Industry Assessments
Contact: Lawrence Huang
Phone: (02) 9228 6236
Fax: (02) 9228 6555
Email: Lawrence.Huang@planning.nsw.gov.au

Mr Steve Ryan
Qube Holdings Limited C/O Tactical Group
Level 15, 125 Walker Street
NORTH SYDNEY NSW 2060

Our Ref: SSD 7500
File:16/03046

Dear Mr Ryan

State Significant Development - Secretary's Environmental Assessment Requirements
Proposed Warehouse and Logistics Hub, Qube – 5 and 9 Culverston Road, Minto (SSD 7500)

Please find attached the Secretary's Environmental Assessment Requirements (SEARs) for the proposed warehouse and logistics hub for Qube Holdings Limited at 5 and 9 Culverston Road, Minto in the Campbelltown LGA.

The SEARs have been prepared in consultation with the relevant government agencies as well as Campbelltown City Council (see **Attachment 2**), and are based on the information you have provided to date. Please note that the Department may alter the SEARs at any time. You must consult further with the Department if you do not lodge a development application and Environmental Impact Statement (EIS) for the development within two years of the date of issue of these SEARs.

I wish to emphasise the importance of effective and genuine community consultation and the need for the proposal to proactively respond to the community's concerns. Accordingly, you must undertake a comprehensive, detailed and genuine community consultation and engagement process during the preparation of the EIS. This process must ensure that the community is informed of the development and engaged with issues of concern to them. Sufficient information must be provided to the community to enable a good understanding of the development and any potential impacts.

Your development may require separate approval under the provisions of the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). If an EPBC Act approval is required, please advise the Department accordingly, as the Commonwealth assessment process may be integrated into the NSW assessment process, and supplementary SEARs may need to be issued.

Please contact the Department at least two weeks before you intend lodge the EIS and any associated documentation for the development. This will enable the Department to determine the:

- applicable fee (under Division 1AA, Part 15 of the Environmental Planning and Assessment Regulation 2000); and
- consultation and public exhibition arrangements, including copies and format requirements of the EIS.

If you have any enquiries about these SEARs, please contact Lawrence Huang on the above details.

Yours sincerely

Chris Ritchie 10/3/16
Director
Industry Assessments
As the delegate of the Secretary

Secretary's Environmental Assessment Requirements

Section 78A(8A) of the *Environmental Planning and Assessment Act 1979*

State Significant Development

Application Number	SSD 7500
Development	Construction of a warehouse and logistics hub comprised of four warehouses with a gross floor area of 112,000 m^2.
Location	5 and 9 Culverston Road, Minto (Lot 3 DP 817793 and Lot 400 DP 875711)
Applicant	Qube Holdings Limited C/O Tactical Group
Date of Issue	March 2016
General Requirements	The Environmental Impact Statement (EIS) for the development must meet the form and content requirements in clauses 6 and 7 of Schedule 2 of the *Environmental Planning and Assessment Regulation 2000.* In addition, the EIS must include: • a detailed description of the development, including: – the need for the proposed development; – justification for the proposed development; – likely staging of the development; – likely interactions between the development and existing, approved and proposed operations in the vicinity of the site; and – plans of any proposed building works. • consideration of all relevant environmental planning instruments, including identification and justification of any inconsistencies with these instruments; • a risk assessment of the potential environmental impacts of the development, identifying the key issues for further assessment; • a detailed assessment of the key issues specified below, and any other significant issues identified in this risk assessment, which includes: – a description of the existing environment, using sufficient baseline data; – an assessment of the potential impacts of all stages of the development, including any cumulative impacts, taking into consideration relevant guidelines, policies, plans and statutes; and – a description of the measures that would be implemented to avoid, minimise, mitigate and if necessary, offset the potential impacts of the development, including proposals for adaptive management and/or contingency plans to manage significant risks to the environment. • a consolidated summary of all the proposed environmental management and monitoring measures, highlighting commitments included in the EIS. The EIS must also be accompanied by a report from a qualified quantity surveyor providing: • a detailed calculation of the capital investment value (CIV) of the development as defined in clause 3 of the *Environmental Planning and Assessment Regulation 2000*, including details of all components of the CIV; • an estimate of the jobs that will be created by the development during the construction and operational phases of the development; and • certification that the information provided is accurate at the date of preparation.
Key issues	The EIS must address the following specific matters: • **Strategic and Statutory Context** – including: – detailed justification for the proposal and the suitability of the site; and – demonstration that the proposal is generally consistent with all relevant planning strategies, environmental planning instruments and

	development control plans (DCPs) and justification for any inconsistencies. • **Traffic and Transport** – including: – a Traffic Impact Assessment detailing all daily and peak traffic and transport movements likely to be generated (vehicle, public transport, pedestrian and cycle trips) during construction and operation of the development, including a description of vehicle access routes and the impacts on nearby intersections; – details of access to the site from the road network including intersection location, design and sight distance; – an assessment of predicted impacts on road safety and the capacity of the road network to accommodate the development; – plans of any road upgrades or new roads required for the development if necessary; – detailed plans of the proposed layout of the internal road network and parking provision on-site in accordance with the relevant Australian Standards; and – details of any likely dangerous goods to be transported on arterial and local roads to/from the site, if any, and the preparation of an incident management strategy. • **Urban Design and Visual** – including: – layout of the development including staging, site coverage, setbacks, proposed open space and landscaped areas; – suitable landscaping incorporating endemic species; – the layout and design of the development having regard to the surrounding vehicular, pedestrian and cycling networks, if applicable; – a detailed assessment (including photomontages and perspectives) of the facility (buildings and storage areas) including height, colour, scale, bulk, building materials and architectural treatments and finishes, signage, lighting and any retaining walls particularly from nearby public receivers and significant vantage points within the broader public domain; – proposed cut and fill works associated with the development; and – measures to minimise the extent of cut and fill. • **Noise and Vibration**– including: – a description of all potential noise and vibration sources during the construction and operational phases of the development, including on and off-site traffic noise; – a noise impact assessment, including a cumulative noise impact assessment in accordance with relevant Environment Protection Authority guidelines; and – details of noise mitigation, management and monitoring measures. • **Soils and Water** – including: – a description of the water demands and a breakdown of water supplies; – a description of the measures to minimise water use; – a detailed water balance; – a description of all wastewater generated on-site; – a description of the proposed erosion and sediment controls during construction and operation; – a description of the surface and stormwater management system, including on-site detention, and measures to treat or re-use water; – an assessment of potential surface and groundwater impacts associated with the development; – an assessment of the impact of flooding on the proposed development for the full range of flood events up to the probable maximum flood; – an assessment of the impact of the proposed development on floor behaviour; and – details of impact mitigation, management and monitoring measures. • **Air Quality** – including: – an assessment of the air quality impacts at private properties during construction and operation of the development, in accordance with relevant Environment Protection Authority guidelines; and

	– details of any mitigation, management and monitoring measures required to prevent and/or minimise emissions. • **Infrastructure Requirements** – including: – a detailed written and/or geographical description of the existing infrastructure required on-site; – identification of any infrastructure upgrades required to facilitate the development, and describe any arrangements to ensure that the upgrades will be implemented in a timely manner and maintained; and – a detailed description of cooling/heating systems to be installed on-site. • **Greenhouse Gas and Energy Efficiency** – including an assessment of the energy use on site, and demonstrate what measures would be implemented to ensure the proposal is energy efficient. • **Ecologically Sustainable Development** – including an assessment of how the development will incorporate ecologically sustainable development principles in all phases of the development. • **Waste** – including: – details of the quantities and classification of all waste streams to be generated on site; – details of waste storage, handling and disposal; and – details of the measures that would be implemented to ensure that the development is consistent with the aims, objectives and guidance in the *NSW Waste Avoidance and Resource Recovery Strategy 2014-2021.* • **Contributions** – including: – consideration of Council's Section 94/94A Contribution Plan and/or details of any Voluntary Planning Agreement. • **Mineral Resources** – including an assessment of the potential impacts of the proposed development on any significant mineral resources.
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. You should provide these as part of the EIS rather than as separate documents.
Consultation	During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners. In particular you must consult with: • Campbelltown City Council; • Environment Protection Authority; • Office of Environment and Heritage; • Department of Primary Industries; • Department of Industry – Resources and Energy; • Transport for NSW; • Roads and Maritime Services; • Sydney Water; and • local residents and stakeholders. 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.
Further consultation after 2 years	If you do not lodge an EIS for the development within 2 years of the issue date of these SEARs, you must consult with the Secretary in relation to any further requirements for lodgement.
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 development.

ATTACHMENT 1
Technical and Policy Guidelines

The following 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.

Many of these documents can be found on the following websites:
http://www.planning.nsw.gov.au
http://www.bookshop.nsw.gov.au
http://www.publications.gov.au

Policies, Guidelines & Plans	
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. Provide these as part of the EIS rather than as separate documents. In addition, the EIS must include the following: 1. An existing site survey plan drawn at an appropriate scale illustrating: • the location of the land, boundary measurements, area (sqm) and north point; • the existing levels of the land in relation to buildings and roads; • location and height of existing structures on the site; • location and height of adjacent buildings and private open space; and • all levels to be to Australian Height Datum (AHD). 2. Locality/context plan drawn at an appropriate scale should be submitted indicating: • significant local features such as heritage items; • the location and uses of existing buildings, shopping and employment areas; and • traffic and road patterns, pedestrian routes and public transport nodes. 3. Drawings at an appropriate scale illustrating: • detailed plans, sections and elevations of the existing building, which clearly show all proposed internal and external alterations and additions.
Documents to be Submitted	
	Documents to submit include: • 1 hard copy and 1 electronic copy of all the documents and plans for review prior to exhibition; and • Other copies as determined by the Department once the development application is lodged.

Aspect	Policy / Methodology
Transport and Access	
	State Environmental Planning Policy (Infrastructure)
	Guide to Traffic Generating Development (Roads and Maritime Services)
	Road Design Guide (Roads and Maritime Services)
	Austroads Guide to Traffic Management – Pt 12: Traffic Impacts of Development
	Austroads Guidelines for Planning and Assessment of Road Freight Access in Industrial Areas
	NSW Freight and Ports Strategy

Noise and Vibration	
	Assessing Vibration: A Technical Guide (DEC, 2006).
	Australian and New Zealand Environment Council – Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZEC, 1990).
	NSW Industrial Noise Policy (EPA, 2000).
	Environmental Criteria for Road Traffic Noise (EPA, 1999).
	Environmental Noise Control Manual (DECC).
	Interim Construction Noise Guideline (DECC, 2009).
	National Water Quality Management Strategy: Policies and principles - a reference document (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Implementation guidelines (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Australian Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC/ARMCANZ)
	Bunding and Spill Management (EPA)
	Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DEC)
	Using the ANZECC Guideline and Water Quality Objectives in NSW (DEC)
	The NSW State Rivers and Estuaries Policy (NSW Water Resources Council)
	Water Sharing Plan for the Metropolitan Region Unregulated River Water Sources (NOW) 2011
Soils and Water	
Groundwater	National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC)
	NSW State Groundwater Policy Framework Document (DLWC)
	NSW State Groundwater Quality Protection Policy (DLWC)
	The NSW State Groundwater Dependent Ecosystem Policy (DLWC)
	Water Sharing Plan for the Greater Metropolitan Region Groundwater Sources (NOW) 2011
Acid Sulfate Soils	Acid Sulfate Soil Manual (ASSMAC)
Erosion and Sediment	Managing Urban Stormwater: Soils & Construction (Landcom)
	Design Manual for Soil Conservation Works - Technical Handbook No. 5 (Soil Conservation Service of NSW)
	Soil and Landscape Issues in Environmental Impact Assessment (DLWC)
	Wind Erosion – 2nd Edition
Stormwater	Managing Urban Stormwater: Strategic Framework. Draft (EPA)
	Managing Urban Stormwater: Council Handbook. Draft (EPA)
	Managing Urban Stormwater: Treatment Techniques (EPA)
	Managing Urban Stormwater: Source Control. Draft (EPA)
	Managing Urban Stormwater: Harvesting and Reuse (DEC)
Wastewater	National Water Quality Management Strategy: Guidelines for Sewerage Systems - Effluent Management (ARMCANZ/ANZECC)
	National Water Quality Management Strategy: Guidelines for Sewerage Systems - Use of Reclaimed Water (ARMCANZ/ANZECC)
	National Water Quality Management Strategy - Guidelines For Water Recycling: Managing Health And Environmental Risks (Phase1) (EPHC, NRMMC & AHMC)
	National Water Quality Management Strategy - Guidelines For Water Recycling: Managing Health And Environmental Risks (Phase1) (EPHC, NRMMC & AHMC)
Air Quality	
	Protection of the Environment Operations (Clean Air) Regulation 2002
	Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (DEC)
	Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (DEC)
Waste	

ATTACHMENT 2

Government Authority and Council Responses to Request for Key Issues

Lawrence Huang

From: Luke Joseph <Luke.Joseph@campbelltown.nsw.gov.au>
Sent: Tuesday, 23 February 2016 12:08 PM
To: Lawrence Huang
Subject: Submission in response to Request for SEARS - Warehouse and Logistics Hub - SSD 7500

Importance: High

Follow Up Flag: Follow up
Flag Status: Completed

Hi Lawrence

Council's concerns regarding this proposal are as follows:

1. The proposed landscaping appears to be insufficient. To maintain the consistency of visual amenity throughout the City of Campbelltown, the landscaping should comply with Council's landscaping standards for industrial development, which is as follows:

a) A detailed landscape plan and report shall be prepared by a suitably qualified person and submitted with all development applications for the construction of industrial buildings.

b) Landscaping shall be provided to a minimum of 50% depth of the required setback area located:
i) along the full width of each street frontage (other than vehicle driveways); and
ii) along the full width of setbacks of sites adjoining open space, residential and/or commercial areas.

c) The first three (3) metres of all required street front landscaped area (as measured from the street boundary) shall be planted of advanced canopy trees that are:
i) a minimum of two (2) metres in height with a minimum pot size of 400 litre at the time of planting;
ii) of native species; and
iii) planted /placed every 10 metres.

d) Site boundary landscaping of minimum one (1) metre width shall be provided between the street boundary and the building line.

