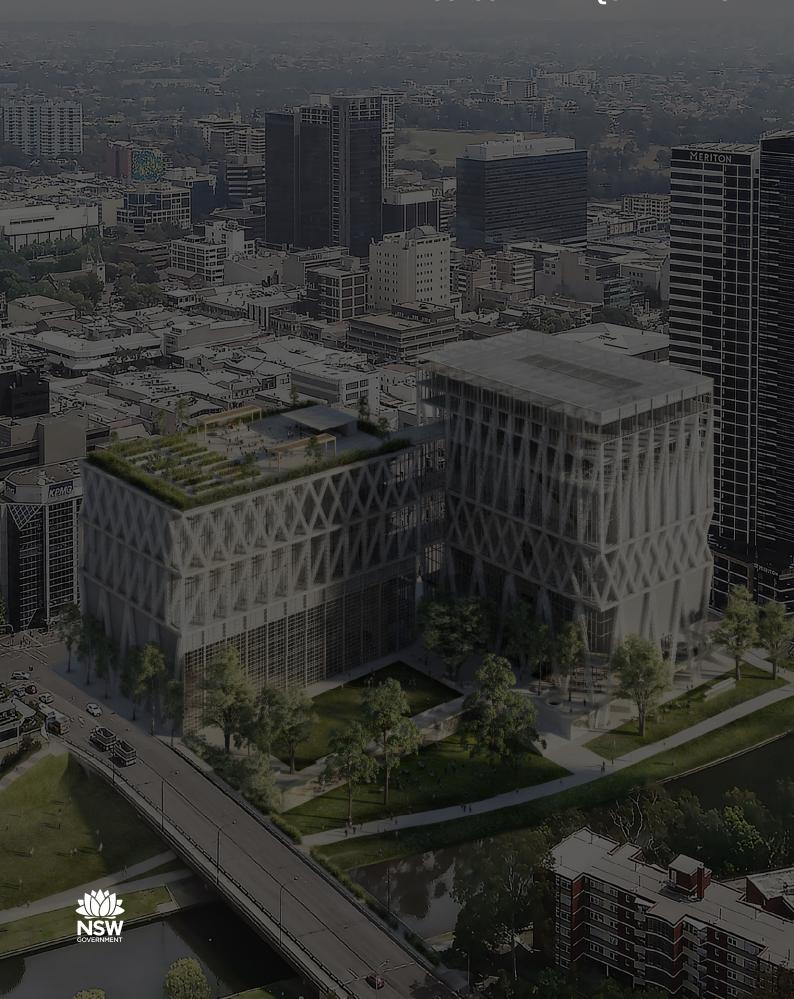
POWERHOUSE PARRAMATTA ENVIRONMENTAL IMPACT STATEMENT

APPENDIX A SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS



Planning Secretary's Environmental Assessment Requirements

Section 4.12(8) of the *Environmental Planning and Assessment Act* 1979 Schedule 2 of the Environmental Planning and Assessment Regulation 2000

Application Number	SSD-10416
Project Name	Construction of the New Powerhouse
Location	30B Phillip Street, Parramatta (Lots 1 and 2 DP 1247122 and Lot 1 DP 128474)
Applicant	Infrastructure NSW
Date of Issue	10 February 2020
General Requirements	The Environmental Impact Statement (EIS) must be prepared in accordance with and meet the minimum requirements of clauses 6 and 7 of Schedule 2 of the Environmental Planning and Assessment Regulation 2000 (the Regulation).
	Notwithstanding the key issues specified below, the EIS must include an environmental risk assessment to identify the potential environmental impacts associated with the development.
	Where relevant, the assessment of key issues below, and any other significant issues identified in the risk assessment, must include:
	· adequate baseline data
	consideration of the potential cumulative impacts due to other developments in the vicinity (completed, underway or proposed)
	 measures to avoid, minimise and if necessary, offset predicted impacts, including detailed contingency plans for managing any significant risks to the environment.
	The EIS must also be accompanied by a report from a qualified quantity surveyor providing:
	 a detailed calculation of the capital investment value (CIV) (as defined in clause 3 of the Regulation) of the proposal, including details of all assumptions and components from which the CIV calculation is derived. The report shall be prepared on company letterhead and indicate applicable GST component of the CIV
	an estimate of jobs that will be created during the construction and operational phases of the proposed development
	· certification that the information provided is accurate at the date of preparation.
Key issues	The EIS must address the following specific matters:
	Statutory and Strategic Context The EIS shall address the statutory provisions applying to the development contained in all relevant environmental planning instruments, including:
	 State Environmental Planning Policy (State & Regional Development) 2011 State Environmental Planning Policy (Infrastructure) 2007 State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55)

