Concept Approval

Section 75O of the *Environmental Planning and Assessment Act 1979*

I, the Minister for Planning and Infrastructure, under the *Environmental Planning and Assessment Act 1979* (the Act), determine:

a) to approve the Concept Plan referred to in Schedule 1, subject to the terms of approval in Schedule 2 and the modifications in Schedule 3;
b) under section 75P(1)(b) of the Act that approval to carry out the development the subject of the Concept Plan is to be subject to:
   i. Part 4 of the Act, where that part of the development is of a type that is identified as permissible with consent by an applicable environmental planning instrument (EPI); or
   ii. Part 5 of the Act, where that part of the development is a type of activity within the meaning of Part 5 and identified as permissible without consent by an applicable EPI; or
   iii. section 76 of the Act, where that part of the development is of a type identified as exempt development by an applicable EPI;
c) under section 75P(2)(c) of the Act:
   i. where development is subject to Part 4 of the Act (other than complying development), that development is subject to the further environmental assessment requirements specified in Schedule 3 of this approval, and
   ii. where development is subject to Part 5 of the Act, that development is subject to the further environmental assessment requirements specified in Schedule 3 of this approval.

Brad Hazzard MP
Minister for Planning and Infrastructure

Sydney 2012

SCHEDULE 1

Application No:	09_0096
Proponent:	Newcastle Port Corporation
Approval Authority:	Minister for Planning and Infrastructure
Land:	Lot 33 in DP 1116571 - land within the former BHP Steelworks site, off Selwyn Street, Mayfield, within the Newcastle local government area

Proposal:	The concept plan involves the redevelopment of 90 hectares of port-side land in Mayfield, for land based port facilities serving a mix of cargo types. The Concept Plan also includes supporting road and rail infrastructure to service the port facilities.

DEFINITIONS

Act, the	*Environmental Planning and Assessment Act, 1979*
ARTC	Australian Rail Track Corporation
Concept Plan	The concept plan the subject of this approval
Concept Plan Site	Land on which all components of the Port Terminal Facilities will be located.
Council	Newcastle City Council
Department, the (DP&I)	Department of Planning and Infrastructure
Director-General, the	Director-General of the Department of Planning and Infrastructure (or delegate)
Director-General's Approval	A written approval from the Director-General (or delegate). Where the Director-General's Approval is required, the Director-General will endeavour to provide a response within one month of receiving an approval request. The Director-General may ask for additional information if the approval request is considered incomplete. When further information is requested, the time taken for the Proponent to respond in writing will be added to the one month period.
EA	Environmental Assessment
EPA	Environment Protection Authority of the Office of Environment and Heritage
HDC	Hunter Development Corporation
Intertrade Industrial Park	The site adjoining the Concept Plan, being part of the former BHP steel works site.
Minister, the	Minister for Planning and Infrastructure
Mtpa	Million tonnes per annum
OEH	Office of Environment and Heritage (formerly the Department of Environment, Conservation, Climate Change and Water)
Project	Development as described in the Concept Plan (including development to be assessed under Part 4 and Part 5 of the Act)
Project Approval	Approval granted for development in accordance with the *Environmental Planning and Assessment Act, 1979*
Proposal	Port Terminal Facilities - Concept Plan
Proponent	Newcastle Port Corporation
Publicly Available	Available for inspection by a member of the general public (for example available on an internet site or at a display centre)
Remediation Works	Works required to remediate and manage contamination and the risks from it.
RLMC	Regional Land Management Corporation
RMS	Roads and Maritime Services
Utilities Infrastructure	Infrastructure to support the future development of the Concept Plan site, including but not limited to water, sewerage, electricity and telecommunications infrastructure, but not including transport infrastructure

TEU	Twenty foot equivalent units
VOC	Volatile Organic Compound

SCHEDULE 2

1. TERMS OF CONCEPT PLAN APPROVAL

1.1 The Proponent shall carry out the project generally in accordance with:

a) Major Project Application 09_0096;

b) the *Mayfield Site Port-Related Activities Concept Plan Environmental Assessment*, Volumes 1 to 6, prepared by AECOM Australia Pty Ltd and dated July 2010;

c) the *Mayfield Site Port-Related Activities Concept Plan Submissions Report*, prepared by AECOM Australia Pty Ltd and dated December 2010;

d) the Addendum to the Submissions Report, prepared by AECOM Australia Pty Ltd and dated 4 March 2011;

e) the Newcastle Port Corporation – Modification of Concept Plan, prepared by Newcastle Port Corporation and dated 6 December 2013; and

f) the terms of this approval.

1.2 In the event of an inconsistency between:

a) the terms of this approval and any document listed from term 1.1a) and 1.1d) inclusive, the terms of this approval shall prevail to the extent of the inconsistency; and

b) any document listed from terms 1.1a) and 1.1e) inclusive, and any other document listed from terms 1.1a) and 1.1e) inclusive, the most recent document shall prevail to the extent of the inconsistency.

1.3 If there is any inconsistency between this concept plan approval and any related approvals (being those approvals subject to the requirements of this Concept Plan), this Concept Plan approval shall prevail to the extent of the inconsistency.

1.4 The Proponent shall comply with any reasonable requirement(s) of the Director-General arising from the Department's assessment of:

a) any reports, plans or correspondence that are submitted in accordance with this Concept Plan approval or any related approvals; and

b) the implementation of any actions or measures contained in these reports, plans or correspondence.

1.5 With the approval of the Director-General, the Proponent may prepare and submit any management plan, strategy or monitoring program required by this approval on a progressive basis. Where a management plan, strategy and monitoring program is required before carrying out any development or stage of development, the document may be prepared and submitted in relation to either discrete components of the project or for a specified time period.

Limits of Approval

1.6 This Concept Plan approval does not apply to berths, berthing or harbour operations. It also does not apply to activities approved or legally operating at the site in accordance with other project approvals at the date of this Concept Plan approval.

1.7 To avoid any doubt, this Concept Plan approval does not permit the construction or operation of any project, which will be subject to separate approval(s) under the Act.

1.8 The provisions of requirements 2.5, 2.6, 2.7, 2.8, 2.10, 2.11, 2.12, 2.13, 2.14, 2.15, 2.19, 2.20, 2.20 and 2.29 do not apply to utilities infrastructure if developed independently from other port uses.

Contamination

1.9 This Concept Plan approval does not limit or affect the requirements the Voluntary Remediation Agreement issued to the RLMC pursuant to section 26 of the *Contaminated Land Management Act, 1997*, dated 14 September 2005.

