SITE IMAGE

Landscape Architects

# PASMINCO
# LANDSCAPE MASTER PLAN –
# Landscape Visual Analysis

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## Visual Analysis – Munibung Hills

### Study Objective

To assess the potential visual impact of residential development proposals that would likely result from the rezoning proposals for the subject areas of the Pasminco and Incitec lands.

### Summary

Other than this visual impacts analysis and assessment by Site Image and Virtual Ideas, the proposed development extent has also been determined in consideration of the remediation boundary, planning constraints and feasibilities, the visual analysis study by CMP, the geotechnical, slope, bushfire, open space links, and other parameters.

Views do occur towards the site and to the hill and ridgelines, however the proposed development does not obstruct or impact on the ridgelines or hill.

The visibility to the hills is somewhat limited given the geographical and physical barriers. Most notably was the finding that the locations where the ridgeline and hills are visible are a significant distance away, and therefore reducing the impact of development significantly. This is reflected in the photo montages prepared by *Virtual Ideas*.

Based on the analysis and assessment, it can be summarised that the subject site has a low degree of visibility for both the passing traffic and from surrounding and nearby development, and no visibility beyond the visual catchment.

It is proposed the development will incorporate appropriate landscape and vegetation to street verges, park areas and other open spaces, thus reducing further visual impact of development, as well as providing vegetated green links to the hill.

## Visual context

The visual impact of the proposed development is important given the significant ridge lines of Munibung Hill and ridge line, and the prominence it has from the west. Munibung Hill and ridgelines are visible and form a prominent feature in the landscape.

The site is located on the lower slopes below the Munibung Hill ranges. The overall setting is framed by the open and thinly vegetated Munibung Hills set between the Pacific Ocean and perched just above Lake Macquarie's northern most confluence.

Differing land uses adjoin the site including the residential community of Boolaroo, and coastal community of Speers Point is to the south where Cockle Creek flows into Lake Macquarie's northern shores at Speers Point.

The main road, TC Frith Avenue, and the Sydney/Newcastle railway line, as well as a golf course and a coal preparation/colliery are located on lower lying lands to the west and northwest along the western boundary to the Pasminco site.

A small amount of residential land, part of Argenton has views to the ridgeline and is located to the north. Also to the north and east of the site are areas of industrial and commercial land uses, respectively Cardiff and Glendale.

To the south-west the elevated suburb of Teralba has distant views to the Munibung hills.

## Landscape Character

Within the Munibung Hills zone, the landscape is disturbed Open Woodland, which has resulted from significant rehabilitation works. These rehabilitation works have been largely completed however do not extend up the entire hillside1.

As summarised in the Umwelt Flora and Fauna report: "The preliminary assessment of the conservation significance of the vegetation community occurring within the study area indicates that the highly modified and disturbed site is unlikely to comprise a significant vegetation community within Lake Macquarie Local Government Area. One threatened species, the Charmhaven Apple, is known to occur within a discrete section of the study area…Many hybrid of *Angophora inopina* and *A. floribunda* are also known to occur"[2].

## Computer Modelling and rendering.

The landscape design documentation is supported by computer rendering of the landscape setting and built proposals as prepared by Virtual Ideas. Refer to Virtual Ideas report as to the process involved.

The rendering is a full 3-D computer model that incorporates to a high degree of accuracy the landform, road and buildings, existing and proposed vegetation. This information is combined in a computer photo montage so that the representation is a substantially accurate representation of the expected views to the site after completion. As with all aspects of the approvals proposals, the renderings acknowledge the maturing of the proposed vegetation, noting that this is the design outcome in the short to medium term.

Site Image has worked extensively with Virtual Ideas, and is fully cognisant of the requirements to gain surveyor verification of the survey and CAD data application, and its combination with actual photographs using verification of both location and view-points.

## Selection of View Points for Visual Analysis

Five key viewing positions have been selected and give a good basis for the assessment of the likely appearance of the proposed development.
These views are:

Camera Position 02: Macquarie soccer and athletic Park, at the confluence of Cockle Creek, on Creek Reserve Rd, near car park.

