Department of Planning and Environment

4 February 2022

Mr Barry Strichen
Liverpool Plains Shire Council
PO Box 152
Quirindi NSW 2343

EF22/363
SEAR 1636

Dear Mr Strichen

Waste Management Facilities or Works (Landfill Expansion)
Lot 213 DP 1173230, Merriwa Road, Willow Tree
Planning Secretary's Environmental Assessment Requirements (SEAR) 1636

Thank you for your request for the Planning Secretary's Environmental Assessment Requirements (SEARs) for the preparation of an Environmental Impact Statement (EIS) for the above development proposal. I have attached a copy of these requirements.

In support of your application, you indicated that your proposal is both designated and integrated development under Part 4 of the *Environmental Planning and Assessment Act 1979* and requires an approval under the *Protection of the Environment Operations Act 1997*. In preparing the SEARs, the Department of Planning and Environment (the Department) has consulted with the Environment Protection Authority. A copy of their requirements is attached.

The Department has also consulted with the Transport for NSW as required by Schedule 3 of State Environmental Planning Policy (Infrastructure) 2007. A copy of their requirements is attached.

The Department has also consulted with the Biodiversity, Conservation & Science Division of the Department. A copy of their additional requirements for the EIS are attached.

If other integrated approvals are identified before the Development Application (DA) is lodged, you must undertake direct consultation with the relevant agencies, and address their requirements in the EIS.

If your proposal contains any actions that could have a significant impact on matters of National Environmental Significance, then it will require an additional approval under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). This approval is in addition to any approvals required under NSW legislation. If you have any questions about the application of the EPBC Act to your proposal, you should contact the Commonwealth Department of Agriculture, Water and the Environment on (02) 6274 1111.

Should you have any further enquiries, please contact Zoe Halpin, Planning and Assessment, at the Department on (02) 9995 6430 or via email at zoe.halpin@planning.nsw.gov.au.

Yours sincerely

Chris Ritchie
Director
Industry Assessments
as delegate of the Planning Secretary

Department of Planning and Environment

Planning Secretary's Environmental Assessment Requirements

Section 4.12(8) of the *Environmental Planning and Assessment Act 1979*. Schedule 3 of the Environmental Planning and Assessment Regulation 2000.

Designated Development

SEAR Number	1636
Proposal	The expansion of an existing landfill, including cell construction, to receive up to 9,000 tonnes per year of domestic putrescible, organic and clean fill waste.
Location	Lot 213 DP 1173230, Merriwa Road, Willow Tree, in the Liverpool Plains local government area
Applicant	Liverpool Plains Shire Council
Date of Issue	4 February 2022
General Requirements	The Environmental Impact Statement (EIS) must meet the minimum form and content requirements in clauses 6 and 7 of Schedule 2 of the Environmental Planning and Assessment Regulation 2000.
Key Issues	The EIS must include an assessment of all potential impacts of the proposed development on the existing environment (including cumulative impacts if necessary) and develop appropriate measures to avoid, minimise, mitigate and/or manage these potential impacts. As part of the EIS assessment, the following matters must also be addressed: • **strategic and statutory context** – including: – a detailed justification for the proposal and suitability of the site for the development – a demonstration that the proposal is consistent with all relevant planning strategies, environmental planning instruments, development control plans (DCPs), or justification for any inconsistencies – a list of any approvals that must be obtained under any other Act or law before the development may lawfully be carried out. – a description of how the proposed expansion integrates with existing on-site operations – a description of any amendments to and/ or additional licence(s) or approval(s) required to carry out the proposed development. • **waste management** – including: – details of the type, quantity and classification of waste to be received at the site – details of any resource outputs and any additional processes for residual waste – details of waste handling including, transport, identification, receipt, stockpiling and quality control – the measures that would be implemented to ensure that the proposed development is consistent with the aims, objectives and guidelines in the *NSW Waste Avoidance and Sustainable Materials Strategy 2041*. • **Landfill design and rehabilitation** – details of the consistency of the proposal with the *Environmental Guidelines: Solid Waste Landfills,* second edition (EPA, 2016)

- description of the proposed cell design and integrity
- details of proposed leachate and gas management and monitoring
- consideration of proposed water quality control and monitoring
- description and justification of proposed daily waste covering
- details of the proposed final capping, closure measures and rehabilitation of the site, including its final landuse.

- **hazards and risk** – including:
  - a preliminary risk screening completed in accordance with State Environmental Planning Policy No. 33 – Hazardous and Offensive Development and Applying SEPP 33 (DoP, 2011), with a clear indication of class, quantity and location of all dangerous goods and hazardous materials associated with the development. Should preliminary screening indicate that the project is "potentially hazardous" a Preliminary Hazard Analysis (PHA) must be prepared in accordance with Hazardous Industry Planning Advisory Paper No. 6 - Guidelines for Hazard Analysis (DoP, 2011) and Multi-Level Risk Assessment (DoP, 2011).
  - an assessment of the risk of bushfire, including addressing the requirements of *Planning for Bush Fire Protection 2019* (RFS). Any proposed Asset Protection Zones must not adversely affect environmental objectives (e.g. buffers)
  - any geotechnical limitations that may occur on the site and if necessary, appropriate design considerations to address this
- **fire and incident management** – including:
  - technical information on the environmental protection equipment to be installed on the premises such as air, water and noise controls, spill clean-up equipment, fire management (including the location of fire hydrants and water flow rates at the hydrants) and containment measures
  - details of the size and volume of any stockpiles and their arrangements to minimise fire spread and facilitate emergency vehicle access
- **air quality and odour** – including:
  - a quantitative assessment of the potential air quality, dust and odour impacts of the development, during both construction and operation, in accordance with relevant Environment Protection Authority guidelines
  - a description and appraisal of air quality and odour impact mitigation and monitoring measures, in line with International Best Practice.
- **noise and vibration** – including:
  - a description of all potential noise and vibration sources during construction and operation, including noise associated with any blasting, machinery and plant movements, and road traffic noise
  - a noise and vibration assessment in accordance with the relevant Environment Protection Authority guidelines
  - a description and appraisal of noise and vibration mitigation and monitoring measures.
- **soil and water** – including:
  - a description of local soils, topography, drainage and landscapes
  - details of water usage for the proposal including existing and proposed water licencing requirements in accordance with the *Water Act 1912* and/or the *Water Management Act 2000*
  - an assessment of potential impacts on floodplain and stormwater management and any impact to flooding in the catchment
  - details of sediment and erosion controls
  - a detailed site water balance
  - an assessment of potential impacts on the quality and quantity of surface and groundwater resources
  - details of the proposed stormwater and wastewater management systems (including sewage), water monitoring program and other measures to

