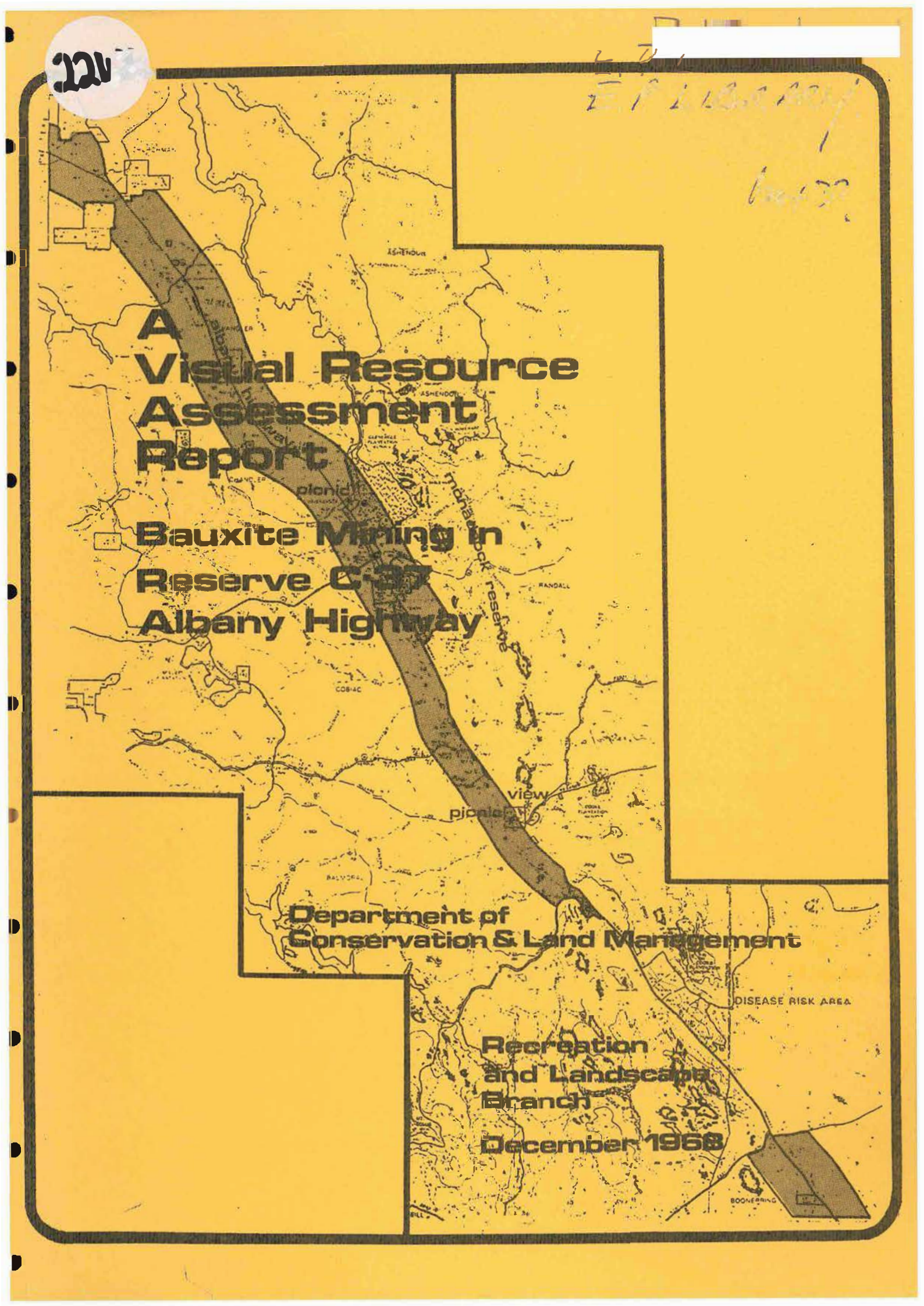

A Visual Resource Assessment Report

Bauxite Mining in Reserve C.F. Albany Highway

Department of Conservation & Land Management

Recreation and Landscape Branch

December 1968

A VISUAL RESOURCE ASSESSMENT REPORT

Bauxite Mining in Reserve C-37 Albany Highway

A description and analysis of the visual resource in terms of proposed mining activity

Recreation and Landscape Branch
Department of Conservation
and Land Management

December 1986

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INTRODUCTION

Significant reserves of bauxite ore are known to exist adjacent to the Albany Highway. A portion of the resource lies within Reserve C-37 as defined by System 6 EPA recommendations. ALCOA has expressed its interest in extracting the bauxite.

The visual resource (landscape), while an intangible value, is of immense benefit to the community. Social, physical and spiritual wellbeing of our urbanized community is influenced by such values.