1.10 The requirements of development consent DA 293-08-00 approved by the Minister for Planning on 6 April 2001 (and as subsequently modified), as they relate to remediation works, including the maintenance and monitoring of remediation works and the Concept Plan site in general (including groundwater and surface water monitoring), and as they relate to development constructed and operated under the development consent, remain in force, until they are superseded by future project approvals or as otherwise agreed by the Director-General, in consultation with the EPA.

Heritage

1.11 This Concept Plan approval does not limit or affect the requirements the Excavation Permit requirements issued to the RLMC (and transferred to HDC) pursuant to section 140 of the *Heritage Act, 1977*, dated 21 September 2005.

1.12 The requirements of development consent DA 293-08-00 approved by the Minister for Planning on 6 April 2001 (and as subsequently modified), as they relate to cultural heritage, remain in force, until they are superseded by future project approvals or as otherwise agreed by the Director-General, in consultation with the OEH.

Statutory Requirements

1.13 This Concept Plan approval does not remove any obligation to obtain, renew, or comply with licences, permits or approvals as required by law associated with any project subject to this Concept Plan approval.

Existing and Approved Development

1.14 Construction and operational environmental impacts associated with existing and approved development not subject to this shall be considered in the assessment of projects associated with this Concept Plan and shall be incorporated into any management plan, strategy, monitoring program and review (and the like) required under this Concept Plan approval.

SCHEDULE 3

2. MODIFICATIONS TO THE CONCEPT PLAN – ENVIRONMENTAL ASSESSMENT REQUIREMENTS

Project Stages Subject to Other Provisions of the Act

2.1 Under section 75P(2)(c) of the Act, the following environmental assessment requirements apply with respect to future development that is subject to Part 4 (other than complying development) or Part 5 of the Act:

General Requirements

a) demonstration that the project is generally consistent with the requirements of this approval and with the scope and intent of the Concept Plan outlined in the documents under requirement 1.1 of this approval;

b) detailed project description, including construction, operation, maintenance, and staging; and the design and location of ancillary infrastructure (including consideration of the *Utilities Infrastructure Plan* prepared as a requirement of this approval);

c) details of the consultation process and outcomes with relevant stakeholders, including with (but not limited to):
   i. Government authorities, such as DP&I, OEH, EPA, DPI, Transport for NSW, HDC and Council;
   ii. Service and infrastructure providers, such as ARTC, RMS, Railcorp, AusGrid, Hunter Water Corporation and Jemena;
   iii. Special interest groups and the public, including adjoining and affected landowners; and

d) an updated environmental assessment of relevant statutory matters and *Issue-Specific Requirements* for construction and operation (including cumulative impacts of existing and approved development on the site and on adjoining sites) and the identification of relevant avoidance, mitigation and management measures to address associated impacts.

Issue-Specific Requirements

e) a **Transport Assessment** that assesses the transport, access and traffic impacts from projects associated with this Concept Plan. The assessment shall:
   i. consider the transport limits and objectives of the Concept Plan, including the objective of not exceeding the total truck movement limits identified in requirement 2.3 (Table 3);
   ii. consider freight volume forecasts and transport demand;
   iii. consider the *Transport Infrastructure Strategy* (if required) and identified infrastructure, service improvements or management measures (if identified);
   iv. consider the traffic performance and functionality of the local, regional and State road network and site access, including the consideration of development within the vicinity of the Concept Plan site (including connecting road networks) and the cumulative impacts from adjoining development;
   v. consider rail impacts associated with the project, including: network capacity and the availability of rail access and paths, rail operations on the Port Waratah and Bullock Island loops, and rail access and interface agreements;
   vi. consider the *Transport Monitoring and Review* results undertaken as a requirement of this approval;
   vii. identify rail and road infrastructure requirements, including those specified in this approval and the corresponding exceptions;

viii. identify traffic management measures consistent with the requirements of the *Traffic Management Plan* required under this approval;
ix. identify rail service and infrastructure changes and upgrades, and initiatives to facilitate an increased rail share of freight movements;
x. consider construction traffic routes and associated traffic impacts, including capacity constraints, changes to access and safety impacts; and
xi. include consideration of relevant road and rail design standards including but not limited to *Austroads Guide to Road Design 2009 (with RTA supplements) , Australian Standards,* and *Newcastle Development Control Plan 2005 – Element 4.11 (Subdivision).*

f) An **Air Quality and Greenhouse Gas Assessment** that assesses emissions and air quality impacts on local and regional receivers and at a broader level. The assessment shall:
i. identify emissions and pollutants of concern (including from associated shipping and transport activities) and identify surrounding sensitive receptors that may be impacted by potential pollutants;
ii. consider the site pollutant performance criteria identified in this approval;
iii. include a refined assessment of pollutants on receptors, including PM_{10} concentrations, taking into account the *Site Air Quality Model, Meteorological Monitoring and Air Quality Monitoring Program* required under this approval, and cumulative air quality impacts, as relevant;
iv. identify mitigation and management measures that would be implemented to prevent adverse impact to local and regional air quality and sensitive receptors, including designs that allow provision of 'cold ironing' and the demonstration of best practice air quality management, with the objective of not increasing emission concentrations beyond the boundary of the site above existing background levels;
v. a scope 1 Greenhouse Gas Assessment and the identification of management measures and sustainability initiatives to reduce greenhouse gas emissions; and
vi. include consideration of the *Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in NSW* (EPA, 2001).

g) A **Noise and Vibration Assessment** that assesses noise and vibration impacts. The assessment shall:
i. consider noise goals defined in this approval;
ii. consider the *Concept Plan Noise Model* and *Noise Verification Monitoring Program*, required under this Concept Plan approval and identify project specific noise and vibration criteria;
iii. identify baseline and future conditions and the levels and character of noise and vibration sources;
iv. identify sensitive receivers, modelling assumptions and noise and vibration impacts, including on and off-site road and rail noise impacts on receivers within the vicinity of the site, such as road traffic noise impacts on residential areas adjacent to Industrial Drive;
v. include details of noise and vibration attenuation measures and how these would be implemented and managed (including costs to property owners, where relevant), should the predicted levels exceed the Concept Plan and project specific criteria, along with a schedule for implementing such works; and
vi. include consideration of the following guidelines or any documents that supersede them: *NSW Industrial Noise Policy* (EPA, 2000) for operational noise; *Interim Construction Noise Guideline* (DECC, 2009) for site

establishment and construction; *Environmental Noise Management – Assessing Vibration: A Technical Guideline* (DECC, 2006) for vibration; the *NSW Roads Noise Policy* (DECCW, 2011) for off-site traffic noise and the *Interim Guideline for the Assessment of Noise from Rail Infrastructure Projects* (DECC and DoP, 2007) for off-site rail noise.