2. The proposal indicates that 200 jobs would be created by the proposal, however the plans identify more than double this amount of car parking spaces. Clarity is required in this regard so that traffic impacts upon the intersection of Airds Road and Culverston Road can be properly assessed.

3. Council has not been provided with an assessment of the likely car parking demand, however if there is an oversupply of car parking, then the car parking areas should be reduced in size and additional landscaping provided at the front of the site. If however the car parking is compliant and the landscaping requirements outlined above are not able to be achieved, that would suggest that the site is being overdeveloped at the expense of adequate landscaping and Council would not support the proposal.

4. Council requests that the development be required to demonstrate compliance with Section 7.3 of the Campbelltown Sustainable City DCP 2014 (Building Form and Character) to ensure high quality industrial development is constructed throughout the City.

Please note that the developer has approached Council for stormwater advice, and Council is currently preparing this advice.

Kind regards

Luke Joseph
Acting Coordinator – Development Assessment Unit
Campbelltown City Council

P: +61 2 4645 4608
F: +61 2 4645 4111

www.campbelltown.nsw.gov.au

NSW GOVERNMENT | Department of Primary Industries

OUT16/10072

Mr Lawrence Huang
Industry Assessments
NSW Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Lawrence.Huang@planning.nsw.gov.au

Dear Mr Huang,

Warehouse and Logistics Hub, Minto (SSD_7500)
Request for Secretary's Environmental Assessment Requirements

I refer to your email dated 11 February 2016 to the Department of Primary Industries in respect to the above matter. Comment has been sought from DPI Water, Fisheries, Agriculture and Lands. Any further referrals to DPI can be sent by email to landuse.enquiries@dpi.nsw.gov.au. DPI Fisheries and Agriculture have no issues. Water and Lands comments are as follows.

Comment by DPI Water
DPI Water has reviewed the supporting documentation accompanying the request for Secretary's Environmental Assessment Requirements (SEARs) and provides the following comments, and further detail in **Attachment A**.

It is recommended that the EIS be required to include:

- Annual volumes of surface water and groundwater proposed to be taken by the activity (including through inflow and seepage) from each surface and groundwater source as defined by the relevant water sharing plan.
- Assessment of any volumetric water licensing requirements (including those for ongoing water take following completion of the project).
- The identification of an adequate and secure water supply for the life of the project. Confirmation that water can be sourced from an appropriately authorised and reliable supply. This is to include an assessment of the current market depth where water entitlement is required to be purchased.
- A detailed and consolidated site water balance.
- Assessment of impacts on surface and ground water sources (both quality and quantity), related infrastructure, adjacent licensed water users, basic landholder rights, watercourses, riparian land, and groundwater dependent ecosystems, and measures proposed to reduce and mitigate these impacts.

- Full technical details and data of all surface and groundwater modelling.
- Proposed surface and groundwater monitoring activities and methodologies.
- Assessment of any potential cumulative impacts on water resources, and any proposed options to manage the cumulative impacts.
- Consideration of relevant policies and guidelines.
- A statement of where each element of the SEARs is addressed in the EIS (i.e. in the form of a table).

For further information please contact John Galea, Water Regulation Officer, [Parramatta Office], on 8838 7520 or at john.galea@dpi.nsw.gov.au.

Comment by DPI Lands
The proponent must identify any Crown land affected by the proposal. Prior to preparation of the EIS it is recommended that the proponent undertake a Crown Land Status search available through Crown Lands.

For further information please contact Rebecca Johnson, Co-ordinator Client Services, (Newcastle Office) on 4920 5040 or at rebecca.johnson@lands.nsw.gov.au.

Yours sincerely

Mitchell Isaacs
Director, Planning Policy & Assessment Advice
25/02/2016

Attachment A

Warehouse and Logistics Hub, Minto (SSD_7500)
Request for Secretary's Environment Assessment Requirements
DPI Water - General Assessment Requirements for general projects

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The following detailed assessment requirements are provided to assist in adequately addressing the assessment requirements for this proposal.

For further information visit the DPI Water website, www.water.nsw.gov.au

Key Relevant Legislative Instruments

This section provides a basic summary to aid proponents in the development of an Environmental Impact Statement (EIS), and should not be considered a complete list or comprehensive summary of relevant legislative instruments that may apply to the regulation of water resources for a project.

The EIS should take into account the objects and regulatory requirements of the *Water Act 1912* (WA 1912) and *Water Management Act 2000* (*WMA 2000*), and associated regulations and instruments, as applicable.

Water Management Act 2000 (WMA 2000)
Key points:

- Volumetric licensing in areas covered by water sharing plans,
- Works within 40m of waterfront land,
- SSD & SSI projects are exempt from requiring water supply work approvals and controlled activity approvals as a result of the *Environmental Planning & Assessment Act 1979 (EP&A Act)*,
- No exemptions for volumetric licensing apply as a result of the *EP&A Act*,
- Basic landholder rights, including harvestable rights dams,
- Aquifer interference activity approval and flood management work approval provisions have not yet commenced and are regulated by the *Water Act 1912,*
- Maximum penalties of $2.2 million plus $264,000 for each day an offence continues apply under the *WMA 2000.*

Water Act 1912 (WA 1912)
Key points:

- Volumetric licensing in areas where no water sharing plan applies,
- Monitoring bores,
- Aquifer interference activities that are not regulated as a water supply work under the *WMA 2000*,
- Flood management works,
- No exemptions apply to licences or permits under the *WA 1912* as a result of the *EP&A Act*,
- Regulation of water bore driller licensing.

Water Management (General) Regulation 2011
Key points:

- Provides various exemptions for volumetric licensing and activity approvals,
- Provides further detail on requirements for dealings and applications.

Water Sharing Plans – these are considered regulations under the *WMA 2000*

Access Licence Dealing Principles Order 2004

Harvestable Rights Orders

Water Sharing Plans

It is important that the proponent understands and describes the ground and surface water sharing plans, water sources, and management zones that apply to the project. The relevant water sharing plans can be determined spatially at www.ourwater.nsw.gov.au. Multiple water sharing plans may apply and these must all be described.

The *Water Act 1912* applies to all water sources not yet covered by a commenced water sharing plan.

The EIS is required to:

- Demonstrate how the proposal is consistent with the relevant rules of the Water Sharing Plan including rules for access licences, distance restrictions for water supply works and rules for the management of local impacts in respect of surface water and groundwater sources, ecosystem protection (including groundwater dependent ecosystems), water quality and surface-groundwater connectivity.
- Provide a description of any site water use (amount of water to be taken from each water source) and management including all sediment dams, clear water diversion structures with detail on the location, design specifications and storage capacities for all the existing and proposed water management structures.
- Provide an analysis of the proposed water supply arrangements against the rules for access licences and other applicable requirements of any relevant WSP, including:
    - Sufficient market depth to acquire the necessary entitlements for each water source.
    - Ability to carry out a "dealing" to transfer the water to relevant location under the rules of the WSP.
    - Daily and long-term access rules.
    - Account management and carryover provisions.
- Provide a detailed and consolidated site water balance.
- Further detail on licensing requirements is provided below.

Relevant Policies and Guidelines

The EIS should take into account the following policies (as applicable):

- NSW Guidelines for Controlled Activities on Waterfront Land (NOW, 2012)
- NSW Aquifer Interference Policy (NOW, 2012)
- Risk Assessment Guidelines for Groundwater Dependent Ecosystems (NOW, 2012)
- Australian Groundwater Modelling Guidelines (NWC, 2012)
- NSW State Rivers and Estuary Policy (1993)
- NSW Wetlands Policy (2010)
- NSW State Groundwater Policy Framework Document (1997)
- NSW State Groundwater Quality Protection Policy (1998)
- NSW State Groundwater Dependent Ecosystems Policy (2002)
- NSW Water Extraction Monitoring Policy (2007)

DPI Water policies can be accessed at the following links:
http://www.water.nsw.gov.au/Water-management/Law-and-policy/Key-policies/default.aspx

http://www.water.nsw.gov.au/Water-licensing/Approvals/Controlled-activities/default.aspx

An assessment framework for the NSW Aquifer Interference Policy can be found online at: http://www.water.nsw.gov.au/Water-management/Law-and-policy/Key-policies/Aquifer-interference.

Licensing Considerations

The EIS is required to provide:

- Identification of water requirements for the life of the project in terms of both volume and timing (including predictions of potential ongoing groundwater take following the cessation of operations at the site – such as evaporative loss from open voids or inflows).
- Details of the water supply source(s) for the proposal including any proposed surface water and groundwater extraction from each water source as defined in the relevant Water Sharing Plan/s and all water supply works to take water.
- Explanation of how the required water entitlements will be obtained (i.e. through a new or existing licence/s, trading on the water market, controlled allocations etc.).
- Information on the purpose, location, construction and expected annual extraction volumes including details on all existing and proposed water supply works which take surface water, (pumps, dams, diversions, etc.).
- Details on all bores and excavations for the purpose of investigation, extraction, dewatering, testing and monitoring. All predicted groundwater take must be accounted for through adequate licensing.
- Details on existing dams/storages (including the date of construction, location, purpose, size and capacity) and any proposal to change the purpose of existing dams/storages.
- Details on the location, purpose, size and capacity of any new proposed dams/storages.
- Applicability of any exemptions under the *Water Management (General) Regulation 2011* to the project.

Water allocation account management rules, total daily extraction limits and rules governing environmental protection and access licence dealings also need to be considered.

The Harvestable Right gives landholders the right to capture and use for any purpose 10% of the average annual runoff from their property. The Harvestable Right has been defined in terms of an equivalent dam capacity called the Maximum Harvestable Right Dam Capacity (MHRDC). The MHRDC is determined by the area of the property (in hectares) and a site-specific run-off factor. The MHRDC includes the capacity of all existing dams on the property that do not have a current water licence. Storages capturing up to the harvestable right capacity are not required to be licensed but any capacity of the total of all storages/dams on the property greater than the MHRDC may require a licence.

For more information on Harvestable Right dams, including a calculator, visit: http://www.water.nsw.gov.au/Water-licensing/Basic-water-rights/Harvesting-runoff/Harvesting-runoff

Dam Safety

Where new or modified dams are proposed, or where new development will occur below an existing dam, the NSW Dams Safety Committee should be consulted in relation to any safety issues that may arise. Conditions of approval may be recommended to ensure safety in relation to any new or existing dams.

See www.damsafety.nsw.gov.au for further information.

Surface Water Assessment

The predictive assessment of the impact of the proposed project on surface water sources should include the following:

- Identification of all surface water features including watercourses, wetlands and floodplains transected by or adjacent to the proposed project.
- Identification of all surface water sources as described by the relevant water sharing plan.
- Detailed description of dependent ecosystems and existing surface water users within the area, including basic landholder rights to water and adjacent/downstream licensed water users.
- Description of all works and surface infrastructure that will intercept, store, convey, or otherwise interact with surface water resources.
- Assessment of predicted impacts on the following:
    - flow of surface water, sediment movement, channel stability, and hydraulic regime,
    - water quality,
    - flood regime,
    - dependent ecosystems,
    - existing surface water users, and
    - planned environmental water and water sharing arrangements prescribed in the relevant water sharing plans.

Groundwater Assessment

To ensure the sustainable and integrated management of groundwater sources, the EIS needs to include adequate details to assess the impact of the project on all groundwater sources.

Where it is considered unlikely that groundwater will be intercepted or impacted (for example by infiltration), a brief site assessment and justification for the minimal impacts may be sufficient, accompanied by suitable contingency measures in place in the event that groundwater is intercepted, and appropriate measures to ensure that groundwater is not contaminated.