	mitigate surface and groundwater impacts – characterisation of the nature and extent of any contamination on the site and surrounding area – a description and appraisal of impact mitigation and monitoring measures. • **traffic and transport** – including: – details of road transport routes and access to the site – road traffic predictions for the development during construction and operation – swept path diagrams depicting vehicles entering, exiting and manoeuvring throughout the site – an assessment of impacts to the safety and function of the road network and the details of any road upgrades required for the development. – a traffic impact assessment (TIA) in accordance with Transport for NSW's requirements. • **biodiversity** – including: – accurate predictions of any vegetation clearing on site or for any road upgrades – a detailed assessment of the potential impacts on any threatened species, populations, endangered ecological communities or their habitats, groundwater dependent ecosystems and any potential for offset requirements in accordance with the current Environment, Energy and Science Group legislation and guidelines – details of weed management during construction and operation in accordance with existing State, regional or local weed management plans or strategies – a detailed description of the measures to avoid, minimise, mitigate and/or offset biodiversity impacts. • **visual** – including an impact assessment at private receptors and public vantage points. • **heritage** – including Aboriginal and non-Aboriginal cultural heritage.
Environmental Planning Instruments and other policies	The EIS must assess the proposal against the relevant environmental planning instruments, including but not limited to: • State Environmental Planning Policy (Infrastructure) 2007 • State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017 • State Environmental Planning Policy (Koala Habitat Protection) 2020 • State Environmental Planning Policy No. 33 – Hazardous and Offensive Development • State Environmental Planning Policy No. 55 – Remediation of Land • Liverpool Plains Local Environmental Plan 2011 • relevant development control plans and section 7.11 plans.
Guidelines	During the preparation of the EIS you should consult the Department's Register of Development Assessment Guidelines which is available on the Department's website at https://www.planning.nsw.gov.au/Assess-and-Regulate/Development-Assessment/Industries. Whilst not exhaustive, this Register contains some of the guidelines, policies, and plans that must be taken into account in the environmental assessment of the proposed development.
Consultation	During the preparation of the EIS, you must consult the relevant local, State and Commonwealth government authorities, service providers and community groups, and address any issues they may raise in the EIS. In particular, you should consult with the: • Department of Planning and Environment, specifically the: ○ Environment, Energy and Science Group ○ Environment Protection Authority • Transport for NSW

	• NSW Rural Fire Service • Liverpool Plains Shire Council • the surrounding landowners and occupiers that are likely to be impacted by the proposal. Details of the consultation carried out and issues raised must be included in the EIS.
Further consultation after 2 years	If you do not lodge an application under Section 4.12(8) of the *Environmental Planning and Assessment Act 1979* within 2 years of the issue date of these SEARs, you must consult with the Planning Secretary in relation to any further requirements for lodgement.

Industry Assessments
Department of Planning and Environment
4 Parramatta Square
12 Darcy Street PARRAMATTA 2124

Attention: Zoe Halpin

Notice Number	1616069
Date	24-Jan-2022

RE: Environmental Assessment Requirements 1636 - Waste Management Facilities or Works (Landfill expansion) – 258 Merriwa Road, Willow Tree (Lot 213 DP 1173230)

I refer to your request for the Environment Protection Authority's (EPA) requirements for the environmental assessment (EA) in regard to the above proposal received by EPA on 14 January 2022.

The EPA has considered the details of the proposal as provided by Department Planning and Environment (DPE) and has identified the information it requires to issue its general terms of approval in **Attachment A**. In summary, the EPA's key information requirements for the proposal include an adequate assessment of:

1. **Air:** Odour, dust and litter impacts to nearby sensitive receivers during the life of the development.
2. **Noise:** Proximity to sensitive receptors and impacts of any noise sources associated with the development.
3. **Waste:** Demonstrate how the landfill design meets the EPA's Solid Waste Guidelines (2016). The EA needs to discuss lawful management and disposal of all wastes received at the site including any resource recovery undertaken at the site.

In carrying out the assessment, the proponent should refer to the relevant guidelines as listed in Attachment A and any relevant industry codes of practice and best practice management guidelines.

Based on the information provided to the EPA, the proponent will require an Environment Protection Licence to construct and operate the proposed waste facility if approval is granted. The proponent will need to make a separate application to the EPA at the completion of the assessment process. General information requirements can be obtained from the EPA's Environment Line by calling 131 555 or on the EPA's website at www.epa.nsw.gov.au/licensing/licencePOEO.htm.

To assist the EPA in assessing the EA it is requested that the EA document follow the format of DPE's EIS guidelines and addresses the EPA's specific requirement outlined in the following attachments.

If the necessary information is not adequately addressed in the EA then delays in the development assessment process may occur.

The proponent should be aware that any commitments made in the EA may be formalised as approval conditions and may also be placed as formal licence conditions.

The Proponent should be made aware that, consistent with provisions under Part 9.4 of the *Protection of the Environment Operations Act 1997* ("the Act") the EPA may require the provision of a financial assurance and/or assurances. The amount and form of the assurance(s) would be determined by the EPA and required as a condition of an Environment Protection Licence ("EPL").

In addition, as a requirement of an EPL, the EPA will require the Proponent to prepare, test and implement a Pollution Incident Response Management Plan and/or Plans in accordance with Section 153A of the Act.

The EPA requests that the proponent provide one (1) electronic copy of the EPA when lodging the licence application with the EPA. These documents should be sent to the EPA's general email: info@epa.nsw.gov.au.

If you have any queries regarding this matter please contact Daniel Stokes on (02) 4908 6804.

Yours sincerely

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Jasmine Walden

Acting Unit Head

Environment Protection Authority

(by Delegation)

ATTACHMENT A: Environmental Assessment Requirements - EAR 1636 - Waste Management Facilities or Works (Landfill expansion) – 258 Merriwa Road, Willow Tree

1. Environmental impacts of the project

1.1 The Environment Assessment (EA) must address the requirements of Section 45 of the *Protection of the Environment Operations Act 1997* (POEO Act) by determining the extent of each impact and providing sufficient information to enable the EPA to determine appropriate conditions, limits and monitoring requirements for an Environment Protection Licence (EPL).

1.2. Impacts related to the following environmental issues need to be assessed, quantified and reported on:

- **Air Issues**: air quality including odour, dust and litter generation from the operation on the surrounding landscape and/or community;
- **Noise and vibration impacts** associated with any blasting, and operational noise particularly machinery and plant movements on nearby receivers;
- **Waste** including hazardous materials and radiation. Consideration needs to be given to disposal options for all waste types, where relevant. Consideration of any resource recovery undertaken at the site.
- **Water and Soils** including leachate management systems, site water balance and sediment and erosion controls during construction and operation phases.