The objectives of this report are:

1. to systematically identify and assess the visual resources of the project area;

2. to determine the ability of the project landscape to absorb change without visual degradation;

3. to identify areas of conflict between bauxite extraction sites and visual resources;

4. to assess the degree of impact of proposed extraction sites; and

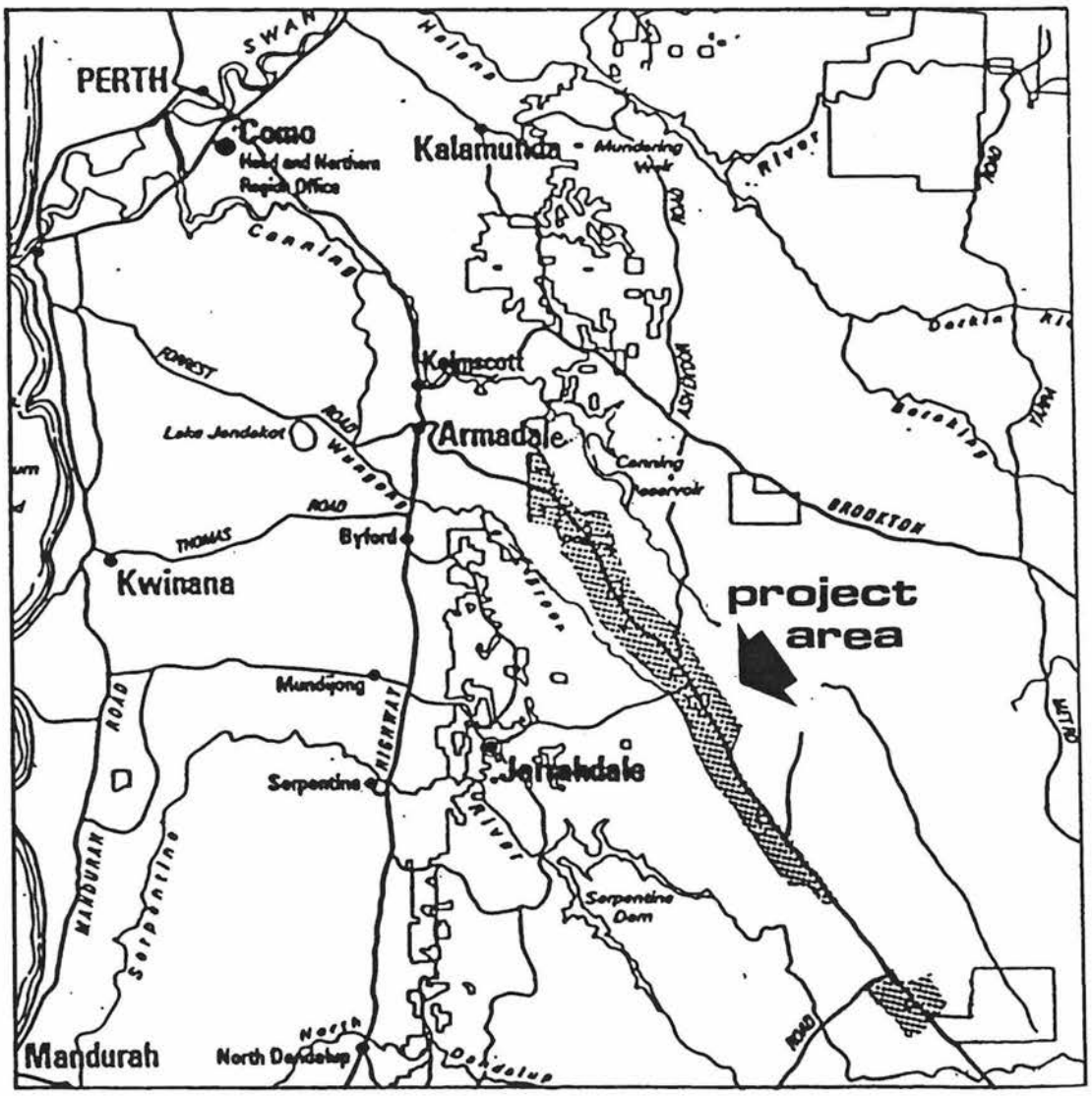
5. to make appropriate recommendations where conflicts are identified.

In order to objectively understand the visual resource values within the project area, a systematic method of visual resource analysis and assessment has been used.

