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Mr Geoff Hudson
Environment Manager, Inland Rail
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PO Box 10343
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Dear Mr Hudson

RE: Inland Rail Project: Narrabri to North Star – SSI 16_7474

Please find attached amended Secretary's Environmental Assessment Requirements (SEARs) for the preparation of an Environmental Impact Statement for the Inland Rail (Narrabri to North Star) proposal. This amendment includes guidelines for preparing assessment documentation relevant to the *Environmental Protection and Biodiversity Conservation Act 1999* provided by the Commonwealth Department of the Environment and Energy regarding impacts on matters of national environmental significance. The SEARs have also been amended to remove reference to the *NSW Sustainable Design Guidelines* as the Department recognises this document does not assist the proposal's consultation outcomes.

Should you have any enquiries regarding this matter, please contact Mick Fallon on 8217 2083 or at mick.fallon@planning.nsw.gov.au

Yours sincerely


Glenn Snow 8/11/16
Director Transport Assessments
As delegate of the Secretary

Secretary's Environmental Assessment Requirements

Application Number	SSI 16_7474
Proposal	Inland Rail – Narrabri to North Star
Location	Generally within the existing rail corridors between Narrabri and North Star.
Proponent	Australian Rail Track Corporation
Date of Issue	8 November 2016

General Standard SEARs

Desired Performance Outcome	Requirement	Current Guidelines ¹
1. Environmental Impact Assessment Process The process for assessment of the proposal is transparent, balanced, well focussed and legal.	1. The Environmental Impact Statement must be prepared in accordance with Part 3 of Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i> (the Regulation). 2. The project will impact on matters of national environmental significance (MNES) protected under the Environmental Protection and Biodiversity Conservation Act (EPBC Act) and will be assessed in accordance with the NSW Bilateral Agreement (2015). The Proponent must assess impacts to MNES protected under the EPBC Act. This Assessment must be in accordance with the requirements listed in Attachment A. 3. The onus is on the Proponent to ensure legislative requirements relevant to the project are met.	EPBC Act Environment Assessment Process (SEWPAC, 2010)
2. Environmental Impact Statement The project is described in sufficient detail to enable clear understanding that the project has been developed through an iterative process of impact identification and assessment and project refinement to avoid, minimise or offset impacts so that the project, on balance, has the least adverse environmental, social and economic impact, including its cumulative	1. The EIS must include, but not necessarily be limited to, the following: (a) executive summary; (b) a description of the project, including all components and activities (including ancillary components and activities) required to construct and operate it; (c) a statement of the objective(s) of the project; (d) a summary of the strategic need for the project with regard to its critical State significance and relevant State Government policy; (e) an analysis of any feasible alternatives to the project.²; (f) a description of feasible options within the project.³; (g) a description of how alternatives to and options within the project were analysed to inform the selection of the preferred alternative / option. The description must contain sufficient detail to	

¹ Guidelines listed are the current list of guidelines that may be applicable to a CSSI project. It is the Proponents responsibility to identify, and justify, which guidelines have been applied to a specific project.

² Alternatives to a project are different projects which would achieve the same project objective(s) including the consequences of not carrying out the project. For example, alternatives to a road project may be a rail project in the same area and alternate routes for the road.

³ Options within the project are variations of the same project. For example, options within a road project could be design of an intersection; the location or design of a bridge; locations for a vent stack.

Desired Performance Outcome	Requirement	Current Guidelines ¹
impacts.	enable an understanding of why the preferred alternative to and options(s) within the project were selected; (h) a concise description of the general biophysical and socio-economic environment that is likely to be impacted by the project (including offsite impacts). Elements of the environment that are not likely to be affected by the project do not need to be described; (i) a demonstration of how the project design has been developed to avoid or minimise likely adverse impacts; (j) the identification and assessment of key issues as provided in the 'Assessment of Key Issues' performance outcome; (k) a statement of the outcome(s) the proponent will achieve for each key issue; (l) measures to avoid, minimise or offset impacts must be linked to the impact(s) they treat, so it is clear which measures will be applied to each impact; (m) consideration of the interactions between measures proposed to avoid or minimise impact(s), between impacts themselves and between measures and impacts;⁴ (n) an assessment of the cumulative impacts of the project taking into account other projects that have been approved but where construction has not commenced, projects that have commenced construction, and projects that have recently been completed; (o) statutory context of the project as a whole, including: – how the project meets the provisions of the EP&A Act and EP&A Regulation; – a list of any approvals that must be obtained under any other Act or law before the project may lawfully be carried out; (p) a chapter that synthesises the environmental impact assessment and provides: – a succinct but full description of the project for which approval is sought; – a description of any uncertainties that still exist around design, construction methodologies and/or operational methodologies and how these will be resolved in the next stages of the project; – a compilation of the impacts of the project that have not been avoided;	

⁴ Measures proposed to avoid or minimise one impact may cause an unintended impact on another issue. Therefore these impacts and their interactions need to be analysed and resolved where possible.

Desired Performance Outcome	Requirement	Current Guidelines ¹
	- a compilation of the proposed measures associated with each impact to avoid or minimise (through design refinements or ongoing management during construction and operation) or offset these impacts; - a compilation of the outcome(s) the proponent will achieve; and - the reasons justifying carrying out the project as proposed, having regard to the biophysical, economic and social considerations, including ecologically sustainable development and cumulative impacts. (q) relevant project plans, drawings, diagrams in an electronic format that enables integration with mapping and other technical software. 2. The EIS must only include data and analysis that is reasonably needed to make a decision on the proposal. Relevant information must be succinctly summarised in the EIS and included in full in appendices. Irrelevant, conflicting or duplicated information must be avoided.	

