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Midal Cables International

Tomago Aluminium Rod and Cable Manufacturing Project

Submissions Response Report

April 2012

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1. Introduction

1.1 Background

Midal Cables International (Midal) propose to construct an aluminium rod and conductor manufacturing facility on a 2.8ha parcel of land adjacent to the Tomago Aluminium Smelter at Tomago in the Port Stephens local government area (LGA). This is subsequently referred to as 'the project' for the purposes of this report.

An Environmental Assessment was prepared for the project by GHD Pty Limited on behalf of the Midal. The Environmental Assessment supported Project Application No. MP 10_0039 and was submitted to the Department of Planning and Infrastructure for public exhibition between 17 February 2012 and 19 March 2012. It was prepared in accordance with Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and addressed requirements issued by the Director-General of the Department of Planning and Infrastructure on 12 April 2011.

The community and other stakeholders were invited to make submissions to the Department of Planning and Infrastructure during the exhibition period. A total of eight submissions were received.

The purpose of this Submissions Response Report is to address the requirements of the Director-General by responding to the issues raised in submissions received following exhibition of the Environmental Assessment

This Submissions Response Report should be read in conjunction with the Environmental Assessment.

1.2 The proponent

Midal is an Australian registered company and forms part of the Midal Group of companies that is based in the Kingdom of Bahrain. Midal specialises in manufacturing and supplying aluminium and aluminium alloy rod, wires and conductors, aluminium clad steel, aluminium sections and tubes which are exported to a large number of countries including Australia. Midal uses only virgin molten metal sourced directly from smelters to manufacture their products.

1.3 Overview of the project

The Tomago Aluminium Smelter currently produces 530,000 tonnes per year of aluminium product and has recently gained approval to increase production to 575,000 tonnes per year utilising the existing plant and infrastructure. Virtually all this production is exported and used to manufacture items such as conductors and aluminium shapes, some of which are then imported back into Australia.

Midal has entered into a long term contract to purchase 50,000 tonnes per annum of molten aluminium from the Tomago Aluminium Company (TAC) smelter at Tomago. Midal would cast the molten aluminium into rods that are not currently manufactured in Australia. Approximately half the production would be processed into aluminium

conductors that would be used for electricity transmission purposes and the other half would be formed into aluminium rods and exported.

The project is needed as it would take advantage of an opportunity to add value to existing production by the smelter. This would reduce the amount of material exported from the smelter by approximately 10% and substantially reduce the amount of finished aluminium conductors imported into Australia.

1.3.1 The site

The project would be located on industrial land within the Tomago Industrial Area approximately 6 km from the Port of Newcastle. As indicated in Figure 1, the project would be located at a site that is adjacent to the Tomago Aluminium Smelter. The site is within the buffer zone which was established as a condition of consent for the smelter. The buffer zone acts as an environmental management zone which aims to reduce land uses that are incompatible with the operations of the smelter.

The site is legally identified as Lot 5 and 6 DP 270328 and is approximately 2.8ha in area, including the proposed haul road corridor to the north, located on part of Lot 301 DP 634536 and Lot 3232 DP 618103. The northern and central portions of the site consist of grasses, scattered shrubs and trees and have been extensively used for industrial purposes.

The site is part of a Community Title subdivision and all lots within the subdivision are serviced by a private road on Community Land. The unsealed part of the road with frontage to the site would be rebuilt and sealed as part of the project.

The site has been heavily modified by previous industrial land use and parts have been used for sand mining. It is characterised by cleared areas and remnant infrastructure from previous industrial use.

Fragments and disused hardstand areas from previous industrial uses are present in Lots 5 and 6.

A Colorbond shed in poor condition is located in the southern portion of the site with associated wash bays and covered storage areas. This would be removed as part of the project. A large hardstand area with concrete anchor points, metal casting/weld fragments and also several resinous stains/patches is located south of the shed.

The central portion of the site is grassed with low points/depressions and scars/hardstand areas from previous industrial use. This area is scattered with workshop waste/debris. In the southern central portion of the property (north of the existing shed), concrete hardstand areas are present with metal castings/weld fragments and blue discolouration of the surface rocks and gravels. An access road is located along the southern boundary.

The site is elongated and is relatively flat with a general slope of approximately 2% from the north to the south.

1.3.2 Main components of the project

The main components of the project are shown on Figure 2 and include:

- ▶ A haul road approximately 150m long that would be used to transport molten aluminium from the Tomago Smelter.
- ▶ A building approximately 98m by 35m and 8m high to house the gas fired furnace and rolling mill that would manufacture aluminium rod. Ancillary infrastructure such as the gas fired furnace and rolling mill control rooms, and undercover rod storage would also be within this building.
- ▶ Cooling towers and infrastructure associated with the gas fired furnace and rolling mill.
- ▶ A building approximately 124m by 46m and 8m high to house wire drawing machines, stranding machines and associated facilities.
- ▶ Laboratories and administration buildings.
- ▶ Stores building, electrical and mechanical workshops.
- ▶ Hardstand movement, loading areas, and car parking.
- ▶ System to collect roofwater for reuse in the manufacturing process.
- ▶ Stormwater detention and nutrient control devices.
- ▶ Onsite sewage treatment plant with onsite subsurface irrigation of the landscaped areas.

The project does not require modification to the operations of the smelter other than to allow molten metal to be transported to the Midal project via a dedicated haul road.

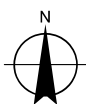
A description of the project is provided in Section 6 of the Environmental Assessment.



LEGEND

Extent of Works

1:25,000 (at A4)
0 100 200 400 600 800
Metres
Map Projection: Transverse Mercator
Horizontal Datum: Geocentric Datum of Australia (GDA)
Grid: Map Grid of Australia 1994, Zone 56



Midal Cables International Pty Ltd
Tomago Rod and Conductor Manufacturing Facility
Environmental Assessment

Job Number	22-15280
Revision	A
Date	12 OCT 2011

Local Context Plan

Figure 1

Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E entlmail@ghd.com.au W www.ghd.com.au

G:\2215280\GIS\Maps\Deliverables\EA\2215280_EA_002_LocalContext_20110713_A.mxd

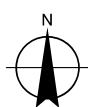
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Data Source: Nearmap: Imagery - 2011. Created by: fmackay, tmorton



LEGEND

- Proposed Car Park
- Proposed Building Footprint
- Proposed Haul Road
- Extent of Works
- Cadastre

1:2,500 (at A4)
 0 10 20 40 60 80
 Metres
 Map Projection: Transverse Mercator
 Horizontal Datum: Geocentric Datum of Australia (GDA)
 Grid: Map Grid of Australia 1994, Zone 56



Midal Cables International Pty Ltd
 Tomago Rod and Conductor Manufacturing Facility
 Environmental Assessment

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Date	12 Oct 2011

Site Layout

Figure 2

Level 3, GHD Tower, 24 Honeysuckle Drive, Newcastle NSW 2300 T 61 2 4979 9999 F 61 2 4979 9988 E Entlmail@ghd.com.au W www.ghd.com.au

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 Data Source: NearMap: PhotoMap - 2011; LPMA: DTDC - 2007. Created by: Imackay, Imorton, mbarrier

1.4 Approval process

Schedules 1 and 2 of the *State Environmental Planning Policy 2005 (Major Development)* identify the types of development that require approval under Part 3A of the EP&A Act. The project meets the definition of metal, mineral or extractive material processing included in Schedule 1, and is therefore a project to which Part 3A applies.