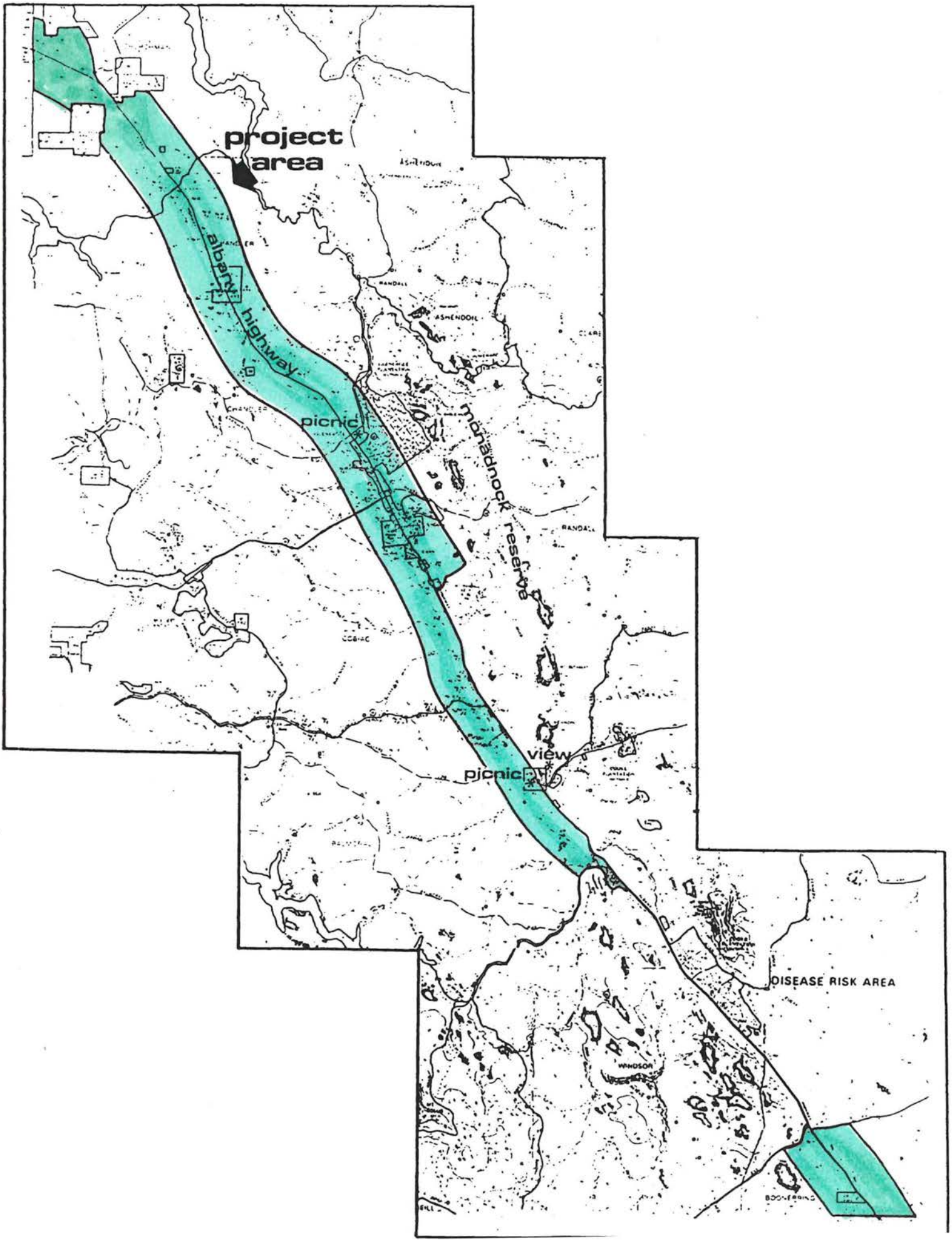
THE SITE

The portion of Reserve C-37 called the Project Area is located adjacent to the Albany Highway between Bedfordale Hill and North East Road - a distance of approximately 50km. The Reserve generally extends for one kilometre on both sides of the highway except where the Monadnock Reserve is defined. It is located 7km from Armadale and 35km from Perth.

The Albany Highway is a major 'gateway' travel route providing primary access to Perth from points south and south-east. Many urban residents depart the city via the highway in search of recreation activities and scenery. Points of interest close to the study area include the Monadnock Reserve, reservoirs (Canning and Wungong), fishing, picnicking, camping and walking. More distant destinations include the Stirling Ranges National Park and the south coast.



LOCATION MAP



RESERVE C-37 IN CONTEXT

The project area was included as part of a larger land unit, C-37 Brookton and Albany Highways, in the report, The Darling System - System 6 Part II: Recommendations for Specific Localities (EPA - 1983).

The Reserve justification statement is as follows: "Although there has been some replacement of natural vegetation with introduced eucalypts and pine, the forests of the Brookton and Albany Highways remain relatively intact over long distances. There are many wildflowers to be seen in the understoreys, their composition changing with different soil types and with rainfall. **It is important that the natural vegetation be retained both for its appeal to visitors and for scientific study. Some of the plants are rare".**

The Albany Highway landscape, including the project area, was the subject of a detailed corridor study with management prescriptions entitled The View from the Road (Herbert and Schmidt, 1984).
The objectives of the study were to describe major landscape elements, identify degraded landscapes and recommend management procedures to maintain the desired visual values and to enhance degraded landscapes.
The prescriptions, which applied to harvest and thinning of roadside plots, rehabilitation of gravel pits and enhancement of dieback areas, were approved by the Forests Department (now C.A.L.M.) for phased implementation. Initial works have concentrated on removal of smaller softwood plots and general roadside cleanup. The work is continuing.

