

Technical Paper

A

Visual Impact Assessment

The Site's Visual Character

The property contains low lying flats and undulating hills varying in elevation from approximately less than 10 AHD to 90 AHD (Dept of Lands SIX, 2010) in the north western corner. The Application Area occupies mostly flat land (albeit for some elevated land to the north-west) in the north and southern-most parts of the site. These two areas are connected by a narrow access corridor which straddles Jones Road. There are 2 residences and a number of farm utility buildings within the property.

The property itself consists of a variety of landcover types including densely forested areas, grass areas with scattered trees, low-lying grass lands, artificial drainage lines from past agricultural uses, undulating hills with various vegetation cover types and natural and created water bodies. These elements give it a rural and bushland character.



Hoop pines are significant visual elements on higher parts of the site.



The numerous dams at the site are high visual quality elements.



Elevated areas in the north west overlook flats and grasslands.



Open grasslands with dense patches of vegetation create visual contrast.



Existing pathways and tracks provide access through forest patches.



Some grassland areas contain scattered trees.



Gently undulating landforms surround flat grasslands.



The site contains many existing tracks and areas cleared by previous land owners.



Cattle graze parts of the site



Narrow corridors of cleared land provide access between vegetation clusters.



Large amenity trees are a high quality visual element.



The southern part of the site is flat grassland with a backdrop of dense forest.



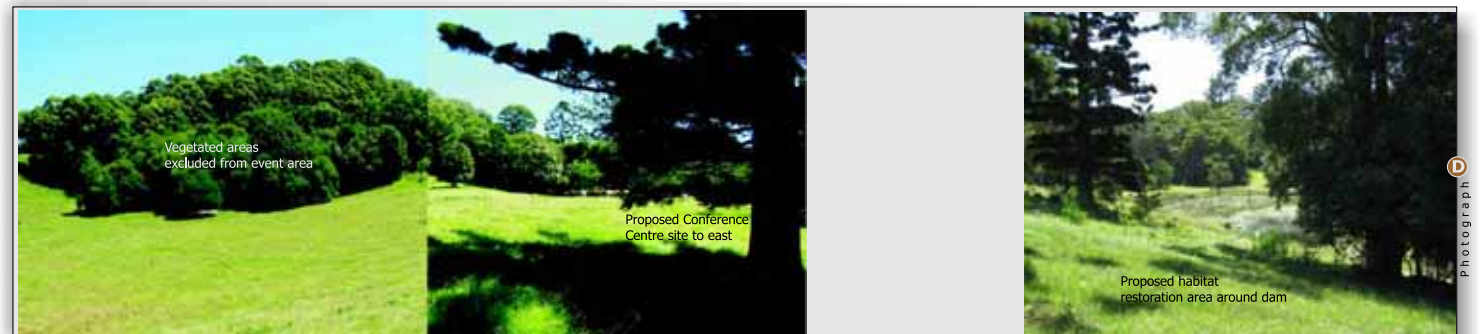
Flat, low grasslands with patches of vegetation occupy the northern parts of the site. This photograph looks northward toward proposed event space and the boundary.



Grassland between two dense vegetation patches. This photograph looks northward to the site.



Forested areas form a backdrop to the flat open grass areas of the site, protecting them from view from many locations.



This photograph looks northwest from near the large dam towards the site proposed for the Conference Centre.



This photograph shows one of the track accesses which exist between forest patches.



Date	25.02.10
Author Reference	SDR 09_120

Not to scale

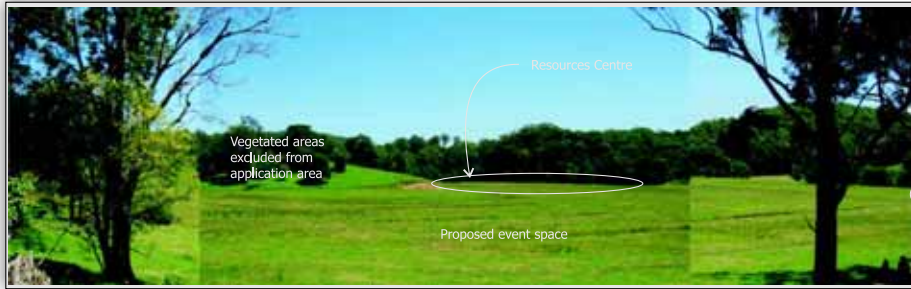
IMPORTANT NOTE !
Cadastral information is subject to survey. The alignment of the aerial photography and vectorial overlays is approximate only.