The Environmental Assessment (EA) should address the specific requirements outlined under each heading below and assess impacts in accordance with the relevant guidelines mentioned.

2. Licensing requirements

2.1. The development is a scheduled activity under the *Protection of the Environment Operations Act 1997* (POEO Act) and will therefore require an Environment Protection Licence (EPL) if approval is granted.

2.2. Should project approval be granted, the proponent will need to make an application to the EPA for its EPL for the proposed facility prior to undertaking any on site works. Additional information is available through the *EPA Guide to Licensing* document (www.epa.nsw.gov.au/licensing/licenceguide.htm).

SPECIFIC ISSUES

3. Air issues

3.1. The EA must demonstrate the proposal's ability to comply with the relevant regulatory framework, specifically the *Protection of the Environment Operations (POEO) Act (1997)* and the *POEO (Clean Air) Regulation (2002)*. Particular consideration should be given to section 129 of the POEO Act concerning control of "offensive odour".

3.2. The EA must include an air quality impact assessment (AQIA).

3.3. The AQIA must be carried out in accordance with the document, *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* (2005) http://www.epa.nsw.gov.au/resources/air/ammodelling05361.pdf.

3.4. The EA must detail emission control techniques/practices that will be employed at the site and identify how the proposed control techniques/practices will meet the requirements of the POEO Act, *POEO (Clean Air) Regulation* and associated air quality limits or guideline criteria.

4. Noise and Vibration

The EA must assess the following noise and vibration aspects of the proposed development:

4.1.Construction noise associated with the proposed development should be assessed using the *Interim Construction Noise Guideline (*DECC, 2009). These are available on our website at: https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/interim-construction-noise-guideline.

4.2. Vibration from all activities (including construction and operation) to be undertaken on the premises should be assessed using the guidelines contained in the *Assessing Vibration: a technical guideline* (DEC, 2006). These are available on our website at: https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/assessing-vibration.

4.3. If blasting is required for any reasons during the construction or operational stage of the proposed development, blast impacts should be demonstrated to be capable of complying with the guidelines contained in *Australian and New Zealand Environment Council – Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration* (ANZEC, 1990). These are available on our website a: https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/interim-construction-noise-guideline.

4.4. Operational noise from all industrial activities (including private haul roads and private railway lines) to be undertaken on the premises should be assessed using the guidelines contained in the *NSW Noise Policy for Industry* (EPA, 2017). These are available on our website at: https://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/noise-policy-for-industry-(2017)

4.5. Noise on public roads from increased road traffic generated by land use developments should be assessed using the guidelines contained in the *NSW Road Noise Policy* and associated application notes (EPA, 2011). These are available on our website at: https://www.epa.nsw.gov.au/your-environment/noise/transport-noise.

5. Waste, chemicals and hazardous materials and radiation

5.1. The EA must assess all aspects of waste generation, management and disposal associated with the proposed development.

5.2. The EA must demonstrate how the design of the landfill meets the requirements of the EPA's Solid Waste Landfill Guidelines. This is available on our website at: https://www.epa.nsw.gov.au/your-environment/waste/waste-facilities.

5.3. The EIS must demonstrate compliance with all regulatory requirements outlined in the POEO Act and associated waste regulations.

5.4. The EA must identify, characterise and classify the following in accordance with the EPA's *Waste Classification Guidelines (2014)* and associated addendums:

(i) all waste that will be generated onsite through excavation, demolition or construction activities,including proposed quantities of the waste;

(ii) all waste that is to be received and/or disposed of at the proposed site including waste type, source, volume and whether any levy is payable on the waste received;

(iii) all waste that is proposed to be disposed of to an offsite location, including proposed quantities of the waste and the disposal locations for the waste. This includes waste that is intended for re-use or recycling.

Note: The EPA's W*aste Classification Guidelines (2014)* and associated addendums are available on our website at: https://www.epa.nsw.gov.au/your-environment/waste/classifying-waste.

5.5. The EA must outline contingency plans for any event that may result in environmental harm, such as excessive stockpiling of material, dirty water volumes or leachate volumes exceeding the storage capacity available on-site.

5.6. The EA must demonstrate that appropriate spill containment will be provided for storage, filling and loading of all fuels and other chemicals to be used on site, in accordance with the relevant Australian Standard.

5.7. The EA must outline relevant resource recovery orders or exemptions for any proposed reuse or recycling of waste material. If the proponent intends to apply for a specific exemption, the EA should outline what is proposed including identification of proposed sites for the application of the composted material to land, whether it be on the same property or another site.

6. Water and Soil

6.1. The EA must demonstrate how the proposed development will meet the requirements of section 120 of the POEO Act.

6.2. The EA must include a water balance for the development including water requirements (quantity, quality and source(s)) and proposed storm, wastewater and leachate disposal, including type, volumes, proposed treatment and management methods and re-use options.

6.3. If the proposed development intends to discharge waters to the environment, the EA must demonstrate how the discharge(s) will be managed in terms of water quantity, quality and frequency of discharge and include an impact assessment of the discharge on the receiving environment. This should include:

- Description of the proposal including position of any intakes and discharges, volumes, water quality and frequency of all water discharges.
- Description of the receiving waters including upstream and downstream water quality as well as any other water users.
- Demonstration that all practical options to avoid discharge have been implemented and environmental impact minimised where discharge is necessary.

6.4. The EA must refer to Water Quality Objectives for the receiving waters and indicators and associated trigger values or criteria for the identified environmental values of the receiving environment. This information should be sourced from the ANZECC (2000) Guidelines for Fresh and Marine Water Quality (http://www.environment.gov.au/water/policy-programs/nwqms/).

6.5. The EA must describe how stormwater will be managed in all phases of the development, including details of how stormwater and runoff will be managed to minimise pollution. Information should include measures to be implemented to minimise erosion, leachate and sediment mobilisation at the site. The EA should consider the guidelines *Managing urban stormwater: soils and construction,* vol. 1 (Landcom 2004) and vol. 2 (A. Installation of services; C. Unsealed roads; D. Main Roads; E. Mines and quarries) (DECC, 2008).

6.6. The EA must provide details of:

- Onsite leachate management systems including any treatment of leachate through a wastewater treatment plant.
- Any proposed transport and disposal of leachate off-site.

6.7. The EA must describe any water quality monitoring programs to be carried out at the development site. Water quality monitoring should be undertaken in accordance with the *Approved Methods for the Sampling and Analysis of Water Pollutant in NSW* (2004) which is available at: http://www.epa.nsw.gov.au/resources/legislation/approvedmethods-water.pdf.