- Draft Remediation of Land SEPP
- State Environmental Planning Policy No 64—Advertising and Signage (and associated guidelines)
- · Draft State Environmental Planning Policy (Environment)
- Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005
- State Environmental Planning Policy No 65 Design Quality of Residential Apartment Development (if residential development is proposed)
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004 (if residential development is proposed)
- Parramatta Local Environmental Plan 2011.

The EIS shall also address the relevant planning provisions, goals and strategic planning objectives in the documents listed in **Attachment 1**, as relevant.

Permissibility

Detail the nature and extent of any prohibitions that apply to the development.

Development Standards

Identify compliance with the development standards applying to the site and provide justification for any contravention of the development standards.

2. Design excellence

The EIS shall include a design excellence strategy prepared in consultation with the Government Architect NSW and City of Parramatta Council. The Strategy shall demonstrate how the development, including the public domain, achieves design excellence, in accordance with PLEP 2011.

The Strategy shall document how the proposal has been subject to a competitive design process and include the endorsed design competition brief, jury conclusions report and proposal for a design integrity process.

3. Built form, heritage and urban design

The EIS shall:

- outline the design process which informed the proposal including justification and analysis of the benefits and impacts of the proposal and any alternative schemes considered, including any designs which could have retained Willow Grove and the St George's Terrace
- address and respond to the height, bulk and scale of the proposed development within the context, streetscape and visual and physical character of the locality
- give specific consideration to the overall site layout, open spaces, interface with the public domain (including River Square, Civic Link and River foreshore), through site links, laneways, street interfaces, facades, massing, setbacks, building articulation, solar access and overshadowing, materials, colours, signage or signage envelopes
- · include a table identifying the proposed land uses, including a floor by floor breakdown of gross floor area (GFA), total GFA and FSR
- provide an analysis of the proposed built form against the applicable development standards and controls
- · address Crime Prevention Through Environmental Design Principles (CPTED).

4. Integration with surrounding area

The EIS shall demonstrate how the proposal:

- will be designed and staged to integrate with the future development of surrounding sites and the wider redevelopment of Parramatta including Civic Link, River Square, River foreshore and the future laneway to Church Street
- · will address public accessibility, connectivity and major events at Civic Link, River Square and the River foreshore
- addresses amenity impacts, visual and view impacts, servicing and loading arrangements, pedestrian connectivity and activation of public spaces.

5. Public domain

The EIS shall:

- · identify how ground level (both the street and river frontage) uses are configured to provide safe and active street frontages and provide visual interest and activation to the public domain
- · identify improvements to the public domain, including clear definition of any private, semi private or public open space, pedestrian movement patterns, street trees and associated landscaping, street furniture, public amenities, lighting and linkages to other public domain spaces
- address how the public domain responds and contributes to existing and planned future public spaces in Parramatta, including Civic Link, River foreshore and River Square and supports pedestrian and cycle movements in, around and through the site
- address access and egress along the City River foreshore including pedestrian, cycle, events use, maintenance and interface with the existing footbridge crossing the river
- · address universal access between the river level, New Powerhouse, and street level
- address ongoing maintenance, management and operation of the public domain upon completion of the development, inclusive of emergency and event access to the river foreshore within the block
- · address how access to the site will be secured at various times of the day, including land ownership arrangements.