Sources | Aerial Photography: Bill Mills (2009) | Photography: Sheryn De-Re

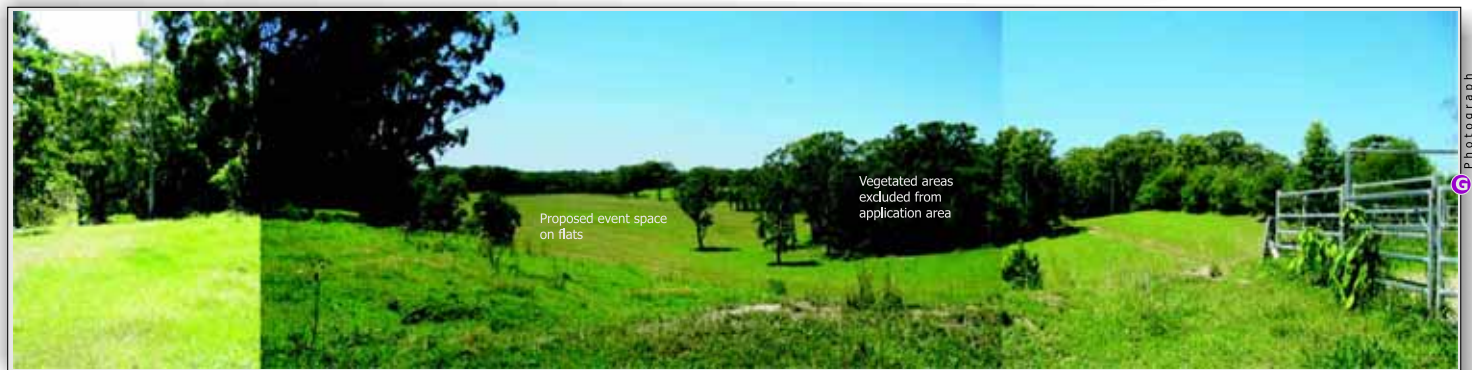
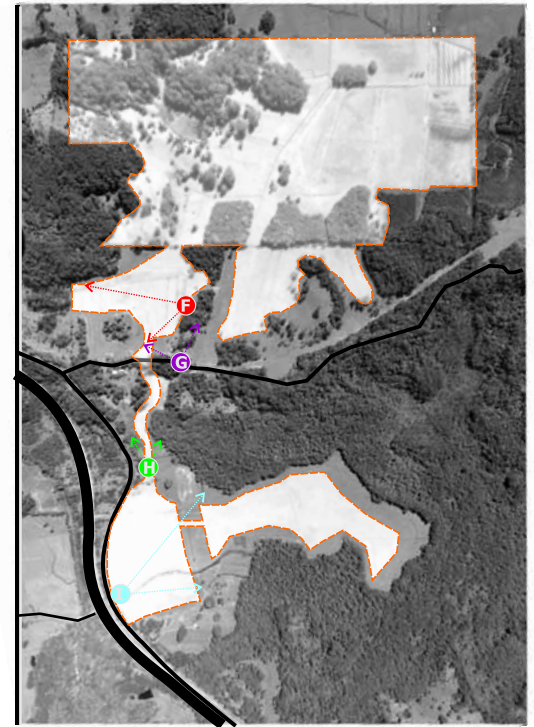
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design team Ink
landscape architecture urban design

Illustration | 1.2 Photographic Plates Views from within the Site

North Byron Parklands | Tweed Valley Way & Jones Road



This photograph looks westward toward proposed event space and the resources centre.



This photograph looks from near the existing entry off Jones Road northward towards proposed event area and habitat areas.



This photograph looks northward towards the proposed spine road which links the northern and southern parts of the site.



This photograph is taken from the Pacific Highway. It looks eastward over the southern parts of the site which are mostly flat with a backdrop of forest. The flat grassy parts are proposed for use as carparking for large events (only). A residence owned by the proponents is located on the property just off the right of the photo.



Date	25.02.10
Author	SDR
Reference	09_120

Not to scale

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Sources | Photography: Sheryn Da-Re

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Illustration | 1.3 Photographic Plates Views from within the Site

North Byron Parklands | Tweed Valley Way & Jones Road

Views to the Site

Background Assumptions

User Groups

The photographic plates illustrate the typical views of motorists and nearby residents. Views from the air or by other users were not captured.

Field of Vision

When considering the visual impacts of the proposal, it has been assumed that all viewers have similar extents of vertical and horizontal peripheral vision, being 90 degrees horizontally and 65 degrees vertically, either side of a central viewing point. According to the Roads and Traffic Authority (RTA) Road Design Guidelines (1991), only about 2 percent of that vision is detailed (at the point of focus) and the remaining field of vision diminishes away from the central viewing point as the eye concentrates on detail at this point. This cone of vision is reduced with increasing speed. The process of recognising and observing an object or scene is complex and involves constant scanning, recognition and refocussing within the field of view; a process that is modified (narrowed) by viewer movement, the speed of the viewer and secondary activities such as driving.

The assessment of views from roads, assumes that the driver does not move their eyes or head to look directly at the site and therefore, influencing the field of vision.

Photograph Heights

The viewing height for viewers in vehicles (1.15m above ground level) is based upon the height of an average person's eyes when seated in a typical passenger car. Photographs have been taken at two heights: approximately 1.15m, whilst seated in a vehicle or at approximately 1.55m, being eye height when standing.

Site Context

The property is bound to the west by Tweed Valley Way (the old Pacific Highway). Further to the west and at a higher elevation is the recently upgraded Pacific Highway. Large farm and rural residential uses occur further west, in and around the community of Yelgun.

The northern boundary of the property adjoins grassy lowlands which gradually rise to an elevation of approximately 40 AHD on Wooyung Road. Some large rural residential properties are located along this road. Some of these properties contain dwellings which overlook the northern parts of the site and proposed event space.

To the east of the property are dense vegetated lands containing Billinudgel Nature Reserve and a SEPP 14 Wetland. South Golden Beach is approximately 2.2 kilometres eastward of the site. The site can not be seen from South Golden Beach.

The southern portions of the site were the subject of land clearing by previous owners. The southern property boundary adjoins elevated vegetated lands.

Access to the site is presently obtained from two locations; centrally from approximately 450m along Jones Road, and in the south off Tweed Valley Way adjoining the Yelgun Road intersection.

Specific Locations from Where the Site can be Seen

A desk top analysis identified potential locations (key viewing locations) from where the site may be seen. The actual likelihood of seeing the site and/or proposed infrastructure (temporary or otherwise) was checked by visiting each of the viewing locations. These locations included public and private lands such as dwellings at Yelgun, off Tweed Valley Way and at Wooyung and various points along the Pacific Highway, Jones Road, Yelgun Road, Tweed Valley Way and Wooyung Road.

The assessment was undertaken from public lands, however, where possible photographs were taken from private properties with relevant owner permissions. Access could not be obtained to all properties.

Distance

Distance zones were determined within the visual catchment. The following distance zones were used:

- ☐ Foreground – areas within 1km of the viewer
Within this range the viewer experiences maximum discernment of details (Great Lakes Council 2002 cited in GeoLINK)
- ☐ Middleground – between 1 km and 6km from the site
Within this range, textures from different vegetation communities and land use patterns are visible to the viewer (Great Lakes Council 2002 cited in GeoLINK)
- ☐ Background – more than 6 km from the site

Beyond this distance, textures and patterns are indistinct to the viewer. The viewer is unaware of individual details and discerns broad landscape types as patterns of light, dark and muted colour. (Great Lakes Council 2002 cited in GeoLINK).

Viewing distances that are located within the foreground are generally of highest visual impact because the site or the particular element of the landscape being assessed occupies more of the total viewed area than if it were located in the middleground or background.