Desired Performance Outcome	Requirement	Current Guidelines ¹
3. Assessment of Key Issues* Key issue impacts are assessed objectively and thoroughly to provide confidence that the project will be constructed and operated within acceptable levels of impact. * Key issues are nominated by the Proponent in the CSSI project application and by the Department in the SEARs. Key issues need to be reviewed throughout the preparation of the EIS to ensure any new key issues that emerge are captured. The key issues identified in this document are not exhaustive but are key issues common to most CSSI projects.	- The level of assessment of likely impacts must be proportionate to the significance of, or degree of impact on, the issue, within the context of the proposal location and the surrounding environment. The level of assessment must be commensurate to the degree of impact and sufficient to ensure that the Department and other government agencies are able to understand and assess impacts. - For each key issue the Proponent must: - describe the biophysical and socio-economic environment, as far as it is relevant to that issue; - describe the legislative and policy context, as far as it is relevant to the issue; - identify, describe and quantify (if possible) the impacts associated with the issue, including the likelihood and consequence (including worst case scenario) of the impact (comprehensive risk assessment), and the cumulative impacts; - demonstrate how potential impacts have been avoided (through design, or construction or operation methodologies); - detail how likely impacts that have not been avoided through design will be minimised, and the predicted effectiveness of these measures (against performance criteria where relevant); and - detail how any residual impacts will be managed or offset, and the approach and effectiveness of these measures. - Where multiple reasonable and feasible options to avoid or minimise impacts are available, they must be identified and considered and the proposed measure justified taking into account the public interest.	
4. Consultation The project is developed with meaningful and effective engagement during project design and delivery.	The project must be informed by consultation, including with relevant government agencies, infrastructure and service providers, special interest groups, affected landowners, businesses and the community. The consultation process must be undertaken in accordance with the current guidelines.	

Desired Performance Outcome	Requirement	Current Guidelines ¹
	2. The Proponent must document the consultation process, and demonstrate how the project has responded to the inputs received. 3. The Proponent must describe the timing and type of community consultation proposed during the design and delivery of the project, the mechanisms for community feedback, the mechanisms for keeping the community informed, and procedures for complaints handling and resolution.	

Key Issue Standard SEARs

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines
5. Air Quality The project is designed, constructed and operated in a manner that minimises air quality impacts (including nuisance dust and odour) to minimise risks to human health and the environment to the greatest extent practicable.	- The Proponent must undertake an air quality impact assessment (AQIA) for construction and operation of the project in accordance with the current guidelines - The Proponent must ensure the AQIA also includes the following: - demonstrated ability to comply with the relevant regulatory framework, specifically the <i>Protection of the Environment Operations Act 1997</i> and the <i>Protection of the Environment Operations (Clean Air) Regulation (2010)</i>; and - a cumulative local and regional air quality impact assessment.	Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales (DEC, 2005) Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (DEC, 2005) Technical Framework - Assessment and Management of Odour from Stationary Sources in NSW (DEC, 2006)
6. Biodiversity The project design considers all feasible measures to avoid and minimise impacts on terrestrial and aquatic biodiversity. Offsets and/or supplementary measures are assured which are equivalent to any remaining impacts of project construction and operation.	- The Proponent must assess biodiversity impacts in accordance with the current guidelines including the Framework for Biodiversity Assessment (FBA). - The Proponent must assess any impacts on biodiversity values not covered by the FBA as specified in s2.3.⁵ - The Proponent must assess impacts on the EECs, threatened species and/or populations as listed in Attachment B and provide the information specified in s9.2 of the FBA.⁶	<u>NSW Biodiversity Offsets Policy for Major Projects</u> (OEH, 2014) <u>Framework for Biodiversity Assessment</u> (OEH, 2014) <u>Policy and Guidelines for Fish Habitat Conservation and Management – Update 2013</u> (DPI, 2013) <u>Threatened Species Survey and Assessment Guidelines</u> <u>Why do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings</u> (NSW Fisheries, 2013)

⁵ OEH will provide specific assessment requirements for any such impacts during agency consultation on the SEARs.

⁶ OEH will provide this list of species during agency consultation on the SEARs.

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines
	4. The Proponent must identify whether the project as a whole, or any component of the project, would be classified as a Key Threatening Process (KTP) in accordance with the listings in the <i>Threatened Species Conservation Act 1997</i> (TSC Act), <i>Fisheries Management Act 1994</i> (FM Act) and <i>Environmental Protection and Biodiversity Conservation Act 2000</i> (EPBC Act). 5. The Proponent must assess impacts on MNES as outlined in Section 1.2.	2003 NSW Sustainable Design Guidelines Version 3.0 (TfNSW, 2013) Aquatic Ecology in Environmental Impact Assessment – EIA Guideline (Marcus Lincoln Smith 2003)
7. Climate Change Risk The project is designed, constructed and operated to be resilient to the future impacts of climate change.	1. The Proponent must assess the risk and vulnerability of the project to climate change in accordance with the current guidelines. 2. The Proponent must quantify specific climate change risks with reference to the NSW Government's climate projections at 10km resolution (or lesser resolution if 10km projections are not available) and incorporate specific adaptation actions in the design.	Australian Government's Climate Change Impacts and Risk Management – A Guide for Business and Government (2006) AS/NZS 3100:2009 Risk Management – Principles and Guidelines Technical Guide for Climate Change Adaptation for the State Road Network (RMS, in draft)
8. Flooding The project minimises adverse impacts on existing flooding characteristics. Construction and operation of the project avoids or minimises the risk of, and adverse impacts from, infrastructure flooding, flooding hazards, or dam failure.	1. The Proponent must assess and model the impacts on flood behaviour during construction and operation for a full range of flood events up to the probable maximum flood (taking into account storm intensity due to climate change) including: (a) any detrimental increases in the potential flood affectation of other properties, assets and infrastructure; (b) consistency (or inconsistency) with applicable Council floodplain risk management plans; (c) compatibility with the flood hazard of the land;	NSW Government's Floodplain Development Manual (Department of Natural Resources, 2005) PS 07-003 New guideline and changes to section 117 direction and EP&A Regulation on flood prone land Practical Consideration of Climate Change - Flood risk management guideline (DECC, 2007)