Where groundwater is expected to be intercepted or impacted, the following requirements should be used to assist the groundwater assessment for the proposal.

- The known or predicted highest groundwater table at the site.
- Works likely to intercept, connect with or infiltrate the groundwater sources.
- Any proposed groundwater extraction, including purpose, location and construction details of all proposed bores and expected annual extraction volumes.
- Bore construction information is to be supplied to DPI Water by submitting a “Form A” template. DPI Water will supply “GW” registration numbers (and licence/approval numbers if required) which must be used as consistent and unique bore identifiers for all future reporting.
- A description of the watertable and groundwater pressure configuration, flow directions and rates and physical and chemical characteristics of the groundwater source (including connectivity with other groundwater and surface water sources).
- Sufficient baseline monitoring for groundwater quantity and quality for all aquifers and GDEs to establish a baseline incorporating typical temporal and spatial variations.

- The predicted impacts of any final landform on the groundwater regime.
- The existing groundwater users within the area (including the environment), any potential impacts on these users and safeguard measures to mitigate impacts.
- An assessment of groundwater quality, its beneficial use classification and prediction of any impacts on groundwater quality.
- An assessment of the potential for groundwater contamination (considering both the impacts of the proposal on groundwater contamination and the impacts of contamination on the proposal).
- Measures proposed to protect groundwater quality, both in the short and long term.
- Measures for preventing groundwater pollution so that remediation is not required.
- Protective measures for any groundwater dependent ecosystems (GDEs).
- Proposed methods of the disposal of waste water and approval from the relevant authority.
- The results of any models or predictive tools used.

Where potential impact/s are identified the assessment will need to identify limits to the level of impact and contingency measures that would remediate, reduce or manage potential impacts to the existing groundwater resource and any dependent groundwater environment or water users, including information on:

- Any proposed monitoring programs, including water levels and quality data.
- Reporting procedures for any monitoring program including mechanism for transfer of information.
- An assessment of any groundwater source/aquifer that may be sterilised from future use as a water supply as a consequence of the proposal.
- Identification of any nominal thresholds as to the level of impact beyond which remedial measures or contingency plans would be initiated (this may entail water level triggers or a beneficial use category).
- Description of the remedial measures or contingency plans proposed.
- Any funding assurances covering the anticipated post development maintenance cost, for example on-going groundwater monitoring for the nominated period.

Groundwater Dependent Ecosystems

The EIS must consider the potential impacts on any Groundwater Dependent Ecosystems (GDEs) at the site and in the vicinity of the site and:

- Identify any potential impacts on GDEs as a result of the proposal including:
  - the effect of the proposal on the recharge to groundwater systems;
  - the potential to adversely affect the water quality of the underlying groundwater system and adjoining groundwater systems in hydraulic connections; and
  - the effect on the function of GDEs (habitat, groundwater levels, connectivity).
- Provide safeguard measures for any GDEs.

Watercourses, Wetlands and Riparian Land

The EIS should address the potential impacts of the project on all watercourses likely to be affected by the project, existing riparian vegetation and the rehabilitation of riparian land. It is recommended the EIS provides details on all watercourses potentially affected by the proposal, including:

- Scaled plans showing the location of:
  - wetlands/swamps, watercourses and top of bank;
  - riparian corridor widths to be established along the creeks;
  - existing riparian vegetation surrounding the watercourses (identify any areas to be protected and any riparian vegetation proposed to be removed);
  - the site boundary, the footprint of the proposal in relation to the watercourses and riparian areas; and
  - proposed location of any asset protection zones.
- Photographs of the watercourses/wetlands and a map showing the point from which the photos were taken.
- A detailed description of all potential impacts on the watercourses/riparian land.
- A detailed description of all potential impacts on the wetlands, including potential impacts to the wetlands hydrologic regime; groundwater recharge; habitat and any species that depend on the wetlands.
- A description of the design features and measures to be incorporated to mitigate potential impacts.
- Geomorphic and hydrological assessment of water courses including details of stream order (Strahler System), river style and energy regimes both in channel and on adjacent floodplains.

Landform rehabilitation

Where significant modification to landform is proposed, the EIS must include:

- Justification of the proposed final landform with regard to its impact on local and regional surface and groundwater systems;
- A detailed description of how the site would be progressively rehabilitated and integrated into the surrounding landscape;
- Outline of proposed construction and restoration of topography and surface drainage features if affected by the project; and
- An outline of the measures to be put in place to ensure that sufficient resources are available to implement the proposed rehabilitation.

Consultation and general enquiries
General licensing enquiries can be made to Advisory Services: water.enquiries@dpi.nsw.gov.au, 1800 353 104.

Assessment or state significant development enquiries, or requests for review or consultation should be directed to the Strategic Stakeholder Liaison Unit, water.referrals@dpi.nsw.gov.au.

A consultation guideline and further information is available online at:
www.water.nsw.gov.au/water-management/law-and-policy/planning-and-assessment

End Attachment A

Department of Industry
Resources & Energy

17th February 2016

Lawrence Huang
Student Planner
Industry Assessments
Department of Planning & Environment
GPO Box 39
Sydney NSW 2001

Your Reference: SSD 7500 & File # 16/03046
Our Reference: OUT16/8325

Emailed: Lawrence.Huang@planning.nsw.gov.au

Dear Mr Huang

Re: Request for Secretary's Environmental Assessment Requirements – SSD 7500
Proposed Warehouse & Logistics Hub – Culverston Rd – Minto – Campbelltown LGA

I refer to your letter of 11th February 2016 requesting advice on issues concerning the preparation of Secretary's Environmental Assessment Requirements for the above project. Thank you for the opportunity to provide advice on the above matter. This is a response from the NSW Department of Industry – Geological Survey of NSW (GSNSW). The Department of Primary Industries (incorporating advice from Agriculture and Fisheries) and the Forestry Corporation of NSW may respond separately.

Mineral Resources Requirements

Identification and assessment of impacts on other land users is required as a critical component of the Environmental Assessment (EA) process. Specifically, the EA must consider the potential for the project to impact upon any significant mineral resources, including metallic minerals, industrial and extractive minerals, petroleum, gas and coal resources. A significant aspect of mineral resource evaluation and development in regards to land use planning is that the locations of mineable deposits cannot always be predicted. This makes it imperative that known resources are protected from sterilisation by inappropriate zoning or development, and that access to land for mineral exploration should be maintained over as much of the project area as possible.

As such, the GSNSW requires the proponent to conduct an assessment as part of the EA, regarding the potential impacts of the project on any significant mineral resources, including:

- **Any operating mines, extractive industries or known mineral or petroleum resources.**
- **Exploration activities in the vicinity of the proposed development.**
- **Access for future exploration in the area.**

Specific Issues

Coal Authorisation (AUTH) 6 held by the Secretary NSW Department of Industry on behalf of the Crown exists over a broad regional area including the subject site. GSNSW considers this request for SEARs as adequate consultation at this stage. GSNSW will further review the proposal the EIS stage and provide additional comment if required.

Geoscience Information Services

The GSNSW has a range of online data available on line through the following website address:
http://www.resources.nsw.gov.au/titles/online-services

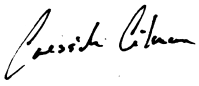
This site hosts a range of data to enable research into exploration, land use and general geoscience topics. Additionally, the location of exploration and mining titles in NSW may be accessed by the general public using the following online utilities:

1. **NSW Titles** enables the public to access and view frequently updated titles mapping information across NSW. This online service is available at:
   http://nswtitles.minerals.nsw.gov.au/nswtitles/

2. **MinView** allows on-line interactive display and query of exploration tenement information and geoscience data. It allows spatial selection, display and download of geological coverages, mineral deposits and mine locations, geophysical survey boundaries, drillhole locations, historical and current exploration title boundaries and other spatial datasets of New South Wales. This online service is available at:
   http://www.resources.nsw.gov.au/geological/online-services/minview

Queries regarding the above information, and future requests for advice in relation to this matter, should be directed to the GSNSW Land Use team at landuse.minerals@industry.nsw.gov.au.

Yours sincerely



Cressida Gilmore
Team Leader - Land Use

Our reference: DOC16/75388-01:PW
Contact: Paul Wearne (02) 4224 4100

Department of Planning and Environment
(Attention: Lawrence Huang)
GPO Box 39
SYDNEY NSW 2001

Dear Ms Copas

PROPOSED WAREHOUSE AND LOGISTICS HUB
5 AND 9 CULVERSTON ROAD, MINTO – CAMPBELLTOWN LOCAL GOVERNMENT AREA (SSD 7500)

I am writing in reply to the Department of Planning and Environment's (DPE) request for the Environment Protection Authority (EPA) to provide key requirements for the preparation of Environmental Impact Statement (EIS) for the above proposed project.

The EPA has attached some general guidance to assist DPE in the development of Secretary Environmental Assessment Requirements (**Attachment A**). These relate to the following key environmental issues:

- EPA Licensing and Regulation
- Water Quality
- Air Quality
- Noise and Vibration
- Waste Management
- Contaminated Land Management
- Emergency Response.

These issues should be assessed in accordance with the relevant guidelines/documents listed in **Attachment B**.

The EPA may have additional requirements or comments upon receipt and review of the EIS.

If you have questions regarding the above, please phone the contact officer on (02) 4224 4100.

Yours sincerely

23/02/16

PETER BLOEM
Manager Illawarra
Environment Protection Authority

Att A: Key Environmental Issues
Att B: Guidance Material

PO Box 513 Wollongong NSW 2520
Level 3, 84 Crown Street, Wollongong NSW 2500
Tel: (02) 4224 4100 Fax: (02) 4224 4110
ABN 43 692 285 758
www.epa.nsw.gov.au

ATTACHMENT A

KEY ENVIRONMENTAL ISSUES

1. EPA Licensing and Regulation

The proponent should undertake a review of all activities associated with the development and document any EPA licensing requirements. The proponent should consult the *EPA Guide to Licensing* which can be obtained at the following web site: www.epa.nsw.gov.au/licensing/licenceguide.htm.

Section 47 of the *POEO Act* defines scheduled development work as *'work at any premises at which scheduled activities are not carried on that is designed to enable scheduled activities to be carried on at the premises'*. Under Section 47 of the POEO Act it is an offence for scheduled development work to be undertaken without an EPL.

2. Water Quality

The environmental outcome for the project should ensure:

- there is no pollution of waters (including surface and groundwater) except in accordance with an EPL
- provides development that maintains or restores the community's environmental uses and values of water through the achievement of the relevant NSW Water Quality and Flow Objectives
- promotes integrated water cycle management that optimises opportunities for sustainable water supply, wastewater and stormwater management and reuse initiatives where it is safe and practicable to do so
- bunding is designed in accordance with the EPA's *Bunding and Spill Management Guidelines.*

The EIS should document how the above outcomes will be achieved.

The EIS should also include but not necessarily be limited to the following matters:

- Details on proposed stormwater management at the site including integrated water cycle management/water sensitive urban design.
- Provide a description of the receiving waters including measures to ensure the achievement of the relevant NSW Water Quality and Flow Objectives.
- Provide information on any water discharges including location, volumes, water quality, monitoring programs and frequency of discharge.
- Describe the nature and degree of any likely impacts that the proposed project may have on the receiving environment. This should include a characterisation of potential water pollutants at the site and any associated mitigation and management measures.
- Demonstrate that all practical options to avoid discharge have been implemented and environmental impact minimised where discharge is necessary.
- Information on any stormwater reuse, retention and detention strategies to minimise changes to the hydrological (flow) regime of receiving waterways.
- Describe how stormwater will be managed during the construction phase. The proponent should provide a commitment in the EIS that a *Soil and Water Management Plan* will be developed and implemented prior to construction in accordance with the *Managing urban stormwater: soils and construction, vol. 1 (Landcom 2004) and vol. 2 (A. Installation of services; B. Waste landfills; C. Unsealed roads; D. Main Roads; E. Mines and quarries)* (DECC 2008).

Sewage Management

There appears to be no information provided regarding connection of the proposed development to the existing Sydney Water sewerage system. The EPA recommends that the proponent document in the EIS discussions with Sydney Water regarding this connection and whether it can cater for any new loads. Information should also be sought on whether any additional load will impact the system's environmental performance especially in relation to sewage overflows from any existing sewage pumping stations and discharges from any associated sewage treatment plant. The EPA's policy is that for new systems there

should be no pollution of waters as a result of overflows during dry weather and that overflows during wet weather should be avoided.

3. Air Quality

The environmental outcome for the project should ensure:

- emissions do not cause adverse impact upon human health or the environment
- no offensive odour beyond the boundary of the premises
- compliance with the requirements of the POEO Act and its associated regulations
- maintains or improves air quality to ensure National Environment Protection Measures for ambient air quality are not compromised
- any dust emissions are prevented or minimised.