The Minister for Planning declared the project to be a major project on 18 March 2010 and confirmed it is to be assessed under Part 3A of the EP&A Act due to the application of Section 75B(2) of that Act. The Environmental Assessment was prepared to address requirements issued by the Director-General of the Department of Planning and Infrastructure on 12 April 2011. Although Part 3A was repealed on 1 October 2011, the project will continue to be assessed under Part 3A as it is a transitional Part 3A Project.

The project was referred to the Department of Sustainability, Environment, Water, Population and Communities (DSEWPaC) under the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) on 18 August 2011 to determine if the project is a controlled action. On the 29 September 2011 DSEWPaC decided that the project is not a controlled action. As a result, the project does not require further assessment and/or approval under the EPBC Act (referral number 2011/6085).

Midal prepared an Environmental Assessment for the project that was publicly exhibited by the Department of Planning and Infrastructure between 17 February 2012 and 19 March 2012. A total of eight submissions were received during the exhibition period and the Director-General required that Midal respond to issues raised in the submissions. This document details Midal's response to the submissions.

The Department of Planning and Infrastructure will evaluate the Environmental Assessment and this Submissions Response Report giving consideration to the issues raised in submissions received during the exhibition period.

Midal may proceed with the project if it is approved under Part 3A of the EP&A Act.

1.5 Structure of this report

This Submissions Response Report is structured as follows:

- ▶ **Section 1:** provides an introduction and background to this report
- ▶ **Section 2:** provides responses to the issues raised in submissions received during the exhibition period
- ▶ **Chapter 3:** provides the final Statement of Commitments for the project
- ▶ **Chapter 4:** concludes the report.

2. Consideration of issues raised in submissions

2.1 Overview

The Environmental Assessment was exhibited by the Department of Planning and Infrastructure from 17 February to 19 March 2012. The community and other stakeholders were invited to make submissions to the Department of Planning and Infrastructure during this time. A total of eight submissions were received during the exhibition period. The following section summarises and addresses issues that were raised in submissions.

2.2 Environment Protection Authority

Issue – Conditions proposed to be included in the Environment Protection licence and recommended conditions of approval

The Environment Protection Authority's (EPA) submission does not object to the project and indicates that if it is approved, an Environment Protection Licence (EPL) that would be required under the *Protection of the Environment Operations Act 1997* (POEO Act) as it would be a scheduled activity (Metallurgical activity).

Attachment A to the submission provides detailed comments on the Environmental Assessment. Attachment B outlines conditions that are proposed to be included in the EPL relating to air, noise and water impacts, and Attachment C outlines recommended consent conditions relating to ecological and aboriginal cultural heritage issues.

Response

Midal agrees with the general intent of the conditions outlined in Attachments B and C to EPA's submissions and would liaise with the Department of Planning and Infrastructure and EPA to refine specific conditions when negotiating the terms of the Minister's Conditions of Approval and EPL.

2.2.1 Air impact assessment

Issue – Additional information is required to allow the EPA to determine appropriate concentration limits and monitoring requirements.

The EPA requires additional information, such as the location and number of stacks, to derive emission limits for the stacks. This information must be provided with an application for an Environment Protection Licence (EPL) that would be required under the *Protection of the Environment Operations Act 1997* (POEO Act). The EPA would include concentration limits and monitoring for all stacks for all appropriate parameters in the EPL.

Response

The air quality assessment undertaken as part of the Environmental Assessment modelled emissions from a separate stack for each production process. Emissions from a total of six stacks were modelled (two holding furnaces, two tilting furnaces, one

ageing oven and one rolling mill). Each stack was modelled directly above the emission source within the building.

The modelling for the Environmental Assessment was based on a conceptual design and it is possible that the number of stacks may be reduced during detailed design. This could involve venting emissions from multiple sources through one stack.

When applying for the EPL, Midal would provide the EPA with a site layout plan showing the precise location of each stack.

Issue – An air quality management plan (AQMP) should be developed and implemented for both the construction and operational phases of the project.

The AQMP should be implemented prior to the commencement of construction and should include measures to manage, control and measure point and fugitive emissions from the site.

Response

As indicated in Section 8.5 of the Environmental Assessment, plans would be prepared to manage air quality impacts during construction and operation of the project. As the main air quality impact during construction would be related to dust, a dust management plan would be prepared and form part of the Construction Environmental Management Plan (CEMP).

An AQMP would also be prepared for the operational phase and would include measures to manage, control and measure point and fugitive emissions from the site. This would include the monitoring and reporting requirements that would be included in the EPL, such as stack testing.

2.2.2 Noise impact assessment

Issue – Noise compliance assessment

The submission indicated that the Noise Impact Assessment prepared for the Environmental Assessment was satisfactory and allowed EPA to determine suitable noise limits to protect the amenity of affected residential receivers. The noise limits were calculated in accordance with the Industrial Noise Policy and Attachment B to EPA's submission included a condition requiring a Noise Compliance Assessment Report to confirm that the noise limits are being achieved in practice.

Response

Midal agrees with the general intent of the recommended condition that a Noise Compliance Assessment Report should be prepared to confirm that the noise limits are being achieved during operation of the project.

2.2.3 Surface and groundwater impacts

Issue – Details regarding the groundwater monitoring locations, parameters and methods will need to be determined.

EPA concurred with comments in the Environmental Assessment that indicated that groundwater monitoring should be undertaken for parameters including depth, pH, electrical conductivity, hydrocarbons, ammonia, phosphorus and nitrogen. Details regarding the monitoring requirements would be determined when Midal submits an application for an EPL. Attachment B to EPA's submission includes a requirement to monitor groundwater.

Response

Midal agrees with the intent of the proposed EPL condition to monitor groundwater. Details regarding the groundwater monitoring locations, parameters and methods would be confirmed when applying for the EPL.

2.2.4 Aboriginal cultural heritage assessment

Issue – It is acknowledged that there is a likelihood of finding further evidence of Aboriginal occupation of the site if the project proceeds.

EPA acknowledged that Midal has committed to developing and implementing measures to manage potential impacts on items of Aboriginal cultural heritage significance that may be encountered during construction. EPA included recommended conditions of approval in Attachment C to the submission.

Response

The project would not impact on any known items of significance to the Aboriginal community. The Statement of Commitments reflects that registered Aboriginal parties would be consulted during construction of the project and would have an opportunity to monitor initial ground disturbance activities associated with development of the haul road.

Midal agrees with the intent of the EPA's recommended conditions of approval relating to management of potential impacts on any items of significance to the Aboriginal community that may be encountered during construction.

2.2.5 Threatened species

The EPA noted that the Environmental Assessment has adequately addressed two issues that were previously raised. These issues relate to the need for targeted surveys within the flowering period of two species of *Diuris*, and the need for a biodiversity offset strategy.