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines
	(d) compatibility with the hydraulic functions of flow conveyance in flood ways and storage areas of the land; (e) downstream velocity and scour potential; (f) impacts the development may have upon existing community emergency management arrangements for flooding. These matters must be discussed with the State Emergency Services and Council; - and (g) any impacts the development may have on the social and economic costs to the community as consequence of flooding.	
9. Health and Safety The project avoids, to the greatest extent possible, risk to public safety.	1. The Proponent must assess the likely risks of the project to public safety, paying particular attention to pedestrian safety, subsidence risks, bushfire risks and the handling and use of dangerous goods.	SEPP No. 33 - Hazardous and Offensive Development
10. Heritage The design, construction and operation of the project facilitates, to the greatest extent possible, the long term protection, conservation and management of the heritage significance of items of environmental heritage and Aboriginal objects and places. The design, construction and operation of the project avoids or minimises impacts, to the greatest extent possible, on the heritage	1. The Proponent must identify and assess any direct and/or indirect impacts (including cumulative impacts) to the heritage significance of: (a) Aboriginal places and objects, as defined under the <i>National Parks and Wildlife Act 1974</i> and in accordance with the principles and methods of assessment identified in the current guidelines; (b) Aboriginal places of heritage significance, as defined in the Standard Instrument – Principal Local Environmental Plan; (c) environmental heritage, as defined under the <i>Heritage Act 1977</i>; and (d) items listed on the National and World Heritage lists.	Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (OEH, 2011) Aboriginal Cultural Heritage Consultation requirements for proponents (DECCW, 2010) Code of practice for archaeological investigation of Aboriginal objects in NSW (DECCW, 2010) NSW Skeletal Remains: Guidelines for Management of Human Remains (Heritage Office, 1998) Aboriginal site recording form

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines
significance of environmental heritage and Aboriginal objects and places.	2. Where impacts to State or locally significant heritage items are identified, the assessment must: (a) include a statement of heritage impact for all heritage items (including significance assessment); (b) consider impacts to the item of significance caused by , but not limited to, vibration, demolition, archaeological disturbance, altered historical arrangements and access, visual amenity, landscape and vistas, curtilage, subsidence and architectural noise treatment (as relevant) (c) outline measures to avoid and minimise those impacts in accordance with the current guidelines; and (d) be undertaken by a suitably qualified heritage consultant(s) (note: where archaeological excavations are proposed the relevant consultant must meet the NSW Heritage Council's Excavation Director criteria). 3. Where archaeological investigations of Aboriginal objects are proposed these must be conducted by a suitably qualified archaeologist, in accordance with section 1.6 of the <i>Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW</i> (DECCW 2010). 4. Where impacts to Aboriginal objects and/or places are proposed, consultation must be undertaken with Aboriginal people in accordance with the current guidelines.	Aboriginal site impact recording form Aboriginal Heritage Information Management System site registration form Care agreement application form Criteria for the assessment of excavation directors (NSW Heritage Council, 2011) NSW Heritage Manual (Heritage Office and Department of Urban Affairs and Planning, 1994) Assessing Heritage Significance (NSW Heritage Office, 2001) The Australia ICOMOS Burra Charter

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines
11. Noise and Vibration - Amenity Construction noise and vibration (including airborne noise, ground-borne noise and blasting) are effectively managed to minimise adverse impacts on acoustic amenity. Increases in noise emissions and vibration affecting nearby properties and other sensitive receivers during operation of the project are effectively managed to protect the amenity and well-being of the community.	- The Proponent must assess construction and operational noise and vibration impacts in accordance with relevant NSW noise and vibration guidelines. The assessment must include consideration of impacts to sensitive receivers including small businesses, and include consideration of sleep disturbance and, as relevant, the characteristics of noise and vibration (for example, low frequency noise). - The Proponent must demonstrate that blast impacts are capable of complying with the current guidelines, if blasting is required.	Technical Basis for Guidelines to Minimise Annoyance due to Blasting Overpressure and Ground Vibration (ANZECC, 1990) Assessing Vibration: a technical guideline (DEC, 2006) Interim Construction Noise Guideline (DECCW, 2009) NSW Industrial Noise Policy (EPA, 2000) Construction Noise Strategy (TfNSW, 2012) Rail Infrastructure Noise Guideline (EPA, 2013) NSW Road Noise Policy (DECCW, 2011) Environmental Noise Management Manual (RMS 2001) Development Near Rail Corridors and Busy Roads – Interim guideline (DoP, 2008) Noise Mitigation Guideline (RMS, 2015) Noise Criteria Guideline (RMS, 2015) NSW Sustainable Design Guidelines Version 3.0 (TfNSW, 2013)
12. Noise and Vibration - Structural Construction noise and vibration (including airborne noise, ground-borne noise and blasting) are effectively managed to minimise	The Proponent must assess construction and operation noise and vibration impacts in accordance with relevant NSW noise and vibration guidelines. The assessment must include consideration of impacts to the structural integrity and heritage significance of items (including Aboriginal places and items of environmental heritage).	German Standard DIN 4150-3: Structural Vibration - effects of vibration on structures

