditions of this approval shall prevail to the extent of the inconsistency; and
  - b) any document listed from condition A1a) to A1c) inclusive, and any other document listed from condition A1a) to A1e) inclusive, the most recent document shall prevail to the extent of the inconsistency.
- A4. The Proponent shall comply with any reasonable requirement(s) of the Director-General arising from the Department's assessment of:
- a) any reports, plans or correspondence that are submitted in accordance with this approval; and
  - b) the implementation of any actions or measures contained in these reports, plans or correspondence.

### Limits of Approval

- A5. This project approval shall lapse five years after the date on which it is granted, unless the works subject of this approval are physically commenced on or before that time.

### Statutory Requirements

- A6. The Proponent shall ensure that all applicable licences, permits and approvals are obtained and maintained as required throughout the life of the project. No condition of this approval removes the obligation for the Proponent to obtain, renew or comply with such licences, permits or approvals. The Proponent shall ensure that a copy of this approval and all relevant environmental approvals are available on the site at all times during the project.

### Compliance

- A7. The Proponent shall ensure that employees, contractors and sub-contractors are aware of, and comply with, the conditions of this approval relevant to their respective activities.
- A8. The Proponent shall be responsible for environmental impacts resulting from the actions of all persons that it invites onto the site, including contractors, sub-contractors and visitors.

## PART B – PRIOR TO DEMOLITION

### Environmental Representative

- B1. Prior to the commencement of any demolition activities, or as otherwise agreed by the Director-General, the Proponent shall nominate for the approval of the Director-General a suitably qualified and experienced Environmental Representative(s). The Proponent shall engage the Environmental Representative(s) during demolition activities or as otherwise agreed by the Director-General. The Environmental Representative(s) shall:
- a) oversee the implementation of all environmental management plans and monitoring programs required under this approval, and advise the Proponent upon the achievement of these plans/programs;
  - b) consider and advise the Proponent on its compliance obligations against all matters specified in the conditions of this approval and the Statement of Commitments.
  - c) have the authority and independence to recommend to the Proponent reasonable steps to be taken to avoid or minimise unintended or adverse environmental impacts, and, failing the effectiveness of such steps, to recommend to the Proponent that relevant activities are to be ceased as soon as reasonably practicable if there is a significant risk that an adverse impact on the environment will be likely to occur.

### Community Information Plan

- B2. Prior to the commencement of demolition, the Proponent shall update the Community Information Plan (as required by Condition 4.3 of the Concept Plan Approval (MP08\_0075)), in relation to Stage 2A (i) to outline measures for disseminating information on the development status of the project and methods for actively engaging with surrounding landowners and affected stakeholders regarding issues that would be of interest/ concern to them during the demolition of the project. A copy of the updated Plan shall be provided to the Director-General prior to the commencement of demolition.

### Demolition Management Plan

- B3. The Proponent shall prepare, in consultation with Council, and implement a **Demolition Management Plan** (DMP) to outline environmental management practices and procedures to be followed during demolition of the project. The Plan shall be consistent with *Guideline for the Preparation of Environmental Management Plans* (DIPNR 2004) and shall include, but not necessarily be limited to:
- a) a description of all activities to be undertaken on the site during demolition including an indication of stages and sub-stages of demolition where relevant;
  - b) statutory and other obligations that the Proponent is required to fulfil during demolition including all approvals, consultations and agreements required from authorities and other stakeholders, and key legislation and policies;
  - c) details of how the environmental performance of the demolition works will be monitored, and what actions will be taken to address identified adverse environmental impacts. In particular, the following environmental performance issues shall be addressed in the Plan:
    - (i) processes and equipment used in demolition and impacts and mitigation measures on nearby buildings and facades particularly on nearby heritage items. The DMP must demonstrate how the structural integrity of adjacent buildings will be maintained through demolition.
    - (ii) measures to monitor and minimise soil erosion and the discharge of sediment and other pollutants to lands and/ or waters during demolition activities;
    - (iii) measures to monitor and control noise emissions during demolition works;
    - (iv) measures to monitor and mitigate and manage vibration and ground movement;
    - (v) measures to minimise and manage impacts on existing non-indigenous items and locales;



- (vi) measures to monitor and control air emissions during demolition to ensure that air emissions are both minimised and in compliance with the requirements of this approval;
- (vii) a description of the roles and responsibilities for all relevant employees involved in the demolition of the project;
- (viii) quantification of traffic volumes generated by demolition activities and description of traffic management measures;
- (ix) complaints handling procedures during demolition;
- (x) details of consultation with adjoining land owners and occupiers; and
- (xi) measures to minimise and manage impacts on existing street trees and vegetation and measures to restore/replace any damaged or removed street trees.