h) A **Hydrological Assessment** that assesses the potential on and off site hydrological impacts of the project and the projects interaction with the sites hydrological objectives. The assessment shall:
   i. consider flooding coastal risk impacts on the project and adjoining land uses within, adjoining and within the locality of the site, including the consideration of climate change risks, and the NSW sea level rise planning benchmarks;
   ii. consider surface and storm water impacts, including interactions with remediation works and the sites drainage regime, spills and leaks and impacts to coastal processes;
   iii. consider impacts to groundwater, including the need to isolate stormwater from land contamination and the local groundwater table;
   iv. detail flooding, surface and storm water, groundwater, and water quality management and monitoring measures, including the maintenance of measures, the application of first flush collection systems and Water Sensitive Urban Design measures; and
   v. consideration of the *Stormwater Management Strategy* required under this approval; and
   vi. relevant documents including the *Floodplain Development Manual* (DIPNR, 2005)*, Flood Risk Management Guide* (DECCW, 2010), and *Newcastle Development Control Plan 2005.*

i) A **Hazards and Risks Assessment** for potentially hazardous projects (including projects that are associated with the transport, handling or storage of hazardous or dangerous materials) that details a hazards assessment and the identification of risk reduction measures to ensure that risk levels for the projects are maintained within acceptable levels at a project, precinct and site level. The assessment shall:
   i. consider appropriate separation distances, hazard safeguards, *Port Emergency Response Plan*, *Safety Management System*, and *Hazard Audits* as required by this approval;
   ii. consider climate change and associated coastal risks and hazards,
   iii. consider *State Environmental Planning Policy No.33 – Hazardous and Offensive Development* and associated guidelines and include (as relevant):
      a) a hazard analysis taking into account *Hazardous Industry Planning Advisory Paper No 6 – Hazard Analysis*, Department of Planning, January 2011, and the identification of impact distances and buffer zones for fire, explosion and gas release (as relevant) to prevent impacts on adjoining land uses both within and external to the site;
      b) a hazardous materials transport study detailing routes to be used for the movement of vehicles (road and rail) carrying hazardous or dangerous materials to or from the site, and shall take into account *Hazardous Industry Planning Advisory Paper No 11 – Route Selection*, Department of Planning, January 2011; and
      c) a fire safety study taking into account relevant aspects of *Hazardous Industry Planning Advisory Paper No 2 – Fire Safety Study Guidelines*, Department of Planning, January 2011, and *Best Practice Guidelines for Contaminated Water Retention and Treatment Systems*, Department of Planning, 1994.

j) A **Contamination Assessment** that assesses the potential environmental and human health risks of site contaminants on the project and impacts on site remediation outcomes, including remediation works and the maintenance and monitoring of those works. The assessment shall:

i. consider contamination risks, potential acid sulfate soils, site suitability and that the project will not increase risks on adjoining sites, waterways and/or projects;

ii. demonstrate compatibility with and will not have a detrimental impact on site remediation works (completed, current and future, as applicable) and the maintenance and monitoring of remediation works, including consideration of:

a) soil, ground water, surface water, VOC and odour works, including contaminants left in-situ or encapsulated,

b) the maintenance of remediation works, including cap integrity and permeability, site grading, levels and storm and waste water drainage systems, and VOC management measures,

c) the structural integrity of drainage works and the barrier wall, including the risk of surface and subsurface displacement resulting from future vertical and lateral loadings, easements, differential settlement, capping beam intrusions and foundation restrictions, and

d) access to and protection of existing and future groundwater monitoring wells;

iii. demonstrate that the design has assessed VOC risks and that it incorporates controls and protections to protect human health; and

iv. include consideration of the following documents:

a) *Contaminated Land Management Act, 1997, State Environmental Planning Policy No.55 – Remediation of Land* and related guidelines,

b) DA 293-08-00 approved by the Minister for Planning on 6 April 2001, as subsequently modified and related management plans, including the *Contaminated Site Management Plan*, dated 2009 prepared by Hunter Development Corporation, and

c) Voluntary Remediation Agreement pursuant to section 26 of the *Contaminated Land Management Act, 1997*, dated 14 September 2005 and related documents including the *Voluntary Remediation Proposal* prepared by the RLMC, dated 30 August 2005 and the *Remediation Action Plan* dated September 2004 and prepared by Sinclair Knight Mertz for the RLMC.

k) an **Archaeological Assessment** that assesses the potential archaeological resources of the site (historical archaeological relics) and the project impacts on the heritage significance of these resources. The assessment shall:

i. consider Excavation Permit (2005/S140/041) and the associated Research Design and Methodology;

ii. consider previous archaeological studies completed for the site, including the *Assessment of the Historical Archaeology and Research Design: Newcastle Steelworks Closure Area* (Umwelt, May 2005); and

iii. consider relevant documents including the NSW Heritage Manual (NSW Heritage Council) and associated guidelines.

l) an assessment at an appropriate level of detail, of other environmental issues but not limited to: social and economic, waste management, visual, landscaping and lighting

impacts. The assessment shall identify the measures for managing and mitigating any impacts, consistent with industry accepted environmental practice.

Berths

m) an assessment of the cumulative impacts of any berthing, water front structure or the like associated with any future project, including consideration of the *Issue-Specific Requirements* noted above, as relevant.

Transport

2.2 Projects associated with this Concept Plan shall be operated with the objective of not exceeding the capacity of the transport network, including the local, regional and State road network, and the total truck movement limits identified in Table 1, subject to the identified exceptions, which will be considered in future project assessments.

Note: Table 1 should be interpreted with reasonable flexibility to recognise the long term variance in assumed background traffic conditions, which can be influenced by broader transport enhancements and development not related to this concept plan approval.

2.3 Projects associated with this Concept Plan shall not exceed the total truck movement limits presented in Table 1, except as identified.