Our ref: DOC22/31503
Senders ref: SEAR 1636

Zoe Halpin
Planning Officer
Planning and Assessment Group
Department of Planning and Environment
zoe.halpin@planning.nsw.gov.au

Dear Zoe

Willow Tree Waste Management Facility Expansion – EARs

I refer to your email dated 13 January 2022 seeking input into the Department of Planning and Environment's Environmental Assessment Requirements (EARs) for the preparation of an Environmental Impact Assessment (EIS) for the Willow Tree Waste Management Facility Expansion at 258 Merriwa Road, Willow Tree.

The Biodiversity, Conservation and Science Directorate (BCS) has considered your request and provides EARs for the proposed development in **Attachments A** and **B**.

BCS recommends the EIS needs to appropriately address the following:

1. Biodiversity and offsetting
2. Water and soils
3. Flooding

If you have any questions about this advice, please do not hesitate to contact Ben Ellis, Principal Project Officer, via ben.ellis@environment.nsw.gov.au or (02) 8275 1838

Yours sincerely,

Samantha Wynn

Samantha Wynn
Senior Team Leader Planning North West
Biodiversity, Conservation and Science Directorate

18 January 2022

Attachment A - Environmental Assessment Requirements

Attachment B - Guidance Material

ATTACHMENT A

BCS's Recommended Environmental Assessment Requirements (EARs) for the Willow Tree Waste Management Facility Expansion

BCS	Biodiversity, Conservation and Science Directorate of the NSW Department of Planning and Environment
The Department	NSW Department of Planning and Environment
NPWS	National Parks and Wildlife Service

1. The Proposal

All components of the proposed development must be clearly described, including:

- the location of the proposed development and its context in the locality
- the rationale for the project
- the size, scale and type of the proposed development
- the pre-construction, construction, operational, and, where relevant, decommissioning and rehabilitation phases of the proposed development, and the methods proposed to implement these phases
- plans and maps of the proposed development showing the locations of relevant phases and infrastructure
- the staging and timing of the proposed development
- the proposed development's relationship to any other proposals and developments

2. Environmental Impacts of the Proposal

The proponent must consider, assess, quantify and report on the likely environmental impacts of the proposal if applicable, particularly:

- Biodiversity
- National Park estate: land reserved or acquired under the *National Parks and Wildlife Act 1974*
- Flooding and floodplain issues
- Cumulative impacts

The Secretary's Environmental Assessment Requirements should address the specific requirements outlined under each heading below and assess impacts in accordance with the relevant guidelines mentioned. A full list of guidelines and reference material is presented in **Attachment B**. Appropriate justification should be provided in instances where the matters below are not addressed.

3. Biodiversity

Biodiversity Assessment Methodology for the Biodiversity Offsets Scheme (BOS)

The EIS should include an assessment of the following:

a. The EIS must assess the impact of the proposed development on biodiversity values to determine if the proposed development is "likely to significantly affect threatened species" for the purposes of Section 7.2 of the Biodiversity Conservation Act 2016 (BC Act), as follows:

   a. The EIS must demonstrate and document how the proposed development exceeds, or does not exceed, the biodiversity offsets scheme threshold as set out in Section 7.4 of

the BC Act 2016 and Clause 7.1 of the Biodiversity Conservation Regulation 2017 (BC Regulation) by determining whether the proposed development involves:

i. **The clearing of native vegetation exceeding the thresholds** listed under Clause 7.23 of the BC Regulation, **or**

ii. The clearing of native vegetation, or other action, **on land included on the Biodiversity Values Map** published under Clause 7.23 of the BC Regulation (this map includes areas of outstanding biodiversity value, as declared under Section 3.1 of the BC Act).

b. If the proposal does not trigger any of the criteria in (a) above, then the EIS must determine whether the proposed development is likely to have a significant impact based on '*the test for determining whether proposed development likely to significant affect threatened species or ecological communities'* in Section 7.3 of the BC Act.

c. Where there is reasonable doubt regarding potential impacts, or where information is not available, then a significant impact upon biodiversity should be considered likely when applying the test in Section 7.3 of the BC Act. Where it is concluded that there is no significant impact, the EIS must justify how the conclusion has been reached.

d. If the development exceeds the thresholds in (a) or (b), then the EIS must be accompanied by a biodiversity development assessment report (BDAR) prepared in accordance with Part 6 of the BC Act. That is, the Biodiversity Assessment Methodology applies.

Required Information

Where development is considered "likely to significantly impact on threatened species" and a Biodiversity Development Assessment Report is required, the following requirements apply:

- Biodiversity impacts related to the proposal are to be assessed in accordance with the Biodiversity Assessment Method 2020 and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must include information in the form detailed in the *Biodiversity Conservation Act 2016* (s6.12), Biodiversity Conservation Regulation 2017 (s6.8) and Biodiversity Assessment Method.
- The BDAR must document the application of the avoid, minimise and offset hierarchy including assessing all direct, indirect, uncertain and prescribed impacts in accordance with the Biodiversity Assessment Method.
- The BDAR must include details of the measures proposed to address the offset obligation as follows:
    - The total number and classes of biodiversity credits required to be retired for the proposal.
    - The number and classes of like-for-like biodiversity credits proposed to be retired.
    - The number and classes of biodiversity credits proposed to be retired in accordance with the variation rules.
    - Any proposal to fund a biodiversity conservation action.
    - Any proposal to make a payment to the Biodiversity Conservation Fund.
- If seeking approval to use the variation rules, the BDAR must contain details of the reasonable steps that have been taken to obtain requisite like-for-like biodiversity credits.

The BDAR must be prepared by a person accredited to apply the Biodiversity Assessment Method under s6.10 of the *Biodiversity Conservation Act 2016*.

Where a BDAR is not required and a threatened species assessment is prepared to support a conclusion of "no significant impact", the EIS must include a field survey of land identified as native vegetation and/or native species habitat inclusive of non-vegetative habitat, namely, karst, caves, crevices, cliffs, rocky outcrops and other features of geological significance and habitat associated with human made structures. This should be conducted and documented in accordance with the

relevant guidelines including the Threatened Species Survey and Assessment Guidelines: Field Survey Methods for Fauna – Amphibians (DECCW, 2009), Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities - Working Draft (DEC, 2004) and Guidelines for Threatened Species Assessment (Dept Planning, July 2005). The approach should also reference the field survey methods and assessment information on the Department of Planning and Environment website including the BioNet Atlas, Threatened Species Profiles, taxon specific survey guidelines and BioNet Vegetation Classification (see Attachment B).

Category 1 – exempt land

Clearing of native vegetation on land that meets the definition of Category 1 - exempt land (as defined under the Local Land Services Act 2013 (LLS Act)) does not require assessment or offsetting under the Biodiversity Conservation Act 2016. Prescribed impacts as outlined in chapter 6 of the Biodiversity Assessment Method (2020) must still be considered on Category 1 - exempt land. In addition, potential impacts to Matters of National Environmental Significance under the Environment Protection and Biodiversity Conservation Act 1999 on Category 1 – exempt land must be considered.