The EIS should document how the above outcomes will be achieved.

The EPA recommends that an Air Impact Assessment must be prepared in accordance with the *Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in New South Wales*. A thorough assessment needs to be undertaken of the proposed activities at the site to assess the impact of any air emissions and the adequacy of proposed air pollution controls. This should include but not necessarily be limited to information on the following matters:

- characterization of any emissions (including any fugitive emissions) for example NOx, VOCs, particles and odours
- best practice management measures to control emissions
- any cumulative impacts.

Off Road Equipment

Off road transport sources (particularly diesel engines) can be a source of PM10, PM2.5 and NOx. Opportunities that involve the adoption of best practices to achieve the lowest possible emission standard for these pollutants should be assessed. The EPA recommends that any off road equipment or plant should achieve the specifications or be consistent with the specifications listed on page 12 of the *NSW Government Resource Efficiency Policy*, (OEH 2014). A copy of this specification can be obtained at: http://www.epa.nsw.gov.au/resources/government/140567NSWGREP.pdf.

Air Quality Management Plan

The EIS should detail measures to prevent or minimise air pollution during construction and operation. The EIS should include a commitment that the proponent will develop and implement an *Air Quality Management Plan* prior to construction. This plan should include but not necessarily be limited to the following requirements:

- Identify all major sources of air emissions and associated mitigation measures to ensure air pollution is prevented or minimised
- Describe protocols for regular maintenance of plant and equipment
- Outline procedures for monitoring and reporting air emissions
- Describe measures to regularly review the effectiveness of air pollution control measures.

4. Noise and Vibration

The environmental outcome of the project should be to minimise adverse impacts due to noise and vibration from the development. The EIS must clearly outline the noise mitigation, monitoring and management measures the proponent intends to apply to the project to minimise noise and vibration impacts during construction and development of the site.

The assessment should be undertaken in accordance with the NSW *Industrial Noise Policy*. In particular the assessment should include, but not necessarily limited to: the identification and assessment of all potential noise sources associated with the development, the location of all sensitive receptors, proposed hours of operation and proposed noise mitigation measures. The assessment should also take into account adverse weather conditions including temperature inversions. Sound power levels measured or estimated

for all plant and equipment should be clearly stated and justified. It should also include an assessment of cumulative noise impacts, having regard to existing surrounding industrial activities and development.

The EIS must also identify the transport route(s) to be used, the hours of operation and assess any potential road traffic noise impacts in accordance with the "*NSW Road Noise Policy*".

Any construction noise should also be assessed and any proposed noise mitigations measures identified and documented in the EIS in accordance with the *Interim Construction Noise Guideline* (DECC 2009). A copy of this guideline is available at: http://www.epa.nsw.gov.au/noise/constructnoise.htm.

5. Waste Management

The goal of the development should be to ensure:

- it is in accordance with the principles of the waste hierarchy and cleaner production
- the handling, processing and storage of all materials used at the premises does not have negative environmental or amenity impacts
- the beneficial reuse of all wastes generated at the premises are maximised where it is safe and practical to do so
- no waste disposal occurs on site except in accordance with an EPL.

The EIS should document waste management strategies that will ensure any waste generated during construction and operation is classified and managed in accordance with the latest version of EPA's *Waste Classification Guidelines*.

The EPA recommends the proponent consult the following guidelines:

- The *Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities* (EPA December 2012). This guide can be accessed at: http://www.epa.nsw.gov.au/resources/managewaste/120960-comm-ind.pdf.

6. Contaminated Land

State Environmental Planning Policy (SEPP) 55 will apply and a contaminated land assessment will need to be undertaken and included in the EIS. SEPP 55 states that as part of the development process the following key considerations should be addressed:

- Whether the land is contaminated
- If the land is contaminated whether it is suitable in its contaminated state (or will be suitable, after remediation) for all the purposes to which the land will be used
- If the land requires remediation; will be made suitable for any purpose for which the land will be used.

In cases where land is potentially contaminated, the investigation and any remediation and validation work is to be carried out in accordance with the guidelines made or approved by the EPA under Section 105 of the *Contaminated Land Management Act 1997* and be in accordance with the requirements and procedures in the following:

- *Contaminated Land Management Act 1997*
- *Contaminated Land Management Regulation 2013*
- *State Environmental Planning Policy 55 – Remediation of Land.*

7. Emergency Response

The EIS should document systems and procedures to deal with all types of emergencies. This includes incidents (for example, spills, explosions or fire) that may occur at the premises or that may be associated with activities that occur at the premises and which are likely to cause harm to the environment. This should also include appropriate measures to protect the environment during these emergencies such as on site containment measures for fire water and communication strategies that involves reporting of any incidents to appropriate regulatory authorities.

ATTACHMENT B - GUIDANCE MATERIAL

Title	Web address
Licensing	
Guide to Licensing	www.epa.nsw.gov.au/licensing/licenceguide.htm
Air Issues	
Air Quality	
Approved methods for modelling and assessment of air pollutants in NSW (2005)	http://www.epa.nsw.gov.au/resources/air/ammodelling05361.pdf
Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales (DEC 2007)	http://www.epa.nsw.gov.au/resources/air/07001amsaap.pdf
POEO (Clean Air) Regulation 2010	http://www.legislation.nsw.gov.au/maintop/view/inforce/subordleg+428+2010+cd+0+N
The Assessment and Management of Odour from Stationary Sources in NSW: Technical Framework	http://www.epa.nsw.gov.au/resources/air/20060440framework.pdf
The Assessment and Management of Odour from Stationary Sources in NSW: Technical Notes	http://www.epa.nsw.gov.au/resources/air/20060441notes.pdf
Clean Machine Program	http://www.epa.nsw.gov.au/air/nonroaddiesel.htm
Noise and Vibration	
Interim Construction Noise Guideline (DECC, 2009) and Industrial Noise Policy Application Notes	http://www.epa.nsw.gov.au/resources/noise/09265cng.pdf
Assessing Vibration: a technical guideline (DEC, 2006)	http://www.epa.nsw.gov.au/resources/noise/vibrationguide0643.pdf
Industrial Noise Policy (EPA, 2000) and Industrial Noise Policy Application Notes	http://www.epa.nsw.gov.au/noise/industrial.htm
NSW Road Noise Policy (EPA, 2011)	http://www.epa.nsw.gov.au/resources/noise/2011236nswroadnoisepolicy.pdf
Waste, Chemicals and Hazardous Materials and Radiation	
Waste Classification Guidelines (DECC, 2014)	http://www.epa.nsw.gov.au/resources/wasteregulation/140796-classify-waste.pdf
Resource Recovery Exemptions	http://www.epa.nsw.gov.au/waste/RRecoveryExemptions.htm
Water and Soils	
Stormwater Management	
Managing Urban Stormwater - Soils and Construction vol. 1 (Landcom 2004) and vol.2 (A. Installation of services; B Waste Landfills; C Unsealed Roads; d Main	http://www.environment.nsw.gov.au/stormwater/publications.htm

Title	Web address
Roads; E Mines and quarries (DECC 2008)	
Wastewater	
National Water Quality Management Strategy: Guidelines for Sewerage Systems - Effluent Management (ARMCANZ/ANZECC 1997)	http://www.epa.gov.au/water/policy-programs/nwqms/
National Water Quality Management Strategy: Guidelines for Sewerage Systems – Use of Reclaimed Water (ARMCANZ/ANZECC 2000)	http://www.epa.gov.au/water/policy-programs/nwqms
Environmental Guidelines for the Utilisation of Treated Effluent by Irrigation (NSW DEC 2004)	http://www.epa.nsw.gov.au/resources/water/effguide.pdf
Water	
Water Quality Objectives	http://www.epa.nsw.gov.au/ieo/index.htm
ANZECC (2000) Guidelines for Fresh and Marine Water Quality	http://www.environment.gov.au/water/quality/publications/australian-and-new-zealand-guidelines-fresh-marine-water-quality-volume-1
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	http://www.epa.nsw.gov.au/resources/legislation/approvedmethods-water.pdf
NSW Government Water Quality and River Flow Environmental Objectives	http://www.epa.nsw.gov.au/ieo/)
Groundwater	
State Groundwater Policy Framework Document (DLWC 1997)	
The NSW State Groundwater Quality Protection Policy (DLWC 1998)	
NSW State Groundwater Dependent Ecosystems Policy (DLWC, 2002)	
National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ & ANZECC, 1995)	http://www.environment.gov.au/resource/national-water-quality-management-strategy-guidelines-groundwater-protection-australia
Metropolitan Water Sharing Plan	http://www.water.nsw.gov.au/Water-management/Water-sharing-plans/Water-sharing
Bunding and Spill Management	
Storing and Handling Liquids: Environmental Protection - Participants Manual	http://www.environment.nsw.gov.au/water/bundingspill.htm
Environmental Compliance Report: Liquid Chemical Storage, Handling and Spill Management - Part B Review of Best Practice and Regulation	http://www.environment.nsw.gov.au/water/bundingspill.htm

NSW GOVERNMENT | Office of Environment & Heritage

DOC16/78592
SSD 7500

Ms Kate MacDonald
Team Leader, Industry Assessments
NSW Department of Planning & Environment
GPO Box 39
SYDNEY NSW 2001

Attention: Mr Lawrence Huang

Dear Ms MacDonald

Proposed Warehouse and Logistics Hub at 5 and 9 Culverston Road, Minto (SSD 7500)

I refer to your letter received 11 February 2016 by the Office of Environment and Heritage (OEH) seeking input into the Secretary's environmental assessment requirements (SEARs) for the proposed Warehouse and Logistics Hub at 5 and 9 Culverston Road, Minto (SSD 7500).

OEH has reviewed the relevant documentation including the draft SEARs and recommends the inclusion of the requirements in relation to water quality and flooding in the final SEARs at Attachment A.

Yours sincerely

S. Harrison 03/03/16

SUSAN HARRISON
Senior Team Leader Planning
Greater Sydney Region

Contact officer: DANA ALDERSON
8837 6304

PO Box 644 Parramatta NSW 2124
Level 6, 10 Valentine Ave Parramatta NSW 2150
Tel: (02) 9995 5000 Fax: (02) 9995 6900
ABN 30 841 387 271
www.environment.nsw.gov.au

Attachment A. Environmental Assessment Requirements for proposed Warehouse and Logistics Hub at 5 and 9 Culverston Road, Minto (SSD 7500)

Water and soils
1. The EIS must map the following features relevant to water and soils including: a. Acid sulfate soils (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Planning Map). b. Rivers, streams, wetlands, estuaries (as described in Appendix 2 of the Framework for Biodiversity Assessment). c. Groundwater. d. Groundwater dependent ecosystems. e. Proposed intake and discharge locations.
2. The EIS must describe background conditions for any water resource likely to be affected by the development, including: a. Existing surface and groundwater. b. Hydrology, including volume, frequency and quality of discharges at proposed intake and discharge locations. c. Water Quality Objectives (as endorsed by the NSW Government http://www.environment.nsw.gov.au/ieo/index.htm) including groundwater as appropriate that represent the community's uses and values for the receiving waters. d. Indicators and trigger values/criteria for the environmental values identified at (c) in accordance with the ANZECC (2000) Guidelines for Fresh and Marine Water Quality and/or local objectives, criteria or targets endorsed by the NSW Government.
3. The EIS must assess the impacts of the development on water quality, including: a. The nature and degree of impact on receiving waters for both surface and groundwater, demonstrating how the development protects the Water Quality Objectives where they are currently being achieved, and contributes towards achievement of the Water Quality Objectives over time where they are currently not being achieved. This should include an assessment of the mitigating effects of proposed stormwater and wastewater management during and after construction. b. Identification of proposed monitoring of water quality.
4. The EIS must assess the impact of the development on hydrology, including: a. Water balance including quantity, quality and source. b. Effects to downstream rivers, wetlands, estuaries, marine waters and floodplain areas. c. Effects to downstream water-dependent fauna and flora including groundwater dependent ecosystems. d. Impacts to natural processes and functions within rivers, wetlands, estuaries and floodplains that affect river system and landscape health such as nutrient flow, aquatic connectivity and access to habitat for spawning and refuge (e.g. river benches). e. Changes to environmental water availability, both regulated/licensed and unregulated/rules-based sources of such water. f. Mitigating effects of proposed stormwater and wastewater management during and after construction on hydrological attributes such as volumes, flow rates, management methods and re-use options.

g. Identification of proposed monitoring of hydrological attributes.

Flooding

5. The EIS should ensure the use of the latest data from Council's relevant flood studies i.e. 'Bow Bowing Bunbury Curran Creek Flood Studies'. It is recommended that the proponent consult with Campbelltown City Council to ensure the latest flood data is used.

6. The EIS must map the following features relevant to flooding as described in the Floodplain Development Manual 2005 (NSW Government 2005) including:
   a. Flood prone land
   b. Flood planning area, the area below the flood planning level.
   c. Hydraulic categorisation (floodways and flood storage areas).