Objects which are viewed with the skyline as a backdrop or at the edge of a break in slope are likely to have a greater visual impact than features viewed against a land or vegetated backdrop.

Recommendations

Measures to mitigate or minimise any possible visual impacts are provided.

Key Viewing Locations Investigated

Roads

- Pacific Highway
- Yelgun Road
- Jones Road (north and southern ends)
- Wooyung Road
- Tweed Valley Way

Private Properties

- Dwellings off Yelgun Road
- A dwelling at the end of Jones Road (north)
- Dwellings off Jones Road (south)
- Dwellings, 1 roadside stall, landscape supplies yard off Wooyung Road
- The Multiple Occupancy site off Tweed Valley Way

Rental properties owned by the proponent were excluded from the assessment.

Not to scale



Date
10.03.10
Author
sdr
Reference
09_120

IMPORTANT NOTE !
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Sources | Aerial Photography: Bill Mills (2009) | Photography: Sheryn De-Re

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landscape architecture urban design

Illustration | **1.4**
Photographic Plates
Site Context/Key Viewing Locations

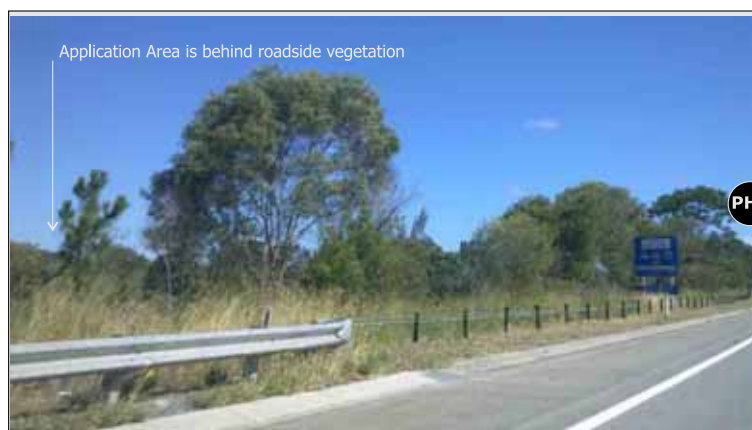
North Byron Parklands | Tweed Valley Way & Jones Road



Pacific Highway: The southern part of the project site and application area are located close to the newly upgraded Pacific Highway. The Pacific Highway is elevated to pass over Yelgun Road. There are no dwellings along the Pacific Highway which can see the project application area. South bound motorists obtain small glimpses to the site through roadside vegetation.



Pacific Highway: View from underpass bridge looking southward. This photo shows a typical view for a motorist and roadside vegetation which filters views to the site. The site is out of the drivers cone of vision.



Pacific Highway: View from highway looking southeast. This photo shows typical roadside vegetation which filters views to the site.



Pacific Highway: View from highway looking eastward towards the application area. This view could only be obtained by someone stopped on the side of the road. Roadside vegetation prevents views into the application area from most locations.



Pacific Highway: View from highway looking eastward towards the application area. This view could only be obtained by someone stopped on the side of the road. This is one of few locations where there is a small gap in the roadside vegetation which allows views to the application area.

Not to scale

Date
25.02.10
Author
DTI
Reference
09-120

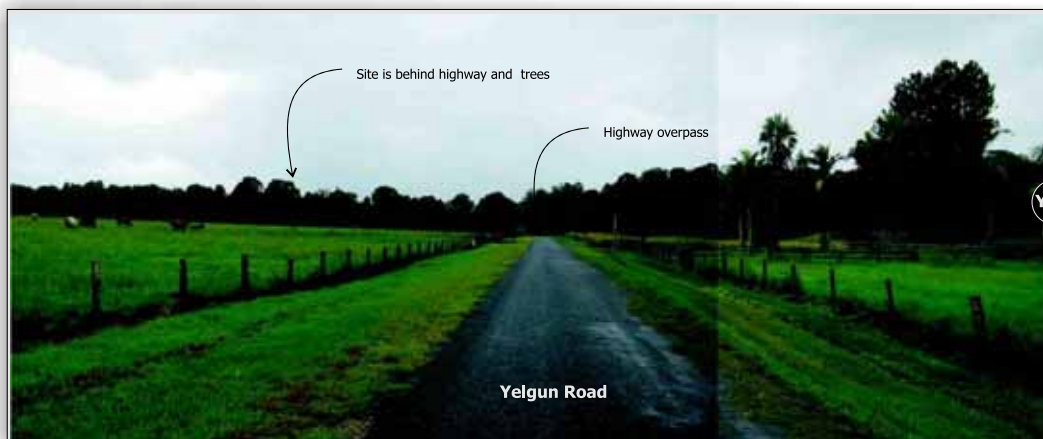
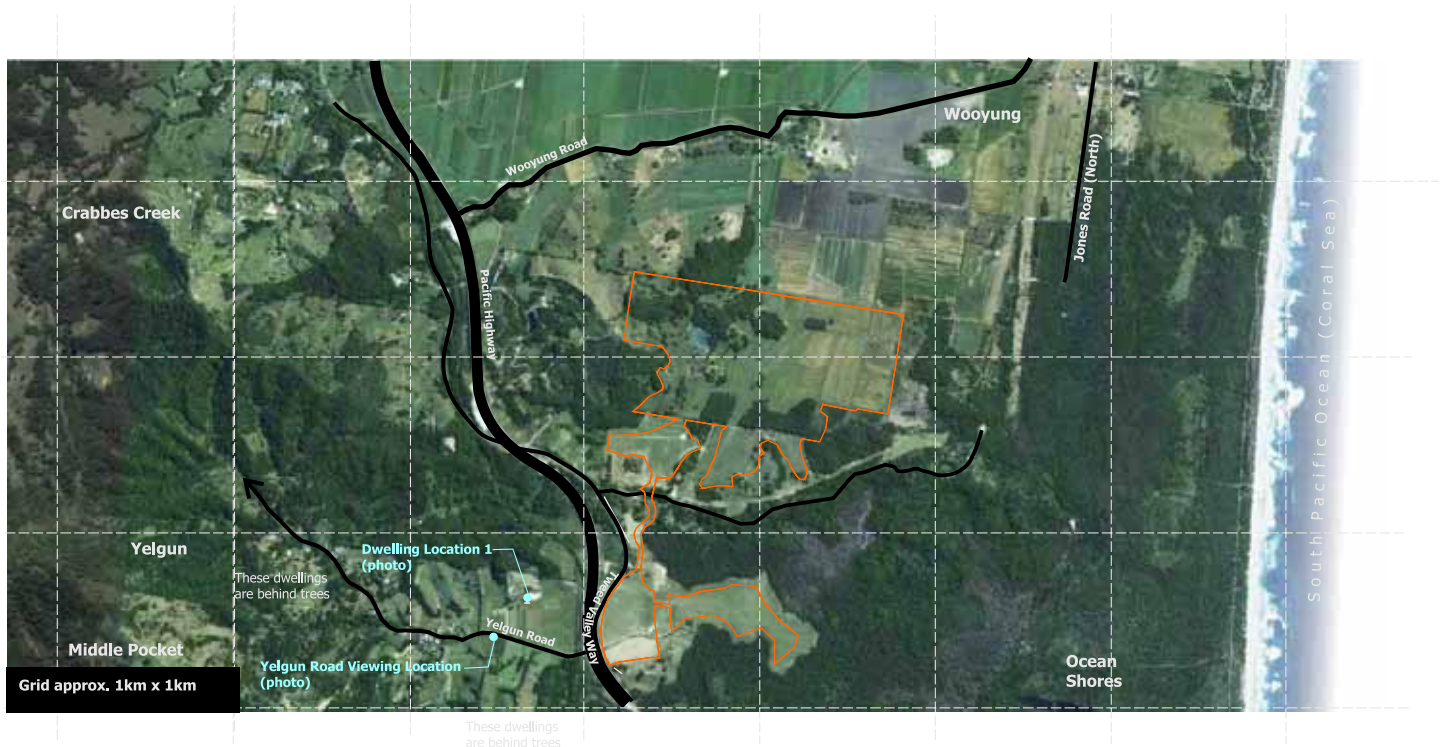
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Sources | Aerial Photography: Bill Mills (2009) | Site Photographs: Sheryn Da-Re