Table 1 – Initial Staging and Total Truck Movement Limits

Total Truck Movements per annum	**Total Truck Movements per day**	**Total Hourly Truck Movements in peak periods**
462,104	1,268	95

a) Truck movements by road may exceed the identified limits in Table 1 up to the limits identified in Table 2, subject to:

i. traffic monitoring identifying that Concept Plan related traffic movements are not having a detrimental impact on the local, regional and State road network and/or predicted background traffic growth is lower than the long term per annum growth rate of 1.0%; or
ii. Deleted
iii. the consideration of land use planning and development changes within the locality of the Concept Plan site, including approved uses on the adjoining Intertrade Industrial Park site, which may result in less traffic generation than considered under this Concept Plan.

Table 2: Intermediate Staging and Total Truck Movement Limits

Total Truck Movements per annum	**Total Truck Movements per day**	**Total Hourly Truck Movements in peak periods**
773,438	**2,120**	**159**

b) Truck movements by road may exceed the identified limits in Table 2 up to the limits identified in Table 3, subject to:

i. the consideration of the matters listed in requirement 2.3a), as relevant; and
ii. the implementation of a *Transport Infrastructure Strategy* as per requirement 2.4, which has been endorsed by Transport for NSW and RMS.

Table 3: Ultimate Staging and Total Truck Movement Limits

Total Truck Movements per annum	Total Truck Movements per day	Total Hourly Truck Movements in peak periods
1,017,882	**2,790**	**209**

Notwithstanding, projects associated with this Concept Plan shall be operated with the objective of not exceeding the total truck movement limits identified in Table 3.

Note: The above requirements do not permit an immediate increase to the identified limits in Table 1. Any exceedances of the limits identified in Table 1, consistent with the above requirements, shall only be permitted, following consideration of the exceedances in future project assessments.

Transport Infrastructure Strategy

2.4 Truck movements by road, which exceed the limits specified in requirement 2.3b) and Table 2, may be undertaken following the preparation, endorsement and implementation of a *Transport Infrastructure Strategy*.

The Strategy shall provide a framework for the development and implementation of local, regional and State road and rail infrastructure improvements or traffic management measures necessary for an increase in truck movements beyond the limits identified in requirement 2.3b) and Table 2. The Strategy shall be developed in consultation with the Department, Transport for NSW, RMS, HDC, Council, adjoining land owners and the local community. The Strategy shall include, but not necessarily be limited to:

a) the objectives and scope of the Strategy;
b) identification of stakeholders associated with the development of the Strategy, consultation undertaken with Stakeholders and how matters raised were considered;
c) freight volume demand forecasts for road and rail freight movement, including a demand and supply analysis and description of the supply chain for the Concept Plan (for all freight movement);
d) identification and alignment of road and rail movements with required road and rail infrastructure and service improvements or management measures required to meet forecast road and rail freight demand;
e) the feasibility of port freight movements utilising existing and identified infrastructure and service provisions measures for the proposal; and
f) identification of how and when the required infrastructure and service improvements or management measures will be delivered, including parties responsible for the funding and implementation of the works.

The Strategy shall be made available to the Director-General and Council following its endorsement by Transport for NSW and the RMS.

Traffic Management Plan

2.5 The Proponent shall prepare and implement a *Traffic Management Plan* for the Concept Plan site in consultation with RMS, HDC, Council, adjoining land owners and the local community to provide a framework for the coordinated management of traffic to, from, and within the Concept Plan site.

The Plan shall include traffic management devices and measures to facilitate the orderly movement of port related traffic movement to/from the road network, and shall include but not necessarily be limited to:

a) measures to ensure heavy vehicle access to and from the site will be primarily along the routes shown in Attachment A to this approval;
b) measures to minimise port freight movements inside am and pm peak traffic periods;
c) measures to encourage the equal distribution of truck movements between the Industrial Drive/George Street and Industrial Drive/Ingall Street intersections;
d) measures to prevent heavy vehicles accessing residential streets and areas within the vicinity of the site and to maintain the residential amenity of the local community; and
e) measures to encourage staff access to the site by means other than private vehicles.

The Plan shall be prepared and implemented prior to the operation of any projects associated with this Concept Plan approval and shall be updated prior to the commencement of any subsequent project approvals associated with this Concept Plan approval.

Transport Infrastructure Upgrades

Link Road

2.6 A link road between Ingall Street and Selwyn Street of suitable standard shall be provided prior to the operation of projects associated with this Concept Plan to minimise traffic impacts on Industrial Drive intersections and to maintain access for emergency vehicles to and between the different precincts of the site.

The timing of provision of the link road may be varied, subject to consideration of the matters outlined in requirement 2.9.

Road Intersections

2.7 The following road intersections shall be upgraded prior to the operation of any projects associated with this Concept Plan with the objective of improving or maintaining the performance of the intersections:

a) Industrial Drive/Ingall Street;
b) Industrial Drive/George Street; and
c) George Street/Selwyn Street.

The upgrades shall be generally consistent with those outlined in Attachment B and shall be designed in accordance with the *Guide to Road Design 2009* (Austroads) (with RTA supplements), and *Traffic Signal Design 2008* (RTA) (or as subsequently updated), and shall be informed by appropriate intersection analysis.

The timing, staging, scope and design of the upgrades may be varied, subject to consideration of the matters outlined in requirement 2.9.

Rail Access

2.8 Rail access to and within the Concept Plan site shall be configured and operated to facilitate increased rail mode share to and from the site, to accommodate train operations to minimise physical and operational impacts on other rail operations within the vicinity of the site, and shall be generally consistent with the following listed infrastructure and operational scenarios:

a) a new rail line extended between the One Steel line and the Bullock Island loop to provide direct access to the site for Port trains and the provision of at least two x 650m length rail sidings to service 1,300m length trains; and
b) the use of an extended shunt neck on the Bullock Island loop approximately 700m beyond the new rail entry to the Port to provide for trains to entering and exiting the site; and
c) provision for the reconfiguration of the Morandoo Yard (road numbers 1 to 5) to provide a total of four x 650m length rail sidings to hold two Port trains while a third train is within the rail sidings within the Concept Plan site.

Rail access consistent with this configuration shall be operational prior to total annual truck movements exceeding the limits identified in requirement 2.3 (Table 1) and total rail freight movements exceeding an average of 3 trains per day (i.e. 3 trains in and 3 trains out) in any given 12 month period.

The timing, staging, scope and design of this rail infrastructure may be varied, subject to consideration of the matters outlined in requirement 2.9.