Section 60F Local Land Services Act 2013 (LLS Act) Act provides the transitional arrangements that are in place until a comprehensive NVR Map with all the land categories is published. During the 'transitional period' assessors can make a reasonable approximation of land categorisation for unpublished layers, in consultation with the landholder.

Where a reasonable approximation is required, it is recommended that:

- assessors first identify whether land meets criteria for Category 2 - Regulated Land, prior to Category 1 - Exempt Land.
    - In some circumstances, land may meet multiple map criteria i.e. criteria for Category 2 - Regulated Land, AND Category 1 - Exempt Land
    - In most circumstances' Category 2 - Regulated Land criteria will determine the categorisation of the land, rather than Category 1 - Exempt Land criteria.

Section 60I of the LLS Act defines the criteria in which land can be classified as Category 2 Regulated Land, this includes land which:

- was not cleared of native vegetation as at 1 January 1990
- was unlawfully cleared of native vegetation between 1 January 1990 and 25 August 2017
- contains native vegetation that was grown or preserved with the assistance of public funds (other than funds for forestry purposes)
- contains grasslands that are not low conservation grasslands
- is subject to a private land conservation agreement
- is a 'set aside' under a Land Management (Native Vegetation) Code
- is an offset under a property vegetation plan or a set aside under the former native vegetation laws
- is subject to an approved conservation measure that was the basis for other land being biocertified
- is identified as coastal wetlands or littoral rainforest
- is identified as koala habitat
- is a declared RAMSAR wetland; or

- is mapped as containing Critically Endangered species of plants or a Critically Endangered Ecological Community.

The above criteria are inclusive of both Category 2 Vulnerable Regulated Land and Sensitive Regulated Land categories.

Where an assessor identifies land that does not meet the criteria for Category 2 Vulnerable or Sensitive Regulated land, the assessor should then assess whether or not the land meets the definition of Category 1 – exempt land.

Where the assessor identifies land as Category 1 – exempt land it must be adequately demonstrated that the identified land meets the criteria as set out in section 60H of the LLS Act. Multiple pieces of evidence should be used to demonstrate a Category 1 – exempt land designation. This might include:

- Publicly available data sets on the SEED data portal, such as:
  - Land use mapping – used to identify and map existing and historical agricultural land use in NSW – see the 2017 landuse map
  - Woody vegetation extent – used to identify and map native vegetation extent – see 2008 Woody extent 2011 woody extent
  - State-wide Landcover and Tree Survey (SLATS) woody clearing for NSW – used to identify detectable clearing events since January 1990 – available here
- Published information on the Native Vegetation Regulatory Map, including Category 2-sensitive regulated, Category 2-vulnerable regulated, and excluded land - available here
- Site-based information and records, including:
  - Current and historical high-resolution aerial photography
  - current and historical photographs of the subject land
  - historical land management records maintained by the landowner
  - vegetation survey data collected on the subject land
  - documentation demonstrating history of authorised clearing and/or development

The published *Native Vegetation regulatory map: method statement* should be reviewed to determine how the datasets can be best interrogated to support any identification of Category 1 – exempt land.

Where there is uncertainty or datasets/information are conflicting, a precautionary approach should be applied, and the land should be categorised as Category 2 – regulated land.

Where Category 1 – exempt land is likely to be present on a development site, early engagement with BCS is encouraged. Prior to the Biodiversity Development Assessment Report being submitted to the consent authority, the accredited assessor should submit a proposed land categorisation method to the BCS North West Planning team at *rog.nw@environment.nsw.gov.au* for endorsement.

4. NPWS Managed Estate

Land reserved or acquired under the *National Parks and Wildlife Act 1974* (NPW Act)

If the proposed development is within, adjacent to, or in close proximity to, NPWS managed conservation estate (e.g. a national park, nature reserve, state conservation area, land which is declared wilderness under the *Wilderness Act 1987*), or is within, adjacent to, or in close proximity to, a watercourse that flows directly into NPWS managed conservation estate, then the EIS must address impacts upon such area/s.

Where NPWS managed estate is likely to be impacted, the EIS should include:

- The following (as appropriate):

- Evidence that the proponent has consulted with BCS on the legal permissibility of the proposal under the NPW Act.
- In the case of proposals on land declared as wilderness under the *Wilderness Act 1987*, evidence that the proponent has consulted with BCS on the appropriateness of the proposal. That is, whether it is consistent with the objects of the *Wilderness Act 1987* (section 3) and the management principles for wilderness areas (section 9).
- Alternative options that have been explored to avoid impacts on the NPWS managed estate (on-park) and a clear justification of any on-park components of the proposal.
- If on-park impacts are considered unavoidable, consideration of the issues, including details of any compensation proposal, consistent with the Department's *Revocation, Recategorisation and Road Adjustment Policy* (2012) for proposals that are located wholly or partly in a National Park or other land acquired or reserved under the *National Parks and Wildlife Act 1974*.

- Consideration of the matters identified in the *Guidelines for consent and planning authorities for Developments adjacent to National Parks and Wildlife Service Land* (NPWS, 2020) where a proposal adjoins or is immediate vicinity of NPWS managed estate, or is upstream of NPWS managed estate, which include:
  - The nature of the impacts, including direct and indirect impacts
  - The extent of the direct and indirect impacts
  - The duration of the direct and indirect impacts
  - The objectives of the reservation of the land
- A description of the mitigation and management options that will be used to prevent, control, abate or minimise identified direct and indirect impacts associated with the proposal. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.

5. Water

- The EIS must map features relevant to water, including:
  - Rivers, streams, estuaries (as described in s4.2 of the Biodiversity Assessment Method).
  - Wetlands (as described in s4.2 of the Biodiversity Assessment Method).
  - Groundwater.
  - Groundwater dependent ecosystems.
- The EIS must describe background conditions for any water resource likely to be affected by the proposal, including:
  - Existing surface and groundwater.
  - Hydrology
  - Water Quality Objectives (as endorsed by the NSW Government) including groundwater as appropriate that represent the community's uses and values for the receiving waters. Indicators and trigger values/criteria for the identified environmental values 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
  - *Risk-based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning Decisions* (OEH/EPA, 2017).
- The EIS must assess the impacts of the proposal on water quality, including:
  - The nature and degree of impact on receiving waters for both surface and groundwater, demonstrating how the proposal 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.

- Identification of proposed monitoring of water quality.
- Consistency with any relevant certified Coastal Management Program (or Coastal Zone Management Plan).