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Illustration | **1.5**
Photographic Plates
Views from Pacific Highway

North Byron Parklands | Tweed Valley Way & Jones Road



Photograph

There are 3 dwellings on Yelgun Road which are situated on hillsides with an elevated position that looks towards the site. Mapping suggests that two of these are behind dense vegetation, although the sites were not visited.

All dwellings are located about 1 km from the site and are therefore at the edge of the foreground/ middleground viewing zone.

Observations from Dwelling 1 and Yelgun Road suggest that roadside vegetation and topography will prevent views to the site from these locations. Although the glow from night lighting may be possible to see.

Yelgun Road: Yelgun Road is situated on flat and low land to the west of the site. Motorists are not able to see the site due to the location of the new Pacific Highway and tall roadside vegetation. This photograph looks east towards the highway overpass.



Photograph

Dwelling Location 1: A view from a residence off Yelgun Road. The residence is situated in the foreground viewing distance. The southern part of the site (proposed for use in large events as carparking) is located beyond the highway and is hidden from view by the elevated highway structure and roadside vegetation. (Photo taken by Benbow Environmental - 11 February 2010)

Not to scale

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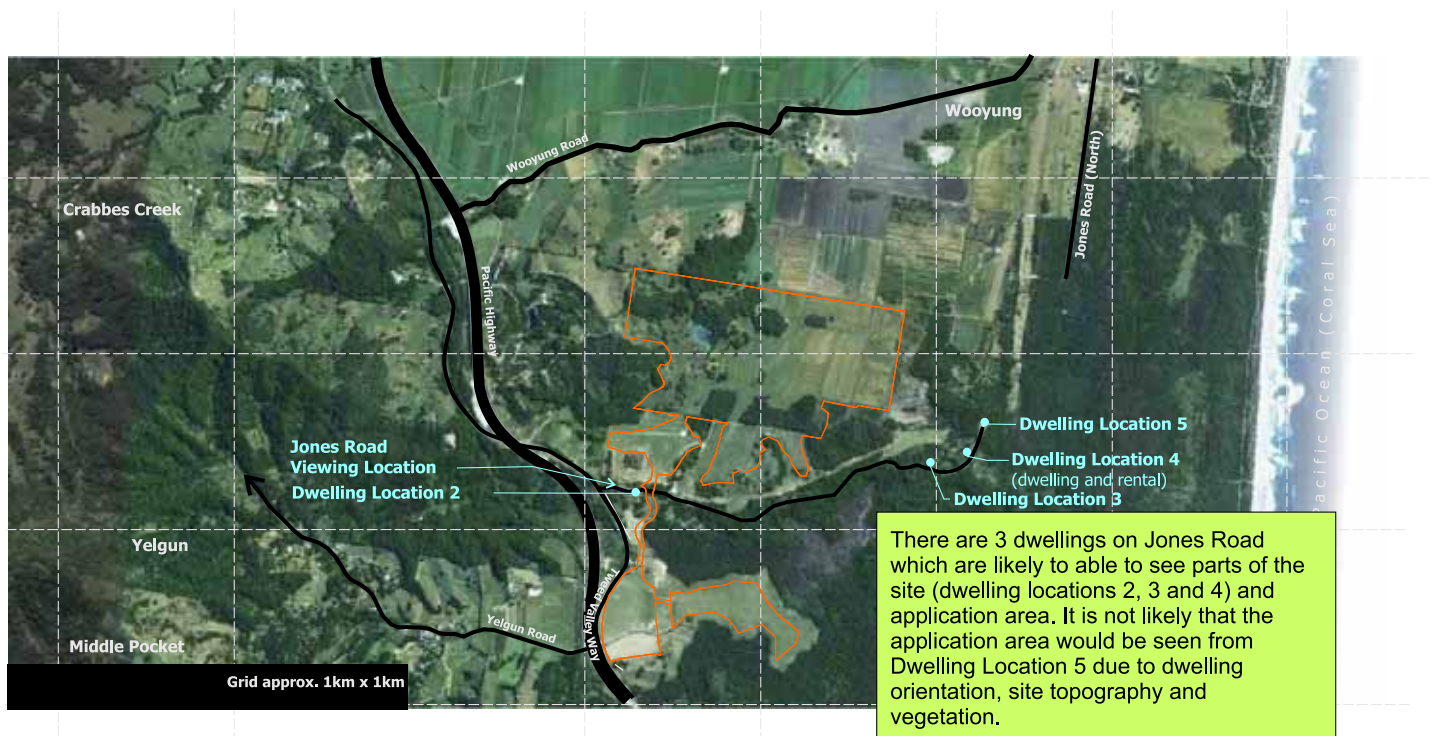
Sources | Aerial Photography: Bill Mills (2009) |