2.9 The final timing, staging, scope and design of the *Transport Infrastructure Upgrades* identified in requirements 2.6, 2.7 and 2.8 may be revised by subsequent project approvals, where the following matters, where relevant, have been considered:

a) In relation to road infrastructure:

i. the level of traffic generated by the operation of the project and the consideration of existing and approved development both on and adjoining the site (including the timing of approved development and access to these sites, where relevant);
ii. satisfactory performance of the intersections, including Level of Service, Degree of Saturation, and queue lengths;
iii. traffic management measures designed to reduce vehicle movements or distribute movements between the intersections;
iv. safe access between and to precincts both from within and outside the site, including the consideration of the *Port Emergency Response Plan*; and
v. consultation with Transport for NSW, the RMS, HDC, Council and adjoining land owners.

b) In relation to rail infrastructure:

i. the objective of increasing freight movement by rail to and from the Concept Plan site and the optimisation of rail operations;
ii. minimising the physical and operational impacts on other rail operations within the vicinity of the site;
iii. availability of additional freight train paths and capacity; and
iv. consultation with Transport for NSW, ARTC, rail operators within the vicinity of the site and adjoining land owners.

Transport Monitoring and Review

2.10 The Proponent shall undertake transport monitoring and review to assess compliance with this Concept Plan approval, subsequent project approvals and to inform transport planning, and the timing of transport infrastructure delivery, service provision and management measures associated with this Concept Plan.

The monitoring and review shall:

a) report on freight volumes, types and movements (road and rail) resulting from projects associated with this Concept Plan, including origin and destination surveys;
b) assess the performance of the road network, including the performance of the Industrial Drive/Ingall Street and Industrial Drive/George Street intersections and the mid block capacity of nominated heavy vehicle routes at a local and regional level;
c) assess the effectiveness of distributing heavy vehicle movements outside of peak traffic periods and the effectiveness of management measures to minimise heavy vehicles accessing residential areas;
d) assess the effectiveness of measures to improve non-vehicular employee access to the site and links to external networks;
e) assess the performance of utilised rail networks, and the use of available train paths; and
f) inform the timing of necessary road and rail infrastructure upgrades, service provision and management measures.

Should the monitoring and review identify a substantial non-compliance with this Concept Plan Approval, and/or subsequent project approvals, the Proponent shall identify measures to be implemented to address the non-compliance.

The monitoring shall be prepared in consultation with Transport for NSW, the RMS and Council and shall be undertaken prior to and one and five years following the commencement of any project (or the commencement of a modification to a project that results in increased transport movements) associated with this Concept Plan, or as otherwise directed or agreed by the Director-General.

The results of this monitoring and review shall be submitted to Transport for NSW, the RMS, Council and the Director-General within six months of the monitoring period. The monitoring and reporting program shall be integrated with the Compliance Tracking Program.

Air Quality

2.11 Projects associated with this Concept Plan approval shall be designed, constructed and operated with the objective of meeting the overall site pollutant performance criteria described in Table 11-6 (or as may be updated in the source documents), of the document referred to in requirement 1.1b), including the utilisation of industry accepted air quality management measures for the transport, handling and storage of pollutant sources.

Site Air Quality Model

2.12 The Proponent shall, prior to the lodgement or consideration of any project associated with this Concept Plan approval, unless otherwise agreed by the Director-General, develop and maintain a *Site Air Quality Model* to facilitate the assessment of air quality impacts of

projects and to report on compliance with the site pollutant performance criteria outlined in requirement 2.11.

The Model shall take into consideration pre-project background air quality and pollutant levels at receptors and shall be maintained until such time as the site is fully developed. Air quality monitoring data collected as part of the *Air Quality Monitoring Program* shall be incorporated into the Model to allow air quality emissions to be managed for the site as a whole and on a cumulative and progressive basis.

The Model shall be updated with details from subsequent project approvals and used to assess performance against the air quality performance criteria during the Concept Plan sites development.

Air Quality Monitoring Program

2.13 The Proponent shall develop and implement an *Air Quality Monitoring Program*, to outline how the air quality impacts, and in particular particulate matter impacts, of the projects associated with this Concept Plan approval will be monitored and proactively managed.

The Program shall be prepared by an appropriately qualified person(s) and shall include, but not necessarily be limited to:

a) identification of an air quality monitoring network and meteorological monitoring that can facilitate the monitoring of air pollutants at a project, precinct and Concept Plan site level,
b) locations, frequencies and methods for monitoring air pollutants, including total suspended particles, PM_{10} and deposited particulate matter;
c) the use of appropriate sampling or monitoring methods to measure air quality and pollutant parameters and a meteorological station consistent with requirement 2.14;
d) the utilisation of real-time monitoring data to inform environmental management decisions associated with the project;
e) a framework for identifying actual and potential air quality impacts, and for applying pro-active and reactive mitigation and management measures to address those impacts;
f) active engagement with the local community to address air quality issues;
g) provisions for reporting monitoring results to the Department and EPA (if requested) and for independent review and auditing of the Program (to be incorporated into the Compliance Tracking Program); and
h) mechanisms for updating the Program as may be required from time to time.

The Program shall be prepared in consultation with the EPA and submitted to the Director-General prior to the commencement of operations of any project associated with this Concept Plan approval, unless otherwise agreed by the Director-General.

Meteorological Monitoring

2.14 The Proponent shall install, operate and maintain a meteorological monitoring station to monitor weather conditions representative of those on the site, in accordance with:
a) AM-1 Guide to Siting of Sampling Units (AS 2922-1987);

b) AM-2 Guide for Horizontal Measurement of Wind for Air Quality Applications (AS 2923-1987); and
c) AM-4 On-Site Meteorological Monitoring Program Guidance for Regulatory Modelling Applications.

The meteorological monitoring station shall be installed within or near the site and the Proponent shall use the meteorological monitoring station to facilitate the air quality monitoring required under this approval. This requirement does not preclude the Proponent from reaching agreement with any other relevant party for the installation, operation and maintenance of a shared monitoring station, or shared use of an existing monitoring station representative of the site, provided the outcomes of this requirement are achieved.

2.15 From the commencement of construction of any project associated with this Concept Plan approval, the Proponent shall continuously monitor, utilising the meteorological monitoring station required under this approval, for each of the parameters listed in Table ~~3~~ 4.