6. Heritage and Archaeology

The EIS shall include:

- a Statement of Heritage Impact (SOHI), prepared by a suitably qualified heritage consultant in accordance with the guidelines in the NSW Heritage Manual. The SOHI is to address the impacts of the proposal on the heritage significance of the site and adjacent areas, and is to:
 - o identify all heritage items (state and local and potential) and conservation areas within and near the site, including built heritage, landscapes and archaeology, include detailed mapping of these items and an assessment of why the items and site(s) are of heritage significance
 - o assess the impacts of the proposal on the heritage significance of these items and conservation areas, including visual and physical impacts,

- vibration, demolition, archaeological disturbance, altered historical arrangements and access, visual amenity, landscape and vistas, setting, and curtilage (as relevant)
- address compliance with any relevant Conservation Management Plan, addressing any proposed adaptive reuse and measures to minimise impacts on the building
- demonstrate attempts to avoid and/or mitigate the impact on the heritage significance or cultural heritage values of the site and the surrounding heritage items heritage conservation areas
- o demonstrate engagement with appropriate local stakeholders.
- a Historical Archaeological Assessment (HAA) prepared by a suitably qualified archaeologist in accordance with the guidelines Archaeological Assessment (1996) and Assessing Significance for Historical Archaeological Sites and Relics (2009). The HAA is to:
 - o identify what relics, if any, are likely to be present, assess their significance and consider the impacts from the proposal on this potential archaeological resource. Where harm is likely to occur, it is recommended that the significance of the relics be considered in determining an appropriate mitigation strategy. If harm cannot be avoided in whole or part, an appropriate Research Design and Excavation Methodology should also be prepared to guide any proposed excavations or salvage programme
 - o discuss the potential significance of the site and the impact of the proposed works, including analysis of the following Archaeological Management Units (AMUs) of the Parramatta Historical and Archaeological Landscape Management Study (PHALMS) which the site encompasses:
 - § AMU 2882. 42-56 Phillip Street, Parramatta
 - § AMU 3083. Church Street, Parramatta
 - § AMU 3092. Church Street, Parramatta.

7. Aboriginal cultural heritage

The EIS shall:

- identify and describe Aboriginal cultural heritage values that exist across the whole area that will be affected by the development and document these in an Aboriginal Cultural Heritage Assessment Report (ACHAR)
- ensure consultation has taken place with Aboriginal people and is documented in accordance with the Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW)
- assess impacts on Aboriginal cultural heritage values and document them in the ACHAR. This must demonstrate attempts to avoid impacts, identify any conservation outcomes and measures to mitigate impacts.

8. Social

The EIS shall include a social impact assessment, which:

· identifies, analyses, and proposes responses to any likely social impacts, including concerns or aspirations that people may have about how the proposal

- might affect their surroundings, way of life, health and wellbeing, community, culture, or their access to and use of infrastructure, services, and facilities
- considers social impacts (positive and negative) from the points of view of community stakeholders and how they expect to experience the proposal (i.e. using primary research and outcomes of engagement)
- · investigates whether any group in the community may disproportionately benefit or experience negative impacts, and proposes commensurate responses consistent with socially equitable outcomes
- considers social impacts for all stages of the project lifecycle, i.e. site preparation, demolition, construction, operation, and how different people and groups may be affected differently at each phase
- considers all remaining feasible alternatives and comparatively analyses their respective social impacts and benefits
- · investigates the cumulative impact of the loss of heritage within the Parramatta area from the point of view of the local communities.

9. Environmental Amenity

The EIS shall:

- · include a visual impact assessment, including photomontages comparing the current site context, future development context, and site in the context of the future development of the wider precinct, showing views from key locations, vistas and view corridors from the public domain
- · include an analysis and assessment of any potential view loss impacts to surrounding residential buildings
- address solar access and overshadowing impacts on surrounding (and known future) public spaces, public domain areas and any affected residential developments
- · include a wind impact assessment, including wind tunnel testing, to demonstrate that the wind environment in the public domain will be comfortable for its intended use
- include a noise and vibration assessment prepared in accordance with the relevant EPA guidelines, detailing operational noise impacts on nearby noise sensitive receivers and outline proposed noise and vibration mitigation and monitoring procedures
- address potential air quality and odour impacts during construction and operation of the development and identify appropriate mitigation measures
- · include a reflectivity analysis identifying potential adverse glare conditions affecting, motorists, pedestrians and occupants of neighbouring buildings.