- The EIS must assess the impact of the proposal on hydrology, including:
  - Water balance including quantity, quality and source.
  - Effects upon rivers, wetlands, estuaries, marine waters and floodplain areas.
  - Effects upon water-dependent fauna and flora including groundwater dependent ecosystems.
  - 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).
  - Changes to environmental water availability, both regulated / licensed and unregulated / rules-based sources of such water.

Project specific requirements

Where there is a heightened potential to impact on water quality and hydrology, the EIS should include the following:

- A description of existing water quality / hydrology based on suitable data (meaning data collection may be required) and must include:
  - Water chemistry.
  - A description of receiving water processes, circulation and mixing characteristics and hydrodynamic regimes.
  - Lake or estuary flushing characteristics.
  - Sensitive ecosystems or species conservation values.
  - Specific human uses and values (e.g. fishing, proximity to recreation areas).
  - A description of any impacts from existing industry or activities on water quality.
  - A description of the condition of the local catchment e.g. erosion, soils, vegetation cover.
  - An outline of baseline groundwater information, including, for example, depth to water table, flow direction and gradient, groundwater quality, reliance on groundwater by surrounding users and by the environment.
  - Historic river flow data.

- An assessment of the impacts of the proposal on water quality and hydrology including:
  - Water circulation, current patterns, water chemistry and other appropriate characteristics such as clarity, temperature, nutrient and toxicants, and potential for erosion.
  - Changes to hydrology
  - Stream bank stability and impacts on macro invertebrates.
  - Water quality and hydrology modelling and / or monitoring, where necessary.

- Proposed water quality monitoring in accordance with the *Approved Methods for the Sampling and Analysis of Water Pollutants in NSW* (DEC 2004). The water quality and aquatic ecosystem monitoring program must include:
  - Adequate data for evaluating maintenance, or progress towards achieving, the relevant Water Quality Objectives.
  - Measurement of pollutants identified or expected to be present.

6. Flooding

- The EIS must map the following features relevant to flooding as described in the Floodplain Development Manual 2005 (NSW Government 2005) including:
  - Flood prone land (i.e. land susceptible to the probable maximum flood event).
  - Flood planning area, the area below the flood planning level.
  - Hydraulic categorisation (floodway and flood storage areas).

- Flood hazard.

- The EIS must describe flood assessment and modelling undertaken in determining the design flood levels for events, including a minimum of the 10% Annual Exceedance Probability (AEP), 1% AEP flood levels and the probable maximum flood, or an equivalent extreme event.
- The EIS must model the effect of the proposal (including fill) on the current flood behaviour for a range of design events as identified above, and the 0.5% AEP and 0.2% AEP year flood events as proxies for assessing sensitivity to an increase in rainfall intensity of flood producing rainfall events due to climate change.
- All site drainage, stormwater quality devices and erosion / sedimentation control measures should be identified in the EIS and the onsite treatment of stormwater and effluent runoff and predicted stormwater discharge quality from the proposal should be detailed.
- Modelling in the EIS must consider and document:
  - Existing council flood studies in the area and examine consistency to the flood behaviour documented in these studies.
  - The impact on existing flood behaviour for a full range of flood events including up to the probable maximum flood (PMF), or an equivalent extreme flood.
  - Impacts of the proposal 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, hazard categories and hydraulic categories.
  - Impacts of earthworks and stockpiles within the flood prone land up to the PMF level. The assessment should be based on understanding of cumulative flood impacts of construction and operational phases.
  - Relevant provisions of the NSW Floodplain Development Manual 2005.
- The EIS must assess the impacts on the proposal on flood behaviour, including:
  - Whether there will be detrimental increases in the potential flood affectation of other properties, assets and infrastructure.
  - Consistency with Council floodplain risk management plans.
  - Consistency with any Rural Floodplain Management Plans.
  - Compatibility with the flood hazard of the land.
  - Compatibility with the hydraulic functions of flow conveyance in floodway's and storage in flood storage areas of the land.
  - Whether there will be adverse effect to beneficial inundation of the floodplain environment, on, adjacent to or downstream of the site.
  - Whether there will be a direct or indirect increase in erosion, siltation, destruction of riparian vegetation or a reduction in the stability of riverbanks or watercourses.
  - Appropriate mitigation measures to offset potential flood risk arising from the proposal. Any proposed mitigation work should be modelled and assessed on the overall catchment basis in order to ensure it fits its purpose and meets the criteria of the Council where it is located, and to ensure it has no adverse impact to surrounding areas.
  - Any impacts the proposal may have upon existing community emergency management arrangements for flooding. These matters are to be discussed with the NSW SES and Council.
  - Whether the proposal incorporates specific measures to manage risk to life from flood. These matters are to be discussed with the NSW SES and Council.
  - Emergency management, evacuation and access, and contingency measures for the proposal during both construction and operational phases considering the full range of 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 NSW SES.
  - Any impacts the proposal may have on the social and economic costs to the community as a consequence of flooding.

ATTACHMENT B

Guidance Material

Title	Web address
Relevant Legislation	
Biodiversity Conservation Act 2016	*https://www.legislation.nsw.gov.au/view/html/inforce/current/act-2016-063*
Commonwealth Environment Protection and Biodiversity Conservation Act 1999	*https://www.legislation.gov.au/Details/C2014C00140/Download*
Environmental Planning and Assessment Act 1979	*https://www.legislation.nsw.gov.au/view/html/inforce/current/act-1979-203*
Fisheries Management Act 1994	*https://www.legislation.nsw.gov.au/view/html/inforce/current/act-1994-038*
National Parks and Wildlife Act 1974	*https://www.legislation.nsw.gov.au/view/html/inforce/current/act-1974-080*
Protection of the Environment Operations Act 1997	*https://www.legislation.nsw.gov.au/view/html/inforce/current/act-1997-156*
Water Management Act 2000	*https://www.legislation.nsw.gov.au/view/html/inforce/current/act-2000-092*
Wilderness Act 1987	*https://www.legislation.nsw.gov.au/view/html/inforce/current/act-1987-196*
Biodiversity	
Biodiversity Values Map	*https://www.lmbc.nsw.gov.au/Maps/index.html?viewer=BVMap*
Biodiversity Assessment Method (OEH, 2020)	*https://www.environment.nsw.gov.au/research-and-publications/publications-search/biodiversity-assessment-method-2020*
Changes to the Biodiversity Assessment Method from 2017 to 2020	*https://www.environment.nsw.gov.au/research-and-publications/publications-search/changes-to-the-biodiversity-assessment-method-from-2017-to-2020*
BAM 2020 Operational Manual Stage 1	*https://www.environment.nsw.gov.au/research-and-publications/publications-search/biodiversity-assessment-manual-2020-operational-manual-stage-1*
BAM Operational Manual Stage 2	*https://www.environment.nsw.gov.au/research-and-publications/publications-search/biodiversity-assessment-method-operational-manual-stage-2*
BAM 2020 Operational Manual Stage 3	*https://www.environment.nsw.gov.au/research-and-publications/publications-search/biodiversity-assessment-method-operational-manual-stage-3*
BAM Calculator User Guide	*https://www.environment.nsw.gov.au/research-and-publications/publications-search/biodiversity-assessment-method-user-guide*
Serious and irreversible impacts of development on biodiversity	*https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity/biodiversity-offsets-scheme/serious-and-irreversible-impacts*