The Plan shall be submitted for the approval of the Director-General no later than one month prior to the commencement of any demolition works associated with the project, or within such period otherwise agreed by the Director-General. Demolition works shall not commence until written approval has been received from the Director-General.

B4. As part of the Demolition Management Plan for the project, required under condition B3 of this approval, the Proponent shall prepare and implement the following:

- a) a **Noise and Vibration Management Plan**, that shall include, but not necessarily be limited to:
  - i) identification of the specific activities that will be carried out and associated noise sources at the premises;
  - ii) identification of all potentially affected sensitive receivers, activities to be carried out, including ancillary facilities, and associated sources of noise at each premises;
  - iii) quantification of the rating background noise level (RBL) for sensitive receivers;
  - iv) the demolition noise, ground-borne noise and vibration objectives outlined in this approval;
  - v) assessment of potential noise, ground-borne noise and vibration levels from the proposed demolition methods (including demolition vehicles) anticipated at sensitive receiver premises against the objectives identified in this approval, in accordance with relevant guidelines;
  - vi) where the objectives are predicted to be exceeded, an analysis of feasible and reasonable mitigation measures that can be implemented to reduce demolition noise impacts;
  - vii) description of management methods and procedures, and specific noise mitigation treatments that will be implemented to control noise and vibration during demolition;
  - viii) where the noise and vibration objectives cannot be met, additional measures including but not necessarily limited to the following shall be considered and implemented where practicable:
    - reduced hours of demolition;
    - the provision of respite from noisy and/or vibration intensive activities;
  - ix) where it is determined that the works cannot be undertaken in a manner that satisfies the demolition noise and vibration objectives, a report justifying that the demolition noise and vibration measures (including management measures) are consistent with current 'best practice' shall be included in the Plan;
  - x) procedures for notifying sensitive receivers of demolition activities that are likely to affect their noise and vibration amenity;
  - xi) measures to monitor noise performance and respond to complaints; and
  - xii) details of consultation with adjoining land owners and occupiers.
- b) a **Historic Heritage Management Plan**, that shall be prepared in consultation with the Office of Environment and Heritage and Council and include, but not necessarily be limited to:
  - i) details of any investigations to be undertaken for the demolition; and



- ii) assessment of potential impacts on adjacent heritage listed buildings, mitigation measures to minimise the risk of damage and provisions to restore heritage buildings to pre-works condition if damage occurs, at the expense of the Proponent.
- c) **Air Quality Management Plan**, that provides details of all dust control measures to be implemented during the demolition of the project. The Plan shall include, but not necessarily be limited to:
  - i) identification of sources of dust deposition;
  - ii) mitigation measures to reduce dust from demolition;
  - iii) establishment of a protocol to handle dust complaints that includes recording, reporting and appropriate actions for dealing with complaints; and
  - iv) a reactive management programme detailing how and when operations are to be modified to minimise the potential for dust emissions, should emissions exceed the relevant criteria.
- d) a **Traffic Management Protocol**, that shall be prepared in consultation with the RTA, Council and State Transit Authority and include information on, but not necessarily be limited to:
  - i) all roads nominated for use during demolition;
  - ii) minimising and monitoring use of local roads by heavy vehicles;
  - iii) identification and designation of heavy vehicle routes, including spoil trucks;
  - iv) adequate access to properties (residential and commercial) during demolition;
  - v) scheduling of works to minimise traffic disruption;
  - vi) safe pedestrian and cyclist movement;
  - vii) safe traffic movement and access;
  - viii) loss of parking spaces and provision of alternative spaces;
  - ix) minimising worker car use and disruption to business activities;
  - x) any other approvals required for the management of traffic; and
  - xi) details of consultation with adjoining land owners and occupiers.

B5. A **Dilapidation Report** must be conducted prior to the commencement of demolition works to assess the current condition of adjacent buildings and roads. Following completion of demolition, a subsequent Dilapidation Report shall be prepared to assess any damage that may have resulted from the demolition. The Dilapidation Report shall include but not necessarily be limited to:

- i) a dilapidation assessment for all roads in the immediate vicinity of the site nominated in the Traffic Management Protocol that are likely to be used by demolition traffic. Copies of the dilapidation report shall be provided to Council and RTA. Any road/footpath damage, aside from that resulting from normal wear and tear, shall be repaired to a standard at least equivalent to that existing prior to the damage, at the cost of the Proponent.
- ii) a dilapidation assessment on surrounding buildings including the former NSW Club House (Lowy Institute Building) and the AFT House. Copies of the report shall be provided to the owners of surrounding buildings. Any damage to buildings, aside from that resulting from normal wear and tear, shall be repaired to a standard at least equivalent to that existing prior to the damage, at the cost of the Proponent.