Table 4 – Meteorological Monitoring

Parameter	Units of Measure	Frequency	Averaging Period	Sampling Method
Rainfall	Mm	Continuous	1 hour	AM-4
Temperature at two metres	^{o}C	Continuous	15 minute	AM-4
Temperature at ten metres	^{o}C	Continuous	15 minute	AM-4
Wind speed at ten metres	m/s	Continuous	15 minute	AM-2 and AM-4
Wind direction at ten metres		Continuous	15 minute	AM-2 and AM-4
Sigma theta at ten metres		Continuous	15 minute	AM-2 and AM-4
Solar radiation	W/m^2	Continuous	15 minute	AM-4

Operational Noise

2.16 The proponent shall, within six months of the date of this approval, but prior to the lodgement or consideration of any project associated with this Concept Plan approval, unless otherwise agreed by the Director General, develop a Site Noise Model for the Concept Plan as described in requirement 2.19. The Site Noise Model shall be developed for the day, evening and night time periods to ensure that the amenity noise goals identified in Table 5 below are met. The Site Noise Model shall be developed having regard to the noise assessment undertaken for the Concept Plan Environmental Assessment.

2.17 Projects associated with the Concept Plan must comply with the amenity noise goals at sensitive residential receivers as detailed in Table 5 below.

Table 5 – Noise Goals at Nearby Residences

Location	Project Specific Noise Goals (dBA) $L_{Aeq\ period}$ (dBA)		
	Day (7.00 am to 6.00 pm)	Evening (6.00 pm to 10.00 pm)	Night (10.00 pm to 7.00 am)
A – 1 Arthur Street, Mayfield (Urban)	60	49	43
B – 2 Crebert Street, Mayfield (Urban)	60	50	43
C – 32 Elizabeth Street, Carrington (Urban)	57	44	45
D – Stockton (Suburban)	55	37	37

The above noise goals apply under winds of up to three metres per second (measured at 10 metres above ground level) and Pasquill stability class from A to F.

Note: To allow for cumulative noise generated by multiple projects under the Concept Plan, individual projects under the Concept Plan should not utilise all of the noise envelope specified by the criteria outlined in Table ~~4~~ 5.

2.18 The Proponent shall, in relation to any project associated with the Concept Plan, assess and implement feasible and reasonable noise mitigation measures to reduce traffic noise impacts associated with the total Concept Plan (including total truck movement limits identified in Table 3) on sensitive receivers where exceedances of traffic noise criteria have been predicted. The application of mitigation measures shall be consistent with the requirements of the *NSW Road Noise Policy* (DECCW, 2011).

Concept Plan Site Noise Model

2.19 The Proponent shall, prior to the lodgement or consideration of any project application associated with this Concept Plan, unless otherwise agreed by the Director-General, develop a *Concept Plan Site Noise Model* to facilitate the assessment of noise impacts and to report on compliance with project, precinct and Concept Plan noise criteria. The Noise Model shall take into consideration pre-project background noise levels at affected sensitive receivers and shall be maintained for the Concept Plan site until such time as the site is fully developed.

The Proponent shall ensure that any noise monitoring data collected as part of the *Noise Verification Monitoring Program* be incorporated into the Noise Model. The Noise Model shall be updated with details from each individual project and used to assess performance against the Concept Plan noise goals.

Noise Verification Monitoring Program

2.20 The Proponent shall develop a *Noise Verification Monitoring Program*, to outline how the noise impacts of the projects associated with this Concept Plan approval will be monitored and proactively managed. The Program shall include, but not necessarily be limited to:

a) identification of a noise monitoring network, consistent with the guidelines provided in the *Industrial Noise Policy* (EPA, 2000);
b) locations, timing and methods for monitoring noise impacts as operations commence for each project associated with the Concept Plan to assess compliance with precinct sound power levels, project specific noise criteria and Concept Plan noise goals, including

identification of monitoring sites at which pre-project and post-project noise levels can be ascertained;

c) a framework for identifying actual and potential noise impacts, and for applying pro-active and reactive mitigation and management measures to address those impacts;
d) provisions for reporting monitoring results and complaints and enquiries received to the EPA and the Department and for independent review and auditing of the Program (to be incorporated into the Compliance Tracking Program); and
e) mechanisms for updating the Program as may be required from time to time, including a system that allows for the periodic assessment of industry accepted Management Practices and Available Technology Economically Achievable to satisfy the Concept Plan noise goals and the project specific noise criteria.

The Program shall be prepared by an appropriately qualified person(s) and shall be submitted to the Director-General prior to the commencement of operations for any project associated with this Concept Plan approval.

Hydrology

Stormwater Management Strategy

2.21 The Proponent shall prepare a *Stormwater Management Strategy* for the Concept Plan site to provide a framework for the coordinated management of storm water and flood risks across the site and within precincts and to facilitate the continual improvement in the quality of stormwater discharge to the South Arm of the Hunter River and a reduction in flooding impacts to land uses within and surrounding the site. The Strategy shall include:

a) the identification of water management risks, including flood risk, water quality and stormwater impacts, the isolation of stormwater from contaminated land and the local groundwater table, and the consideration of climate change and coastal risks;
b) design principles, objectives and environmental performance criteria for flooding, ground water, and storm water management, including the consideration of the following matters:
    i. the design and adoption of stormwater management measures that reflect site constraints, land use and catchment conditions;
    ii. the minimisation of runoff and the reduction of peak flows;
    iii. minimising coastal risks and flooding impacts for land uses within, adjoining and in proximity of the site, including the establishment of site design criteria for site levels and drainage capacity, and consideration of NSW seal level rise planning benchmarks;
    iv. integrating stormwater capture, treatment and reuse into the operating environment;
    v. improving surface and groundwater quality within the site and at discharge points.
c) conceptual site based flooding, storm water, surface water and water quality management measures, including standards for the protection and maintenance of these measures;
d) a monitoring program for surface and ground water which identifies parameters to be monitored, sampling locations, monitoring methods and sampling methodology, including frequency and duration of monitoring and sampling, responsibilities and reporting;
e) corrective action and contingency measures in the event of exceedances of the relevant environmental performance criteria;
f) process for regularly reviewing and updating the Strategy to identify continual improvement to procedures and to reflect ongoing the development of the site;
g) reporting procedures and protocols for evaluating performance; and

h) taking into account the *NSW Coastal Planning Guideline: Adapting to Sea Level Rise* (DoP, 2010), the Preliminary Stormwater Strategy (contained in Appendix H of the Environmental Assessment), *Managing Urban Stormwater: Soils and Construction* (Landcom, 2004), Council design criteria and the existing Hunter Development Corporation groundwater monitoring program.

