

Secretary's Environmental Assessment Requirements

Section 115Y of the *Environmental Planning and Assessment Act 1979*

Application Number	SSI 7319
Proposal	M1 Pacific Motorway Extension to Raymond Terrace
Location	Land generally between Black Hill (M1 Pacific Motorway 1.5 kilometres south of John Renshaw Drive) and Raymond Terrace (A1 Pacific Highway 2.5 kilometres north of Masonite Road, Heatherbrae) in the Newcastle and Port Stephens local government areas.
Proponent	NSW Roads and Maritime Services
Date of Issue	2 November 2015
General Requirements	<p>The Environmental Impact Statement (EIS) must meet the minimum form and content requirements in clauses 6 and 7 of Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i>.</p> <p>Where relevant, the assessment of the key issues below, and any other significant issues identified in the risk assessment, must include:</p> <ul style="list-style-type: none"> adequate baseline data; consideration of cumulative impacts due to other development in the vicinity; and measures to avoid, minimise and if necessary, offset the predicted impacts, including detailed contingency plans for managing any significant risks to the environment.
Key Issues	<p>The EIS must also address the following specific matters:</p> <p>Statutory and Strategic Context — including:</p> <ul style="list-style-type: none"> a statement of the objectives of the proposal, including a description of the strategic need, justification, objectives and outcomes for the proposal, and as relevant the outcomes and objectives of relevant strategic planning and transport policies, including, but not limited to, <i>NSW 2021</i>, <i>NSW Government State Infrastructure Strategy</i>, <i>NSW Long Term Transport Master Plan</i>, <i>Hunter Strategic Infrastructure Plan</i>, <i>Hunter Regional Transport Plan</i>, <i>any draft regional plans for the Hunter</i>, (if placed on public exhibition prior to finalisation of the EIS), <i>draft Raymond Terrace and Heatherbrae Strategy</i> and any other relevant plans; an analysis of feasible alternatives to the carrying out of the proposal and proposal justification, including: <ul style="list-style-type: none"> an analysis of alternatives/options considered having regard to the proposal's objectives (including an assessment of the beneficial and detrimental environmental impacts of the proposal relative to alternatives and the consequences of not carrying out the proposal), and the provision of a clear discussion of the route development and selection process, the suitability of the chosen alignment and whether or not the proposal is in the public interest, and justification for the preferred proposal taking into consideration the objects of the <i>Environmental Planning and Assessment Act 1979</i>; a detailed description of the proposal, including: <ul style="list-style-type: none"> the proposed route,

	<ul style="list-style-type: none"> ○ design of the alignment (vertical and horizontal), associated structures (such as bridges, viaducts, retaining walls, embankments and cuttings), interchanges, and road user facilities, ○ relationship and/or interaction with existing public and freight transport services (including air, rail, and bus services), ○ land use changes, including resumption of residential, commercial, industrial, rural and recreational lands, and impacts to Crown land, ○ interactions with key utilities, services and infrastructure, ○ resource use and sources, and ○ location and operational requirements of construction ancillary facilities and access tracks; <ul style="list-style-type: none"> • an analysis of the proposal, including an identification of how relevant planning, land use and development matters (including relevant strategic and statutory matters) have been considered in the impact assessment (direct, indirect and cumulative impacts) and/or in developing management/mitigation measures; and • detail how the principles of ecologically sustainable development will be incorporated in the design, construction and ongoing operation of the proposal. <p>Traffic and Transport — including but not limited to:</p> <ul style="list-style-type: none"> • details of how: <ul style="list-style-type: none"> ○ the preferred alignment, design and staging, ○ the proposed interchanges and connections to the surrounding road network, and ○ associated road infrastructure facilities, meet the traffic and transport objectives of the proposal, taking into account the following local and regional issues, including: <ul style="list-style-type: none"> ○ adjacent sensitive land uses, ○ transport connectivity to and from existing communities and centres (such as Newcastle, Raymond Terrace, the Lower Hunter and Port of Newcastle), ○ future growth areas (including but not limited to the Beresfield and Tomago industrial areas), ○ approved and proposed developments and projects in the area, and ○ vehicular, cyclist and pedestrian needs; • an assessment and modelling of operational traffic and transport impacts on the local and regional road network, (including but not limited to the M1 Pacific Motorway, A1 Pacific Highway, Tomago Road, Old Punt Road, John Renshaw Drive, Hunter Expressway, the New England Highway and Masonite Road), including an assessment of road user safety impacts, and discussion of the currency of baseline traffic and transport data; • an assessment of potential impacts the proposal may have on: <ul style="list-style-type: none"> ○ the operation of Newcastle Airport and Williamstown RAAF Base, ○ maritime traffic on the Hunter River and the Port of Newcastle, and ○ the Hunter Valley rail network, Main North Rail Line and rail infrastructure in Hexham; • an assessment of public transport impacts and opportunities; an assessment of impacts on cyclist and pedestrian access and safety, and description of proposed cyclist and pedestrian facilities, having consideration of opportunities to integrate existing and proposed cycleway and pedestrian networks, adjoining the proposal; and • construction traffic and transport impacts of the proposal (including ancillary facilities) and associated management measures, in particular: <ul style="list-style-type: none"> ○ impacts to the affected road network (including safety and level of