Issue – Targeted surveys are required for *Diuris arenaria* and *Diuris praecox* within their known flowering period

The draft Statement of Commitment provides EPA with assurance that Midal would conduct pre-construction surveys for *Diuris arenaria* and *Diuris praecox* within their known flowering period (August) in an area of potential habitat within the site that

adjoins the powerline easement. If these species are present, appropriate biodiversity offset measures would be implemented.

EPA recommended conditions of approval relating to the pre-construction surveys.

Response

Midal agrees with the intent of EPA's recommended conditions of approval regarding the need to undertake pre-construction surveys for these species during August in an area of potential habitat within the site that adjoins the powerline easement.

Issue – A biodiversity offset package is to be prepared

A Biodiversity Offset Strategy is to be prepared to offset the loss of native vegetation on the site. The strategy should be done predominantly in accordance with the:

- BioBanking Assessment Methodology (BBAM) (DECC, 2008)
- BioBanking Assessment Methodology and Credit Calculator Operational Manual (DECC, 2009)
- Interim policy on assessing and offsetting biodiversity impacts of Part 3A development (OEH 2011), which allows for modification to the BBAM under specific circumstances.

EPA acknowledged that the package would offset the loss of 0.68 ha of Smooth-barked Apple – Red Bloodwood shrubby open forest that would be removed. The appropriate files and documents would need to be provided to EPA when the offset package is forwarded to EPA for review.

EPA included recommended conditions of approval in Attachment C.

Response

Midal agrees with the intent of the recommended conditions of approval in Attachment C of the EPA submission relating to the biodiversity offset package.

The recommended conditions of approval would require that the offset package is developed prior to commencement of construction. The Statement of Commitment has been revised to reflect that Midal proposes that the offset package be developed within 12 months of the project being approved. The site has been substantially modified by previous industrial development and Midal's approach would allow construction to commence in parallel with development of the offset strategy.

2.3 Hunter Water Corporation

Issue – water and wastewater supply

Hunter Water Corporation did not raise any issues that need to be addressed. The submission noted that there is sufficient capacity within the water supply system to cater for the demands of the project. The site is isolated from existing wastewater infrastructure and does not fall within the Hunter Water drinking water catchment. Midal should contact Hunter Water Corporation if a connection to the wastewater network is required.

Response

As indicated in the Environmental Assessment, wastewater would be managed on-site and connection to Hunter Water Corporation's wastewater network is not required.

2.4 Department of Primary Industries - Office of Water

Issue – water and groundwater

The NSW Office of Water's submission indicated that it is satisfied with the Statement of Commitments for surface and groundwater and recommends that these are included as conditions of approval.

Response

Midal agrees with the approach suggested by the NSW Office of Water.

2.5 NSW Rural Fire Service

Issue – Assessment of the project against Planning for Bushfire Protection 2006

The NSW Rural Fire Service (RFS) has undertaken an assessment of the project against Planning for Bushfire Protection 2006 and recommends the following conditions of approval:

- ▶ Water, electricity and gas supply shall comply with Section 4.2.7 of Planning for Bushfire Protection 2006
- ▶ Landscaping shall comply with the principles of appendix 5 of Planning for Bushfire Protection 2006
- ▶ An emergency / evacuation plan is to be prepared in line with the NSW RFS document Guidelines for the Preparation of an Emergency / Evacuation Plan.

Response -

As indicated in the Bushfire Constraints Analysis prepared as part of the Environmental Assessment, the project would comply with the provisions of Planning for Bushfire Protection 2006. The project would achieve the performance criteria, and aims and objectives of Planning for Bushfire Protection 2006 by incorporating the following acceptable solutions for water, electricity and gas supply:

- ▶ Water supply to the site would be adequate to meet the needs of fire fighters (and others assisting)
- ▶ Electricity supply would be comply with Ausgrid's network standards, including measures to manage bushfire risks
- ▶ Gas supplies would be installed in accordance with AS 1596.

The landscaping principles of appendix 5 of Planning for Bushfire Protection 2006 are to:

- ▶ Prevent flame impingement on the buildings
- ▶ Provide a defendable space for property protection

- ▶ Reduce fire spread
- ▶ Deflect and filter embers
- ▶ Provide shelter from radiant heat
- ▶ Reduce wind speed.

The project would comply with these principles by ensuring that the asset protection zone is established and maintained in accordance with the requirements of Section 4.1 of Planning for Bushfire Protection 2006.

Midal would prepare an emergency / evacuation plan as part of suite of plans that would be implemented during the project. This would include measures that would be prepared in line with the NSW RFS document Guidelines for the Preparation of an Emergency / Evacuation Plan.

2.6 Transport - Roads and Maritime Authority

The submission from the Roads and Maritime Service (RMS) did not raise any objections or requirements for the project. RMS noted that a reconstruction project involving upgrading Tomago Road in the vicinity of the McIntyre Road intersection has commenced. This will provide a left turn lane on the western approach to McIntyre Road together with 3.0m sealed shoulders in the vicinity of the intersection. RMS considered that the upgraded intersection and adjoining works will adequately cater for the increase in traffic resulting from the project.

2.7 Private submission

This submission supported the project but noted that School Drive and the associated intersections are in poor condition and should be upgraded to allow the project to proceed.

2.7.1 Condition of School Road

Issue – The description of School Drive is inaccurate

The Traffic Impact Assessment indicates that School Drive has a sealed two lane carriageway in a fair condition with wide grass shoulders. The submission advised that the western most 500m is mostly two lanes wide but it has lengths that are only 4m wide of sealed surface. The eastern most 500m of School Drive is only one lane wide and in many parts it has a semi-sealed surface.

Issue – The condition of School Road has deteriorated since the field inspection was undertaken for the traffic assessment

The traffic assessment summarises observations of a field inspection in March 2011, however this submission indicated that the condition of School Road has deteriorated since this time. Factors contributing to the deterioration include:

- ▶ Increased traffic from new business in School Drive including a transport depot

- ▶ Increased traffic from the concrete batching plant on the private road within the industrial estate that uses School Drive to access Tomago Road
- ▶ Port Stephens Council has placed a no right turn restriction on a business at 509 Tomago Road. As a result, trucks including B-doubles must now use School Drive to enable a left turn into the business from Tomago Road.
- ▶ An electricity substation has been constructed adjacent to School Drive and the associated works have adversely impacted on the northern shoulder of the road where underground cables were installed.
- ▶ Concealed drainage infrastructure is a hazard to vehicles parking on the shoulder of the road.

This submission disagrees with the statement in the Traffic Impact Assessment that indicates that the current road network is suitable for the proposed trucking operations without the need for major improvements to pavement condition, carriageway alignment and road width. The submission requests a meeting with the relevant authorities to assess the condition of the road and to discuss a solution to enable safe access to the project as well as existing businesses, land holders and residents.

Response to both issues

The site itself is expected to generate 18 heavy vehicles (movement of product and deliveries) and 124 light vehicles (shift workers, administration staff and contractors) along School Drive on a typical weekday. All heavy vehicles would be directed to use School Drive west and McIntyre Road to access the Tomago Road, which is the most suitable and appropriate route for transporting goods and materials to and from suppliers and end of use destinations that are accessed via the Pacific Highway.