10. Ecologically Sustainable Development (ESD)

The EIS shall:

· identify how principles (as defined in Clause 7(4) of Schedule 2 of the Regulation) will be incorporated in the design, construction and ongoing operation phases of the development, and include innovative and best practice proposals for environmental building performance

- include a framework for how the proposal will be designed to consider and reflect best practice sustainable building principles to improve environmental performance and reduce ecological impact. This should be based on a materiality assessment and include waste reduction design measures, future proofing, use of sustainable and low-carbon materials, energy and water efficient design and technology (including water sensitive urban design) and use of renewable energy
- use the climate change projections developed by CSIRO for the Sydney Metropolitan area to inform the building design and asset life of the project and address strategies to mitigate climate change impacts including:
 - o increased frequency of extreme heat days
 - o extended heatwave events
 - o more extreme (intense) rainfall events
 - o gustier wind conditions.
- · demonstrate strategies to minimise climate change drivers (including renewable energy use, reduced urban heat island and water sensitive urban design)
- address how the proposal will support the City's long-term strategy to improve water quality and public engagement with the Parramatta River.

11. Transport, traffic, parking and access (operation)

The EIS shall include a Traffic and Transport Impact Assessment that includes the following:

- accurate details of the current and likely estimated future daily and peak hour vehicle, public transport network, point to point transport, taxis, pedestrian and bicycle movements to/ from the site
- traffic modelling and analysis of the future daily and peak hour vehicle, public transport, pedestrian and bicycle movements likely to be generated by the proposed development and assessment of the impacts on the local road network, including key intersection capacity and any potential need for upgrading or road works (if required)
- traffic modelling and analysis of precinct events, and assessment of pedestrian, bicycle and vehicle facilities and their ability to accommodate event movement through the precinct as well as to and from the development
- an assessment of the need for any road network improvements that may be required to support the development
- an assessment of the operation of existing and future transport networks including rail, bus, ferries, Parramatta Light Rail, Sydney Metro West, pedestrian and bicycle networks and point-to-point transport and coach facilities and their ability to accommodate the forecast number of trips to and from the development
- details of existing and proposed vehicular access arrangements, parking and servicing including compliance with the requirements of the relevant Australian Standards (i.e. turn paths, sight distance requirements, aisle widths, etc.) and an assessment of any potential impacts, considering various design and staging options and impacts for the development of the site
- details of the proposed vehicle, motorcycle, taxi, bus and coach parking, including justification for the level of parking on the site

- details of the provision and access to bicycle parking facilities (and end of trip facilities) in secure, convenient, accessible areas close to main entrances incorporating lighting and passive surveillance
- details of emergency vehicle access arrangements and a response to flood evacuation (up to and including the probable maximum flood) for pedestrians, cyclists and vehicles
- · details of any road and pedestrian safety measures required adjacent to the proposed development
- · initiatives and strategies to encourage employees, guests and visitors to make sustainable travel choices, such as walking, cycling and public transport that support the achievement of State Plan targets
- assessment of loading and servicing demand and details of the existing and proposed loading and servicing facilities, including safe and efficient access to loading, deliveries and servicing of the development.

12. Flooding, drainage and stormwater

The EIS shall include:

- an assessment and proposed management of the stormwater, drainage, flooding and groundwater issues associated with the site, environs and the proposed development, including:
 - o stormwater and drainage infrastructure, including a stormwater management plan, water sensitive urban design, roof gardens, green walls, and MUSIC link model (for water quality)
 - assessment of flood risk in accordance with the guideline contained in the *NSW Floodplain Development Manual 2005*, including potential effects of climate change, sea level rise and an increase in rainfall intensity and integration with Council's wider flood risk management planning and flood modelling
 - o the potential impact of the development on groundwater levels, rates of flow, flow paths and quality.
- an integrated water management strategy that incorporates waste water, rainwater and stormwater runoff. The strategy must outline opportunities for the use of integrated water cycle management practice and principle, and demonstrate water sensitive urban design and any other water conservation measures
- consideration as to how the proposal responds to City River and Civic Link precinct access and egress requirements, including evacuation in flood.