The Albany Highway is a major travel route in WA which passes through landscapes of immense scenic diversity and visual attraction. While portions of the highway viewshed have been degraded by past activities, the long term enhancement plan adopted by C.A.L.M. will ensure that the Highway through the jarrah forest will remain a major scenic gateway into the metropolitan area.

PAST LANDSCAPE ALTERATIONS

The project area has had a long history of landscape alteration ranging from forest settlements, to roadhouses for early travellers, to extensive pine planting during the 1950's and 60's. In addition dieback and the subsequent rehabilitation of infected areas with pine and introduced eucalypt species have resulted in obvious alterations to the naturally established visual character of the area. While some alterations have enhanced the scenic quality of the roadside landscape, most have introduced form, colour and texture quite alien to the desired landscape characteristics and both physically and visually degrade the environment. While past alterations are evident, even dominant, within very localized segments of Reserve C-37, the overall visual image retained by highway travellers is undoubtedly positive - jarrah forest, monadnocks and other naturally established landscape elements.

The publication, The View From The Road, with its management prescriptions effectively analyses past alterations within the project area and recommends effective rehabilitation techniques. The scenic quality has been significantly enhanced since implementation of the recommendations began in 1984.

THE ASSESSMENT METHOD

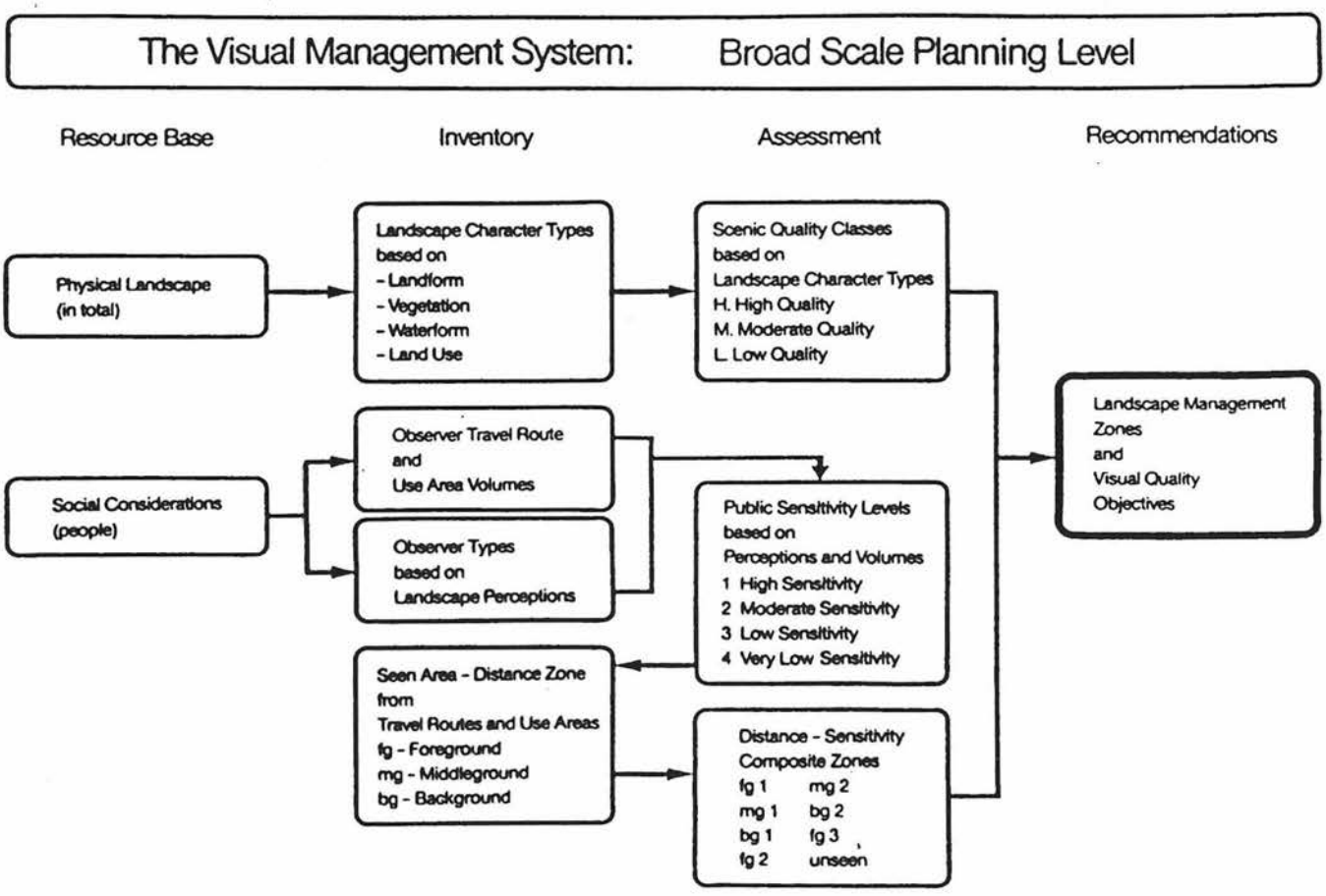
A system of visual resource management developed by the Forests Commission, Victoria has been used to inventory and assess the visual resources of the project area. The system provides an objective base and context in which landscape altering operations can be evaluated and potential impacts considered.