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines
adverse impacts on the structural integrity of buildings, items including Aboriginal places and environmental heritage, and nearby road infrastructure. Increases in noise emissions and vibration affecting environmental heritage as defined in the <i>Heritage Act 1977</i> during operation of the project are effectively managed.	2. The Proponent must demonstrate that blast impacts are capable of complying with the current guidelines, if blasting is required.	
13. Protected and Sensitive Lands The project is designed, constructed and operated to avoid or minimise impacts on protected and sensitive lands.	1. The Proponent must assess the impacts of the project on environmentally sensitive land and processes (and the impact of processes on the project) including, but not limited to: (a) protected areas (including land and water) managed by OEI and/or DPI Fisheries under the <i>National Parks and Wildlife Act 1974</i>; (b) Key Fish Habitat as mapped and defined in accordance with the <i>Fisheries Management Act 1994</i> (FM Act); (c) waterfront land as defined in the <i>Water Management Act 2000</i>; (d) land or waters identified as Critical Habitat under the TSC Act, FM Act or EPBC Act; and (e) biobank sites, private conservation lands and other lands identified as offsets.	Guidelines for developments adjoining land and water managed by the Department of Environment, Climate Change and Water (DECCW, 2010) Revocation, Re-categorisation and Road Adjustment Policy (OEI, 2012) Guidelines for controlled activities on waterfront land (DPI 2012)
14. Socio-economic, Land Use Property, Agriculture and Biosecurity The project minimises adverse social and	1. The Proponent must assess social and economic impacts in accordance with the current guidelines and consider the social and economic impacts of severance of communities.	Environmental Planning and Impact Assessment Practice Note: Socio-economic Assessment (RMS, 2013) Infrastructure proposals on rural lands Guide (DPI, 2013)

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines
economic impacts and capitalises on opportunities potentially available to affected communities. The project minimises impacts to property and business and achieves appropriate integration with adjoining land uses, including maintenance of appropriate access to properties and community facilities, and minimisation of displacement of existing land use activities, dwellings and infrastructure.	- The Proponent must assess agricultural land use impacts in accordance with the current guidelines. - The Proponent must undertake an assessment of biosecurity risks and management measures relating to the potential for spread of pests, diseases or weeds along the length of the project alignment. - The Proponent must assess impacts from construction and operation on potentially affected properties, businesses, recreational users and land and water users (for example, recreational and commercial fishers, oyster farmers), including property acquisitions/adjustments, access, amenity and relevant statutory rights. - Where the project may impact on significant mineral resources, the proponent must assess the impact of the project on these 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; and - consult with active Petroleum Extraction Licence holders in the vicinity of the proposal. - The Proponent must identify encroachments into adjoining road reserves, and any Crown land affected by the proposal.	Landuse Conflict Risk Assessment (LUCRA) Guide (DPI, 2011) Local Environmental Planning Instruments

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines
15. Soils The environmental values of land, including soils, subsoils and landforms, are protected. Risks arising from the disturbance and excavation of land and disposal of soil are minimised, including disturbance to acid sulfate soils and site contamination.	1. The Proponent must assess whether the land is likely to be contaminated and identify if remediation of the land is required, having regard to the ecological and human health risks posed by the contamination in the context of past, existing and future land uses. Where assessment and/or remediation is required, the Proponent must document how the assessment and/or remediation would be undertaken in accordance with current guidelines. 2. The Proponent must assess whether salinity is likely to be an issue and if so, determine the presence, extent and severity of soil salinity within the project area. 3. The Proponent must assess the impacts of the project on soil salinity and how it may affect groundwater resources and hydrology. 4. The Proponent must assess the impacts on soil and land resources (including erosion risk or hazard). Particular attention must be given to soil erosion and sediment transport consistent with the practices and principles in the current guidelines.	Managing Land Contamination: Planning Guidelines SEPP 55 –Remediation of Land, (DUAP & EPA, 1998) Guidelines for Consultants Reporting on Contaminated Sites (OEH, reprinted 2011) Guidelines for the NSW Site Auditor Scheme (DEC, 2006) Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997 (EPA, 2015) Urban and regional salinity – guidance given in the Local Government Salinity Initiative booklets (http://www.environment.nsw.gov.au/salinity/solutions/urban.htm) which includes <i>Site Investigations for Urban Salinity</i> (DLWC, 2002) Landslide risk management guidelines presented in Australian Geomechanics Society (2007) Soil and Landscape Issues in Environmental Impact Assessment (DLWC 2000) Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom 2004) and Volume 2 (A. Installation of Services; B. Waste Landfills; C. Unsealed Roads; D. Main Roads; E. Mines and Quarries) (DECC, 2008)