13. Servicing and Waste

The EIS shall:

- identify, quantify and classify the likely waste streams to be generated during construction and operation of the development and describe the measures to be implemented to minimise, manage, reuse, recycle and safely dispose of this waste with reference to relevant guidelines
- · identify appropriate servicing arrangements (including but not limited to, waste management, loading zones and mechanical plant) for the site.

14. Utilities

The EIS shall:

- address the existing capacity and future requirements of the development for the provision of utilities, including staging of infrastructure in consultation with relevant agencies
- detail impacts to any existing infrastructure assets of utility stakeholders during demolition/construction and any augmentation of infrastructure that may be required to accommodate the proposed development
- demonstrate coordination with the City of Parramatta and other agencies for an integrated approach that considers broader City River public domain outcomes.

15. Contamination and remediation

The EIS shall:

- demonstrate compliance with the requirements of SEPP 55 and if remediation works are required include a Remedial Action Plan
- identify geotechnical issues (including Acid Sulfate Soils) associated with the construction of the development. A Preliminary Site Investigation Study if needed, and/or further information as required by SEPP55 including an Acid Sulphate Soils Management Plan.

16. Biodiversity

The EIS shall include an assessment of the proposal's biodiversity impacts in accordance with section 7.9 of the *Biodiversity Conservation Act 2016*, including the preparation of a Biodiversity Development Assessment Report where required under the Act except where a waiver for preparation of a BDAR has been granted.

17. Construction

The EIS shall include a Construction Pedestrian and Traffic Management Plan addressing:

- details of the peak hour and daily construction and servicing vehicle movements and access arrangements for workers to/from the site, emergency vehicles and service vehicle movements
- cumulative impacts associated with other construction activities in the area, including impacts associated with the potential overlap with construction of the Parramatta Light Rail and any other State, Local and private development and capital works projects
- assessment of traffic and transport impacts during construction and how these impacts will be mitigated for any associated traffic, pedestrians, cyclists and public transport operations
- road safety at key intersections and locations subject to heavy vehicle movements and high pedestrian activity
- · details of temporary cycling and pedestrian access during construction
- potential impacts of the construction on surrounding areas with respect to noise and vibration, air quality and odour impacts, dust and particle emissions, water quality, storm water runoff, groundwater seepage, soil pollution and construction waste
- annual volume of materials to be extracted, processed or stored onsite during construction and how the extracted material will be disposed of or reused.
- river foreshore events and activation in coordination with the City of Parramatta Council
- details of proposed construction methods for the basement levels e.g. shoring of the basement during construction.

18. Staging

The EIS shall provide details regarding the staging of the proposed development (if proposed).

19. Public Benefits and Contributions

The EIS shall provide confirmation of the public benefit to be derived from the proposal.

Plans and Documents

The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the *Environmental Planning and Assessment Regulation 2000*. These are to be provided as part of the EIS (as appendices) rather than as separate documents.

In addition, the EIS must include the following:

- · architectural drawings (to a useable scale at A3):
 - o showing key dimensions, RLs, scale bar and north point
 - o plans, sections and elevations of the proposal
 - o illustrated materials schedule and photomontages.
- site title diagrams and survey plan, showing existing levels, location and heights of existing and adjacent structures/ building
- · locality/context plan, including significant local features, such as heritage items
- site analysis plan
- schedule of proposed land uses, including a floor by floor breakdown of gross floor area (GFA), total GFA and FSR
- architectural and urban design statement
- design excellence strategy, including the endorsed competition brief, jury conclusions report and design integrity process
- landscape and public domain plans
- landscape sections including details of the built form interface
- · landscape and public domain statement
- · arborist report
- · CPTED assessment
- visual impact assessment and view impact assessment, including verified views and photomontages
- solar access analysis report and diagrams
- wind impact assessment (including a wind tunnel study)
- noise and vibration assessment and management plans
- reflectivity analysis
- · heritage impact assessment
- · historical archaeological assessment
- · Aboriginal cultural heritage assessment
- · traffic and transport impact assessment
- social impact statement
- · ESD statement (incorporating a sustainability framework)
- draft construction management plan, including pedestrian and traffic management
- · waste management plan
- assessment of the stormwater, drainage, flooding, groundwater and wastewater impacts
- biodiversity assessment (or waiver)
- · soil and contamination report, and remedial action plan
- · acid sulfate soils management plan
- geotechnical statement