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Illustration | **1.6**
Photographic Plates
Views Yelgun Road

North Byron Parklands | Tweed Valley Way & Jones Road



Jones Road: A typical view looking east along Jones Road. Small glimpses of the site are possible through roadside vegetation. Cut batters and vegetation block most views to the site from the motorist. Views are generally outside the drivers central cone of vision.



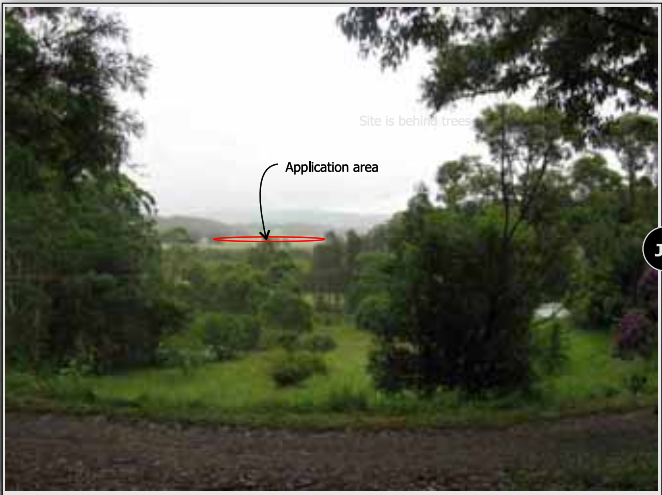
Jones Road: A view towards the site from Jones Road approx. 50m from Dwelling Location 2. The project application area is towards the back of the grassland. This area is proposed as a mixed use space (carparking, camping, small events etc.) and for the Resources Centre.



Dwelling Location 2: Residence on Jones Road. From the dwelling, filtered views of the site and the application area are possible to the north.



Dwelling Location 2: Looking south from the residence on Jones Road. The application area can not be seen.



Photograph

Jones Road: Photo from Jones Road near Dwelling Location 4. The site can be seen in the foreground viewing zone although the view is interrupted by vegetation.



Photograph

Jones Road: Typical view towards the site from Jones Road. Roadside vegetation obscures the view.



Photograph

Dwelling Location 3: Photo from the dwelling looking towards the site. Vegetation obscures view. (Photograph by Benbow Environmental)



Photograph

Dwelling Location 4: Photo from Jones Road towards Dwelling Location 4. The dwelling is situated behind vegetation. The property owner advises that they can see parts of the site below the existing dam.

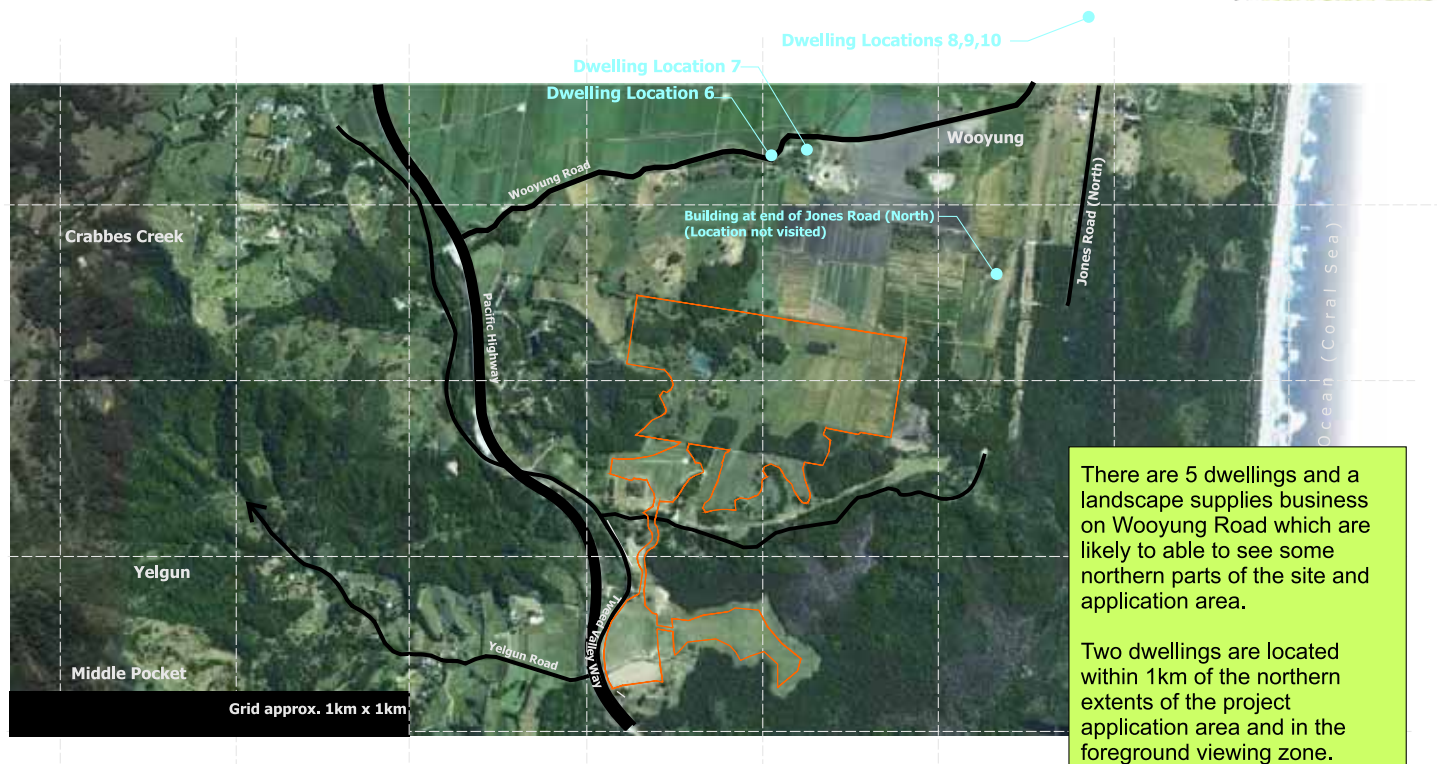
Site is behind trees

Not to scale

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Sources | Aerial Photography: Bill Mills (2009) |

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Illustration | **1.8**
Photographic Plates
Views from Jones Road



There are 5 dwellings and a landscape supplies business on Wooyung Road which are likely to be able to see some northern parts of the site and application area.