The study undertaken for the Environmental Assessment acknowledged that some light vehicles, generated by staff accessing the site, may choose to use the eastern section of School Drive to travel to and from destinations to the east. This traffic flow is likely to be low and unlikely to be impacted by isolated narrow sections of road. The above distribution profile is both consistent with 2011 traffic conditions associated with existing industrial area operations and assumptions agreed with RMS.

Figure 3 provides an understanding of the traffic conditions along the western section of School Drive. Site observations at the time of the inspection indicated that the route was appropriate and suitable for traffic generated by the project, which only amounts to 18 heavy vehicles a day.



Figure 3 School Drive West Road Conditions (February 2011)

Vehicle circulation paths within the site are show in Appendix A and reflect that the project would:

- ▶ Include a new private access roads to access the site from McIntyre Road
- ▶ Contain all loading and unloading movement within the site and construct internal access roads
- ▶ Separate staff and heavy vehicle movement by containing all staff vehicle movement to designated off street parking areas on newly constructed private access roads
- ▶ Construct a separate direct private haulage road that would connect the project to the smelter.

In summary, the project would be one of many developments within this designated industrial precinct and would have minimal impact on the eastern section of School Drive. Impact to pavement conditions on the western section of School Drive would be limited to 18 heavy vehicles a day when the site is fully operational.

2.8 Port Stephens Council

2.8.1 Environmental issues

Issue – The haul road should be redesigned and located adjacent to the southern portion of Lot 301 DP 634536.

Council requested that the road be redesigned to reduce impacts on habitat for the New Holland Mouse, Eastern Freetail Bat, Grey-headed Flying Fox, and hollow bearing trees.

Response

The initial design of the haul road involved a straight road extending from the smelter to the Midal facility. Section 5.4 of the Environmental Assessment reflects that a range of alternative alignments for the haul road were investigated to minimise the area of potential habitat for the New Holland Mouse that would be impacted. The options were limited by geometrical parameters for the road design, as well as the need to maintain adequate separation distance between the haul road and the adjacent properties. Consideration was given to locating the haul road adjacent to the southern boundary of Lot 301 DP 634 536 as suggested by Council. This option was not considered to be feasible. The haul road alignment was selected in consultation with Tomago Aluminium Company and is considered to be an optimal compromise between the need to minimise impacts on New Holland Mouse habitat, and the hazard and safety considerations associated with operation of the haul road.

The design of the haul road was revised to avoid areas of higher value habitat for the New Holland Mouse, based on the results of the habitat model for this species. The original straight haul road was revised within the constraints of the relevant Australian standards and safety considerations and this would avoid the loss of 0.02 ha of the most suitable habitat for the New Holland Mouse on site. This would be achieved by curving the road to the south and removing the 5m temporary construction zone on the northern side where it passes through this habitat. This would reduce the potential for habitat fragmentation by aligning the road through the southern edge of the identified habitat for this species, which would minimise the area that would be partially isolated by the road. This revised alignment would also minimise the loss of hollow-bearing trees by reducing the number to be cleared from four to two.

The project was referred to DSEWPAC on 18 August 2011. The referral outlined the measures to be implemented to minimise potential impacts, including the revised alignment of the haul road. DSEWPAC considered the potential impacts associated with the project, including impacts on habitat for the New Holland Mouse, and on the 29 September 2011 decided that the project is not a controlled action.

Issue – The site plans are misleading.

Council's submission notes that the Environmental Assessment states that vegetation clearing for the haul road is required within a 19m wide easement (Section 6.4.3), however it appears to be about 11m wide on the submitted plans. In addition, Section 11.3.1 refers to a 9m wide road and a 5m wide easement only on the southern side of

the haul road. There is no easement on the northern side in order to protect the habitat for the New Holland Mouse. The width of this corridor is less than the 19m clearing mentioned in Section 6.4.3 and Council requests that clearing be limited to a 14m wide corridor.

Response

As indicated in Section 6.4.3 of the Environmental Assessment, the haul road would be 9 m wide within a 19m wide cleared easement (i.e. 5m either side of the road) that would accommodate services and lighting.

Section 11.3.1 of the Environmental Assessment refers to measures that would be implemented to minimise impacts on habitat for the New Holland Mouse. As the higher quality habitat for the New Holland Mouse is north of a short section of the haul road, this section would be constructed without a 5m wide construction zone on the northern side of the road.

The construction zone would therefore be:

- 19m wide in all areas except those that contain higher quality habitat for the New Holland Mouse
- 14m wide in areas that contain higher quality habitat for the New Holland Mouse

Issue – The biodiversity offset parcels should be secured and demonstrated to be appropriate prior to consent being granted

Response

As indicated in Section 2.2.5, the biodiversity offset strategy is proposed to be prepared within 12 months of the approval being granted. The majority of the site has been substantially modified as a result of historical land use and is of limited ecological value and Midal's approach would allow construction to commence in parallel with development of the offset strategy.

Issue – Surveys for *Diuris arenaria* should be undertaken prior to consent being granted

Response

GHD consulted with EPA in December 2011 regarding the need to undertake pre-construction surveys for *Diuris arenaria* during the known flowering period (August). It was agreed that the surveys were only required to be undertaken in an area of potential habitat within the site that adjoins the powerline easement.

The majority of the site has been substantially modified as a result of historical land use and is of limited ecological value, and EPA agreed that the need to undertake pre-construction surveys for *Diuris arenaria* in August should not preclude construction commencing on the remainder of the site. Section 2.2.5 indicates that the EPA agrees with the approach set out in the Environmental Assessment. As such, it is not considered appropriate to delay approval of the project until after the surveys for *Diuris arenaria* have been completed.

Issue – A Section 88B instrument should be implemented to prohibit future development over the vegetated land adjacent to the haul road within the site and additionally over the New Holland Mouse habitat constituting all of the vegetated land on Lot 3232 DP 618103

Response

Midal objects to an instrument under Section 88B of the *Conveyancing Act 1919* being applied to all vegetated land adjacent to the haul road within the site and additionally over the New Holland Mouse habitat constituting all of the vegetated land on Lot 3232 DP 618103. The potential impacts of the project on native vegetation would be offset by implementing a biodiversity offset strategy that would purchase biobanking credits from an approved biobank site. As the potential impacts would be offset via biobanking, and the biobank site would be covered by a Section 88B instrument, it is not considered appropriate to apply a Section 88B instrument to the site.

Council has requested that the Section 88B instrument cover the New Holland Mouse habitat constituting all of the vegetated land on Lot 3232 DP 618103. Much of this land is not owned by Midal and does not form part of the site that is the subject of the Project Application.

Issue – A condition of consent should limit construction of the haul road to the period February to July to avoid impacting the New Holland Mouse population during their breeding season.

Response

Section 11.5.1 of the Environmental Assessment outlines a range of management measures that would be implemented to minimise potential impacts on the New Holland Mouse. As the proposed haul road is to pass through an area of suitable habitat for the New Holland Mouse, a fauna clearance program would be undertaken to remove animals from the impact area prior to the construction of the haul road to minimise the risk of mortality to individuals utilising this area. Animals would be captured via an intensive trapping program and relocated into suitable habitat north of the construction zone. Temporary barrier fencing constructed from black building plastic along the northern edge of the construction zone would be provided to reduce the potential for animals to re-enter the construction zone during the construction period.