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	<p>service, pedestrian and cyclist access, and disruption to public transport services and access to properties),</p> <ul style="list-style-type: none"> ○ access and route identification and scheduling of transport movements, ○ the number, frequency and size of construction related vehicles (both passenger, commercial and heavy vehicles), ○ the nature of existing traffic on construction access routes (including consideration of peak traffic times), and ○ the need to close, divert or otherwise reconfigure elements of the road network associated with construction of the proposal. <p>having reference to the cumulative construction impacts of other major projects preparing for or commencing construction in the area.</p> <p>Hydrology, Soils and Water - including but not limited to:</p> <ul style="list-style-type: none"> • an assessment of impacts on watercourses, surface water flows (including stormwater, agricultural and flood mitigation drainage systems), water quality, quantity, availability and users (commercial and recreational), with particular reference to any likely impacts on surrounding water bodies and their catchments (including the Hunter River, Purgatory Creek, Windeyers Creek, Grahamstown Dam and Viney Creek), wetlands (particularly State Environmental Planning Policy No 14 – Wetlands (SEPP14) and RAMSAR wetlands) and their habitats, including consideration of monitoring requirements; • an assessment of construction and operational water quality impacts, taking into account impacts from both accidents and runoff (i.e. acute and chronic impacts), having consideration to impacts to surface water runoff, soil erosion and sediment transport, mass movement, and spoil, supply, use and disposal and waste management. The assessment of water quality impacts is to have reference to relevant public health and environmental water quality criteria, including those specified in the <i>Australian and New Zealand Guidelines for Fresh and Marine Water Quality</i> (ANZECC/ARMCANZ 2000), any applicable regional, local or site-specific guidelines, water quality objectives, and any licensing requirements; • an assessment of waterways to be modified as a result of the proposal, including ecological, hydrological and geomorphic impacts (as relevant), including temporary crossings and in-water platforms, and measures to rehabilitate the waterways to preconstruction conditions or better, including fish passage requirements consistent with <i>Policy and Guidelines for Fish Friendly Waterway Crossings</i> (DPI 2004); • identification of potential impacts and benefits of the proposal on existing flood regimes, consistent with the <i>Floodplain Development Manual</i> (Department of Natural Resources 2005), with an assessment of the potential changes to flooding behaviour (levels, velocities, storage and direction) and impacts on bed and bank stability, through flood modelling (using a validated model), including: <ul style="list-style-type: none"> ○ detailed description, justification and assessment of the flood management objectives, and other design objectives and design (including bridge, culvert and embankment design), ○ flood assessment and modelling undertaken for a range of flood events, including (as a minimum) the 1 in 10 year, 1 in 100 year flood events and the probable maximum flood, or an equivalent extreme event. The assessment is to demonstrate how the assessment, including the use of the modelled events listed above, provides consideration of blockage, climate change and impacts of land use change on flood hydrology, noting below, ○ modelling of the effect of the proposal (including fill) on current and future flood behaviour for the range of design events identified
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	<p>above, with use of the 1 in 200 year and 1 in 500 year flood events as proxies for assessing sensitivity to an increase in rainfall intensity due to climate change,</p> <ul style="list-style-type: none"> ○ an assessment of afflux and flood duration (inundation period) on land, infrastructure, property and business operations (including agricultural land and stock movement to flood refuges and evacuation routes), hazard, evacuation and emergency service provision within the affected area, and future development potential of upstream and access affected land, ○ an assessment of impacts associated with the Hunter Valley Flood Mitigation Scheme, ○ an assessment of flooding during construction of the proposal, ○ a cumulative flood assessment of the impact of other major projects recently completed, approved or preparing for construction, and ○ an assessment of emergency management, evacuation and access, and contingency measures for the development considering the full range of flood risk (based upon the probable maximum flood or an equivalent extreme flood event); <ul style="list-style-type: none"> • an assessment of groundwater impacts, taking into consideration impacts associated with geotechnical ground treatments, cuttings and fill locations, and cumulative impacts on regional hydrology, in particular the Tomago Sandbeds Catchment Area drinking water supply. The assessment shall consider: the extent of drawdown including inflows impacts to groundwater characteristics, quality, quantity, and connectivity, discharge and recharge