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines
		Other guidelines made or approved under section 105 of the <i>Contaminated Land Management Act 1997</i>
16. Sustainability The project reduces the NSW Government's operating costs and ensures the effective and efficient use of resources. Conservation of natural resources is maximised.	- The Proponent must assess the sustainability of the project in accordance with the Infrastructure Sustainability Council of Australia (ISCA) <i>Infrastructure Sustainability Rating Tool</i> and recommend an appropriate target rating for the project. - The Proponent must assess the project against the current guidelines including targets and strategies to improve Government efficiency in use of water, energy and transport.	NSW Sustainable Design Guidelines Version 3.0 (TfNSW, 2013) Infrastructure Sustainability Rating Tool Scorecard relating to energy and carbon for large infrastructure projects, ISCA
17. Transport and Traffic Network connectivity, safety and efficiency of the transport system in the vicinity of the project are managed to minimise impacts. The safety of transport system customers is maintained. Impacts on network capacity and the level of service are effectively managed. Works are compatible with existing infrastructure and future transport corridors.	- The Proponent must assess construction transport and traffic (vehicle, pedestrian, bus services, train operation and cyclists) impacts, including, but not necessarily limited to: - a considered approach to route identification and scheduling of transport movements; - the number, frequency and size of construction related vehicles (passenger, commercial and heavy vehicles, including spoil management movements and track machines); - construction worker parking; - the nature of existing traffic (types and number of movements) on construction access routes (including consideration of peak traffic times and sensitive road users and parking arrangements) and assessment of traffic impacts on these routes including identifying traffic management measures to mitigate any issues;	Guide to Traffic Management – Part 3 Traffic Studies and Analysis (Austroads, 2007) Guide to Traffic Generating Developments Version 2.2 (RTA, 2002) Cycling Aspects of Austroads Guides (Austroads, 2014) NSW Bicycle Guidelines v 1.2 (RTA, 2005) Planning Guidelines for Walking and Cycling (DIPNR, 2004) NSW Sustainable Design Guidelines Version 3.0 (TfNSW, 2013)

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines
	(e) provisions proposed to ensure safe access and egress to/from the classified road network; (f) the nature of any train paths (types and number of movements) and potential impact to these train paths due to additional track possession requirements; and (g) the need to close, divert or otherwise reconfigure elements of the road and cycle network associated with construction of the project. 2. The Proponent must assess (and model) the operational transport impacts of the project for both road and rail, including: (a) Existing and forecast travel demand and traffic volumes for the project (road and rail); (b) travel time analysis (road and rail); (c) performance of key interchanges and intersections by undertaking a level of service analysis at key locations (d) assessment of impacts on the operation of bus services and public transport infrastructure; (e) wider transport interactions (local and regional roads, cycling, public and freight transport and the broader NSW rail network); and (f) identification of traffic and transport measures to mitigate any impacts. 3. The proponent must assess the feasibility of level crossings (existing and planned) and take into account: (a) safety assessments; (b) consistency with any Interface Agreements and related Safety Management Plans, including draft Interface Agreements and	Central West Regional Transport Plan (TfNSW 2013) Western Regional Transport Plan (TfNSW 2013) Construction of New Level Crossing Policy (TfNSW) NSW Freight and Port Strategy (TfNSW 2013)

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines
	draft Safety Management Plans; and (c) operation of level crossings with regard to road and rail travel speeds, vehicle types, train lengths, train numbers, road and rail traffic volumes and sight distance.	
18. Visual Amenity The project minimises adverse impacts on the visual amenity of the built and natural environment (including public open space) and capitalises on opportunities to improve visual amenity.	- The Proponent must assess the visual impact of the project and any ancillary infrastructure on: - views and vistas; - streetscapes, key sites and buildings; - heritage items including Aboriginal places and environmental heritage; and - the local community. - The Proponent must provide artist impressions and perspective drawings of the project to illustrate how the project has responded to the visual impact through urban design and landscaping.	AS4282-1997 Control of the obtrusive effects of outdoor lighting Beyond the Pavement: urban design policy, procedures and design principles (RMS, 2014) Bridge Aesthetics: Design guidelines to improve the appearance of bridges in NSW (RMS, 2012) NSW Sustainable Design Guidelines Version 3.0 (TfNSW, 2013) Technical guideline for Urban Green Cover in NSW (OEHL, 2015)
19. Waste All wastes generated during the construction and operation of the project are effectively stored, handled, treated, reused, recycled and/or disposed of lawfully and in a manner that protects environmental values.	- The Proponent must assess predicted waste generated from the project during construction and operation, including: - classification of the waste in accordance with the current guidelines; - estimates / details of the quantity of each classification of waste to be generated during the construction of the project, including bulk earthworks and spoil balance; - handling of waste including measures to facilitate segregation and prevent cross contamination; - management of waste including estimated location and volume of	Waste Classification Guidelines – Part 1: Classification of Waste (EPA 2014) NSW Waste Avoidance and Resource Recovery Strategy (EPA 2014) NSW Sustainable Design Guidelines Version 3.0 (TfNSW, 2013)

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines
	stockpiles; e) waste minimisation and reuse; f) lawful recycling or disposal locations for each type of waste; and g) contingencies for the above, including managing unexpected waste volumes. 2. The Proponent must assess potential environmental impacts from the excavation, handling, storage on site and transport of the waste particularly with relation to sediment/leachate control, noise and dust.	Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom 2004) and Volume 2 (A. Installation of Services; B. Waste Landfills; C. Unsealed Roads; D. Main Roads; E. Mines and Quarries) (DECC, 2008)
20. Water - Hydrology Long term impacts on surface water and groundwater hydrology (including drawdown, flow rates and volumes) are minimised. The environmental values of nearby, connected and affected water sources, groundwater and dependent ecological systems including estuarine and marine water (if applicable) are maintained (where values are achieved) or improved and maintained (where values are not achieved). Sustainable use of water resources.	1. The Proponent must describe (and map) the existing hydrological regime for any surface and groundwater resource (including reliance by users and for ecological purposes) likely to be impacted by the project, including stream orders, as per the FBA. 2. The Proponent must assess (and model if appropriate) the impact of the construction and operation of the project and any ancillary facilities (both built elements and discharges) on surface and groundwater hydrology in accordance with the current guidelines, including: (a) natural processes within rivers, wetlands, estuaries, marine waters and floodplains that affect the health of the fluvial, riparian, estuarine or marine system and landscape health (such as modified discharge volumes, durations and velocities), aquatic connectivity and access to habitat for spawning and refuge; (b) direct or indirect increases in erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses; (c) minimising the effects of proposed stormwater and wastewater	Framework for Biodiversity Assessment – Appendix 2 (OEH, 2014) Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom 2004) and Volume 2 (A. Installation of Services; B. Waste Landfills; C. Unsealed Roads; D. Main Roads; E. Mines and Quarries) (DECC, 2008) NSW Aquifer Interference Policy (DPI, 2012) NSW Sustainable Design Guidelines Version 3.0 (TfNSW, 2013) Risk assessment Guidelines for Groundwater Dependent Ecosystems (Office of Water, 2012)