The inventory is based upon two resource factors:

1. the physical landscape (landscape character type and scenic quality);

2. social considerations (the people who view the landscape).

The Landscape Management Zones which result provide visual quality objectives which state the degree of acceptable alteration within each zone.



PROJECT AREA - ASSESSMENT SUMMARY

- Landscape Character Type -	**Darling Plateau**
- Scenic Quality Class -	**Moderate**
- Sensitivity Level -	
Albany Highway -	**Level I**
Jarrahdale Road -	**Level I**
Gleneagle Picnic Ground -	**Level II**
Sullivan Rock Picnic Ground -	**Level II**
Monadnock Tracks -	**Level II**
Landscape Management Zone -	**A**
Visual Quality Objectives -	**Inevident Alteration**

A full explanation follows:

VISUAL MANAGEMENT SYSTEM - BROADSCALE ASSESSMENT

Step 1 Landscape Character Typing

The project area lies entirely within the Darling Plateau Landscape Character Type, a broadscale area of land with common visual characteristics.

The type is characterized by a plateau landform which is dissected by active V to U-shaped valley drainages. The resulting landforms appear as moulded ridges and domes. A series of granitic peaks or monadnocks which rise to over 500 metres contrast sharply with the surrounding hills and become focal points of exceptional visual interest. Granitic rock outcroppings or surface rock faces are also distinctive landforms.

The landscape type is almost entirely forested. Tall stands of jarrah and marri occupy the higher land while blackbutt and flooded gum thrive in wetter valley locations. The understorey stands, where present, are predominantly banksia, casuarina and dryandra. The resultant broadscale land cover patterns are a subtle blending of colour and textured variation between valleys and hilly landforms. Detailed-scale patterns are more obvious as textural diversity becomes more prominent.

Waterbodies are major visual components of the type. The westerly tending streams maintain V-shaped valleys at higher elevations but expand into broader U-shaped configurations on the flatter portions of the plateau. Falls and rapids occur in the type and become points of visual distinction. Man-made waterbodies are important visual features as well. Canning Dam, Churchman Brook Dam, Wungong Dam and Serpentine Dam are prominent examples.

The naturally established landscape character has been significantly altered by man's activities. Roads, softwood plantations, dams, settlements, towers, power lines, walking tracks, recreation sites, gravel pits and bauxite extraction have significantly altered the landscape characteristics of the Darling Plateau Landscape Type.

Project Specific Comment:

Reserve C-37 is typical of this landscape type. Landform is rolling hilly terrain with a nearly continuous vegetation canopy. There is a gradual transition in vegetation density, size and species composition from northwest to southeast along the highway reserve. In general, the forest diminishes in height and becomes more open further east with Wandoo appearing in localised areas. Rock outcroppings occur throughout the project area.

Step 2 Scenic Quality Classification

A detailed description, inventory and assessment of scenic quality within the project area was not possible as classification criteria for the Darling Plateau Landscape Character Type is not yet finalized. An interim frame of reference which follows describes the relative range of scenic quality elements which exist within the Character Type. These are written in terms of diversity, naturalness and ruggedness in landform, vegetation and waterform.

High Scenic Quality

Landform

- Isolated peaks, ranges or conical hills with distinctive form that become focal points.
- Rock outcroppings or boulders.
- Well defined steep-sided valley gorges tending to V-shape.

Vegetation

- Strongly defined patterns in such combinations as Eucalypt forest, naturally appearing openings or softwood plantings, and streamside vegetation.
- Unique stands of vegetation which create unusual form, colour, texture or spacing in comparison to surrounding vegetation.

Water

- Permanent rivers, lakes, marshes or resevoirs.

Moderate Scenic Quality

Landform

- Rounded hills, ridges and peaks which are not visually dominant.
- Broad shallow valleys tending to U-shape.

Vegetation

- Generally canopied forest cover with some evident pattern but lacking uniqueness.

Water

- Intermittent streams.

Low Scenic Quality

Landform

- Indistinctly dissected land lacking visual variety relative to the surrounding landscape.

Vegetation

- Extensive areas of similar vegetation with few evident patterns.

Project Specific Classification:

Study area landscapes are classified almost entirely as Moderate Scenic Quality. Areas of High Scenic Quality include all rock outcroppings, low swampy areas and streamside zones. Of special note are extensive areas of High Scenic Quality which lie in close proximity to the study area and are visible from the highway.

Step 3 Sensitivity Levelling

The assessment of public sensitivity to visual resource values is an important factor in managing landscape resources. Elements considered in the study area include numbers of viewers, type of travel route (road or walking track) and type of use area (picnic ground or wayside). Other factors which influence public sensitivity such as observer type, level of scenic concern, or expected images are unfortunately unknown.