rates, and implications for water courses, groundwater users, groundwater dependent ecosystems, riparian areas and wetlands. The assessment must give consideration to the <i>NSW Aquifer Interference Policy</i> and the relevant Water Sharing Plans; • identification of potential impacts on acid sulfate soils in accordance with the relevant guidelines and a description of the mitigation measures proposed to minimise potential impacts; • an overview of spoil management processes for the proposal, including consideration of the indicative cut/fill balance and reuse options for spoil generated by the proposal; and • a contaminated lands assessment in accordance with relevant guidelines. <p>Noise and Vibration – including, but not limited to:</p> <ul style="list-style-type: none"> • an assessment of the noise impacts of the proposal during operation, consistent with the <i>Road Noise Policy</i> (EPA 2011) and relevant guidelines. The assessment must include specific consideration of impacts to receivers (such as, but not limited to, dwellings, child and aged care centres, educational establishments, hospitals, motels, nursing homes, places of worship, or recreation), including specific consideration of sleep disturbance and, as relevant, the characteristics of noise (e.g. low frequency noise), and identify reasonable and feasible mitigation measures; • an assessment of construction noise and vibration impacts, consistent with the <i>Interim Construction Noise Guideline</i> (DECCW 2009) and <i>Assessing Vibration: a technical guideline</i> (DEC 2006). The assessment must have regard to the nature of construction activities (including transport, tonal or impulsive noise-generating works and the removal of operational noise barriers, as relevant), the intensity and duration of noise and vibration impacts, the nature, sensitivity and impact to potentially affected receivers, the need to balance timely conclusion of noise and vibration-generating works with periods of receiver respite, and other factors that may influence the timing and duration of
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	<p>construction activities (such as traffic management), and mitigation and management measures, and the construction hours, including proposed extended construction hours;</p> <ul style="list-style-type: none"> • if blasting is required, addressing the relevant requirements of <i>Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration</i> (ANZEC 1990); and • an indication of potential for works outside standard working hours, including predicted levels and exceedances, justification for the activity and discussion of available mitigation and management measures, and the affected communities view on the out of hours works. <p>Biodiversity – including, but not limited to:</p> <ul style="list-style-type: none"> • an assessment of the potential ecological impacts of the proposal, with specific reference to vegetation and habitat clearing, connectivity, edge effects, weed dispersal, riparian and aquatic habitat impacts, soil and water quality impacts and operational impacts. The assessment must: <ul style="list-style-type: none"> ○ be undertaken in accordance with the <i>Framework for Biodiversity Assessment</i> (Office of Environment and Heritage (OEH) 2014) and the <i>NSW Biodiversity Offsets Policy for Major Projects</i> (OEH 2014), and by a person accredited in accordance with section 142B(1)(c) of the <i>Threatened Species Conservation Act 1995</i>. Impacts on species, populations and ecological communities that will require further consideration and provision of information specified in section 9.2 of the <i>Framework for Biodiversity Assessment</i> include those identified by the OEH including the <i>Diuris arenaria</i> (Sandhill Doubletail). Species specific surveys shall be undertaken for those species and in accordance with the survey requirements specified by the OEH (including during further consultation with the OEH), ○ in relation to aquatic biodiversity be consistent with the <i>Policy and Guidelines for Fish Habitat Conservation and Management – Update 2013</i> (DPI 2013), ○ where there are potential impacts to the OEH estate reserved under the <i>National Parks and Wildlife Act 1974</i> or where the proposal is located upstream of OEH estate, an assessment of the matters to be considered outlined in the <i>Guidelines for developments adjoining land and water managed by DECCW</i> (DECCW 2010), ○ make specific reference to impacts on landscape values, biodiversity values of native vegetation and threatened species or populations, including worst case estimates of vegetation clearing and operational impacts, and ○ demonstrate a design philosophy of impact avoidance on ecological values, and in particular, ecological values of high significance, and be consistent with the ‘avoid, minimise or offset’ principle. <p>Heritage – including but not limited to:</p> <ul style="list-style-type: none"> • impacts to <i>Aboriginal heritage</i> (including cultural and archaeological significance), in particular impacts to Aboriginal objects and potential archaeological deposits (PAD), should be assessed. The assessment shall be undertaken generally consistent with the <i>Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW</i> (OEH 2011) and related guidelines and requirements (whilst taking into account s.115ZG of the EP&A Act). Where impacts are identified, the assessment shall: <ul style="list-style-type: none"> ○ outline the proposed mitigation and management measures (including measures to avoid significant impacts and an evaluation of the effectiveness of the measures),