7. The EIS must describe flood assessment and modelling undertaken in determining the design flood levels for events, including a minimum of the 1 in 10 year, 1 in 100 year flood levels and the probable maximum flood, or an equivalent extreme event.

8. The EIS must model the effect of the proposed development (including fill) on the flood behaviour under the following scenarios:
   a. Current flood behaviour for a range of design events as identified in 11 above. This includes the 1 in 200 and 1 in 500 year flood events as proxies for assessing sensitivity to an increase in rainfall intensity of flood producing rainfall events due to climate change.

9. Modelling in the EIS must consider and document:
   a. The impact on existing flood behaviour for a full range of flood events including up to the probable maximum flood.
   b. Impacts of the development on flood behaviour resulting in detrimental changes in potential flood affection of other developments or land. This may include redirection of flow, flow velocities, flood levels, hazards and hydraulic categories.
   c. Relevant provisions of the NSW Floodplain Development Manual 2005.

10. The EIS must assess the impacts on the proposed development on flood behaviour, including:
    a. Whether there will be detrimental increases in the potential flood affectation of other properties, assets and infrastructure.
    b. Consistency with Council floodplain risk management plans.
    c. Compatibility with the flood hazard of the land.
    d. Compatibility with the hydraulic functions of flow conveyance in floodways and storage in flood storage areas of the land.
    e. Whether there will be adverse effect to beneficial inundation of the floodplain environment, on, adjacent to or downstream of the site.
    f. Whether there will be direct or indirect increase in erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses.
    g. Any impacts the development may have upon existing community emergency management arrangements for flooding. These matters are to be discussed with the SES and Council.
    h. Whether the proposal incorporates specific measures to manage risk to life from flood. These matters are to be discussed with the SES and Council.
    i. Emergency management, evacuation and access, and contingency measures for the development considering the full range or flood risk (based upon the probable maximum

flood or an equivalent extreme flood event). These matters are to be discussed with and have the support of Council and the SES.

j. Any impacts the development may have on the social and economic costs to the community as consequence of flooding.

Guidance material

Title	Web address
Relevant Legislation	
Acid sulfate soils	
Acid Sulfate Soils Planning Maps via 'The NSW Natural Resource Atlas'	http://www.nratlas.nsw.gov.au/
Acid Sulfate Soils Manual (Stone et al. 1998)	Manual available for purchase from: http://www.landcom.com.au/whats-new/the-blue-book.aspx Chapters 1 and 2 are on DPI's Guidelines Register at: Chapter 1 Acid Sulfate Soils Planning Guidelines: http://www.planning.nsw.gov.au/rdaguidelines/documents/NSW%20Acid%20Sulfate%20Soils%20Planning%20Guidelines.pdf Chapter 2 Acid Sulfate Soils Assessment Guidelines: http://www.planning.nsw.gov.au/rdaguidelines/documents/NSW%20Acid%20Sulfate%20Soils%20Assessment%20Guidelines.pdf
Acid Sulfate Soils Laboratory Methods Guidelines (Ahern et al. 2004)	http://www.advancedenvironmentalmanagement.com/Reports/Savannah/Appendix%2015.pdf This replaces Chapter 4 of the Acid Sulfate Soils Manual above.
Flooding and Coastal Erosion	
Floodplain development manual	http://www.environment.nsw.gov.au/floodplains/manual.htm
NSW Climate Impact Profile	NSW Climate Impact Profile
Climate Change Impacts and Risk Management	Climate Change Impacts and Risk Management: A Guide for Business and Government, AGIC Guidelines for Climate Change Adaptation
Water	
Water Quality Objectives	http://www.environment.nsw.gov.au/ieo/index.htm
ANZECC (2000) Guidelines for Fresh and Marine Water Quality	http://www.environment.gov.au/water/publications/quality/australian-and-new-zealand-guidelines-fresh-marine-water-quality-volume-1
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf

Transport
Roads & Maritime Services

24 February 2016

Our Reference: SYD16/00241 (A11800564)
DP&E Ref: SSD 7500

Manager
Industry Assessments
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Attention: Lawrence Huang

PROPOSED WAREHOUSE AND LOGISTICS HUB
5 & 9 CULVERSTON ROAD, MINTO

Dear Sir/Madam,

Reference is made to the Department of Planning and Environment (DP&E) email dated 11 February 2016 requesting Roads and Maritime Services (Roads and Maritime) to provide details of key issues and assessment requirements regarding the abovementioned development for inclusion in the Secretary's Environmental Assessment Requirements (SEARs).

Roads and Maritime require the following issues to be included in the transport and traffic impact assessment of the proposed development:

1. Daily and peak traffic movements likely to be generated by the proposed development including the impact on nearby intersections and the need/associated funding for upgrading or road improvement works (if required).

2. Details of the proposed accesses and the parking provisions associated with the proposed development including compliance with the requirements of the relevant Australian Standards (ie: turn paths, sight distance requirements, aisle width, etc).

3. Proposed number of car parking spaces and compliance with the appropriate parking codes.

4. Details of service vehicle movements (including vehicle type and likely arrival and departure times).

5. Roads and Maritime requires an assessment of the likely toxicity levels of loads transported on arterial and local roads to / from the site and, consequently, the preparation of an incident management strategy for crashes involving toxic and flammable loads transported on arterial and local roads to / from the site.

Any inquiries in relation to this application can be directed to Zhaleh Alamouti on 8849 2331 or by email at development.sydney@rms.nsw.gov.au

Yours sincerely

Pahee Rathan
Senior Land Use Planner
Network and Safety Section

17 February 2016

Mr Lawrence Huang
Student Planner
Industry Assessments
Department of Planning and Environment
GPO Box 39
Sydney NSW 2001

Request for SEARs for Proposed Warehouse and Logistics Hub, 5 and 9 Culverston Road, Minto (SSD 7500)

Dear Mr Huang,

Thank you for your letter requesting Sydney Water's input on the Secretary's Environmental Assessment Requirements for the above development. We have reviewed the proposal and provide the following comments for your consideration.

Sydney Water Requirements for Environmental Assessment

Sydney Water requests Secretary Environment Assessment Requirements include the following:

1. The proponent should include an integrated water management strategy that considers water, wastewater and stormwater. It must also include alternative water supply, proposed end uses of potable and non-potable water, demonstration of water sensitive urban design and any water conservation measures. This will allow Sydney Water to determine the impact of the proposed project on its existing services and identify any augmentation requirements.
2. When determining landscaping options, the proponent should take into account that certain tree species can cause cracking or blockage of Sydney Water pipes and therefore should be avoided.
3. Strict requirements for Sydney Water's stormwater assets for certain types of development may apply. Consider the following in your submission, stormwater assets protection, building over and/or adjacent to stormwater assets, building bridges over stormwater assets, potential flood, water quality and heritage impacts and creation of easements.

If you require any further information, please contact Beau Reid of Urban Growth Strategy on 02 8849 4357 or e-mail beau.reid@sydneywater.com.au.

Yours sincerely,

Greg Joblin
Manager, Growth Strategy

ABN 70 250 995 390

Sydney West
200 Old Wallgrove Road
PO Box 87 Horsley Park
NSW 2175 Australia
T (02) 9620 0777
F (02) 9620 0384

Property and Services | Field Services
Telephone: (02) 9620 0104
Your Reference: SSD 7500

12 February, 2016

The General Manager
Department of Planning & Environment
GPO Box 39
SYDNEY NSW 2001

Attn: Lawrence Huang

Dear Mr Huang,

Re: Request for SEARs for Proposed Warehouse and Logistics Hub SSD 7500
5 and 9 Culverston Road, Minto, Campbelltown Local Government Area

Thank you for the request for SEARs notification SSD 7500, Lot 3 in DP 817793 and Lot 400 in DP 875711.

We can advise after review of the abovementioned SEARs Application using *TransGrid's Asset Management Information System (TAMIS),* this proposed development does not affect our infrastructure, therefore we do not object to this proposal. Please also find enclosed a TransGrid plan identifying the subject site as per our records.

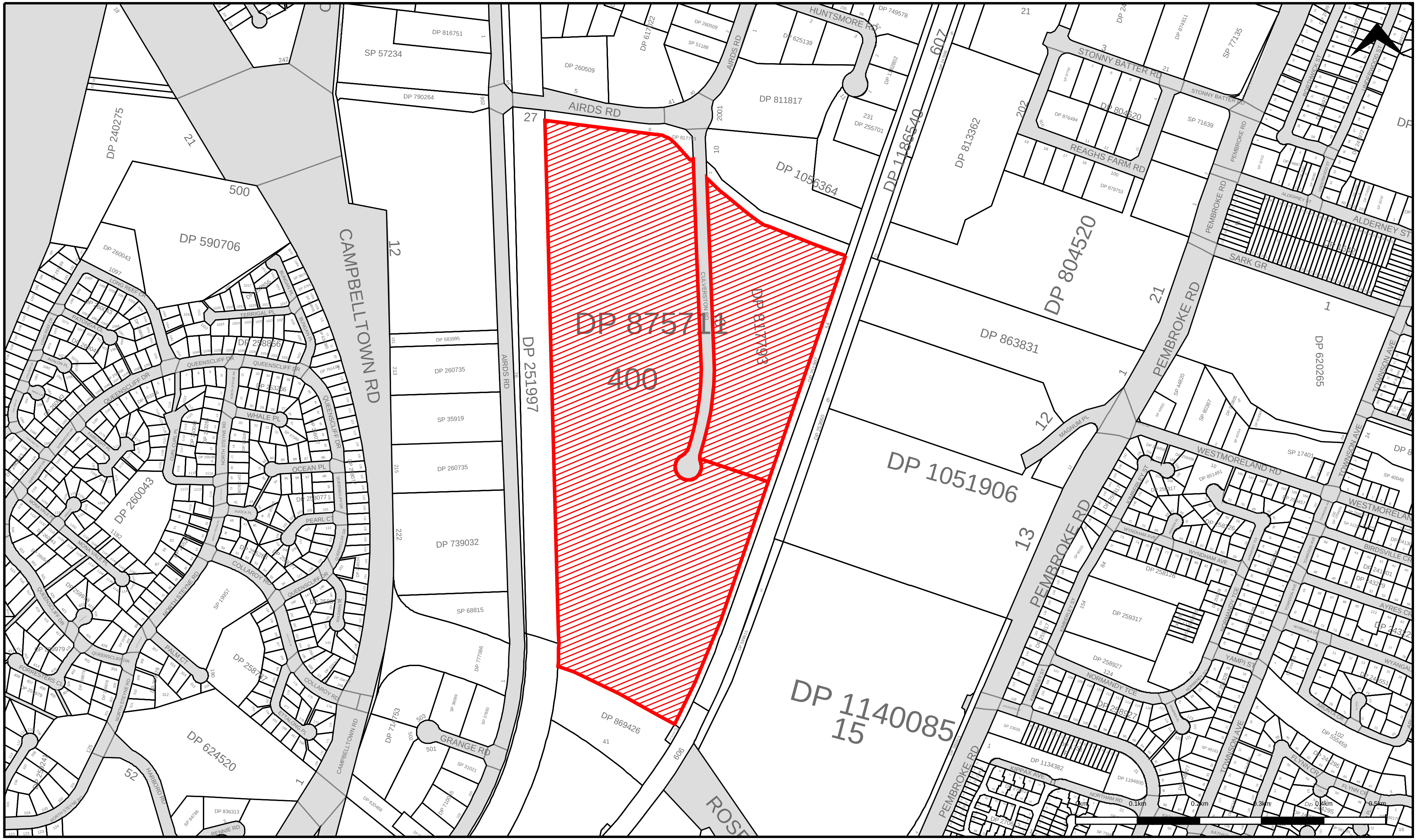
Please find enclosed a copy of *TransGrid's Easement Guidelines for Third Party Development (V10)* ***(Guidelines).*** Please note this is not an extensive list and should there be any uncertainty further consultation with TransGrid would be required.

Thank you for consulting with TransGrid in respect of this matter and should you have any queries, please feel free to contact the undersigned on (02) 9620 0104.

Yours sincerely

Skye Shanahan
Property Enquiries Coordinator | Property and Services

Encl.



Legend

TransGrid Proposal

TransGrid

Lot 3 in DP 817793 & Lot 400 in DP 875711

Property of Transgrid. No warranty is given that information shown is complete or accurate.

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TransGrid Easement Guidelines

Third Party Development

Background

TransGrid acquires Transmission Line (**TL**) and cable easements to provide adequate clearance along the route of a TL for construction and maintenance work and to preserve certain property rights in perpetuity. These easements also ensure no work or other activity is undertaken under or near a TL or cable that could create an unsafe situation either for persons or for the security of the TL or cable.