The Strategy shall be prepared in consultation with Council, HDC, EPA and shall be submitted to the Director-General prior to the lodgement or consideration of any project application associated with this Concept Plan approval, or as otherwise agreed by the Director-General. The Proponent shall update the Strategy, as required, following subsequent project approvals associated with this Concept Plan Approval.

Site Infrastructure

Utilities Infrastructure Plan

2.22 The Proponent shall prepare a *Utilities Infrastructure Plan* for the Concept Plan site to identify the services and utility infrastructure (ie non transport related infrastructure) that will be required for the site and each precinct, and to provide for the coordinated provision of this infrastructure. The Plan shall include, but not be limited to the following:

a) the expected site services/utility demand levels and infrastructure requirements, including reasonable contingencies, at a site and precinct level;
b) the identification of service corridors to and within the site, including at a precinct level, to facilitate the rationalisation of infrastructure provision and to minimise conflict with existing and future site operations, including the prioritisation of connecting services to trunk infrastructure facilities to be provided in the adjoining Intertrade Industrial Park and the provision of shore to ship power to berthed vessels (subject to the findings of the Shore Side Power Feasibility Report); and
c) the identification of when the required infrastructure will be required and the inclusion of an implementation schedule to indicate when infrastructure will be delivered and associated installation protocols.

The Plan shall be prepared in consultation with infrastructure and public utility authorities as well as adjacent landowners, including but not limited to HDC, AusGrid, Hunter Water Corporation, Jemena, RailCorp, RMS, Council, and telecommunication providers (as relevant).

The Plan shall be prepared and submitted to the Director-General prior to the lodgement of or consideration of any project application associated with this Concept Plan approval, or as otherwise agreed by the Director-General. The Proponent shall be responsible for overseeing the implementation of the Plan and shall update it as required, following any subsequent project approvals associated with this Concept Plan approval.

Shore Side Power (cold ironing) Feasibility Report

2.23 The Proponent shall prepare a Shore Side Power (cold ironing) Feasibility Report, in consultation with the EPA, for shore side power on the landside areas adjacent to berths. The Feasibility Report shall be prepared by a suitably qualified person and shall include, but not be limited to:

a) a discussion of industry accepted environmental practice for Shore Side Power, including relevant international experience and standards;
b) consideration of feasible and reasonable measures that could be adopted at the berths, including the consideration and quantification of air quality and noise benefits; and
c) potential options and future recommendations, including the provision of service corridors for future infrastructure.

The Plan shall be prepared and submitted to the Director-General prior to the lodgement of or consideration of any project application associated with this Concept Plan approval, or as otherwise agreed by the Director-General.

Hazards, Dangerous Goods and Chemical Storage

2.24 Potentially hazardous facilities of a project associated with this Concept Plan Approval shall be designed and sited with appropriate separation distances such that they do not cumulatively impact adjacent surrounding land uses at a precinct and Concept Plan site level in a manner exceeding permissible impact levels published in *Hazardous Industry Planning Advisory Paper No.4 – Risk Criteria for Land Use Safety Planning*, Department of Planning, January 2011.

2.25 The hazard safeguards (as applicable) listed in the Hazard Identification Table A.1, in Appendix A, of the report titled *Preliminary Hazardous Analysis, Mayfield Site Port-Related Activities Concept Plan,* dated 19 July 2010 and prepared by AECOM, shall be implemented.

Port Emergency Response Plan

2.26 The Proponent shall prepare a *Port Emergency Response Plan* for the Concept Plan site, precinct and project(s) prior to the commissioning of any projects associated with this Concept Plan approval that involve the transport, handling or storage of hazardous or dangerous materials. The Plan shall:

a) include detailed procedures for the safety of people on and off site who may be at risk from the project;
b) include provision for safe and fully accessible emergency service vehicle access to portside facilities;
c) consider any *Safety Management System* prepared for the project;
d) be updated prior the commissioning of any subsequent projects associated with this Concept Plan approval; and
e) be consistent with the *Hazardous Industry Planning Advisory Paper No.1 - Emergency Planning*, Department of Planning, January 2011.

The Proponent shall submit the Plan or any update of the Plan to the Director-General no later than two months prior to the commencement of any project associated with this Concept Plan approval, or as otherwise agreed by the Director-General. The Proponent may elect to use an existing Plan should that Plan address the requirements of this Concept Plan approval.

Safety Management System

2.27 A *Safety Management System* shall be prepared prior to the commissioning of any project associated with this Concept Plan approval that involves the transport, handling or storage of hazardous or dangerous materials. The System shall cover on-site operations and

associated transport activities involving the transport, handling or storage of hazardous and dangerous materials. The document shall:

a) specify safety related procedures, responsibilities and policies, along with details of mechanisms for ensuring adherence to the procedures; and
b) be consistent with the *Hazardous Industry Planning Advisory Paper No.9 – Safety Management*, Department of Planning, January 2011.

The Proponent of future project applications under this Concept Plan approval shall submit the System to the Director-General no later than two months prior to the commencement of any project associated with this Concept Plan approval, or as otherwise agreed by the Director-General. Records shall be kept on site and shall be available for inspection by the Director-General upon request.

Hazard Audit

2.28 A *Hazard Audit* of each project associated with this Concept Plan approval that involves the transport, handling or storage of hazardous or dangerous materials shall be undertaken twelve months after the commencement of operations and every three years thereafter, or at such intervals as the Director-General may agree.

The audits shall be carried out by a qualified person or team, independent of the project, and shall be consistent with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 5, '*Hazard Audit Guidelines'*.

The Proponent of future project applications under this Concept Plan approval shall submit each audit to the Director-General within one month of the audit being undertaken. The three yearly site Hazard Audits for each project associated with this Concept Plan approval shall be consolidated.

Social and Economic

2.29 Projects associated with this Concept Plan Approval, shall be subject to section 94A development contribution levies consistent with rates identified in the *Section 94A Development Contributions Plan 2009,* The City of Newcastle, March 2011 (or as subsequently updated), or as otherwise agreed with Council.

3. COMMUNITY INFORMATION, CONSULTATION AND INVOLVEMENT

3.1 Subject to confidentiality, the Proponent shall make all documents required under this approval available for public inspection on request.