Title	Web address
Practice Note - Guidance for assessors and decision makers in applying modified benchmarks to assessments of vegetation integrity: Biodiversity Assessment Method	*https://www.environment.nsw.gov.au/research-and-publications/publications-search/guidance-assessors-decision-makers-applying-modified-benchmarks-to-assessments-vegetation-integrity*
Guidance and Criteria to assist a decision maker to determine a serious and irreversible impact (OEH, 2017)	*https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Biodiversity/guidance-decision-makers-determine-serious-irreversible-impact-190511.pdf*
Accreditation Scheme for Application of the Biodiversity Assessment Method Order 2017	*https://www.legislation.nsw.gov.au/view/pdf/asmade/sl-2017-471*
Ancillary rules: Biodiversity conservation actions	*https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Biodiversity/ancillary-rules-biodiversity-conservation-actions-170496.pdf*
Ancillary rules: Reasonable steps to seek like-for-like biodiversity credits for the purpose of applying the variation rules	*https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Biodiversity/ancillary-rules-reasonable-steps-like-for-like-biodiversity-credits-170498.pdf*
Ancillary rules: Impacts on threatened species and ecological communities excluded from application of variation rules	*https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Biodiversity/ancillary-rules-impacts-on-threatened-entities-excluded-from-variation-170497.pdf?la=en&hash=C38840BFF49F012433532DF72E3D90C741E4DAC1*
The Department's Threatened Species Website	*https://www.environment.nsw.gov.au/topics/animals-and-plants/threatened-species*
NSW BioNet (Atlas of NSW Wildlife)	*www.bionet.nsw.gov.au/*
Surveying Threatened Plants and their Habitats - NSW Survey Guide For The Biodiversity Assessment Method (DPIE 2020).	*https://www.environment.nsw.gov.au/research-and-publications/publications-search/surveying-threatened-plants-and-their-habitats-survey-guide-for-the-biodiversity-assessment-method*
Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities - November 2004	*https://www.environment.nsw.gov.au/surveys/BiodiversitySurveyGuidelinesDraft.htm*
Threatened species survey and assessment guidelines: field survey methods for fauna – amphibians	*https://www.environment.nsw.gov.au/research-and-publications/publications-search/threatened-species-field-survey-methods-for-fauna-amphibians*
NSW Survey Guide for Threatened Frogs	*https://www.environment.nsw.gov.au/research-and-publications/publications-search/nsw-survey-guide-for-threatened-frogs*

Title	Web address
Surveying 'species credit' threatened bats and their habitats – NSW survey guide for the Biodiversity Assessment Method	*https://www.environment.nsw.gov.au/research-and-publications/publications-search/species-credit-threatened-bats-nsw-survey-guide-for-biodiversity-assessment-method*
Bat calls of NSW - region-based guide to the echolocation calls of Microchiropteran bats	*https://www.environment.nsw.gov.au/surveys/Batcalls.htm*
Community Biodiversity Survey Manual	*https://www.environment.nsw.gov.au/surveys/CommunityBiodiversitySurveyManual.htm*
BioNet Vegetation Classification - NSW Plant Community Type (PCT) database	*www.environment.nsw.gov.au/research/Vegetationinformationsystem.htm*
The Departments Data Portal (access to online spatial data)	*http://data.environment.nsw.gov.au/*
Fisheries NSW policies and guidelines	*https://www.dpi.nsw.gov.au/fishing/habitat/publications/pubs/fish-habitat-conservation*
National Park Estate	
Guidelines for consent and planning authorities for Developments adjacent to National Parks and Wildlife Service Land (NPWS, 2020)	*https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Parks-reserves-and-protected-areas/Development-guidelines/developments-adjacent-npws-lands-200362.pdf*
List of national parks	*https://www.nationalparks.nsw.gov.au/conservation-and-heritage/national-parks*
Revocation, recategorisation and road adjustment policy (OEH, 2012)	*http://www.environment.nsw.gov.au/policies/RevocationOfLandPolicy.htm*
List of aquatic reserves	*www.dpi.nsw.gov.au/fisheries/habitat/protecting-habitats/mpa*
Water	
Water Quality Objectives	*http://www.environment.nsw.gov.au/ieo/index.htm*
ANZECC & ARMCANZ (2000) Water Quality Guidelines	*https://www.waterquality.gov.au/anz-guidelines/resources/previous-guidelines/anzecc-armcanz-2000*
Risk-based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning Decisions	*http://www.environment.nsw.gov.au/research-and-publications/publications-search/risk-based-framework-for-considering-waterway-health-outcomes-in-strategic-land-use-planning*
Applying Goals for Ambient Water Quality Guidance for Operations Officers – Mixing Zones	*http://deccnet/water/resources/AWQGuidance7.pdf*
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	*http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf*
Flooding	
Floodplain development manual	*http://www.environment.nsw.gov.au/floodplains/manual.htm*
Floodplain Risk Management Guidelines	*http://www.environment.nsw.gov.au/topics/water/coasts-and-floodplains/floodplains/floodplain-guidelines*
NSW Climate Impact Profile	*http://climatechange.environment.nsw.gov.au/*

Title	Web address
Climate Change Impacts and Risk Management	*https://www.environment.gov.au/climate-change/adaptation/publications/climate-change-impact-risk-management*

Transport for NSW

24 January 2022

File No: NTH14/00084/06
Your Ref: SEAR 1636

The Director
Industry Assessments
Department of Planning, Industry and Environment
4 Parramatta Square
PARRAMATTA NSW 2124

Attention: Zoe Halpin – Planning Officer / zoe.halpin@planning.nsw.gov.au

Dear Sir / Madam,

RE: Secretary's Environmental Assessment Requirements for Waste Management Facilities or Works (landfill expansion) Lot 213 DP 1173230; 258 Merriwa Road, Willow Tree

I refer to your email of 13 January 2022 requesting input from Transport for NSW to the Secretary's Environmental Assessment Requirements (SEARs) for the abovementioned development proposal.

Roles and Responsibilities

Our key interests are the safety and efficiency of the transport network, the needs of our customers and the integration of land use and transport in accordance with *Future Transport Strategy 2056*.