	 construction air quality assessment access / DDA impact statement BCA Report signage details pre-submission consultation report.
Consultation	During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups, local cultural organisations and affected landowners. In particular you must consult with: The City of Parramatta Council
	 Government Architect NSW Transport for NSW Sydney Water NSW Aboriginal Land Council
	The EIS must describe the consultation process and the issues raised and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.
	The EIS must also describe the ongoing engagement and consultation process that will be applied throughout the project.
Further consultation after 2 years	If you do not lodge a Development Application and EIS for the development within 2 years of the issue date of these SEARs, you must consult further with the Secretary in relation to the preparation of the EIS.
References	The assessment of the key issues listed above must take into account relevant guidelines, policies, and plans as identified. While not exhaustive, the following attachment contains a list of some of the guidelines, policies, and plans that may be relevant to the environmental assessment of this proposal.

ATTACHMENT 1

Strategic, Policy and Technical Guidelines

The following strategic documents, policy documents and technical guidelines may assist in the preparation of the Environmental Impact Statement. This list is not exhaustive and not all of these guidelines may be relevant to your proposal.

- · Greater Sydney Region Plan and Central City District Plan
- · Greater Parramatta Olympic Peninsula (GPOP) economic corridor (Central City District Plan)
- A City Supported by Infrastructure: Place-based Infrastructure Compact Pilot (Greater Sydney Commission, 2019)
- · Greater Parramatta and the Olympic Peninsula (GPOP) Vision (Greater Sydney Commission, 2017)
- · Greater Parramatta Interim Land Use and Infrastructure Implementation Plan (DPIE, 2017)
- Parramatta River Catchment Group Our Living River project and Masterplan
- · Parramatta Ways Walking Strategy
- City of Parramatta Council draft LSPS
- · City of Parramatta draft Heritage Interpretation Guidelines 2017
- · City of Parramatta Interim Public Art Guidelines for Developers 2015
- · City of Parramatta Public Domain Guidelines (latest)
- Culture and Our City: A Cultural Plan for Parramatta's CBD 2017-2022
- Civic Link Framework Plan 2017
- Draft Community Infrastructure Strategy 2020
- Draft Parramatta DCP Section 4.3 Strategic Precincts 4.3.3.7 Civic Link Precinct DCP 2018
- Socially Sustainable Parramatta Framework 2017
- Parramatta City River Strategy 2015
- Parramatta City Centre Lanes Policy 2011
- Parramatta City Centre Lanes Strategy 2010
- Parramatta CBD Pedestrian Strategy 2017
- · Parramatta Design Series (OS)
- Technical Standards (latest)
- Parramatta Bike Plan 2017
- Better Placed an integrated design policy for the built environment of NSW
- Better Placed Design Guide for Heritage
- · Healthy Urban Development Checklist 2009
- Future Transport Strategy 2056 (and supporting plans)
- Development near rail corridors and busy roads (Roads and Maritime Services)
- Guide to Traffic Generating Developments (Roads and Maritime Services)
- · Guide to Traffic Management Part 12: Traffic Impacts of Development (AUSTROADS)
- Guidelines for controlled activities on waterfront land (Riparian corridors)
- NSW Planning Guidelines for Walking and Cycling
- Sydney's Rail Future
- · Sydney's Bus Future
- Sydney's Ferry Future
- Interim Construction Noise Guidelines (DECCW, 2009)
- Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011)
- Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010
- Aboriginal Heritage Management Strategy 2018-2021
- Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW 2010
- Crime Prevention Through Environmental Design Principles
- NSW and ACT Government Regional Climate Modelling (NARCliM)
- OEH (2015) Urban Green Cover in NSW Technical Guidelines
- Heritage Division, Office of Environment and Heritage Guidelines Archaeological Assessment (1996)
- · Assessing Significance for Historical Archaeological Sites and Relics (2009)
- Australian Guidelines for Water Recycling: Managing Health and Environmental Risks (phase 1) 2006