Two dwellings are located within 1km of the northern extents of the project application area and in the foreground viewing zone. These areas are proposed as managed parklands and camping for larger events. The proposed event area would be in the middleground viewing distance. The other dwellings and business are located in the middleground.



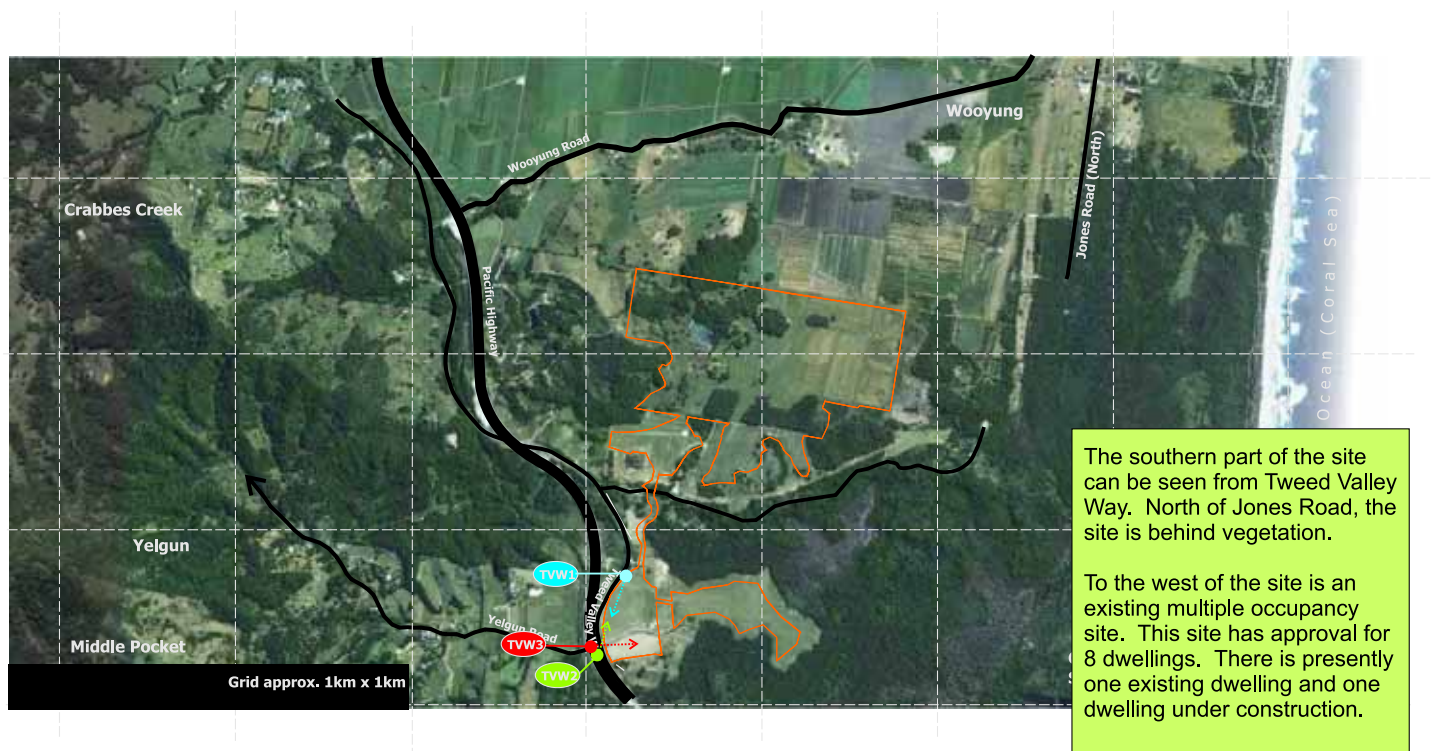
Wooyung Road: View of dwellings and out buildings at Dwelling Location 7. Dwellings are located on elevated land which overlooks the low lands. The most northern extent of the application area is within 800m of this viewing location. However, the flat topography of the foreground, scattered vegetation and elevated viewing location means that the application area could be screened from view by boundary tree planting. Night lighting and Stage Tents for large events may still be visible.



Dwelling Location 6: Photo from dwelling location 6 looking towards the site. The site will be visible in the foreground viewing distance. The northern boundary is proposed to be planted with tall vegetation. This vegetation will assist to screen views to this area. However, since the viewing location is elevated it is likely that Stage Tents and lighting for large events will be seen above vegetation. (Photograph by Benbow Environmental)



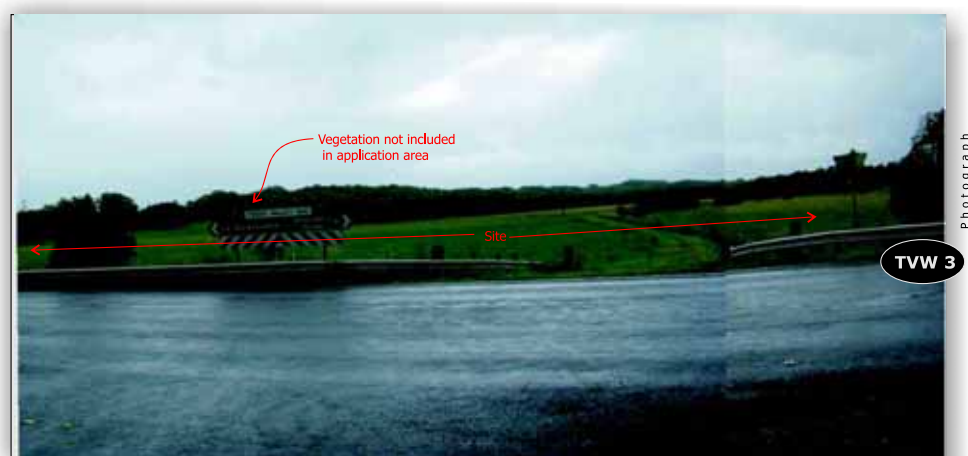
Dwelling Location 8,9,10: Small glimpses of the site and northern parts of the application area can be seen between paddock vegetation from the roadside near dwelling locations 8,9 and 10 (near Jones Rd intersection). These locations are within the middleground viewing distance. Proposed boundary planting will screen these views.