Midal does not propose to limit construction of the haul road to the period February to July because:

- ▶ The intensive trapping would remove animals from the construction zone
- ▶ Temporary barrier fencing would be installed to minimise the potential for animals to re-enter the construction zone.

As indicated in the Environmental Assessment, the project was referred to DSEWPAC to determine if the project is a controlled action. The referral described the measures that would be implanted to minimise potential impacts on the New Holland Mouse, including those outlined above. DSEWPAC decided that the project is not a controlled action. As a result, the project does not require further assessment and/or approval

under the EPBC Act (referral number 2011/6085). DSEWPaC did not place any limitation on the timing of construction of the haul road.

Issue –Replacement of trees lost from the ‘Supplementary Koala Habitat’ area on site should occur.

Council has calculated that 0.55 ha of Supplementary Koala Habitat would be impacted by the proposal and requests that replacement tree planting should occur.

Response

As indicated in Section 11.5.1 of the Environmental Assessment, regeneration would be undertaken to improve vegetation condition on the site and this would include weed control and supplementary planting of native flora in conjunction with the ecological burn, to increase plant species diversity and restore a more natural vegetation structure.

The loss of native vegetation, including any trees that form Supplementary Koala Habitat, would be offset by implementing the biodiversity offset strategy.

2.8.2 Engineering issues

Issue - Stormwater management system

The stormwater assessment suggests that infiltrating the first 14mm of rainfall with additional volumes being discharged from the site. The first 14mm as suggested is an initial loss with no comparison to critical storm durations. The assessment should consider the legal discharge from the site and the allowances made in the original subdivision design. It is suggested that the consent be conditioned to have the proponent demonstrate that post development runoff matches predevelopment flows.

Response

Development of the stormwater management system considered the need to minimise impacts on the groundwater system and minimise the volume of stormwater that would be discharged from the site. A range of options were analysed to select the optimal solution which is presented in the Environmental Assessment. This involves collecting runoff and infiltrating up to 50m³/day. This limit on infiltration was selected to minimise the potential for adverse offsite impacts on groundwater dependent ecosystems.

Consultation with Council in April 2012 indicates that stormwater discharges from the site are required to be less than or equal to the predevelopment flows. To ensure that post development flows are less than predevelopment flows, on site detention of approximately 1,030m³ would be incorporated into the design. This detention would discharge to both an infiltration system and to existing site discharge points.

For the 10 year annual recurrence interval (ARI) storm event, a stormwater flow of 0.448m³/s is currently permitted to be discharged from the site. During operation of the project, approximately 0.310 m³/s would be discharged, of which 0.0006 m³/s (50m³/day) would be infiltrated.

For the 100 year AR) storm event, a stormwater flow of 0.893m³/s is currently permitted to be discharged from the site. During operation of the project, approximately 0.711 m³/s would be discharged, of which 0.0006 m³/s (50m³/day) would be infiltrated.

Issue - Infiltration system

The assessment did not provide information on the proposed infiltration system and associated servicing and maintenance requirements. The consent should be conditioned to ensure the system is easily and practically monitored and maintained in perpetuity for the life of the development.

Response

Midal agrees with the intent of Council's requested condition. Procedures to monitor and maintain the infiltration system in perpetuity would be included in the operating plan for the project.

2.9 Department of Planning and Infrastructure

2.9.1 Traffic issues

Issue – Further information is required relating to truck movements

The Environmental Assessment indicates that finished product would be loaded onto trucks and leave the site via the private road within the industrial subdivision, however it is unclear where heavy vehicles would park (both those delivering molten aluminium and dispatching finished product), be unloaded and loaded for dispatch.

Further details are required on internal truck movements that would occur on the site and where trucks would park/queue (including the number of spaces) during operation of the project.

The Department would like to clarify the type and capacity of trucks used to deliver molten aluminium to the site and those used to dispatch finished products to external markets.

Response

Molten aluminium would be delivered to the site in crucibles with a capacity of approximately 10 tonnes that are mounted on specialised small articulated trucks. The same trucks and crucibles are used in existing operations at the smelter.

Appendix A includes a plan showing vehicle circulation paths. Trucks carrying the crucibles would only be used on the haul road that would link the project with the smelter. The trucks would travel clockwise around the loop which passes through the Crane Building (refer to Appendix A). Once the crucible has been lifted from the truck and the molten metal poured into the holding furnace, the truck would return to the smelter. Deliveries of molten aluminium would be scheduled in advance and there would not be a requirement for multiple trucks carrying molten aluminium to queue within the site.

The finished product would be transported to market using semi-trailers and it is expected that each vehicle would have a capacity of about 25 tonnes. These would be the same type of vehicles that currently transport finished product from the smelter to the market. Vehicles would travel along the private road that extends from McIntyre Road and enter the internal road network via a new road adjacent to the eastern boundary. As indicated in the traffic flow plan in Appendix A, the trucks would travel in an anticlockwise direction to the unloading area adjacent to the eastern side of Building No. 1 if it is collecting aluminium rods, or Building No. 2 if it is collecting conductors.

2.9.2 Access issues

Issue – Further information is required relating to design standards for the upgrade of the private road and site access

The Environmental Assessment indicates that the site would be accessed using Private Road which would be rebuilt and sealed as part of the project. It also states that the site access would be designed to comply with the relevant standards.

The Department would like to clarify the standards that Private Road and the site access would be designed to comply with.

Response

The section of the private road and the site access would be upgraded to comply with Austroads guidelines for road geometry. Appendix B includes a figure showing the design standards that would apply to each section of the road network that would be constructed as part of the project. This indicates that Midal only proposes to upgrade the section of private road for the frontage of the site and the access road along the eastern boundary. No upgrades to McIntyre Road or School Drive are proposed.

2.10 NSW Health – Hunter New England Local Health District

2.10.1 Recycling stormwater and waste water

Issue – Midal would need to determine the appropriate regulatory authority for the stormwater and waste water recycling schemes

The submission indicates that the project would recycle stormwater and wastewater and notes that private entities with reuse schemes greater than 10 people are legislated under the *Water Industry Competition Act 2006* through the NSW Office of Water.

Response

Midal consulted with the NSW Office of Water during preparation of the Environmental Assessment and it was not identified that a licence was required under the *Water Industry Competition Act 2006*. Midal would continue to consult with the NSW Office of Water and if required, apply for a licence under this act.

Issue – The recycling scheme should incorporate a preventative risk management approach.

The submission indicates that a preventative risk management approach should be adopted with reference to the National Water Quality Management Strategy – Australian Guidelines for Water Recycling and the NSW Guidelines for Management of Private Recycled Water Schemes. In addition, the scheme must have a recycled water management plan. The quality of water would determine what the water is able to be used for and the type of irrigation and this would need to be validated.

The submission indicates that it is preferred that reticulated sewerage is utilised and requests that Midal advise when and if this will be possible in the future.

