



Roads and Traffic Authority of NSW

Oxley Highway to Kempsey Upgrading the Pacific Highway Environmental Assessment

MAIN VOLUME

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Glossary

Term	Definition
Access road	A subsidiary no through road constructed to provide property access to service roads.
Acid sulfate soils	Naturally acid clays, mud and other sediments usually found in swamps and estuaries. They could become extremely acidic when drained and exposed to oxygen, and could produce acidic leachate and runoff, which can pollute receiving waters and liberate toxins.
Afflux	An increase in water level due to additional obstacles being placed in the flow path.
Alignment	A detailed, geometric layout, in plan and profile, following a general route.
Ancillary facilities	Temporary facility for construction, including for example an office and amenities compound, construction compound, batch plant (concrete or bitumen), materials storage compound, maintenance workshop, testing laboratory or material stockpile areas.
Annual average daily traffic	Volume representing the total traffic in both directions at each location, calculated from mechanically obtained axle counts.
Annual average daily vehicles	Represents the average number of vehicles passing in both directions during a 24 hour period estimated over a period of one year.
At-grade intersection	A junction at which two or more roads meet at the same level (or grade).
Archaeological site	A site is defined as any material evidence of past Aboriginal activity that remains within a context or place that can be reliably related to that activity. Usually a site classification requires a minimum of two detected artefacts.
Arterial road (A-Class)	<p>An arterial style highway is suitable for areas where there are fewer vehicles turning onto the upgraded highway. It includes four lanes (two in each direction) in separated carriageways. The speed limit generally would be posted at 100 kilometres per hour.</p> <p>Access to the highway is by:</p> <ul style="list-style-type: none"> • Surface level (or at-grade) intersections with local roads. • Some grade separated interchanges and traffic arrangements where warranted. • Left-in / left-out only access for local roads and properties. • U-turn facilities for vehicles to turn around at appropriate, safe locations.
Batch plant	A batch plant is a facility that produces asphalt or concrete for use in construction.
Batter	The side slope of fills or cuts or the degree of such slope.
Bedrock aquifer	A groundwater aquifer that travels along a bedrock base.
Brackish water	Water that has a higher salinity than fresh water, but is less saline than sea water.
Carriageway	Portion of a road or bridge used by vehicles (inclusive of shoulders and slip lanes).
Contiguity	Refers to the connections between places or features such as villages or vegetated areas.
Construction resources	Construction resources are the materials required for the construction of the upgraded highway. These materials could include gravel, sand, water, cement, bitumen, bridge components, drainage pipes, landscaping materials and fuel.

GLOSSARY

Term	Definition
Community severance	Disturbance to a community (such as building a road through the community) that limits people's ability to or desire to move through that area, which in turn can reduce accessibility to key services and damage local social networks and community cohesion.
Critical infrastructure	Project declared as being critical infrastructure under section 75C of the <i>Environmental Planning and Assessment Act 1979</i> .
Crushing plant	A rock processing facility used to crush larger pieces of rock into a regular size for use in road construction.
Culvert	An enclosed channel used for the passage of surface water under a road or other embankment.
Cut (batter)	The material removed (excavated) from the existing ground surface.
Cut-off drains	Cut-off drains are used to prevent water from flowing without restriction down the slopes of cuts and fills.
Decibel (dB)	A unit used in the comparison of powers and levels of sound energy. A comprehensive glossary of noise terms can be found in Section 1 of the <i>Environmental Noise Management Manual</i> (RTA 2001), which can be obtained from RTA's website at www.rta.nsw.gov.au/environment/noise/ .
Design speed	A nominal speed used for the design of geometric features of the road, such as curves.
Dewatering	A term used to describe the removal of groundwater or surface water from the construction site.
Dual carriageway	A road with carriageways separated by a dividing median for traffic travelling in each direction.
Earthworks	The process of extracting, moving and depositing earth during construction.
Ecological community	An ecological community is an assemblage of two or more populations of different species occupying the same geographical area.
environmental assessment (process)	A specialised part of the decision-making process, where the environmental impact of a development proposal or activity is considered in detail, together with other aspects of the development.
Environmental Assessment (reporting)	The documentation of the outcomes of the environmental assessment process required under Part 3A of the <i>Environmental Planning and Assessment Act 1979</i> . A formal evaluation of the effect or likely effect of a development on the environment.
Environmental management system	A set of processes and practices that enable an organisation to reduce its environmental impacts and increase its operating efficiency.
Fill (batter)	The material placed in an embankment.
Geomorphology	Refers to the science of landforms and the processes that shape them such as the sediment transport and erosion by rivers.
Grade separation	The separation of through and cross traffic so that crossing movements that would otherwise cause conflict are at different levels.
Groundwater drawdown	The drawdown is the change in water level observed at a well in an aquifer.
Half interchange	Interchange that only provides for either southbound or northbound entry or exit from the carriageways.
Interchange	A grade separation of two or more roads with one or more interconnecting carriageways or ramps.