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines
	management during construction and operation on natural hydrological attributes (such as volumes, flow rates, management methods and re-use options) and on the conveyance capacity of existing stormwater systems where discharges are proposed through such systems; and (d) water take (direct or passive) from all surface and groundwater sources with estimates of annual volumes during construction and operation. 3. The Proponent must identify any requirements for baseline monitoring of hydrological attributes.	
21. Water - Quality The project is designed, constructed and operated to protect the NSW Water Quality Objectives where they are currently being achieved, and contribute towards achievement of the Water Quality Objectives over time where they are currently not being achieved, including downstream of the project to the extent of the project impact including estuarine and marine waters (if applicable).	1. The Proponent must: (a) state the ambient NSW Water Quality Objectives (NSW WQO) and environmental values for the receiving waters relevant to the project, including the indicators and associated trigger values or criteria for the identified environmental values; (b) identify and estimate the quality and quantity of all pollutants that may be introduced into the water cycle by source and discharge point and describe the nature and degree of impact that any discharge(s) may have on the receiving environment, including consideration of all pollutants that pose a risk of non-trivial harm to human health and the environment; (c) identify the rainfall event that the water quality protection measures will be designed to cope with; (d) assess the significance of any identified impacts including consideration of the relevant ambient water quality outcomes;	NSW Water Quality and River Flow Objectives at http://www.environment.nsw.gov.au/ieo/ Using the ANZECC Guidelines and Water Quality Objectives in NSW (DEC, 2006) Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC/ ARMCANZ, 2000) Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DECC, 2008) Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom 2004) and Volume 2 (A. Installation of Services; B. Waste Landfills; C. Unsealed Roads; D. Main Roads; E. Mines and Quarries) (DECC, 2008)

Key Issue and Desired Performance Outcome	Requirement (specific assessment requirements in addition to the general requirement above)	Current Guidelines
	(e) demonstrate how construction and operation of the project will, to the extent that the project can influence, ensure that: – where the NSW WQOs for receiving waters are currently being met they will continue to be protected; and – where the NSW WQOs are not currently being met, activities will work toward their achievement over time; (f) justify, if required, why the WQOs cannot be maintained or achieved over time; (g) demonstrate that all practical measures to avoid or minimise water pollution and protect human health and the environment from harm are investigated and implemented; (h) identify sensitive receiving environments (which may include estuarine and marine waters downstream) and develop a strategy to avoid or minimise impacts on these environments; and (i) identify proposed monitoring locations, monitoring frequency and indicators of surface water quality.	

Attachment A

Guidelines for preparing Assessment Documentation relevant to the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)

Narrabri to North Star Section Inland Rail (EPBC 2016/7729)

1. On 26 September 2016 it was determined that the Narrabri to North Star section of Inland Rail will impact upon the following matters of national environmental significance (MNES) protected under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act):
 - **threatened species and communities (sections 18 & 18A).**
2. The project will be assessed in accordance with the NSW Assessment Bilateral Agreement (2015) and as such will be required to be assessed in the manner specified in Schedule 1 to that Agreement including, addressing the matters outlined in Schedule 4 of the *Environment Protection and Biodiversity Conservation Regulations 2000* (Cth). These requirements do not stand alone but are a supplement to the Secretary's Environmental Assessment Requirements issued on 17 February 2016 and must be addressed in conjunction with those requirements. The requirements are intended such that there is sufficient information in the assessment report relevant to MNES such that the Commonwealth decision-maker may make a determination on whether or not to approve the action.
3. The proponent must undertake an assessment of all the protected matters that may be impacted by the development under the controlling provision identified in paragraph 1. A list of protected matters that are considered likely to be impacted is provided at Attachment A to these Guidelines. Note that this may not be a complete list and it is the responsibility of the proponent to ensure any protected matters under this controlling provision, likely to be impacted, are assessed for the Commonwealth decision-maker's consideration.

General Requirements

Project Description

4. The title of the action, background to the development and current status.
5. The precise location and description of all works to be undertaken (including associated offsite works and infrastructure), structures to be built or elements of the action that may have impacts on matters of national environmental significance (MNES).
6. How the action relates to any other actions that have been, or are being taken, in the region affected by the action.
7. How the works are to be undertaken and design parameters for those aspects of the structures or elements of the action that may have relevant impacts on MNES.

Impacts

8. The EIS must include an assessment of the relevant impacts of the action on threatened species and communities; including
- a description and detailed assessment of the nature and extent of the likely direct, indirect and consequential impacts, including short term and long term relevant impacts;
 - a statement whether any relevant impacts are likely to be known, unpredictable or irreversible;
 - analysis of the significance of the relevant impacts;
 - any technical data and other information used or needed to make a detailed assessment of the relevant impacts; and
 - a comparative description of the impacts of alternatives, if any, on the threatened species and communities.