Response

As indicated in the Environmental Assessment, there are no sewer provisions servicing the site. The closest reticulated sewer system is currently under construction and would be located 6.8 km away at the corner of Tomago Road and Cabbage Tree Road. As a result, Midal does not propose to connect to the reticulated network and would operate an onsite system to treat sewage and use the treated water for onsite subsurface irrigation.

The potential application of the National Water Quality Management Strategy – Australian Guidelines for Water Recycling, and NSW Guidelines for Management of Private Recycled Water Schemes were considered during development of the water management strategy for the project (refer to Table 4 of the Site Water and Groundwater Assessment). This indicates that:

- ▶ The requirements of the National Water Quality Management Strategy – Australian Guidelines for Water Recycling would need to be adhered to if recycled treated wastewater is reused in the process stream or as a third pipe for indoor use. At this stage, it is not envisaged that recycled wastewater would be reused as process water or for indoor purposes, however if this position changes, the project would be designed and operated to comply with the requirements of the guideline.
- ▶ The requirements of the NSW Guidelines for Management of Private Recycled Water Schemes were considered during development of the concept design and the onsite package treatment plant would be selected to meet the requirements for the proposed end use of the treated water.

2.10.2 Health impacts associated with cooling towers

Issue – The submission noted that the project would use cooling tower, however there is no information on the type or number of cooling towers.

The submission advised that the cooling towers should comply with the *Public Health (Microbial Control) Regulation 2006* and The NSW Code of Practice for the Control of Legionnaires' Disease 2004. These should be read in conjunction with the Australian/New Zealand Standard AS/NZS 3666 Parts 1, 2, and 3: Air-handling and water systems of buildings – Microbial control. A cooling tower management plan for

maintenance and cleaning should be developed particularly as the plant would operate 24 hours per day.

Response

The project would be designed and operated in accordance with guidelines, Australian Standards and regulations relating to cooling towers, including those identified in the submission by the Hunter New England Local Health District.

2.10.3 Noise impacts

Issue – Management of noise impacts

The submission notes that OEH is the appropriate authority for regulating noise under the POEO Act. Efforts should be made to ensure that the noise levels comply with the noise criteria and there are mitigation measures in place if community concerns arise or if there is a cumulative noise impact.

Response

Attachment B to EPA's submission included a condition requiring a Noise Compliance Assessment Report to confirm that the noise limits are being achieved in practice. Section 2.2.2 reflects that Midal would prepare a Noise Compliance Assessment Report. Additional noise management measures would be investigated and implemented if the compliance monitoring indicates non-compliance with the noise criteria.

2.10.4 Waste management

Issue – The Environmental Assessment should provide information on production waste and disposal.

The submission questioned whether solid aluminium-anodizing residue waste would be produced and if so, what the expected quantity would be. It also requested information on whether other heavy metals would be in this residue, where the waste would be disposed of, and whether there are processes/technology to manage this waste on-site?

Response

The project would not involve any aluminium anodizing or electrolytic passivation processes.

2.10.5 Hazard and risk assessment

Issue – Further detail is required on potential off-site impacts to ensure the protection of public health and the environment

The submission noted that a qualitative hazard analysis identified several scenarios that have the potential for off-site impacts such as aluminium-water explosion and toxic exposure, discharge of contaminated water from site, fire/explosion due to pipe rupture or the gas metering station, and leakage of caustic and entrainment within site runoff.

While some off-site impacts have been analysed quantitatively, the submission indicated that additional detail should be provided on all off-site impacts to ensure protection of public health and the environment. This should document hazard controls to be implemented and action to be undertaken in the event that such a scenario occurs. This should include a community awareness, information and notification plan.

Response

The qualitative risk assessment identified the following scenarios may have the potential for off-site impacts:

- ▶ Molten aluminium-water explosion.
- ▶ Fire, explosion or toxic exposure from the reaction of aluminium dross with water.
- ▶ Discharge of contaminated water from site.
- ▶ Fire/explosion from pipeline/fitting rupture/leak of natural gas supply.
- ▶ Fire/explosion at gas metering station.

Consideration was given to the management strategies that would be implemented and consequence analysis not undertaken for risks that could be managed by implementing standard controls.

The project would be operated in accordance with procedures that would be developed to identify, mitigate and manage the potential for off-site risks. This would document hazard controls, and identify protocols to be followed if particular scenarios occur. This would include measures to inform the community.

3. Statement of commitments

Table 3-1 outlines the Statement of Commitments that would be implemented to mitigate, manage and monitor impacts during construction and operation of the project. The commitments refer to mitigation measures for specific issues that are outlined in Chapters 8 to 18 of the Environmental Assessment, and would be addressed in the Construction Environmental Management Plan (CEMP) and Operational Environmental Management Plan (OEMP) that are outlined in Chapter 20 of the Environmental Assessment.

Table 3-1 Statement of Commitments

Issue	Commitments
General management plans	Prepare and implement a CEMP as outlined in Section 20.1.2 of the Environmental Assessment.
	Prepare and implement an OEMP as outlined in Section 20.1.3 of the Environmental Assessment.
Air quality	Measures to reduce the potential for air quality impacts would be incorporated into the design of the facility as described in Section 8.5 of the Environmental Assessment. The specifications provided to prospective equipment suppliers would dictate the technical and environmental performance the equipment would be expected to meet, based on Midal's operational requirements and the conditions of approval for the project. The cooling towers would comply with the <i>Public Health (Microbial Control) Regulation 2006</i> and The NSW Code of Practice for the Control of Legionnaires' Disease 2004. These would be read in conjunction with the Australian/New Zealand Standard AS/NZS 3666 Parts 1, 2, and 3: Air-handling and water systems of buildings – Microbial control. A dust management plan would be prepared as part of the CEMP detailing measures for the control of dust generation.
Site water and groundwater	A Spoil and Fill Management Plan would be incorporated into the CEMP and would include the control measures outlined in Section 9.3. Although no adverse impacts are expected on groundwater, a Groundwater Monitoring Plan would be prepared prior to construction.

Issue	Commitments
Noise	The project would be designed and operated to ensure that noise criteria are not exceeded. A construction noise management plan would be prepared as part of the CEMP to detail how construction noise impacts would be minimised, including the measures identified in Section 10.5 of the Environmental Assessment.
Biodiversity	Measures to minimise the impacts of construction on flora and fauna, including those outlined in Section 11.5, would be included in the CEMP. Retire a sufficient quantity of ecosystem credits generated within an approved BioBank as a biodiversity offset for the 0.68 ha of Smooth-barked Apple Red Bloodwood shrubby open forest removed by the project. The biodiversity offset would be consistent with the Interim Offsetting Guidelines for Part 3A Project and would be delivered via the BioBanking Offsets Scheme. The Biodiversity Offsetting Strategy would be prepared within 12 months of the date of approval of the project. Conduct a pre-construction survey for <i>Diuris praecox</i> and <i>Diuris arenaria</i> within the August flowering period specifically for the area adjoining the powerline easement at the western edge of the site. This survey is to determine if these species are present within the impact area. Biodiversity offsetting requirements and/or translocation would apply should these species be impacted by the haul road. If additional threatened species are identified on the site, the Biodiversity Offset Strategy would be revised to ensure potential impacts are adequately offset. Integrate biodiversity mitigation actions involving fauna clearance, House Mouse control, weed management, nest box installation and an ecological burn into the CEMP to minimise the direct and indirect impacts of the project on adjoining biodiversity values. Revegetate the margins of the haul road with <i>Lomandra longifolia</i> to act as a water and nutrient trap thereby minimising indirect impacts on adjoining vegetation through the operational period of the haul road. A fauna clearance program would be conducted during construction of the proposed haul road. Habitat enhancement would be incorporated into the OEMP, including ecological burn, House Mouse control and bush regeneration programs. A groundwater monitoring program, including a trigger response plan, would be undertaken to monitor the impacts of the project on groundwater dependent ecosystems.