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*1 March 2004, Umwelt Environmental Consultants, DRAFT Preliminary Analysis and Issues Paper: Flora and Fauna Pasminco Cockle Creek Smelter Site*

[2] Extract from: p4, *March 2004, Umwelt Environmental Consultants, DRAFT Preliminary Analysis and Issues Paper: Flora and Fauna Pasminco Cockle Creek Smelter Site*

Camera Position 04: Anzac Pde, Teralba residential area.
Camera Position 10: Bottom of Victoria Street in Argenton, overlooking the railway lines to the site
Camera Position 14: From Lake Road, Argenton overlooking Kindyerra Park
Camera Position 18: Main Road, Edgeworth - from elevated point on major road, golf course in foreground
*(Refer Virtual Ideas photomontages and report).*

The viewpoints have been determined in liaison with Site Image so as to substantially represent the visibility and character of the proposed development from key view points and corridors. Photo locations were chosen in areas where the maximum amount of development could be seen as well as from developed or residential areas and locations of significance.

**Assessement of Visual Impact from the Selected Views/Renderings**
The Virtual Ideas photomontage renderings demonstrate the presence of the ridgeline as a distant background. The ridgeline from closer key points such as from TC Frith Avenue and the railway line is impeded due to vegetation or foreground elements, or the areas are not elevated enough.

Camera Position 02: Macquarie soccer and athletic Park, at the confluence of Cockle Creek, on Creek Reserve Rd, near car park.
The location was chosen due to the site's prominence – with well used sports fields, a cycle way and parking area adjacent the creek.
The photo montage with proposed development illustrates that views are impeded by foreground vegetation as well as the distance between the two sites.

Camera Position 04: Anzac Pde, Teralba residential area.
The location was chosen due to the residential nature and elevated location. The height of the Teralba development is slightly higher than that of the proposed, and looks slightly down upon Munibung ridge and hills.
The proposed development is considered not to obstruct the integrity of the ridgeline and the distance away shows minimal visual impact.

Camera Position 10: Bottom of Victoria Street in Argenton, overlooking the railway lines to the site
The viewpoint is taken from the closest residential and public road development to the site and the closest position from the railway line with a view to Munibung Hills.

The area is low lying and therefore the proposed development is partially hidden. The views of the ridgeline and hills area are maintained and considered to not visually impeed.

Camera Position 14: From Lake Road, Argenton overlooking Kindyerra Park
The viewpoint is from a prominent road (Lake Rd) and overlooking Kindyerra Park, and was one area where the view to the site opened up. The proposed development shows the ridgeline is maintained as are views to the hills and the large green links.

Camera Position 18: Main Road, Edgeworth – from elevated point on major road, golf course in foreground

This camera position is taken from a residential zone and from a very elevated position to get maximum views to the site. The proposed development is visible, however very far away. The Macquarie Hills residential development can also be seen from this position and shows similar visual impact to the proposed development. The ridgelines and views to the hills are maintained and considered as integrated into the lie of the hill.

**Conclusion:**

From the review of the computer rendered selected views, which are considered to be largely representative of external views to the site, the visual impact of the proposed streetscape configuration and residential form is considered to be minor, and well within an acceptable range in the context of the surrounds and locality character.

The visual impact assessment renderings were prepared with good understanding of the baseline visual studies by Conybeare Morrison & Partners (CMP), which provide the basis for Council's own considerations of visual impact.

We believe the Virtual Ideas study comprehensively demonstrates that the visual impact assessment of the site is more complex than development to nominated contour lines, given the dynamic nature of views to the varying landform from a diverse range of viewpoints and viewing circumstances. The computer model was utilised to assist determining possible viewing locations, and in addition, viewing locations nominated in the CMP report and in discussion with Council were located and modelled. These were used as a basis for visiting the locality and taking extensive photographs towards the site, and numerous additional locations as determined on the day of inspection. Importantly, all photograph locations were located by GPS, and were 'exactly' located in the computer model. Photo overlays were utilised to demonstrate the extent of actual views given foreground and context at each location. The five views with greatest potential impact were selected and then computer modelling and overlays demonstrated the actual content of development impact in these views. The visual impact in each of these views is we believe reasonably shown to be minimal.

Moreover, the potential for mature trees and landscaping in open space, streets and gardens will obviously further reduce the potential for visual impact from the future residential buildings and roads. It is understood that more detailed parameters with regard to specific built form, finishes and reflectivity guidelines determined at the detailed approval stage will provide further assurance so that reasonable visual outcomes will be achieved.

From the above summary, we conclude that the study has demonstrated that the proposed residential development of the subject areas of the Pasminco and Incitec lands will be within a minor and therefore an acceptable range of visual impact.