Tweed Valley Way 1: Photo from Tweed Valley Way looking south towards the site. A small part of the site is in the foreground. It remains in the drivers central cone of vision for only a short period of time (speed limit 80km/hr).



Tweed Valley Way 2: Photo looking northward along Tweed Valley Way. The site is seen in the foreground. It remains in the drivers central cone of vision for a short period of time.



Tweed Valley Way 3: Photograph from the Yelgun Road intersection looking east. The site is seen in the immediate foreground of the viewer and occupies most of the view.

Not to scale

Date
25.02.10
Author
Reference
DTI
09-120

IMPORTANT NOTE !

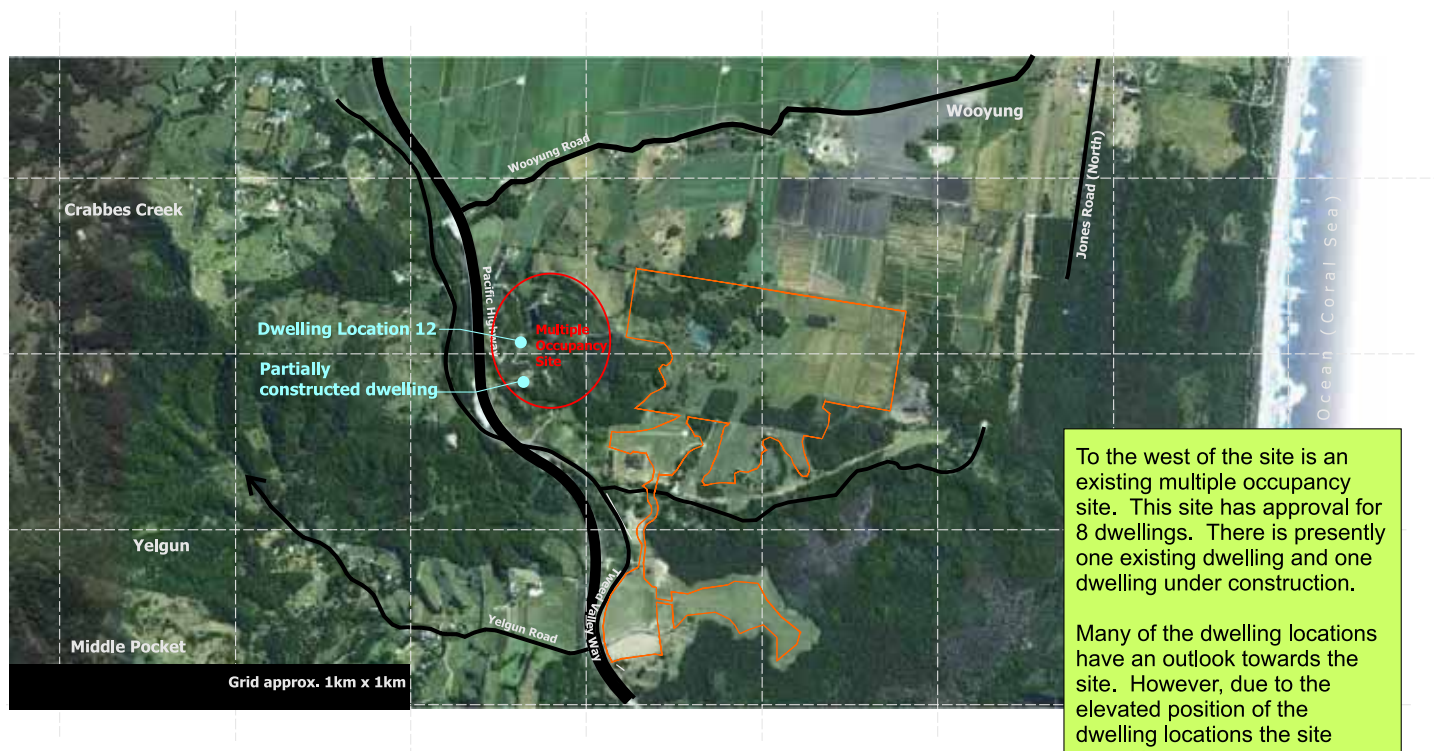
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Sources | Aerial Photography: Bill Mills (2009) | Photographs: Sheryn Da-Re

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Illustration | **1.10**
Photographic Plates
Views from Tweed Valley Way

North Byron Parklands | Tweed Valley Way & Jones Road



To the west of the site is an existing multiple occupancy site. This site has approval for 8 dwellings. There is presently one existing dwelling and one dwelling under construction.

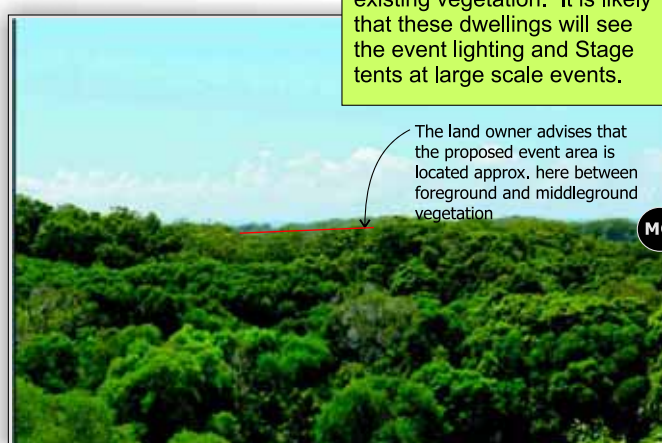
Many of the dwelling locations have an outlook towards the site. However, due to the elevated position of the dwelling locations the site would be set down amongst existing vegetation. It is likely that these dwellings will see the event lighting and Stage tents at large scale events.