Term	Definition
Intersection	A meeting of two or more roads.
Level of service	A fundamental performance measure used in the planning design and operation of roads. It provides the basis for determining the number of lanes to be provided in the road network. Level of service definitions from A to F are provided in Table 18-6 .
Mid North Coast	The Mid North Coast region of NSW is commonly described as the area between Karuah and Yamba and includes the urban centres of Bulahdelah, Taree, Port Macquarie, Kempsey, Coffs Harbour and Grafton.
Mono-sulfidic black ooze	Mono-sulfidic black oozes are reactive gels that accumulate in watercourses. They can be difficult to work, treat and dry, and can oxidise readily once in contact with oxygen.
Motorway (M-Class)	<p>A motorway provides motorists with a choice of:</p> <ul style="list-style-type: none"> • Being able to use a local traffic route for slower speeds and local access. • Using the motorway for longer distance travel at higher speeds. <p>A motorway would have at least four lanes (two in each direction) in separate carriageways. The speed limit would generally be posted at 110 kilometres per hour. Access to the motorway would be controlled by:</p> <ul style="list-style-type: none"> • Interchanges and traffic arrangements with on- and off-ramps to access the upgraded highway for frequently used areas. • Local roads to cross above or below the upgraded highway. • A reduced number of left-in / left-out arrangements for local roads and properties, if these cannot be eliminated entirely.
Off-ramp	A ramp that provides for exit from the carriageways to an interchange or traffic arrangement.
On-ramp	A ramp that provides access to the carriageways from an interchange or traffic arrangements.
Overbridge	A bridge designed to carry traffic over another road.
Palaeochannels	These are channels of unconsolidated sediments or semi-consolidated sedimentary rocks deposited in ancient river and stream channel systems.
Preloading	Fill embankments are used to raise the road above floodplains to reduce the risk of the road being cut by floodwaters. As the underlying ground conditions in the floodplain are sometimes weak, fill material can be placed for the embankments in these areas early in the construction process to help reduce the amount of settlement of the embankment that occurs after the road has been opened to traffic.
Pacific Highway Upgrade Program	The Pacific Highway Upgrade Program to upgrade the Pacific Highway between Hexham (near the F3 Freeway) in NSW and the Queensland border.
pH	Measure of acidity.
Proposal	The Oxley Highway to Kempsey Pacific Highway upgrade that is subject of this Environmental Assessment.
Rest area	An area, with access to and from a road, used to provide amenities for road users.
Sedimentation basin	The Proposal would include temporary sedimentation basins for the construction phase, a number of which would be converted to provide an operational phase water quality function. The basins would serve to treat both day-to-day runoff from the road, and have adequate capacity to contain a major accidental spill from a traffic crash. The size, shape and location of these basins would be finalised during the detailed design stage and would vary according to local conditions and sensitivity of water catchments.
Sensitive receivers	A location that is susceptible to changes in noise or visual amenity. Typical receivers include residences, locations for community gatherings and churches.

Term	Definition
Sensitive receptors	A location that is susceptible to changes in air quality. Typical receptors include residences, hospitals and schools.
Service road	A subsidiary roadway constructed alongside the principal carriageway that is only connected with the principal carriageway at selected points. It reduces the number of access points to a major road, with a consequent improvement in safety.
Slip lane	A lane provided for left turning vehicles allowing them to avoid stopping at an intersection.
Soft soils	Soft soil is described in construction terms as having limited resistance to load, and is weak in terms of supporting structures such as buildings or roads.
Spoil disposal area	An area used to permanently store material not reused in the construction of the upgraded highway such as excess topsoil or earthworks.
Staging	Staging of construction works involves separating the Proposal into smaller, more manageable sections. As an example, the entire Proposal is approximately 37 kilometres in length and could be difficult and expensive to construct as a single work package. To construct the upgraded highway in the most cost effective manner, the Proposal could be broken into three or four sections with each section constructed individually. These sections could also then be open to traffic separately.
State listed wetland	A wetland listed under State Environmental Planning Policy No. 14 Coastal Wetlands.
Station	Distance in metres from the beginning of a road or a key point. For the Proposal this is measured from the southern limit starting at station 0, through to the northern limit of works at Stumpy Creek at station 37800.
Stockpile	A stockpile area is an area where excavated rock and earth, topsoil, mulched trees and vegetation can be stored.
Traffic arrangement	A modified grade separation where the on- and off-ramps are separated from the overbridge or vehicular underpass structure.
Truck stopping bay	A facility that provides a safe location for trucks to stop on the side of a road.
Wick drains	Also known as vertical drains are drains installed with specialised equipment to allow soft soils to settle rapidly.

Abbreviations

Term	Definition
ABS	Australian Bureau of Statistics
ANZECC	Australian and New Zealand Environment and Conservation Council
ARTC	Australian Rail Track Corporation
AusLink Act	Federal <i>AusLink (National Land Transport) Act 2005</i>
dB(A)	A-weighted decibels
DECC	Department of Environment and Climate Change (NSW) <i>now Department of Environment, Climate Change and Water (NSW)</i>
DECCW	Department of Environment, Climate Change and Water (NSW) <i>formerly Department of Environment and Climate Change (DECC)</i>
DEWHA	Department of the Environment, Water, Heritage and the Arts (Federal)
DNR	Former Department of Natural Resources (NSW) <i>now part of DECCW</i>
DPI	Department of Primary Industries (NSW) <i>now Department of Industry and Investment (NSW)</i>
DII	Department of Industry and Investment (NSW) <i>formerly Department of Primary Industries (DPI)</i>
EPA	Environment Protection Authority (NSW) <i>now part of DECCW</i>
EP&A Act	NSW <i>Environmental Planning and Assessment Act 1979</i>
EPBC Act	Federal <i>Environment Protection and Biodiversity Conservation Act 1999</i>
Forests NSW	Forests New South Wales <i>a public trading enterprise within Department of Industry and Investment (NSW)</i>
NSW	New South Wales
POEO Act	NSW <i>Protection of the Environment Operations Act 1997</i>
RTA	Roads and Traffic Authority (NSW)
TSC Act	NSW <i>Threatened Species Conservation Act 1995</i>