The Proponent shall ensure that any measures to restore roads and buildings are undertaken in a timely manner, in accordance with the requirements of the relevant authority/building owner.

The pre-commencement Dilapidation Report shall be provided to the Director-General prior to demolition works. The post-demolition Dilapidation Report shall be provided to the Director-General following completion of demolition.



## Site Management Plan

B6. The Proponent shall prepare and implement a **Site Management Plan** to outline the management of the site once demolition has been completed. The Site Management Plan shall provide a description of how the site will be managed and in particular the following environmental performance issues shall be addressed:

- i) measures to ensure public safety;
- ii) measures to ensure visual amenity;
- iii) measures to monitor and minimise soil erosion and the discharge of sediment and other pollutants to lands and/ or waters; and
- iv) measures to manage surface run-off.

The Plan shall be submitted for the approval of the Director-General no later than one month prior to the completion of any demolition works associated with the project, or within such period otherwise agreed by the Director-General.

## PART C – DURING DEMOLITION

### Water Quality Impacts

C1. The proponent shall comply with section 120 of the *Protection of the Environment Operations Act 1997* which prohibits the pollution of waters. Soil and water management controls shall be employed to minimise soil erosion and the discharge of sediment and other pollutants to lands and/or waters during demolition activities, in accordance with *Landcom's Managing Urban Stormwater: Soils and Conservation* and the DMP required by condition B3.

### Vibration

C2. The Proponent shall ensure that the vibration resulting from demolition of the project does not exceed the preferred values for vibration (for low probability of adverse comment) presented in the DECC publication "*Environmental Noise Management – Assessing Vibration: a technical guideline*" and in accordance with conditions B3 and B4.

### Demolition Noise

C3. The Proponent shall take all reasonable measures to minimise noise emissions and vibration from all plant and equipment operated on the site such that they do not exceed noise and vibration criteria derived by application of the Interim Noise Control Guideline – Demolition Site Noise (DECC 2009) and the Environmental Criteria for Road Traffic Noise (EPA 1999).

C4. The Proponent shall only undertake demolition activities associated with the project that would generate an audible noise at any residential premises during the following hours:

- a) 7:00 am to 7:00 pm, Mondays to Fridays, inclusive;
- b) 7:00 am to 5:00 pm on Saturdays; and
- c) at no time on Sundays or public holidays.

This condition does not apply in the event of a direction from police or other relevant authority for safety reasons, to prevent environmental harm or risk to life.

C5. The Proponent shall only undertake sledge hammering, rock hammering or any similar noise-intensive demolition activities during the following hours:

- a) 9:00 am to 12:00pm, Mondays to Saturdays;
- b) 2:00 pm to 5:00pm, Mondays to Fridays; and
- c) at no time on Sundays or public holidays.



- C6. The hours of demolition activities specified under conditions C4 and C5 of this approval may be varied with the prior written approval of the Director-General. Any request to alter the hours of demolition specified under conditions C4 and C5 shall be:
- a) considered on a case-by-case basis; and
  - b) accompanied by details of the nature and need for activities to be conducted during the varied demolition hours and any other information necessary to reasonably determine that activities undertaken during the varied demolition hours will not adversely impact on the acoustic amenity of receptors in the vicinity of the site; and
  - c) accompanied by written evidence demonstrating consultation with the Office of Environment and Heritage in relation to the proposed variation in demolition times (including consideration of any comments made by the Office of Environment and Heritage).

### **Demolition Noise Standards**

- C7. The airborne demolition noise objective for the project is to manage noise from demolition activities (as measured by a  $L_{eq(15-minute)}$  descriptor) so the noise level contributed by the demolition activities does not exceed the background  $L_{A90}$  noise level by:
- a) more than 10 dB(A) for standard demolition hours;
  - b) more than 5 dB(A) outside of standard demolition hours; and
  - c) more than 5 dB(A) for a demolition period greater than 26 weeks.

For the purpose of this condition, background noise levels shall be those established in the document referred to under condition A1b), unless otherwise established in an approved Demolition Noise and Vibration Management Plan (refer to condition B4(a)).

- C8. Demolition activities between 6pm and 7pm shall be undertaken such that regenerated noise limits do not exceed  $L_{AEQ(15-minute)}$  of 40 dB(A) at the nearest residential receiver

### **Demolition Noise Management**

- C9. During demolition, the Proponent shall minimise noise emissions from plant and equipment operated on the site, including bulldozers, cranes, graders, excavators and trucks, by installing and maintaining where reasonable and feasible, efficient silencers, low-noise mufflers (residential standard), screening of worksites and replacement of reversing alarms on vehicles with alternative silent measures.