Merriwa Road (MR358) is a classified (regional) road and New England Highway (HW9) and is a classified (State) road. Tamworth Regional Council is the Roads Authority for all public roads (other than freeways or Crown roads) in the local government area pursuant to S.7 of the *Roads Act 1993*. Council is responsible for setting standards and determining priorities on Local and Regional Roads.

TfNSW is responsible for maintenance and operation of State roads and can exercise roads authority functions for classified roads in accordance with the Roads Act. Any proposed works on a classified (State) road will require the consent of TfNSW which is provided under the terms of a Works Authorisation Deed (WAD) or other suitable agreement.

It is emphasised that the following comments are based on the preliminary environmental assessment, they are not to be interpreted as binding upon TfNSW and further comment will be provided following formal review of a development application referred by the appropriate Consent Authority.

Transport for NSW Response

TfNSW requests that a Traffic Impact Assessment (TIA) be prepared by suitably qualified person/s in accordance with the Austroads Guide to Traffic Management Part 12, the complementary TfNSW Supplement and RTA Guide to Traffic Generating Developments. The TIA should include, but not necessarily be limited to, an assessment of the considerations outlined in **Attachment A**.

TfNSW highlights that in determining the application under the *Environmental Planning and Assessment Act 1979*, it is the Consent Authority's responsibility to consider the environmental impacts of any roadworks which are ancillary to the development. This includes any works which form part of the proposal and/or any works which are deemed necessary to include as requirements in the conditions of project approval.

If you have any further enquiries regarding the above comments please do not hesitate to contact Leisa Sedger, Development Services Case Officer or the undersigned on (02) 6640 1362 or via email at: development.north@transport.nsw.gov.au

Yours faithfully,

Matt Adams
Team Leader, Development Services
Community and Place | Region North
Regional & Outer Metropolitan

Enc. ATTACHMENT A - Requested TIA consideration for SEAR

ATTACHMENT A - Traffic Impact Assessment – Requested considerations for SEAR

For context, this attachment must be read with TfNSW letter of 24 January 2022 reference number NTH14/00084/06.

Traffic Impact Assessment (TIA) be prepared by suitably qualified person/s in accordance with the Austroads Guide to Traffic Management Part 12, the complementary TfNSW Supplement and RTA Guide to Traffic Generating Developments.

The TIA is to identify the impacts of the development and the proposed on-site and off-site measures proposed to mitigate the impacts of the development on any road or rail related infrastructure. The TIA must explain and justify all inputs informing the proposed mitigation measures and TIA conclusions.

The TIA should be tailored to the scope of the proposed development and include, but not necessarily be limited to, consideration of the following;

- A map of the surrounding road network identifying the site access, nearby accesses, intersections and transport related facilities. The map should include the proposed transport route/s and identify all public roads proposed to obtain access from the classified (State) road/s to the development site.
- The total impact of existing and proposed development on the road network with consideration for a 10-year horizon. This should include;
  - Identify Annual Average Daily Traffic (AADT) volumes with percentage heavy vehicles along the transport route/s and diagrammatically demonstrate AM and PM peak hour movements at key intersections.
  - Background traffic data from published sources and/or recent survey data. The source of data and any assumptions are to be clearly explained and justified, including the growth rate applied to the future horizon. Due to the impact of COVID-19 on travel patterns, traffic counts undertaken at this time may not be representative of normal volumes. Alternative approaches to understanding the impact of COVID-19 on traffic patterns should be discussed with TfNSW.
  - The volume and distribution of existing and proposed trips to be generated by the construction and operational phases of the development. This should identify the maximum daily and hourly demands generated by the development, particularly where they coincide with the network peak hour.
  - The type and frequency of design vehicles accessing the development site.
- Details of the road geometry and alignment along the identified transport route/s, including existing formations, crossings, intersection treatments and any identified hazards. This should include;
  - Available sight distances at the site access and intersections along the proposed transport routes identifying any constraint to achieving the required sight distance for the posted speed limit.
  - An assessment of turn treatment warrants in accordance with the Austroads Guide to Traffic Management Part 6 and Austroads Guide to Road Design Part 4A for intersections along the identified transport route/s, identifying the existence of the minimum basic turn treatments and addressing the need for any warranted higher order treatments.

  - Swept path analysis demonstrating the largest design vehicle entering and leaving the development, and moving in each direction through intersections along the proposed transport route/s.

- Capacity analysis using SIDRA or other relevant application, to identify an acceptable Level of Service (LOS) at intersections with the classified (State) road/s, and where relevant, analysis of any other intersections along the proposed transport route/s (electronic copy to be provided).
- A review of crash data along the identified transport route/s for the most recent 5 year reporting period and an assessment of road safety along the proposed transport route/s considering the safe systems principles adopted under Future Transport 2056.
- Strategic (2D) design drawings of all proposed road works and the site access demonstrating scope, estimated cost and constructability of works required to mitigate the impacts of the development on road safety, traffic efficiency and the integrity of transport infrastructure. Works must be appropriately designed for the existing posted speed limit.
- Site plan demonstrating site access, internal manoeuvring, servicing and parking areas consistent with the relevant parts of AS2890 and Council requirements.
- Details of measures to address impacts and/or provide connections for public transport services and active transport modes, such as, public and school bus services, walking and cycling.
- Details of measures to ameliorate the impacts of road traffic noise and/or dust generated along the proposed transport route/s.
- Details of any Traffic Management Plan (TMP) proposed to address the construction and operation phases of the proposed development. The TMP should be prepared and implemented in accordance with *Australian Standard 1742.3* and the *Work Health and Safety Regulation 2017.* It is recommended that any TMP include, but not necessarily limited to, the following;
  - A map of the primary transport route/s highlighting critical locations.
  - An induction process for vehicle operators and regular toolbox meetings.
  - Procedures for travel through residential areas, school zones and/or bus route/s.
  - any proposed temporary measures such a Traffic Guidance Scheme (TGS)
  - A Driver Code of Conduct for heavy vehicle operators.
  - A complaint resolution and disciplinary procedure.
  - Community consultation measures proposed for peak periods.

Where road safety concerns are identified at a specific location along the proposed haulage routes, TfNSW suggests that the TIA be supported by a targeted Road Safety Audit undertaken by suitably qualified persons in accordance with the Austroads Guidelines.

Any roadwork on classified (State/Regional) road/s is to be designed and constructed in accordance with the current Austroads Guidelines, Australian Standards and TfNSW Supplements.

The developer will be required to enter into a Works Authorisation Deed (WAD) with TfNSW for any roadwork deemed necessary on the classified (State) road. The developer will be responsible for all costs associated with the roadwork and administration for the WAD. It is recommended that developers familiarise themselves with the requirements of the WAD process. Further information can be obtained from the TfNSW website.