Provision of Electronic Information

3.2 The Proponent shall establish and maintain a dedicated website or maintain dedicated pages within its existing website for the provision of electronic information associated with this Concept Plan approval subject to confidentiality requirements. The Proponent shall publish and maintain up-to-date information on this website or dedicated pages including, but not necessarily limited to:

b) information on the statutory context of the Concept Plan approval and the current implementation status of the project;
c) a copy of this approval, any related project approvals and any future modification to this approval;
d) a copy of each relevant environmental approval, licence or permit required and obtained in relation to the project; and
e) details of the outcomes of compliance reviews and audits of the project.

Community Communication Strategy

3.3 The Proponent shall prepare and implement a **Community Communication Strategy** for the project. This Strategy shall be designed to provide mechanisms to facilitate communication between the Proponent, Council and local community (broader and local stakeholders) on the progress and the related environmental management of the project. The Strategy shall include, but not necessarily limited to:

a) identification of stakeholders to be consulted as part of the Strategy, including affected and adjoining landowners;
b) procedures and mechanisms for the regular distribution of information to stakeholders on the progress of the project;
c) procedures and mechanisms through which stakeholders can discuss or provide feedback to the Proponent on the progress of the project;
d) procedures and mechanisms through which the Proponent can respond to any enquiries or feedback from stakeholders in the progress of the project; and
e) procedures and mechanisms that would be implemented to resolve any issues/disputes that may arise between parties on the matters relating to the progress of the project. This may include the use of an appropriately qualified and experienced independent mediator.

Key issues that should be addressed in the Community Communication Strategy should include, but not necessarily be limited to:

i) transport and traffic monitoring and management;
ii) noise and vibration monitoring and management;
iii) air quality monitoring and management; and
iv) cumulative impacts

The Proponent shall maintain and implement the Strategy throughout the development of the Project. The Strategy shall be submitted to the Director-General prior to the lodgement of any project application or commencement of works associated with this Concept Plan approval, unless otherwise agreed by the Director-General.

4. COMPLIANCE MONITORING AND TRACKING

Compliance Tracking Program

4.1 The Proponent shall develop and implement a **Compliance Tracking Program** to track compliance with the requirements of this approval. The Program shall include, but not necessarily be limited to:

a) provisions for periodic review of the compliance status of the Concept Plan and associated projects against the requirements of this approval;
b) provisions for the notification of the Director-General following the determination of, prior to the commencement of construction and prior to the commencement of operation of projects associated with this Concept Plan approval;
c) provisions for periodic reporting of environmental monitoring and compliance status to the Director-General;
d) a program for independent environmental auditing in accordance with *ISO 19011:2003 - Guidelines for Quality and/ or Environmental Management Systems Auditing*; and
e) procedures for rectifying any non-compliance identified during environmental auditing or review of compliance.

The Program shall be submitted to the Director-General for approval prior to the lodgement of approval for any project associated with this Concept Plan approval, unless otherwise agreed by the Director-General.

Attachment A – Heavy Vehicle Route

Attachment B – Road Intersection Upgrades

Works required at the Industrial Drive/Ingall Street Intersection

Ingall Street (Southern Leg)
- The southern leg approach shall be reconfigured to provide a channelized/signalised left turn lane and a single through lane. The southern leg departure shall be maintained as a single lane.
- The left turn lane shall be a minimum 120 metres in length, including taper.
- A signalised pedestrian crossing shall be provided on the southern leg.

Industrial Drive (Eastern Leg)
- The eastern leg approach shall be maintained to provide a left turn lane, two through lanes and a right turn lane. The eastern leg departure shall be maintained as two lanes.
- The right turn lane shall be extended to a minimum 140 metres in length, including taper.
- A signalised pedestrian crossing shall be provided on the eastern leg.

Ingall Street (Northern Leg)
- The northern leg approach shall be reconfigured to provide a combined channelised/signalised left turn/through lane, and two right turn lanes. The northern leg departure shall be maintained as a signal lane.
- The median right lane shall be a minimum 50 metres in length, excluding taper.
- The left turn/through lane and central right turn lane shall extend back to the existing railway level crossing.
- A signalised pedestrian crossing shall be provided on the northern leg.

Industrial Drive (Western Leg)
- The western leg approach shall be reconfigured to provide a channelised/signalised left turn lane, two through lanes and a right turn lane. The western leg departure shall be maintained as two lanes.
- The left turn lane shall be a minimum 120 metres in length, including taper.
- The right turn lane shall be extended to a minimum 170 metres in length, including taper.
- A signalised pedestrian crossing shall be provided on the western leg.

Works required at the Industrial Drive/George Street Intersection

Industrial Drive (Southern Leg)
- The southern leg approach shall be maintained to provide a left turn lane, two through lanes and a right turn lane. The southern leg departure shall be maintained as two lanes.
- A signalised pedestrian crossing shall be provided on the southern leg.

George Street (Eastern Leg)
- The eastern leg approach shall be reconfigured to provide a channelised/signalised left turn lane, a through lane and a right turn lane. The eastern leg departure shall be reconfigured to provide a single lane at the throat of the intersection. The auxiliary lane for the right turn into Selwyn Street shall be retained.
- The current left turn acceleration/merge lane shall be closed and reinstated to match the surrounding environment.
- The left turn lane shall be a minimum 50 metres in length, including taper.
- A central raised concrete median shall be provided.
- A signalised pedestrian crossing shall be provided on the eastern leg.

Industrial Drive (Northern Leg)

- The northern leg approach shall be reconfigured to provide a channelised/signalised left turn lane, two through lanes and a right turn lane. The southern leg departure shall be maintained as two lanes.
- The left turn shall be extended to a minimum 150 metres in length, including taper.

George Street (Western Leg)

- The western leg shall be maintained to provide a two approach lanes and a single departure lane.
- A signalised pedestrian crossing shall be provided on the western leg.

Works required at the George Street/Selwyn Street Intersection

- Move the Give Way line forward for vehicles exiting Selwyn Street.
- Provide a raised central concrete median/island in the throat of Selwyn Street to reinforce the prohibition of the right turn.

General Requirements

- Kerb and gutter and raised median/island kerbs shall be provided where required, as determined by the RMS.
- The intersections shall be designed to accommodate the turn path of the largest design vehicle (B-Double).
- Provision shall be made for on-road cyclists on all approaches and along the length of the proposed works.
- All lanes shall be 3.5 metres in width, or as determined by the RMS.
- Street lighting shall be provided in accordance with Australian Standard AS 1158 or as determined by the RMS.