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	<ul style="list-style-type: none"> ○ be undertaken by a suitably qualified heritage consultant(s), ○ demonstrate effective consultation with Aboriginal communities in determining and assessing impacts and developing and selecting options and mitigation measures (including the final proposed measures), ○ assess and document the archaeological and cultural significance of cultural heritage values of affected sites, and ○ undertake appropriate archaeological investigations generally in accordance with the <i>Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW</i> (DECCW 2010), to establish the full spatial extent and significance of any archaeological evidence across each site/area of PAD, and include the results of these excavations. If an alternative excavation method is proposed, it shall be developed in consultation with Office of Environment and Heritage. <p>Landscape, Design and Visual Amenity – including, but not limited to:</p> <ul style="list-style-type: none"> • consideration of the landscape, design and visual amenity implications of the proposal, including supporting infrastructure, during construction and operation. The assessment must: <ul style="list-style-type: none"> ○ identify the design and landscaping objectives to enhance the design of the proposal and associated structures (including bridge and viaduct structures, embankments, batters and cuttings, and noise mitigation structures), interchanges, and road infrastructure facilities, ○ identify and evaluate the visual impacts and design aspects of the proposal on surrounding areas, in particular impacts on existing views and vistas, streetscapes, key sites and landscapes, ○ detail measures to ameliorate visual impacts during construction and operation of the proposal, including measures to manage lighting impacts, ○ demonstrate how the proposed hard and soft design elements of the proposal would be consistent with the existing and desired future character of the area; and • provide artists' impressions, photomontages and perspective drawings of the proposal from a variety of locations along and adjacent to the route.
Other Issues	<p>Land Use, Social and Economic — including, but not limited to:</p> <ul style="list-style-type: none"> • impacts on directly affected properties and land uses, including impacts related to access, severance and infrastructure, existing and proposed land use, property acquisition and amenity related changes; • social and economic impacts to the community and businesses in the vicinity of the proposal (including agricultural and industrial businesses), associated with traffic, access, property, public domain and amenity related changes; • a description of and assessment of major utility relocations and associated impacts; • consider options for the future use of surplus or residual land; and • a draft Community Involvement Framework identifying relevant stakeholders, procedures for distributing information and receiving/responding to feedback and procedures for resolving community complaints during construction. Key issues that should be addressed in the draft Plan should include (but not necessarily be limited to): <ul style="list-style-type: none"> ○ traffic and transport management (including local roads, property access, pedestrian and cycle access), ○ social impacts,

	<ul style="list-style-type: none"> ○ landscaping/urban design matters, ○ hydrology and flooding, ○ soil and water quality (including wetlands, aquatic and riparian vegetation), ○ biodiversity (including flora and fauna, and ○ noise and vibration mitigation and management, including work outside standard construction hours. <p>Air Quality — including, but not limited to:</p> <ul style="list-style-type: none"> • potential for impacts on local and regional air quality, including sensitive receivers; and • details of the proposed mitigation measures to prevent the generation and emission of dust. <p>Environmental Risk Analysis — notwithstanding the above key assessment requirement, the EIS must include an environmental risk analysis to identify potential environmental impacts associated with the proposal (construction and operation), proposed mitigation measures and potentially significant residual environmental impacts after the application of proposed mitigation measures. Where additional key environmental impacts are identified through this environmental risk analysis, an appropriately detailed impact assessment of this additional key environmental impact must be included in the EIS.</p>
Consultation	<p>During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners.</p> <p>In particular you must consult with:</p> <ul style="list-style-type: none"> • local, State and Commonwealth government authorities, including the: <ul style="list-style-type: none"> ○ Department of the Environment (Cth), ○ Environment Protection Authority, ○ Office of Environment and Heritage, ○ Department of Primary Industries (including Fishing and Aquaculture, Land and Natural Resources, and Water), ○ Mine Subsidence Board, ○ Australian Rail Track Corporation (ARTC), ○ Port of Newcastle, ○ Newcastle City Council, ○ Port Stephens Council, and ○ emergency services; • utilities and service providers including: <ul style="list-style-type: none"> ○ TransGrid, ○ AGL, and ○ Hunter Water Cooperation; • specialist interest groups, including Local Aboriginal Land Councils, Aboriginal stakeholders, and environmental stakeholders; and • the public, including community groups, businesses, and adjoining and affected landowners. <p>The EIS must describe the consultation process and the issues raised, and identify where the design of the proposal has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.</p>
Further consultation after 2 years	<p>If you do not lodge an EIS for the proposal within 2 years of the issue date of these SEARs, you must consult further with the Secretary in relation to the preparation of the EIS.</p>