The TL or cable easement area and its ongoing maintenance are control measures that cannot be compromised. Easements are established to prevent and mitigate against the following electrical safety risks:

- Infringement of electrical safety clearances e.g. due to an activity or vegetation growth;
- Electrical Induction e.g. due to parallel conducting materials;
- Step and touch potentials under fault conditions e.g. due to lightning or bushfire;
- Failure of structures or line equipment e.g. due to third party vehicle or plant impact;
- Transfer off easement of dangerous voltages, e.g. by services installed within the easement area; and
- Blowout of a conductor under high wind (or blow in of vegetation) e.g. into an adjacent structure.

TransGrid's paramount concern is the safety of people and property. TransGrid is also bound to maintain its infrastructure efficiently and cost effectively. The TL and cable easements, along with the accesses, have been designed to facilitate effective operational maintenance.

Development Approval Process

The *Environmental Planning and Assessment Act 1979* may empower Local Councils to act as the consent authority for development applications. In these situations, a Development Application (DA) is prepared and submitted to the Local Council for development consent.

The *State Environmental Planning Policy (Infrastructure) 2007* (SEPP), which commenced on 1 January 2008, requires Local Councils to consult with Electricity Network Operators before granting development consent for proposals that might adversely affect:

- existing electricity infrastructure; and
- easements for electricity purposes, even if no infrastructure has yet been constructed in the easement.

The Local Council must take into consideration any comments made by the Electricity Network Operator who has 21 days to respond to any written notification of a DA received by Council. Council must take into consideration any comments provided by the Electricity Network Operator before it determines any DA. TransGrid's initial response may be a request for additional information to assess a development that seeks to encroach or is immediately adjacent to our easements and infrastructure. Such a request is likely to then be forwarded to the applicant.

The party submitting the development application is required to consult with TransGrid in accordance with the *State Environmental Planning Policy (Infrastructure) 2007* (**SEPP**); the *NSW Occupational Health and Safety Act 2000*; the WorkCover NSW *'Work Near Overhead Power Lines'* Code of Practice 2006, and; the WorkCover NSW *'Work Near Underground Assets'* Guide 2007.

TransGrid Approval

The statutory approval authority should obtain a written approval from TransGrid for all proposed activities within an easement area in accordance with regulation 45 of the *SEPP.*

It is recommended that the development proponent consult with TransGrid prior to lodging a DA, so the proposed development may be assessed relative to TransGrid's easements and infrastructure within the specific locality. Statutory notification pursuant to regulation 45 of the SEPP may not always provide an adequate response time for TransGrid to assess any development proposed within or immediately adjacent to our easements and infrastructure. Therefore, it is considered to be in the best interests of any development proponent to thoroughly consult and attempt to resolve all and any issues with TransGrid prior to submitting a DA. In consulting with TransGrid prior to submitting the DA, the following information must be provided.

1. Detailed specifications and plans drawn to scale and fully dimensioned, showing property boundaries and other relevant information. Survey plans must clearly identify TransGrid's easements; any high voltage transmission infrastructure located therein (including stanchions); and horizontal clearances;

2. Three dimensional CAD file of the development, preferably in 3D-DXF format; and

3. TransGrid will also require an *Impact Assessment* of the development on TransGrid's infrastructure and associated interests (including easements). Details of how any adverse impacts will be managed, mitigated or resolved must also be provided. The *Impact Assessment* form is contained in **Appendix A** of these guidelines.

Upon receipt of the abovementioned documentation, TransGrid will assess the proposed development in relation to its impact on TransGrid infrastructure, easements and means of access. For complicated proposals the consultation process will be comprehensive and the proponent should allow sufficient time for this process prior to lodgement of a DA (see *Timeframes* below).

General Development Proposal Guidelines

1. Prohibited Activities and Encroachments

A number of activities and encroachments are not permitted within the easement area. These are detailed in the "TransGrid Easement Guide" contained in **Appendix B** of these guidelines.

Any *Development Proposal* should be designed in such a way that:

- It does not involve the listed activities, nor introduce the identified encroachments; and
- Does not encourage other parties to undertake such activities or introduce such encroachments in the future.

2. Development

The Development Proposal should be planned taking into consideration the policy of "*prudent avoidance*" as identified by The Right Honourable Harry Gibbs Report (*Inquiry into Community Needs and High Voltage Transmission Line Development*).

This report placed recommendations on the design of new TL's having regard to their proximity to houses, schools, work sites and the like and is equally valid when considering new developments proposed in proximity to existing powerlines and associated easements.

The policy not only considers electrical safety risks it also takes into consideration Electric and Magnetic Field (EMF). The EMF strength rises from the easement edge to beneath the conductors and the most practical way to achieve *prudent avoidance* is to keep any development entirely outside the easement area.

If it is desired to place any part of a development within an easement the proponent shall, in conjunction with the *Development Proposal*, undertake an *Impact Assessment* (see **Appendix A**) to be provided to TransGrid that covers the changes in risk and mitigation measures proposed. General development requirements are listed in **Appendix C**.

Relocating Infrastructure and Interruption to Transmission

The development proponent will be liable for any costs involved in any agreed relocation of TransGrid infrastructure as part of any proposed development. Depending on how the development proposes to encroach on TransGrid's easement, an earthing study and earthing modifications may be required at the developer's expense. Further, the developer will also be liable for any costs and penalties incurred as a consequence of interruptions to TransGrid's transmission operations arising from the development, whether planned or inadvertent.

Post Construction Compliance Statement

The Development Proposal, as provided to TransGrid, must include as-built plans compliant with TransGrid's drawing management system of the final construction where approval of an encroachment is granted. The as-built drawings must be accurate, scaled and display distances/measurements, demonstrating compliance to the agreed plans and implementation of agreed control measures.

Timeframes

TransGrid will respond to a Local Council notification of a proposed development within 21 days as required in the SEPP, however that response may not be an approval (or disapproval). If the Development Proposal does not meet the requirements of these Guidelines, or in the event further detailed engineering analysis is required, TransGrid may require the Development Proposal to be revised and resubmitted or additional information will be sought.

Developers are advised to consider TransGrid's requirements early in the process as discussed and not as an afterthought that could result in project delays, including the future demolition of any prohibited construction works. To this extent, development proponents and their consultants are encouraged to contact and meet with TransGrid in the preliminary planning and design stages of the development in order to establish what restrictions and prohibitions apply and what, if any conditional encroachments can be accommodated.

Further Assistance

For any further development enquiry assistance please contact the Enquiries Services Coordinator:

Enquiries Services Coordinator	Telephone	(02) 9620 0104
	Mobile	0427 094 860
TransGrid Community Liaison Group	Phone	1800 222 537
	Email	community@transgrid.com.au
	Website	www.transgrid.com.au

Appendix A - Development Proposal Impact Assessment

Details of the Development

Street Address	
Land and Title References	
Encroachment and/or Proximity to Easement	
Development Proposal's Clearances to TransGrid's high voltage infrastructure	
Detailed plans of development attached	

Safety

Consideration	Yes/No (If Yes, please provide details and mitigation/ resolution)
Are ground levels being changed within or in the vicinity of the easement? If so, by how much?	
Is any part of the development proposed within 30m of a transmission line structure or guy? If so, how close to the structure/guy?	
Will the development increase earth potential rise risk? (If unsure please consult with TransGrid Enquiries Services Coordinator.)	
Will the development contain metallic structures or services in the easement?	
Will the development result in voltages being transferred off the easement or bring remote earths onto the easement? (If unsure, please consult with TransGrid's Enquiries Services Coordinator.)	
Are public spaces or recreational areas proposed within or adjacent to the easement?	
Will the development encourage people to congregate and/or spend time within the easement or immediately adjacent thereto?	
Are structures with a height greater than 2.5m proposed on the easement?	
Will an Elevated Work Platform (EWP) be required to maintain any structures within the easement?	
Is infrastructure proposed that is a fire hazard, or that would encourage the storage or use of flammable material on the easement?	
Is infrastructure proposed that would require emergency workers (such as fire fighters) to come near, or their equipment to come onto or near high voltage conductors?	

Consideration	Yes/No (If Yes, please provide details and mitigation/ resolution)
Will the easement or the nature of the land in the vicinity of the easement, be altered in any way that would encourage prohibited encroachments to occur within the easement?	
Will access around any TransGrid structure be altered preventing EWPs, crane or other plant access? (Required for TransGrid maintenance purposes.)	
Will the development introduce other risks to maintenance staff when working within the easement?	
Will access to the easement be altered that would introduce risks to TransGrid personnel including, although not limited to, asset inspectors or patrol staff?	

Operations

Consideration	Yes/No (If Yes, please provide details and mitigation/ resolution)
Have any ground level developments been proposed (including roads, driveways, parking lots and turning bays etc) that would expose TransGrid transmission structures and lines to impact risk? (If unsure please consult with the TransGrid Enquiries Services Coordinator.)	
Will the development result in a change in water flows or drainage that could impact on the foundations or structural integrity of any TransGrid structure or guy-wire?	
Are excavations or surface activities proposed that would impact a TransGrid structure's foundations, stability or subterranean earthing systems? (If unsure please consult with the TransGrid Enquiries Services Coordinator.)	

Maintenance

Consideration	Yes/No (If Yes, please provide details and mitigation/ resolution)
Have roads, driveways or landscaping been proposed that would prevent or hinder TransGrid maintenance, or increase maintenance costs, for the above or below ground components of the transmission line structure?	
Will access to the easement or within the easement, be obstructed, restricted or altered?	
Have access roads, bridges, crossings and the like been designed to cater for the weight and size of TransGrid maintenance plant (EWPs and Cranes)?	
Does the development encourage the placement of obstructions that would prevent access for routine or emergency works?	

Development Design & Construction

Consideration	Yes/No (If Yes, please provide details and mitigation/ resolution)
Has the development been designed so that during the construction phase TransGrid is not restricted from undertaking normal maintenance and inspection activities?	
Has the development been designed so that during the construction phase prohibited activities or encroachments are not required in the easement area?	
Has the design health and safety risk assessment complied with the following WorkCover NSW instruments: • '*Work Near Overhead Power Lines*' Code of Practice 2006; and/or • *'Work Near Underground Assets'* Guide 2007?	

TransGrid's Rights

Consideration	Yes/No (If Yes, please provide details and mitigation/ resolution)
Are TransGrid's existing access rights preserved, pursuant to the terms of the easement?	
Will TransGrid be exposed to new or higher maintenance costs (e.g. landscaping or other development changes impacting easement access, use and maintenance)?	
Does a new deed of easement need to be negotiated by the development proponent?	

Preservation of Easement for Access

Consideration	Yes/No (If Yes, please provide details and mitigation/ resolution)
Will TransGrid's *Easement for Access* be affected?	
Does a new *Easement for Access* need to be arranged by the development proponent, including to supersede an existing registered right of carriageway?	

Appendix B - Prohibited encroachments and activities

TransGrid will use its powers under the Electricity Supply Act, involve WorkCover or take other legal action as required to prevent or halt prohibited activities.

1. Transmission Lines

Activities and encroachments that are **prohibited** within a Transmission Line (TL) Easement include, but are not limited to *(Note 2)*, the following:

- The construction of houses, buildings, substantial structures, or parts thereof.
- The installation of fixed plant or equipment.
- The storage of flammable materials, corrosive or explosive material.
- The placing of garbage, refuse or fallen timber.
- The planting or cultivation of trees or shrubs capable of growing to a height exceeding 4 metres.
- The placing of obstructions within 20 metres of any part of a transmission line structure or supporting guy-wire.
- Camping or the permanent parking of caravans or other camping vehicles.
- Public spaces or recreational areas which encourage people to spend time within or congregate within the easement.
- The parking or storage of flammable liquid carriers or containers.
- The installation of site construction offices, workshops or storage compounds.
- Flying of kites or wire-controlled model aircraft within the easement area.
- Flying of any manned aircraft or balloon within 60m of any structure, guy-wire or conductor.
- Flying of remote controlled or autonomous aerial devices (such as UAVs) within 60m of any structure, guy-wire or conductor.
- Placing any obstructions on access tracks or placed within the easement area that restricts access.
- Any vegetation maintenance (such as felling tall trees) where the vegetation could come within the Ordinary Persons Zone – refer to the WorkCover NSW '*Work Near Overhead Power Lines*' - Code of Practice 2006'.
- Any substantial excavation within 15 metres of a pole or supporting guy-wire or guy foundation or within 20 metres of a tower
- The climbing of any structure (any development that encourages or facilitates climbing will not be permitted).
- Any change in ground levels that reduce clearances below that required in AS7000.
- The attachment of any fence, any signage, posters, or anything else, to a structure or guy-wire.

  Note: Interference to electricity infrastructure is an offence under the *Electricity Supply Act 1995*.
- The movement of any vehicle or plant between the tower legs, within 5m of a structure, guy-wire or between a guy-wire and the transmission pole.

  Note: Any damage to electricity infrastructure is an offence under the Electricity Supply Act 1995.
- The storage of anything whatsoever within the tower base or within 10m of any tower leg.
- Any structure whatsoever that during its construction or future maintenance will require an Accredited person to access.