Criteria used for classification of travel routes and use areas follows:

Level 1 - High Sensitivity

- Freeways and State highways with more than 500 vehicles/day.
- Classified tourist roads.
- Main sealed roads with more than 75 vehicles/day.
- Recreation, cultural or scenic sites and viewpoints of national or interstate significance.
- Walking tracks of national significance.
- Residential areas with high degrees of scenic concern.
- Interstate passenger rail lines with daily daylight service.
- Rail lines of cultural, historic or scenic significance.
- Navigable rivers, lakes, and resevoirs of national recreation significance.

Level 2 - Moderate Sensitivity

- Main sealed roads with more than 50 vehicles/day.
- Forest access and other roads with more than 35 vehicles/day.
- Roads with less than 35 vehicles/day, but planned for recreation promotion within 5 years.
- Recreation, cultural or scenic sites of state significance.
- Walking tracks of state or high local significance.
- Residential areas with moderate degrees of scenic concern.

° State passenger rail lines with daily rural town service.

° Navigable rivers, lakes and resevoirs of state recreation significance.

Level 3 - Low Sensitivity

° Timber management roads with occasional recreation traffic up to 10 vehicles/day.

° Walking tracks of low local significance.

° State passenger rail lines with less than daily rural town service.

Level 4 - Very Low Sensitivity

° Timber management roads with infrequent recreation traffic less than 3 vehicles/day.

° Forest tracks with infrequent recreation usage.

Project Specific Levelling:

Level 1 - Albany Highway; MRD counts indicate over 2 000 vehicles (up to 5 000 people at 2.5 per vehicle) use this highway per day. While no perception studies are available, there is little doubt that a great many travellers anticipate and expect undisturbed or naturally inspired scenery once beyond Armadale.

Level 1 - Jarrahdale Road; major access to Jarrahdale. Counts unknown but assumed to be over 75 per day.

Level 2 - Gleneagle picnic ground; estimates of use indicate that up to 200 people visit this destination or wayside stop during peak use periods; of state significance.

Level 2 - Sullivan Rock picnic ground and trailhead; estimates of use indicate that up to 30 people visit this site during peak periods; of state significance.

Level 2 - Bibbulmun Track - currently being realigned to a site traversing the Monadnock Reserve. Use figures unknown; of state significance.

Level 2 - Other Monadnocks walking tracks - Mt Cooke, Mt Vincent, Mt Cuthbert, Mt Randall, Eagle Hill; user numbers unknown but published in Forests on Foot; assumed of state significance.

Step 4 Seen Area Mapping

The seen area is the landscape that can be viewed from a road or other observation point; the viewshed. Where the observer is offered a sequence of views as along a highway, the cumulative viewshed is mapped. Seen area is based entirely on topographic screening as vegetation screening is transitory - easily removed by man, fire or disease.

Specific Project Comment:

Seen area was mapped from the Albany Highway, Gleneagle picnic ground, Sullivan Rock picnic ground and Sullivan Rock trail.

Screening Analysis

Mapping of roadside vegetation screening can be a useful management tool - particularly in planning short term, low impact alterations to the visual resources.

Specific Project Comment:

Roadside vegetation was rated for its screening potential according to the following categories:

1. Dense - views restricted to roadside clearing - no penetration.

2. Moderately dense - filtered views with pockets of dense understory - generally allowing penetration into the vegetation zone but not to the limit of potential seen area.

3. Sparse - filtered views with very little screening capability - generally allowing view penetration to the limit of potential seen area.

4. Open - unobstructed view.

Step 5 Distance Zone Mapping

The distance between the viewer and the landscape is an important variable factor when managing the visual resource. Three distance zones are used:
foreground (fg) - from the observer to .5 km,
middleground (mg) - from .5 km to 6.5 km,
background (bg) - from 6.5 km to 16 km.

Project Specific Comment:

The entire seen area within the project area as viewed from the Albany Highway, Gleneagle and Sullivan picnic grounds and Sullivan Rock track falls within the foreground distance zone. Textural detail in the landscape is highly visible.

Step 6 Landscape Management Zoning

Integration of Scenic Quality Class and Sensitivity Level - Distance Zone results in Landscape Management Zones. Zones indicate areas of relative concern for visual resource values.