Issue	Commitments
Soil and contamination	Measures to minimise soil erosion and contamination, including those outlined in Section 12.3 of the Environmental Assessment, would be included in the CEMP and OEMP documentation
Waste	Measures would be implemented where practicable to minimise, reuse and/or recycle any excavated and scrap material from construction. A Waste Management Plan would be prepared incorporating the measures of control identified in Section 13.3.
Traffic and transport	To minimise impacts during construction on existing road users, truck movements would be confined to the off-peak periods. A construction traffic management plan would be prepared incorporating the measures of control identified in Section 14.4. All heavy vehicle loading and unloading movements would occur within the site and internal access roads and designated loading and unloading zones would be provided for specific site operations. Staff and heavy vehicle movements would be separated by containing all staff vehicle movement to designated off street parking areas on newly constructed private access roads. A separate direct private haulage road would be provided to connect the project with the smelter. To minimise impacts during construction on existing road users, truck movements associated with the delivery of material and removal of fill would be scheduled and where possible avoid commuter peak periods. A project construction traffic management plan would be prepared that incorporates control measures to manage the impact on road users and surrounding property during the construction period.
Bushfire	To minimise potential bushfire risk, asset protection zones would be established as outlined in Section 15.3.1 of Environmental Assessment. Preparation of a site management plan during construction and operation of the project would also be undertaken to assist in reducing bushfire risk.
Hazards analysis	The risk management and mitigation procedures outlined in Section 16.5.3 of the Environmental Assessment would be implemented during operation of the project. Emergency management procedures would be developed to respond to potential fire and explosion scenarios.
Greenhouse gas and climate change	Potential energy efficiency measures including recovering waste heat and utilising renewable energy (as detailed in Section 17.4.1) and avoidance of natural hazards from climate change (as detailed in Section 17.4.2) would be considered in the detailed design phase of the project.

Issue	Commitments
Heritage	An Aboriginal Cultural Heritage Awareness Program would be prepared and all personnel and contractors involved in the construction activities within the site would be inducted into the program. Records would be kept of which staff/contractors have been inducted, and when, for the duration of the project. This program would be developed in collaboration with registered Aboriginal parties. Initial ground disturbance works associated with development of the haul road would be monitored by representatives from the registered Aboriginal parties and an archaeologist would be on call to inspect the site, if required. A work method statement would be prepared prior to monitoring that details a methodology that allows work to continue in the case of low significance finds. The method statement would nominate a suitable location to store such finds. If any Aboriginal cultural objects of unknown significance are uncovered during construction, all works would cease in the immediate vicinity of the find to prevent further impacts to objects. A suitably qualified archaeologist and members of the registered Aboriginal parties would be contacted to determine the significance of the find. Any new sites must be registered in the AHIMS and details of the proposed management of these sites must be provided in the information submitted to AHIMS. If human remains were located during construction, all works would cease in the vicinity of the site and the NSW Police, the Aboriginal community and OEH would be notified. If any Aboriginal objects are uncovered during the project, custodial arrangements would be developed that comply with the provisions of Sections 85A and 89A of the <i>National Parks and Wildlife Act 1974</i>. Records would be kept of the support, or otherwise, from all registered Aboriginal stakeholders, of any decisions regarding final custodial arrangements.

4. Conclusion

Midal propose to undertake the project to take advantage of an opportunity to add value to existing production at the Tomago Aluminium Smelter by sourcing molten aluminium to manufacture aluminium rods and conductors. This would reduce the volume of aluminium rods and conductors imported to Australia.

The Environmental Assessment considered the potential impacts of the project and was prepared in accordance with the provisions of Part 3A of the EP&A Act and the requirements of the Director-General of the NSW Department of Planning and Infrastructure. The Environmental Assessment documents the potential environmental impacts associated with the project, considering both potential positive and negative impacts, and outlines management and mitigation measures to protect the environment where required.

Midal has reviewed the submissions received during exhibition of the Environmental Assessment between 17 February 2012 and 19 March 2012. This Submissions Response Report addresses the issues raised in the submissions.

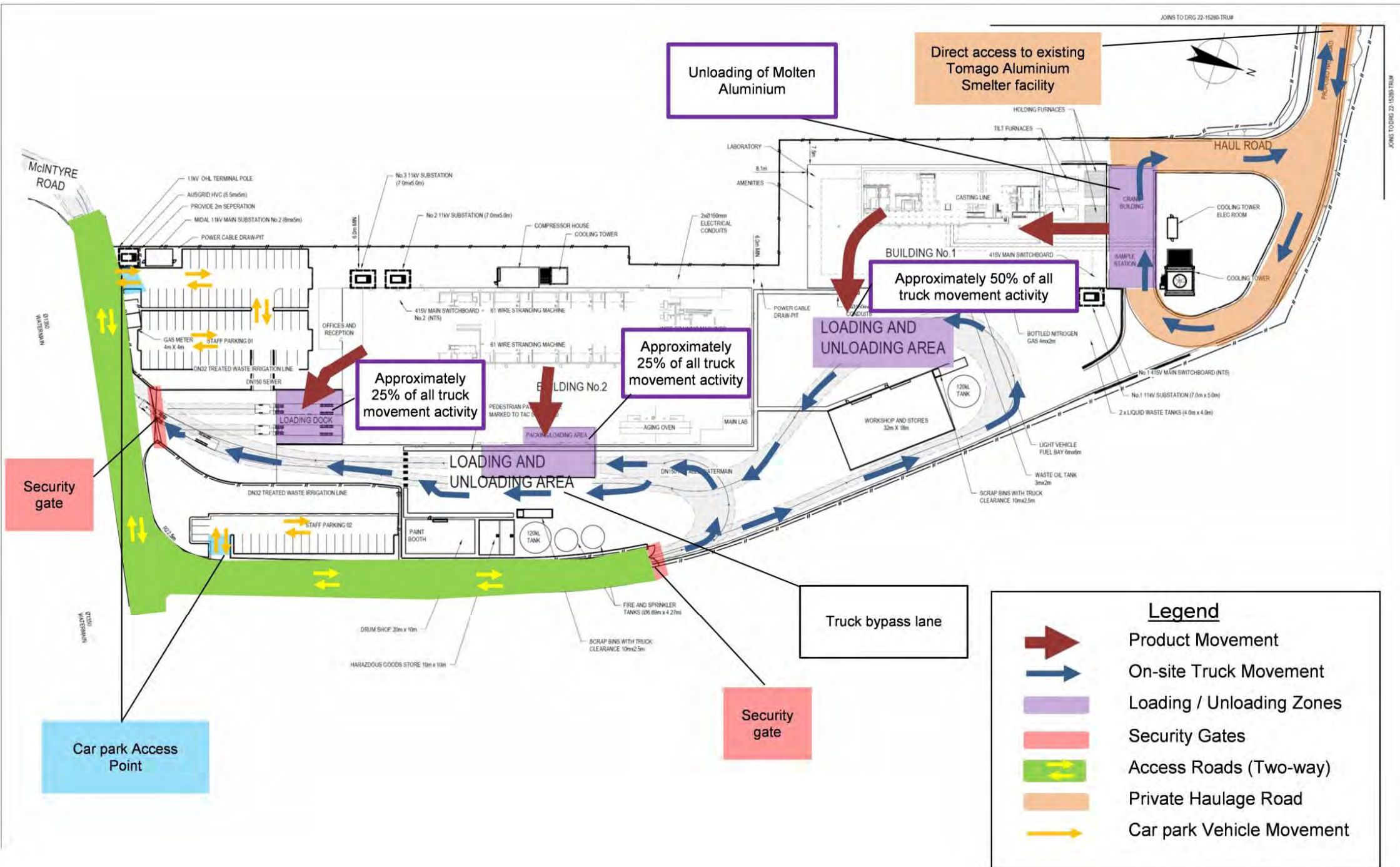
The Statement of Commitments has been reviewed and amended to address issues raised in submissions (where required) and ensure that potential environmental impacts are appropriately managed.