  Note: The final structure may meet AS7000 clearances, but may be accessible (e.g. by EWP) by Ordinary Persons within the Ordinary Persons Zone.
- Any work that generates significant amounts of dust or smoke that can compromise the TL high voltage insulation.
- The erection of any structure in a location that could create an unsafe situation work area for TransGrid staff.
- Burning off or the lighting of fires.

- Any activity (including operation of mobile plant or equipment having a height when fully extended exceeding 4.3 metres) by persons not Accredited or not in accordance with the requirements of the WorkCover NSW 'Work Near Overhead Power Lines' Code of Practice 2006 that is within (Note 1):
  - 3m of an exposed 132kV overhead power line
  - 6m of an exposed 220kV or 330kV overhead power line
  - 8m of an exposed 500kV overhead power line

  Note: Distances quoted are to the design conductor position (i.e. maximum sag and blowout)

The following activities <u>may possibly</u> be approved with conditions. TransGrid's prior written consent is required. The proponent will have to demonstrate (using the Impact Assessment process) that the risks associated with the activity have been satisfactorily mitigated.

- Temporary parking of caravans and other large vehicles in the outer 3m of the easement area, subject to a 4.3 metre height restriction and metallic parts being earthed.
- The erection of flagpoles, weather vanes, single post signs, outdoor lighting, subject to a 4.3 metre height restriction and metallic parts being earthed.
- The erection of non-electric agricultural fencing, yards and the like.

  Note: Fencing that exceeds 2.5 metres in height or that impedes access would not be approved.
- The erection of metallic fencing less than 2.5 metres in height providing that it is earthed, located more than 20 metres from any part of a transmission line structure or supporting guy and greater than 4 metres of the vertical projection of the overhead conductors.
- The erection of electric fencing provided that the height of the fencing does not exceed 2.5 metres and provided that the fence does not pass beneath the overhead conductors.

  Note: Approval may be given for a portable electric fence to pass underneath the conductors provided that it is supplied from a portable battery-powered energiser that is located remotely from frequented areas. Where it is necessary for a permanent electric fence to pass beneath the overhead conductors, or where an extensive permanent electric fencing system is installed in proximity to a transmission line certain additional safety requirements will be required.
- The installation or use of irrigation equipment inside the easement.

  NOTE: An irrigation system will not be approved if it is capable of coming within 4 metres of the overhead conductors; exceeds 4.3 metres in height; consists of individual sections of rigid or semi-rigid pipe exceeding 4.3 metres; is capable of projecting a solid jet of water to within 4 metres of any overhead conductors; requires fuel to be stored within the easement; and/or requires an outage of the transmission line for it's operation.
- The installation of low voltage electricity, telephone, communication, water, sewerage, gas, whether overhead, underground or on the surface.

  Note: Services that do not maintain standard clearances to the overhead conductors that are within 15 metres from the easement centre-line, 20 metres from any part of a transmission line supporting structure or are metallic and within 30 metres of any part of a structure will not be approved. TransGrid may impose additional conditions or restrictions on proposed development.
- The installation of high voltage electricity services, subject to there being no practicable alternative and provided the standard clearances are maintained to the supporting structures.

  Note: Where extensive parallels are involved certain additional safety requirements may be imposed by TransGrid, depending on the particular case and engineering advice.
- Swimming pools, subject to TransGrid's strict compliance criteria.

  Note: Above ground pools will not be approved. In-ground pools will not be approved if there is a practicable alternative site clear of the easement area. If there is no practical alternative site, in-ground

pools including coping will not be approved if it encroaches more than 4.5 metres, or is less than 30 metres away from a transmission line structure. A site specific assessment by TransGrid is required.

- Detached garages, detached carports, detached sheds, detached stables, detached glass houses, caravans, site containers, portable tool sheds, pergolas and unroofed verandahs attached to residences on the outer 3 meters of the easement only.
- Prefabricated metal (garden) sheds. TransGrid approved sheds must be earthed.

  Note: Sheds exceeding 2.5 metres in height, with a floor area exceeding 8m², encroaching more than of up to 3 metres or within 30 metres of any part of a transmission line structure will not be approved. Connection of electric power will not be approved.
- Single tennis courts.

  Note: Tennis courts that hinder access are for commercial use or do not provide adequate clearances shall not be approved.
- Subdivisions. See ***Appendix C*** requirements.
- Roads, carparks, cycleways, walking tracks and footpaths on the outer part of the easement or as a thoroughfare across the easement, subject to horizontal and vertical clearances. Restrictions and other conditions on consent may also apply. These will not be approved when located within:
  - 20 metres of any part of a transmission line structure
  - 10 metres of the centre-line of a transmission line 132kV and below
  - 17 metres of the centre-line of a transmission line above 132kV

  Note: Roads and pathways that cross the transmission line as a thoroughfare may be permitted. Where it is proposed that a road passes within 30 metres of a transmission structure or supporting guy, TransGrid may refuse consent or impose restrictions and other conditions on consent. Where a road passes within 30 metres of a transmission structure or supporting guy, the structure's earthing system may require modification for reasons including, but not limited to, preventing fault currents from entering utility services which may be buried in the road. The option of raising conductors or relocation of structures, at the full cost to the proponent, may be considered.
- Excavation – subject to restriction criteria.

  Note: Substantial excavations located within 20 metres of any part of a steel tower or pole structure and exceeding a depth 3 metres will not be approved.
- Quarrying activities, earthworks, dam or artificial lake construction.
- Mining. Approval would be based on the merits of the proposal and any related circumstances.
- Use of explosives.

Note 1: An encroachment or activity that is located outside the prohibited distance of the infrastructure but still within the easement will not necessarily be permitted. It will generally need to be addressed in the Impact Assessment and remains subject to TransGrid prior consent.

Note 2: The above list is not exhaustive and if there is any uncertainty as to whether an activity or encroachment is acceptable within an easement, please contact TransGrid. TransGrid may impose additional conditions or restrictions on proposed development.

2. Cables

The location of TransGrid's subterranean infrastructure and associated easements includes, but is not limited to, beneath private freehold and strata land as well as public roadways and railways etc. All development proposed within immediate proximity of TransGrid's subterranean infrastructure, including high voltage cables, stratum tunnels and conduits, must undertake a *Dial Before You Dig* search of any land where development is proposed, including roads adjoining a development site where subterranean services are proposed to be installed. The activities listed below are prohibited within cable easements:

- The storage of flammable liquids or explosives
- The planting or cultivation of trees or shrubs with extensive root systems
- The construction of houses, buildings or substantial structures
- The installation of fixed plant or equipment
- The placing of garbage, refuse or fallen timber
- Boring directly over the cable lay (eg. the installation of fencing or safety railing)
- The raising or lowering of existing ground surface levels
- Any excavation within 2m of an underground cable.

The following activities may be approved with conditions. TransGrid's prior written consent is required. The proponent will have to demonstrate (using the Impact Assessment process) that the risks associated with the activity have been satisfactorily mitigated.

- Parking of vehicles

  Note: Parking will be prohibited if the surface is not capable of supporting the vehicles likely to be parked, risking the crushing of the cable/ducts or erosion of the ground

- The operation of mobile plant and equipment

  Note: Such operations will be prohibited if the surface is not capable of supporting the vehicles likely to be parked, whereby risking the crushing of the cable/ducts or erosion of the ground

- The erection of structures spanning the easement
- Excavation
- Concrete driveways
- The installation of metallic pipes, fences, underground or overhead cables and services
- Road-boring within approved distances of a high voltage cable.

Where TransGrid's prior written consent has been granted to undertake work near an easement and related subterranean infrastructure, including the tunnels and conduits that accommodate our high voltage transmission line cables, all works must be undertaken in accordance with the WorkCover NSW 'Work Near Underground Assets' Guide 2007. Further, all development works must comply with the TransGrid guidelines for subterranean infrastructure referring to the document titled "*Requirements for Working In the Vicinity of TransGrid Underground Cables".*

Appendix C - General Requirements for Developments and Subdivisions

The following list of current general requirements is provided for your information. It should be noted that the list is not exhaustive and, where there is any doubt concerning a particular activity within the easement area advice should be sought from TransGrid.

1. Completed Works

The completed works shall provide for the following considerations:

- A safe unobstructed working platform shall be preserved around the transmission line structures for access by EWP, cranes as well as other large plant and equipment. No obstructions of any type shall be placed within 30 metres of any part of a transmission line structure.
- Roads, streets etc (including kerb to property boundaries) and intersections shall not be located within 30 metres of any TL structure.
- Developments must meet the clearances requirements set out in AS7000 between their finished level and the conductor at its maximum operating temperature.
- Proposed roadway locations shall also take into consideration any street lighting requirements to ensure that statutory clearance requirements are followed. The design clearances should include future maintenance safety issues. TL outages will not be provided for street light maintenance. Access to the TL and its structures shall be available at all times for TransGrid plant and personnel. In this regard a continuous and unobstructed access way shall be retained along the easement.
- Where fences are required for security purposes access gates will be installed in an agreed location and a TransGrid lock will be fitted.
- Application of “prudent avoidance” in relation to electric and magnetic fields should always be observed.
- No increase in earth potential rise risks.
- All underground services installed more than 20 metres but within 30 metres of a TL structure shall be non-metallic. Utility services (including street lighting), whether above or below ground, shall not be installed without prior written approval of TransGrid.
- Excavation work or other alterations to existing ground levels shall not be carried out within the easement area without the prior approval of TransGrid. Approval will not normally be granted for such work within 20 metres of any supporting structure.
- Boundaries for new subdivided properties should not be located within the easement.
- Fenced boundaries for all new properties in the subdivision shall not be within 30 metres of any TL structure.
- A “Restriction-as-User” (88B Instrument) shall be placed on the titles of any created lots that may become affected by a TL easement. Any proposed activity within an easement area will require the prior written approval of TransGrid (appropriate wording will be advised when required).
- Any proposed development must not impact on TransGrid’s costs of inspecting, maintaining or reconstruction of the transmission lines.
- In order to comply with its statutory responsibilities to maintain adequate clearance between the conductors and any forms of vegetation, TransGrid maintains its easements as follows:
  - Tall growing species likely to infringe safe clearances are to be removed regardless of existing height at time of construction.
  - Trees likely to fall onto conductors or towers are also to be removed whether on the easement or off the easement (ref. Sec 48 of the Electricity Supply Act 1995).

- Shrubs and other vegetation of lower mature height within the easement will be reduced and managed, generally by slashing with ground level retained.
- Vegetation management will aim to reduce available fuel and subsequent bushfire risks in accordance with NSW Rural Fire Service Bush Fire Environmental Assessment Code that sets out the requirements for hazard reduction strategies such as Asset Protection Zones and Strategic Fire Advantage Zones.
- Removed vegetation will be mulched or chipped and removed from site or retained on site in accordance with owner/stakeholder requirements.
- Other works considered necessary in order to provide a safe working environment for maintenance staff, contractors and for the property owner/manager will be undertaken.

Proposed vegetation plantings, such as Riparian corridors, within the transmission line easements shall be compatible with the above maintenance requirements and must consider on-going vegetation control.

2. Construction

During construction, the development plans shall also provide for the following considerations:

- Vehicles, plant or equipment having a height exceeding 4.3 metres when fully extended shall not be brought onto or used within the easement area without prior TransGrid approval.
- Where temporary vehicular access or parking (during the construction period) is within 16 metres of a transmission line structure, adequate precautions shall be taken to protect the structure from accidental damage. Plans need to be submitted to TransGrid for prior approval.
- The easement area shall not be used for temporary storage of construction spoil, topsoil, gravel or any other construction materials.

3. Costs

The Developer shall bear all costs of any specialist design studies, TransGrid supervision, reconstruction or modification of the transmission line and its components, including consultation and design required to maintain clearances due to proposed ground level changes; road crossings within the easement; or due to any damage to the TL arising from the development.

Example of the Required Working Platform for Transmission Tower Maintenance

NSW GOVERNMENT | Transport for NSW

Ms Kate MacDonald
Team Leader Industry Assessments
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Attn: Lawrence Huang

Dear Ms MacDonald

Request for SEARs for Proposed Warehouse and Logistic Hub SSD 7500
5 and 9 Culverston Road, Minto, Campbelltown LGA

Thank you for your correspondence dated 11 February 2016 requesting Transport for NSW (TfNSW) to provide input into the draft SEARs for the subject development at Minto.

Roads and Maritime Services will be submitting a separate response.

TfNSW has reviewed the draft SEARs and suggested additions and changes are provided in track changes at **Attachment 1**.