### **Dust Generation**

- C10. The Proponent shall construct the project in a manner that minimises dust emissions from the site, including wind-blown and traffic-generated dust. All activities on the site shall be undertaken with the objective of preventing visible emissions of dust from the site. Should such visible dust emissions occur at any time, the Proponent shall identify and implement all practicable dust mitigation measures, including cessation of relevant works, as appropriate, such that emissions of visible dust cease. Works are to be carried out in accordance with the DMP.

### **Bunding and Spill Management**

- C11. The Proponent shall store and handle dangerous goods (as defined by the Australian Dangerous Goods Code) and combustible liquids, strictly in accordance with:
- (a) all relevant Australian Standards;
  - (b) a minimum bund volume requirement of 110% of the volume of the largest single stored volume within the bund; and
  - (c) Storing and Handling Liquids: Environmental Protection – Participants Manual (2007); and
  - (d) Environmental Compliance Report: Liquid Chemical Storage, Handling and Spill Management – Part B Review of Best Practice and Regulation (2005).

In the event of an inconsistency between requirements listed from a) to d) above, the most stringent requirement shall prevail to the extent of the inconsistency.



## **Traffic and Transport Impacts**

- C12. The swept path of the longest vehicle entering and exiting the project site, as well as manoeuvrability through the site, shall be in accordance with *AUSTROADS (Guide to Traffic and Engineering Practice)* or the revised *Austrroads Guide to Traffic Management*, as determined appropriate by the RTA.

## **Waste Generation and Management**

- C13. All waste materials removed from the site shall only be directed to a waste management facility lawfully permitted to accept the materials.
- C14. The Proponent shall not cause, permit or allow any waste generated outside the site to be received at the site for storage, treatment, processing, reprocessing, or disposal on the site, except as expressly permitted by a licence under the *Protection of the Environment Operations Act 1997*, if such a licence is required in relation to that waste.
- C15. The Proponent shall maximise the treatment, reuse and/or recycling of demolition material, to minimise the need for treatment or disposal of those materials outside the site.
- C16. The Proponent shall ensure that all liquid and / or non-liquid waste generated and / or stored on the site is assessed and classified in accordance with the *Waste Classification Guidelines* (DECC, 2008), or any future guideline that may supersede that document.
- C17. The Proponent shall remove asbestos from the building prior to demolition where reasonably practical. All work is to be carried out in accordance with the *Occupational Health and Safety Regulation 2001*. Asbestos removal is to be carried out in accordance with the code of practice for the safe removal of asbestos *NOHSC 2002(2005)*.
- C18. The demolition work is to be carried out in accordance with *Australian Standard 2601 Demolition of Structures*. All demolition and asbestos removal work is to be carried out by a suitably licensed contractor.

## **Independent Environmental Auditing**

- C19. At the end of demolition and then as may be directed by the Director-General, the Proponent shall commission an independent person or team to undertake an **Environmental Audit** of the project. The independent person or team shall be approved by the Director-General prior to the commencement of the Audit. The Audit shall:
- a) be carried out in accordance with ISO 19011:2002 - Guidelines for Quality and or Environmental Management Systems Auditing;
  - b) assess compliance with the requirements of this approval, and other licences and approvals that apply to the project;
  - c) assess the environmental performance of the project against the predictions made and conclusions drawn in the documents referred to under condition A1 of this approval;
  - d) review the effectiveness of the environmental management of the project, including any environmental impact mitigation works; and
  - e) review the adequacy of the Proponent's response to any complaints made about the project through the Complaints Register required, referred to in the concept approval.

The **Environmental Audit Report** shall be submitted for comment to the Director-General within two months of the completion of the Audit, detailing the findings and recommendations of the Audit and including a detailed response from the Proponent to any of the recommendations contained in the Report.

## **Incident Reporting**

- C20. Within 24 hours of any incident or potential incident with actual or potential significant off-site impacts on people or the biophysical environment, a report shall be supplied to the Department outlining the basic facts. A further detailed report shall be prepared and submitted following investigations of the causes and identification of necessary additional preventive measures. That report must be submitted to the Director-General no later than 14 days after the incident or potential incident.
- C21. The Proponent shall maintain a register of accidents, incidents and potential incidents.

- C22. The register shall be made available for inspection at any time by the Director-General. The Proponent shall meet the requirements of the Director-General to address the cause or impact of any incident, as it relates to this approval, reported in accordance with condition C20 of this approval, within such period as the Director-General may require.