The project would be constructed in accordance with a CEMP that would include a suite of sub-plans to address construction related issues raised in submissions.

While the project has the potential to result in some residual adverse impacts, these would be adequately managed by implementing the Statement of Commitments. On balance, the benefits of the project substantially outweigh adverse impacts. It is concluded that the environmental impacts associated with the project can be appropriately managed by implementing the Statement of Commitments.

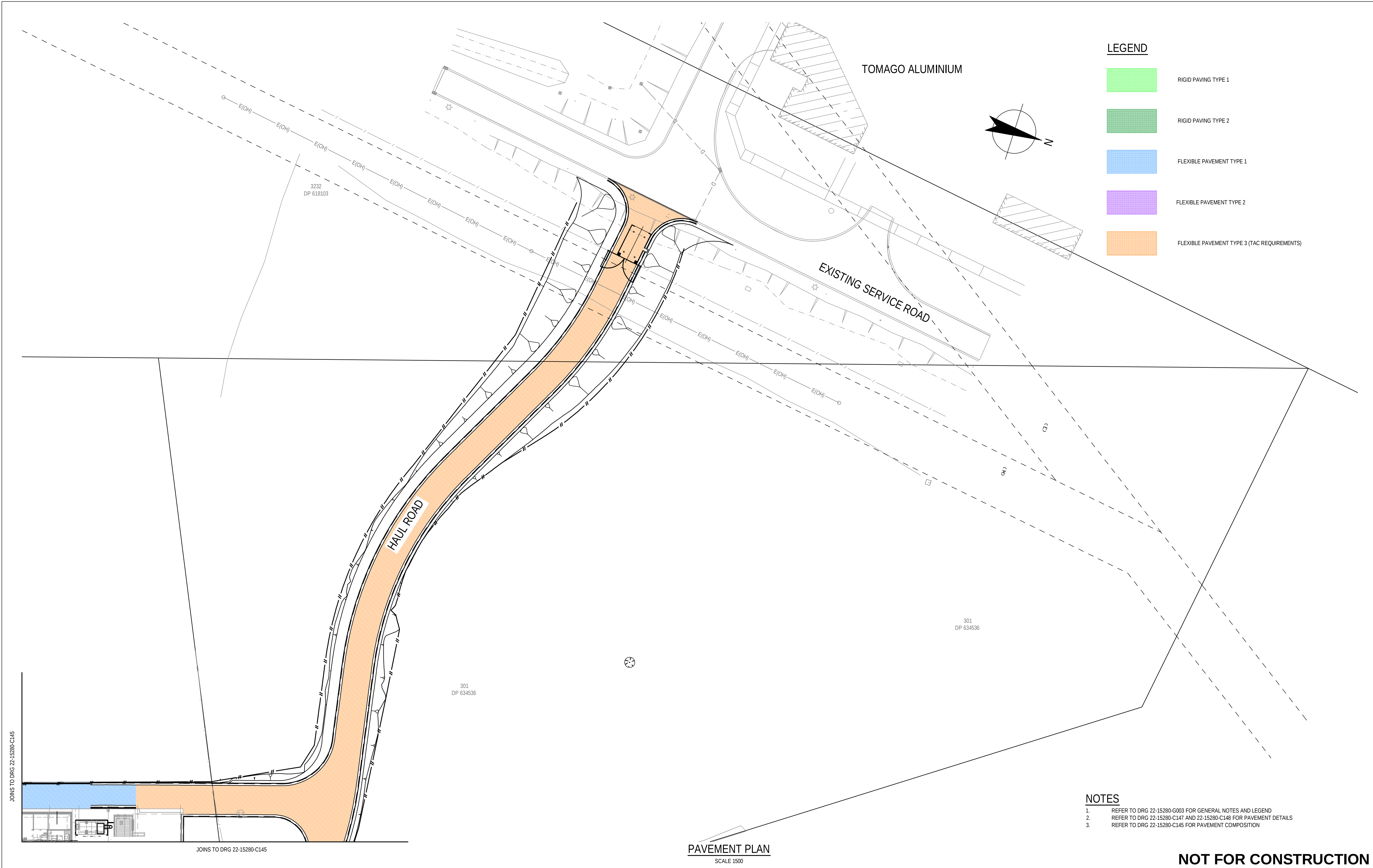
Appendix A

Vehicle circulation plan



Appendix B

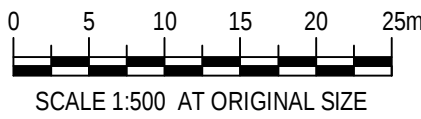
Road design standards



- NOTES**
1. REFER TO DRG 22-15280-G003 FOR GENERAL NOTES AND LEGEND
 2. REFER TO DRG 22-15280-C147 AND 22-15280-C148 FOR PAVEMENT DETAILS
 3. REFER TO DRG 22-15280-C145 FOR PAVEMENT COMPOSITION

NOT FOR CONSTRUCTION

A	ISSUED FOR INFORMATION ONLY				RJC GAP PP* 23.12.11
No	Revision	Note: * indicates signatures on original issue of drawing or last revision of drawing			Drawn Job Manager Project Director Date





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Project	TOMAGO ROD AND CONDUCTOR FACILITY		
Title	PAVEMENT PLAN		
	SHEET 2 OF 2		
Original Size	A1	Drawing No: 22-15280-C146	Rev: A

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Document Status

Rev No.	Author	Reviewer		Approved for Issue		
		Name	Signature	Name	Signature	Date
0	Pete Carson	Gordon Paterson		Phillip Pigram		13 April 2012