Avoidance, mitigation and offsetting

9. For each of the relevant matters protected that are likely to be impacted by the development, the EIS must provide information on proposed avoidance and mitigation measures to deal with the relevant impacts of the action, including:
- a description and an assessment of the expected or predicted effectiveness of the mitigation measures;
 - any statutory policy basis for the mitigation measures;
 - the cost of the mitigation measures;
 - a description of the outcomes that the avoidance and mitigation measures will achieve;
 - an outline of an environmental management plan that sets out the framework for continuing management, mitigation and monitoring programs for the relevant impacts of the action;
 - a description of the offsets proposed to address the residual adverse significant impacts and how these offsets will be established.
10. Where a significant residual adverse impact to a relevant protected matter is considered likely, the EIS must provide information on the proposed offset strategy, including discussion of the conservation benefit associated with the proposed offset strategy.

Key Issues – Biodiversity

11. The EIS must address the following issues in relation to Biodiversity including separate:
- identification of each EPBC Act listed threatened species and community likely to be impacted by the development.
 - Any likely impacts must be described for each matter and, if there are impacts, how these impacts are avoided, mitigated and if required offset. Note that only significant residual adverse impacts are required to be offset.

12. For each of the relevant EPBC Act listed threatened species and communities likely to be impacted by the development the EIS must provide a separate:

- description of the habitat and habits (including identification and mapping of suitable breeding habitat, suitable foraging habitat, important populations and habitat critical for survival), with consideration of, and reference to, any relevant Commonwealth guidelines and policy statements including listing advice, conservation advice and recovery plans, threat abatement plans and wildlife conservation plans; and
- details of the scope, timing and methodology for studies or surveys used and how they are consistent with (or justification for divergence from) published Australian Government guidelines and policy statements.
- description of the impacts of the action having regard to the full national extent of the species or community's range.

[Note: the relevant guidelines and policy statements for each species and community are available from the Department of the Environment Species Profiles and Threats Database. <http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl>]

13. For each of the relevant EPBC Act listed threatened species and communities likely to be impacted by the development the EIS must provide a separate:

- identification of significant residual adverse impacts likely to occur after the proposed activities to avoid and mitigate all impacts are taken into account.
- details of how the current published NSW Framework for Biodiversity Assessment (FBA) has been applied in accordance with the objects of the EPBC Act to offset significant residual adverse impacts;
- details of the offset package to compensate for significant residual impacts including details of the credit profiles required to offset the development in accordance with the FBA and/or mapping and descriptions of the extent and condition of the relevant habitat and/or threatened communities occurring on proposed offset sites.

[Note: For the purposes of approval under the EPBC Act, it is a requirement that offsets directly contribute to the ongoing viability of the specific protected matter impacted by a proposed action i.e. 'like for like'. In applying the FBA, residual impacts on EPBC Act listed threatened ecological communities must be offset with Plant Community Type(s) (PCT) that are ascribed to the specific EPBC listed ecological community. PCTs from a different vegetation class will not generally be acceptable as offsets for EPBC listed communities.]

14. Any significant residual impacts not addressed by the FBA may need to be addressed in accordance with the Environment Protection and Biodiversity Conservation Act 1999 Environmental Offset Policy. <http://www.environment.gov.au/epbc/publications/epbc-act-environmental-offsets-policy>. [Note if the EPBC Act Environmental Offset Policy is used to calculate proposed offsets for a threatened species or community you may wish to seek further advice from the Department of Planning and Environment.]

15. For each threatened species and community likely to be impacted by the development, the EIS must provide reference to, and consideration of, relevant approved conservation advice or recovery plan for the species or community.

[Note: the relevant guidelines and policy statements for each species and community are available from the Department of the Environment Species Profiles and Threats Database. <http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl>]

Environmental Record of person proposing to take the action

16. Information in relation to the environmental record of a person proposing to take action must include details as prescribed in Schedule 4 Clause 6 of the EPBC Regulations 2000.

Information Sources

For information given in the EIS, the EIS must state the source of the information, how recent the information is, how the reliability of the information was tested; and what uncertainties (if any) are in the information.

REFERENCES

1. *Environment Protect and Biodiversity Conservation Act 1999* - section 51-55, section 96A(3)(a)(b), 101A(3)(a)(b), section 136, section 527E
2. NSW Assessment Bilateral Agreement (2015) - Item 18.1, Item 18.5, Schedule 1
3. *Matters of National Environmental Significance - Significant impact guidelines 1.1* (2013) EPBC Act
4. *Environment Protect and Biodiversity Conservation Act 1999* Environmental Offsets Policy October 2012

Attachment A

The Department of the Environment's Environment Reporting Tool (ERT) identifies that 20 threatened species and communities may occur within 2 km of the proposed action. Based on the information in the referral documentation, the location of the action, species records and likely habitat present in the area, there are likely to be significant impacts on the following matters:

- Natural Grassland on Basalt and Fine-textured Alluvial Plains of Northern New South \ Wales and Southern Queensland - Critically Endangered
- Koala (*Phascolarctos cinereus*) combined populations of Qld, NSW and the ACT – Vulnerable

The EIS must contain, in accordance with sections 8-10, a description of the impacts on each these matters and how the impacts will be avoided, mitigated and if required offset. Note that only significant residual adverse impacts are required to be offset.