Thank you again for the opportunity of providing advice for the subject proposal. If you require clarification on requirements issue raised, please don't hesitate to contact Edmond Platon, Transport Planner on 8202 2557 or edmond.platon@transport.nsw.gov.au

Yours sincerely

3/3/16

Mark Ozinga
Manager, Land Use and Transport Planning
Planning and Programs

CD16/01980

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www.transport.nsw.gov.au
ABN 18 804 239 602

Secretary's Environmental Assessment Requirements

Section 78A(8A) of the *Environmental Planning and Assessment Act 1979*

State Significant Development

Application Number	SSD 7500
Development	Construction of a warehouse and logistics hub to warehouse and distribute goods. Four proposed warehouses with a total building area of 112,000 m^2.
Location	5 and 9 Culverston Road, Minto (Lot 3 DP 917793 and Lot 400 DP 875711)
Applicant	Qube Holdings Limited C/O Tactical Group
Date of Issue	March 2016
General Requirements	The Environmental Impact Statement (EIS) for the development must meet the form and content requirements in clauses 6 and 7 of Schedule 2 of the *Environmental Planning and Assessment Regulation 2000.* In addition, the EIS must include: • a detailed description of the development, including: – the need for the proposed development; – justification for the proposed development; – likely staging of the development; – likely interactions between the development and existing, approved and proposed operations in the vicinity of the site; and – plans of any proposed building works. • consideration of all relevant environmental planning instruments, including identification and justification of any inconsistencies with these instruments; • risk assessment of the potential environmental impacts of the development, identifying the key issues for further assessment; • detailed assessment of the key issues specified below, and any other significant issues identified in this risk assessment, which includes: – a description of the existing environment, using sufficient baseline data; – an assessment of the potential impacts of all stages of the development, including any cumulative impacts, taking into consideration relevant guidelines, policies, plans and statutes; and – a description of the measures that would be implemented to avoid, minimise, mitigate and if necessary, offset the potential impacts of the development, including proposals for adaptive management and/or contingency plans to manage significant risks to the environment. • consolidated summary of all the proposed environmental management and monitoring measures, highlighting commitments included in the EIS. The EIS must also be accompanied by a report from a qualified quantity surveyor providing: • a detailed calculation of the capital investment value (CIV) of the development as defined in clause 3 of the *Environmental Planning and Assessment Regulation 2000*, including details of all components of the CIV; • an estimate of the jobs that will be created by the development during the construction and operational phases of the development; and • certification that the information provided is accurate at the date of preparation.
Key issues	The EIS must address the following specific matters: • **Strategic and Statutory Context** – including: – detailed justification for the proposal and the suitability of the site; and – demonstration that the proposal is generally consistent with all relevant planning strategies, environmental planning instruments and

development control plans (DCPs) and justification for any inconsistencies.

- **Contributions** – including:
  - consideration of Council's Section 94/94A Contribution Plan and/or details of any Voluntary Planning Agreement.
- **Traffic and Transport** – including:
  - a Traffic Impact Assessment detailing all daily and peak traffic and transport movements likely to be generated (vehicle, public transport, pedestrian and cycle trips) during construction and operation of the staged development, including a split of light and heavy vehicles, the type of heavy vehicles likely to be used, description of vehicle access routes used to access key freight locations/routes and the impacts on nearby intersections;
  - details of access to the site from the road network including intersection location, design and sight distance and parking provisions;
  - assess the impacts of traffic generated on the road networks, including impacts on ~~an assessment of predicted impacts on~~ road safety and the capacity of the road network to accommodate the development. The assessment needs to be supported by appropriate modelling;
  - an assessment of impacts on any Transport Infrastructure including vehicle, bus, pedestrian and cycle pathways that may result from the development;
  - an assessment of any cumulative impact of any adjoining or near development that may impact on roads or transport infrastructure in the locality as a result of the proposal;
  - plans of any road upgrades or new roads required for the development and funding if necessary;
  - detailed plans of the proposed layout of the internal road network, truck marshalling, facilities and parking provision on-site in accordance with the relevant Australian Standards; ~~and~~
  - details of any likely dangerous goods to be transported on arterial and local roads to/from the site, if any, and the preparation of an incident management strategy, if relevant;~~.~~
  - ~~D~~detail service vehicle movements, including vehicle type and likely arrival and departure times;
  - 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, including the preparation of a draft Construction Traffic Management Plan to demonstrate the proposed management of impact. This Plan needs to include vehicle routes, number of trucks, hours of operation, access & parking arrangements and traffic control measures for all demolition/construction activities.
  - details of any ground penetration works (eg excavation, piers/piles etc) deeper than 2m in depth and within 25m of a rail corridor. Further information should be provided including:
    - Geotechnical and Structural report/drawings.
    - Construction methodology with details pertaining to structural support during excavation.
    - Cross sectional drawings showing ground surface, rail tracks, sub soil profile, proposed basement excavation and structural design of sub ground support adjacent to the Rail Corridor.
    - Detailed Survey Plan showing the relationship of the proposed developed with respect to RailCorp's land and infrastructure.
    - If required by Sydney Trains, an FE analysis which assesses the different stages of loading-unloading of the site and its effect on the rock mass surrounding the rail corridor.
  - if any rail siding is proposed:
    - detailed design and engineering drawings of the proposed rail siding.
    - details of train operating plans, including likely rail routes and

destinations, train size and configuration, service frequency, anticipated train path requirements, expected ramp up periods and peak demand.
    - detailed assessment of the proposed project on the capacity, efficiency and safety of the rail networks, including level crossings.
    - assessment of the noise impacts of rail and siding operations in line with relevant NSW noise policy and guidelines.

- **Urban Design and Visual** – including:
    - layout of the development including staging, site coverage, setbacks, proposed open space and landscaped areas;
    - suitable landscaping incorporating endemic species;
    - the layout and design of the development having regard to the surrounding vehicular, pedestrian and cycling networks, if applicable;
    - a detailed assessment (including photomontages and perspectives) of the facility (buildings and storage areas) including height, colour, scale, bulk, building materials and architectural treatments and finishes, signage, lighting and any retaining walls particularly from nearby public receivers and significant vantage points within the broader public domain;
    - proposed cut and fill works associated with the development; and
    - measures to minimise the extent of cut and fill.
- **Noise and Vibration**– including:
    - a description of all potential noise and vibration sources during the construction and operational phases of the development, including on and off-site traffic noise;
    - a noise impact assessment, including a cumulative noise impact assessment in accordance with relevant Environment Protection Authority guidelines; and
    - details of noise mitigation, management and monitoring measures.
- **Soils and Water** – including:
    - a description of the water demands and a breakdown of water supplies;
    - a description of the measures to minimise water use;
    - a detailed water balance;
    - a description of all wastewater generated on-site;
    - a description of the proposed erosion and sediment controls during construction and operation;
    - a description of the surface and stormwater management system, including on-site detention, and measures to treat or re-use water;
    - an assessment of potential surface and groundwater impacts associated with the development; and
    - details of impact mitigation, management and monitoring measures.
- **Air Quality and Odour** – including:
    - a description of all potential odour sources and predicted odour emissions associated with the construction and operational phases of the proposed development;
    - details of air quality and odour impacts on private properties, in accordance with relevant Environment Protection Authority guidelines; and
    - details of mitigation, management and monitoring measures for preventing and/or minimising emissions.
- **Infrastructure Requirements** – including
    - a detailed written and/or geographical description of the existing infrastructure required on-site;
    - identification of any infrastructure upgrades required to facilitate the development, and describe any arrangements to ensure that the upgrades will be implemented in a timely manner and maintained; and
    - a detailed description of cooling/heating systems to be installed on-site.
- **Greenhouse Gas and Energy Efficiency** – including an assessment of the energy use on site, and demonstrate what measures would be implemented

	to ensure the proposal is energy efficient. • **Ecologically Sustainable Development** – including an assessment of how the development will incorporate ecologically sustainable development principles in all phases of the development. • **Waste** – including: – details of the quantities and classification of all waste streams to be generated on site; – details of waste storage, handling and disposal; and – details of the measures that would be implemented to ensure that the development is consistent with the aims, objectives and guidance in the *NSW Waste Avoidance and Resource Recovery Strategy 2014-2021*. • **Socio-Economic** – including an analysis of the economic and social impacts of the development, particularly of any benefits to the community.
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. You should provide these as part of the EIS rather than as separate documents.
Consultation	During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners. In particular you must consult with: • Campbelltown City Council; • Office of Environment and Heritage; • Department of Primary Industries; • Transport for NSW; • Roads and Maritime Services; • Sydney Trains; and • local residents and stakeholders. 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.
Further consultation after 2 years	If you do not lodge an EIS for the development within 2 years of the issue date of these SEARs, you must consult with the Secretary in relation to any further requirements for lodgement.
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 development.

ATTACHMENT 1
Technical and Policy Guidelines

The following 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.

Many of these documents can be found on the following websites:
http://www.planning.nsw.gov.au
http://www.bookshop.nsw.gov.au
http://www.publications.gov.au

Policies, Guidelines & Plans	
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. Provide these as part of the EIS rather than as separate documents. In addition, the EIS must include the following: 1. An existing site survey plan drawn at an appropriate scale illustrating: • the location of the land, boundary measurements, area (sqm) and north point; • the existing levels of the land in relation to buildings and roads; • location and height of existing structures on the site; • location and height of adjacent buildings and private open space; and • all levels to be to Australian Height Datum (AHD). 2. Locality/context plan drawn at an appropriate scale should be submitted indicating: • significant local features such as heritage items; • the location and uses of existing buildings, shopping and employment areas; and • traffic and road patterns, pedestrian routes and public transport nodes. 3. Drawings at an appropriate scale illustrating: • detailed plans, sections and elevations of the existing building, which clearly show all proposed internal and external alterations and additions.
Documents to be Submitted	
	Documents to submit include: • 1 hard copy and 1 electronic copy of all the documents and plans for review prior to exhibition; and • Other copies as determined by the Department once the development application is lodged.

Aspect	Policy / Methodology
Transport and Access	
	State Environmental Planning Policy (Infrastructure)
	Guide to Traffic Generating Development (~~RTA~~Roads and Maritime Services)
	Road Design Guide (~~RTA~~Roads and Maritime Services)
	Austroads Guide to Traffic Management – Pt 12: Traffic Impacts of Development
	Austroads Guidelines for Planning and Assessment of Road Freight Access in Industrial Areas
	~~NSW Freight and Ports Strate~~

Noise and Vibration	
	Assessing Vibration: A Technical Guide (DEC, 2006).
	Australian and New Zealand Environment Council – Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZEC, 1990).
	NSW Industrial Noise Policy (EPA, 2000).
	Environmental Criteria for Road Traffic Noise (EPA, 1999).
	Environmental Noise Control Manual (DECC).
	Interim Construction Noise Guideline (DECC, 2009).
	National Water Quality Management Strategy: Policies and principles - a reference document (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Implementation guidelines (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Australian Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC/ARMCANZ)
	Bunding and Spill Management (EPA)
	Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DEC)
	Using the ANZECC Guideline and Water Quality Objectives in NSW (DEC)
	The NSW State Rivers and Estuaries Policy (NSW Water Resources Council)
	Water Sharing Plan for the Metropolitan Region Unregulated River Water Sources (NOW) 2011
Soils and Water	
Groundwater	National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC)
	NSW State Groundwater Policy Framework Document (DLWC)
	NSW State Groundwater Quality Protection Policy (DLWC)
	The NSW State Groundwater Dependent Ecosystem Policy (DLWC)
	Water Sharing Plan for the Greater Metropolitan Region Groundwater Sources (NOW) 2011
Acid Sulfate Soils	Acid Sulfate Soil Manual (ASSMAC)
Erosion and Sediment	Managing Urban Stormwater: Soils & Construction (Landcom)
	Design Manual for Soil Conservation Works - Technical Handbook No. 5 (Soil Conservation Service of NSW)
	Soil and Landscape Issues in Environmental Impact Assessment (DLWC)
	Wind Erosion – 2nd Edition
Stormwater	Managing Urban Stormwater: Strategic Framework. Draft (EPA)
	Managing Urban Stormwater: Council Handbook. Draft (EPA)
	Managing Urban Stormwater: Treatment Techniques (EPA)
	Managing Urban Stormwater: Source Control. Draft (EPA)
	Managing Urban Stormwater: Harvesting and Reuse (DEC)
Wastewater	National Water Quality Management Strategy: Guidelines for Sewerage Systems - Effluent Management (ARMCANZ/ANZECC)
	National Water Quality Management Strategy: Guidelines for Sewerage Systems - Use of Reclaimed Water (ARMCANZ/ANZECC)
	National Water Quality Management Strategy - Guidelines For Water Recycling: Managing Health And Environmental Risks (Phase1) (EPHC, NRMMC & AHMC)
	National Water Quality Management Strategy - Guidelines For Water Recycling: Managing Health And Environmental Risks (Phase1) (EPHC, NRMMC & AHMC)
Air Quality	
	Protection of the Environment Operations (Clean Air) Regulation 2002
	Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (DEC)
	Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (DEC)
Waste	