Photograph

12

Dwelling Location 12: Photo from the existing dwelling towards the site. The site is located behind vegetation. However, the vacant dwelling site in the foreground overlooks the site from this elevated position. (Photograph by Benbow Environmental)



Photograph

MO

Multiple Occupancy: Photo looking from the internal driveway access of the MO eastward towards the site. The proposed event area is in the foreground but located behind and below dense vegetation. Stage tents and lighting for large events may be possible to see amongst the vegetation. (Photograph by Benbow Environmental)



Photograph

12

Dwelling Location 12: Photograph from the rear verandah of the dwelling looking southward to the site. The southern part of the site is proposed for use as car parking for large events only. This area is screened from view by vegetation. (Photograph by Benbow Environmental)

Not to scale

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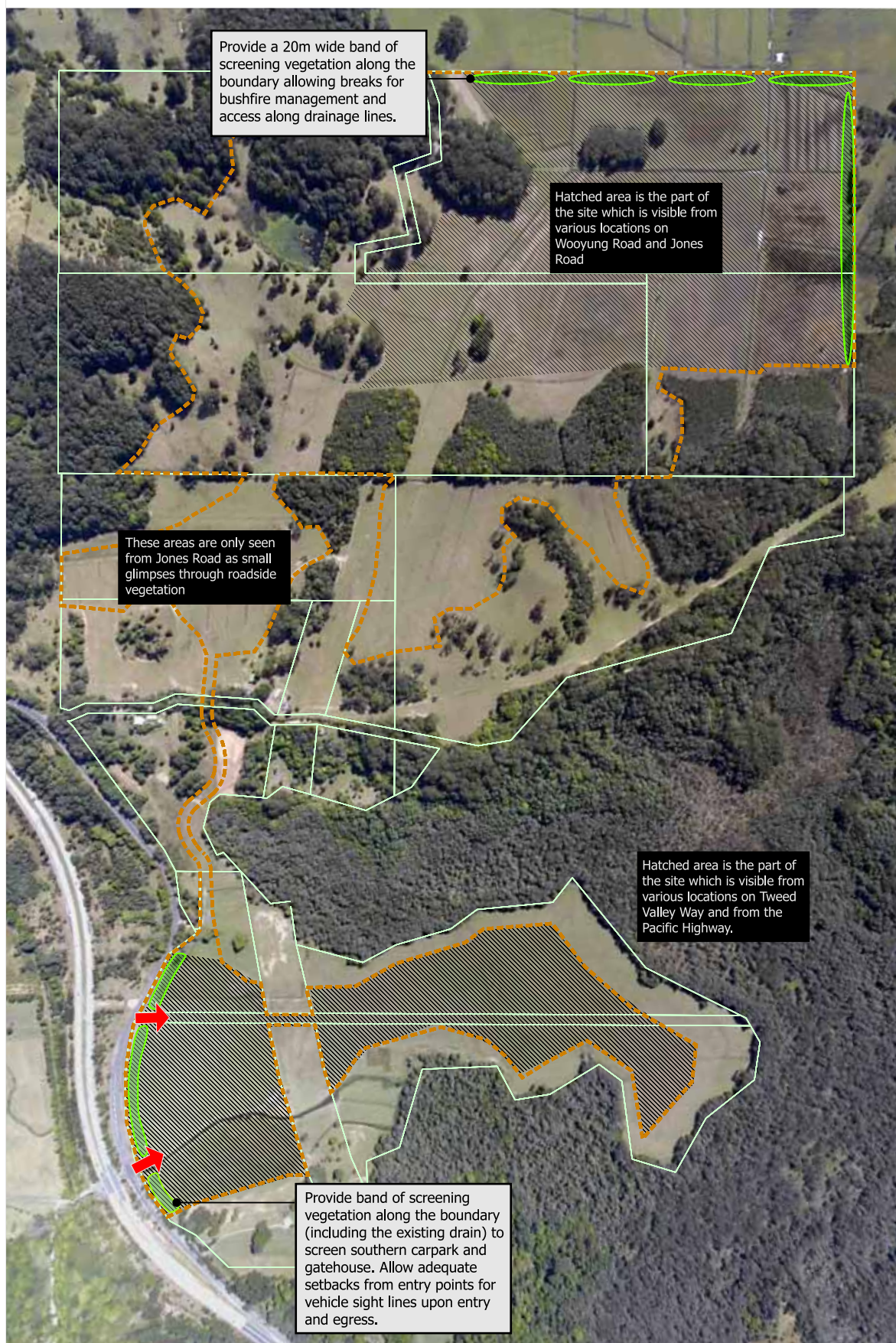
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Sources | Aerial Photography: Bill Mills (2009) | Photographs: Sheryn Da-Re

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Illustration | **1.11**
Photographic Plates
Views from Tweed Valley Way (MO)

North Byron Parklands | Tweed Valley Way & Jones Road



1:8000 (@ A3)

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Illustration | 1.12

Photographic Plates Visual Mitigation Measures Plan

North Byron Parklands | Tweed Valley Way & Jones Road



View from a Vehicle on Tweed Valley Way

Screen planting along boundary



**Illustration of Proposed Boundary Planting
along Tweed Valley Way Frontage**

Plant species shown are illustrative only. Species may vary.

Not to scale

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Illustration | **1.13**
Photographic Plates
Visual Mitigation Measures Images 1

North Byron Parklands | Tweed Valley Way & Jones Road



Photograph by Benbow Environmental

View from Dwelling at 210 Wooyung Road
(photograph zoomed in)



Illustration of Proposed Planting
along Northern Site Boundary

Not to scale

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Illustration | **1.14**
Photographic Plates
Visual Mitigation Measures Images 2

North Byron Parklands | Tweed Valley Way & Jones Road