The Department of the Environment considers there is some risk that there may be impacts on the matters listed below. These species must be assessed for impacts. Any likely impacts must be described for each matter and, if there are impacts, how these impacts are avoided, mitigated and if required offset. Note that only significant residual adverse impacts are required to be offset.

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland ecological community – Critically Endangered;
- Regent Honeyeater (*Anthochaera Phrygia*) - Critically Endangered
- Squatter Pigeon (*Geophaps scripta scripta* (southern) - Vulnerable
- Painted Honeyeater (*Grantiella picta*) - Vulnerable
- Swift Parrot (*Lathamus discolor*) - Endangered
- Superb Parrot (*Polytelis swainsonii*) Vulnerable
- Murray Cod (*Maccullochella peelii*) - Vulnerable
- Pilliga Mouse (*Pseudomys pilligaensis*) - Vulnerable
- *Androcalva procumbens* - Vulnerable
- Ooline (*Cadellia pentastylis*) - Vulnerable
- Bluegrass (*Dichanthium setosum*) - Vulnerable
- *Tylophora linearis* - Endangered
- Five-clawed Worm-skink (*Anomalopus mackayi*) - Vulnerable
- Pink-tailed Worm-lizard (*Aprasia parapulchella*) - Vulnerable
- Border Thick-tailed Gecko (*Uvidicolus sphyrurus*) - Vulnerable\



Planning &
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Attachment B

**Attachment B – Species/Populations/Ecological Communities which
require further consideration**

Class	Scientific Name	Common Name	NSW status	Comm. status	IBRA Subregions
EEC	<i>Brigalow within the Brigalow Belt South, Nandewar and Darling Riverine Plains Bioregions</i>	Brigalow within the Brigalow Belt South, Nandewar and Darling Riverine Plains Bioregions	EEC	EEC	All IBRA subregions relevant to project
EEC	<i>Cadellia pentastylis (Ooline) community in the Nandewar and Brigalow Belt South Bioregions</i>	Cadellia pentastylis (Ooline) community in the Nandewar and Brigalow Belt South Bioregions	EEC		Liverpool Plains and Northern Basalts IBRA subregions only
EEC	<i>Carbeen Open Forest Community in the Darling Riverine Plains and Brigalow Belt South Bioregions</i>	Carbeen Open Forest Community in the Darling Riverine Plains and Brigalow Belt South Bioregions	EEC		All IBRA subregions relevant to project
EEC	<i>Fuzzy Box Woodland on alluvial Soils of the South Western Slopes, Darling Riverine Plains and Brigalow Belt South Bioregions</i>	Fuzzy Box Woodland on alluvial Soils of the South Western Slopes, Darling Riverine Plains and Brigalow Belt South Bioregions	EEC		Liverpool Plains IBRA subregion only
EEC	<i>Marsh Club-rush sedgeland in the Darling Riverine Plains Bioregion</i>	Marsh Club-rush sedgeland in the Darling Riverine Plains Bioregion	CEEC		Castlereagh Barwon IBRA subregion only
EEC	<i>Myall Woodland in the Darling Riverine Plains, Brigalow Belt South, Cobar Penepplain, Murray-Darling Depression, Riverina and NSW South Western Slopes bioregions</i>	Myall Woodland in the Darling Riverine Plains, Brigalow Belt South, Cobar Penepplain, Murray-Darling Depression, Riverina and NSW South Western Slopes bioregions	EEC	EEC	All IBRA subregions relevant to project
EEC	<i>Native Vegetation on Cracking Clay Soils of the Liverpool Plains</i>	Native Vegetation on Cracking Clay Soils of the Liverpool Plains	EEC	CEEC	Liverpool Plains IBRA subregion only
EEC	<i>White Box Yellow Box Blakely's Red Gum Woodland</i>	White Box Yellow Box Blakely's Red Gum Woodland	EEC	CEEC	All IBRA subregions relevant to project
Mammals	<i>Chalinolobus dwyeri</i>	Large-eared Pied Bat	V	V	Liverpool Plains and Northern Basalts IBRA subregions only

Reptiles	<i>Anomalopus mackayi</i>	Five-clawed Worm-skink	E	V	Northern Basalts, Northern Outwash and Castlereagh Barwon IBRA subregions only
Insects	<i>Jalmenus eubulus</i>	Pale Imperial Hairstreak	CE		Northern Outwash IBRA subregion only
Flora	<i>Cadellia pentastylis</i>	Ooline	V	V	Liverpool Plains and Northern Basalts IBRA subregions only
Flora	<i>Cyperus conicus</i>		E		Northern Basalts IBRA subregion only
Flora	<i>Desmodium campylocaulon</i>	Creeping Tick-trefoil	E		Northern Basalts, Northern Outwash and Castlereagh Barwon IBRA subregions only
Flora	<i>Dichanthium setosum</i>	Bluegrass	V	V	Liverpool Plains, Northern Basalts and Northern Outwash IBRA subregions only
Flora	<i>Digitaria porrecta</i>	Finger Panic Grass	E		All IBRA subregions relevant to project
Flora	<i>Homopholis belsonii</i>	Belson's Panic	E	V	All IBRA subregions relevant to project
Flora	<i>Lepidium aschersonii</i>	Spiny Peppercross	V	V	Northern Basalts IBRA subregion only
Flora	<i>Polygala linariifolia</i>	Native Milkwort	E		Northern Basalts IBRA subregion only
Flora	<i>Pomaderris queenslandica</i>	Scant Pomaderris	E		Liverpool Plains IBRA subregion only
Flora	<i>Tylophora linearis</i>		V	E	All IBRA subregions relevant to project