The matrix used follows:

MATRIX		(2) DISTANCE ZONE - SENSITIVITY LEVEL							
		fg-1	mg-1	bg-1	fg-2	mg-2	bg-2	fg-3	U
(1) SCENIC QUALITY CLASS	H	A	A	A	A	B	B	B	B
	M	A	B	B	B	B	C	C	C
	L	B	B	B	B	C	C	C	C
		(3) LANDSCAPE MANAGEMENT ZONE							

Matrix key:

(1) Scenic Quality Classes
- H - High
- M - Moderate
- L - Low

(2) Distance Zones
- fg - foreground
- mg - middleground
- bg - background
- u - uninventoried levels 3 or 4, and unseen in levels 1, 2 or 3

(2) Sensitivity Levels
- 1 - High
- 2 - Moderate
- 3 - Low
- 4 - Very Low

(3) Landscape Management Zone = Visual Quality Objectives
- A = IA - Inevident Alterations
- B = AA - Apparent Alterations
- C = DA - Dominant Alterations

Project Specific Comment:

The project area is rated as Landscape Management Zone A based upon a Moderate Scenic Quality and Foreground-Level 1 Sensitivity Level.

Visual quality objectives are established for each Management Zone. These provide measurable standards or objectives for management of the visual resources.

For Zone A the Visual Quality Objective is Inevident Alteration

This states that management alterations (any change) should range from visually inevident to temporarily apparent. When apparent, the period of impact (contrast) should not exceed one year.

THE ALCOA PROPOSAL

ALCOA has identified 16 broadscale zones of laterite which lie entirely or partly within the project area. Within these zones, 56 probable ore bodies have been identified and mapped. The location of each is approximate as Company supplied data is mapped at 1:50 000 scale.

Company representatives have expressed the desire to extract all known ore from the project area. Alcoa's 6-10 year mine plan (November, 1986) for Jarrahdale Mine Site includes the region west of the Albany Highway and south to Jarrahdale Road.

DETAILED ASSESSMENT

The Visual Management System provides broadscale zones of landscape concern with visual quality objectives. These indicate broadscale levels of scenic concern and degrees of desirable alteration throughout the landscape.

In order to understand how easy or difficult it may be to achieve the desired Visual Quality Objective, it is necessary to assess site specific factors in terms of a proposed alteration.

Each laterite area and probable ore unit has been assessed using maps, aerial photos and on-site analysis. Data gathered has been recorded on an analysis and assessment form. Factors considered are:

- Screening category
- View analysis
  - number of view points
  - critical travel direction
  - angle of view
  - duration of view
- Status of screen.

In addition the laterite areas, ore units, screening category, the study area boundary and foreground seen area boundary are shown on maps at 1:25 000 scale.

A visual impact projection, which indicates the ability of a landscape to absorb change without losing its intrinsic character, results. Categories are:

1. High impact - A dominant visual impact would result.

2. Moderage impact - An apparent impact would result.

3. Low impact - An inevident impact would result.

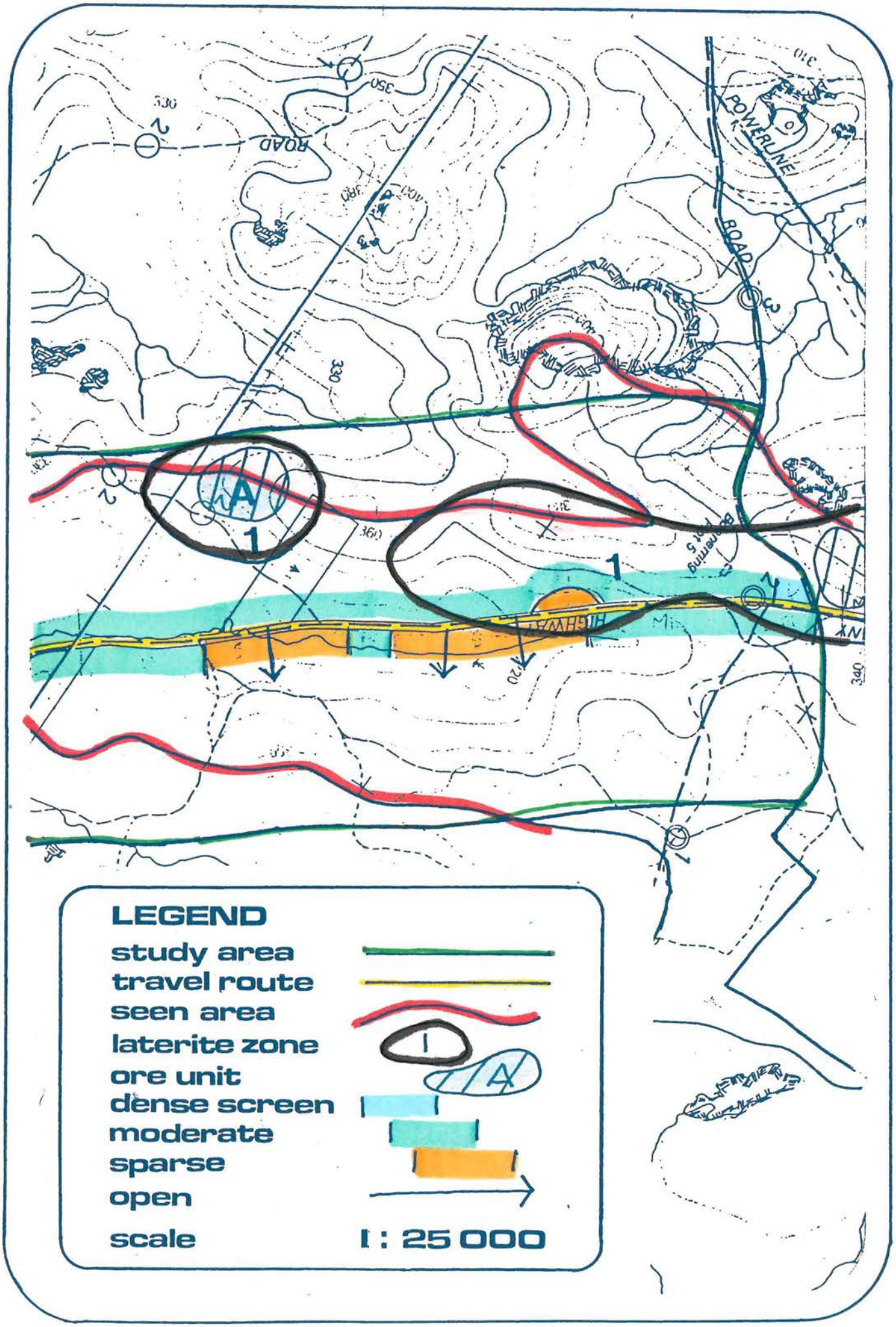
The final recommendations are objectively based on both broadscale objectives, detailed assessment data and visual impact projection. Categories are:

1. Acceptance - little or no visual impact anticipated.

2. Possible - subject to further detailed assessment and extraction conditions.

3. Unacceptable - severe negative impact certain.

An assessment summary begins on page 80.


POWERLINE
ROAD
ROAD
HIGHWAY
A
1
LEGEND
study area
travel route
seen area
laterite zone
ore unit
dense screen
moderate
sparse
open
scale
1 : 25 000

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** ***Number*** 1

- **PROBABLE ORE UNIT** ***Letter*** A

- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Moderately Dense

  Discussion:

- **VIEW ANALYSIS**
  Number of Primary View Points: highway and designated way-side potential view only - currently screened.

  Critical Travel Direction: northbound

  Angle of View: 30 - 45°

  Duration of View: moderate potential

  Other:

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: Stable
  wet area veg. Stable to jarrah woodland

  Discussion: View to unit is currently screened
  No change expected

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: Low

  Discussion: Inevident Alteration assuming maintenance of screen.

- **ASSESSMENT/RECOMMENDATION** No problems anticipated

SOLUS
ROAD
ALBANY
COOKE
ROAD
A
B
C
D
E
I
J
K
2
LEGEND
study area
travel route
seen area
laterite zone
ore unit
dense screen
moderate
sparse
open
scale
1 : 25 000

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** ***Number*** 2

- **PROBABLE ORE UNIT** ***Letter*** A

- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Sparce to open; some moderately dense
  Discussion: Most of unit is fully open to highway viewpoints; Some screening of low portion of unit

- **VIEW ANALYSIS**
  Number of Primary View Points: highway - many
  Critical Travel Direction: north - unseen to south bound
  Angle of View: focal view - focussed by hwy alignment 10-30°
  Duration of View: extended period
  Other: forms skyline from highway viewpoints

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: Paperbark wet area will remain open; some pine
  Discussion: will be removed immediately. The area is to be managed for visual enhancement and preservation.

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: High
  Discussion: Dominant Alteration - majority of unit on lateral ridgeline - part of skyline

- **ASSESSMENT/RECOMMENDATION**
  Unacceptable in any form
  Negative impact certain if mined -

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** ***Number*** 2

- **PROBABLE ORE UNIT** ***Letter*** B

- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Open

  Discussion: Very little effective screening - even more exposed than 2-A

- **VIEW ANALYSIS**
  Number of Primary View Points: highway-fg and mg Sullivan Rock Track

  Critical Travel Direction: northbound, southbound

  Angle of View: focal landscape - skyline from both highway and Sullivan viewpoints

  Duration of View: long

  Other: critical focal skyline

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: Open landscape with remain

  Discussion: pine to be removed; wet area and Sullivan Rock will remain with little veg. screen.

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: High

  Discussion: Dominant alteration

- **ASSESSMENT/RECOMMENDATION**
  Unacceptable in any form
  Negative impact certain if mined.

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** ***Number*** 2

- **PROBABLE ORE UNIT** ***Letter*** C

- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Variable; immediate fg screen, mod dense but open from points north on highway and
  Discussion: Sullivan Rock, Mt Vincent

- **VIEW ANALYSIS**
  Number of Primary View Points: highway, wayside and Sullivan walking track.
  Critical Travel Direction: southbound only
  Angle of View: focal to 20°, viewer below on highway
  Duration of View: long duration from track and roadside wayside
  Other: located on skyline

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: dieback prone
  Discussion: dense patchwork of mod. dense to open adjacent to unit. Critical views however are open with no screening potential.

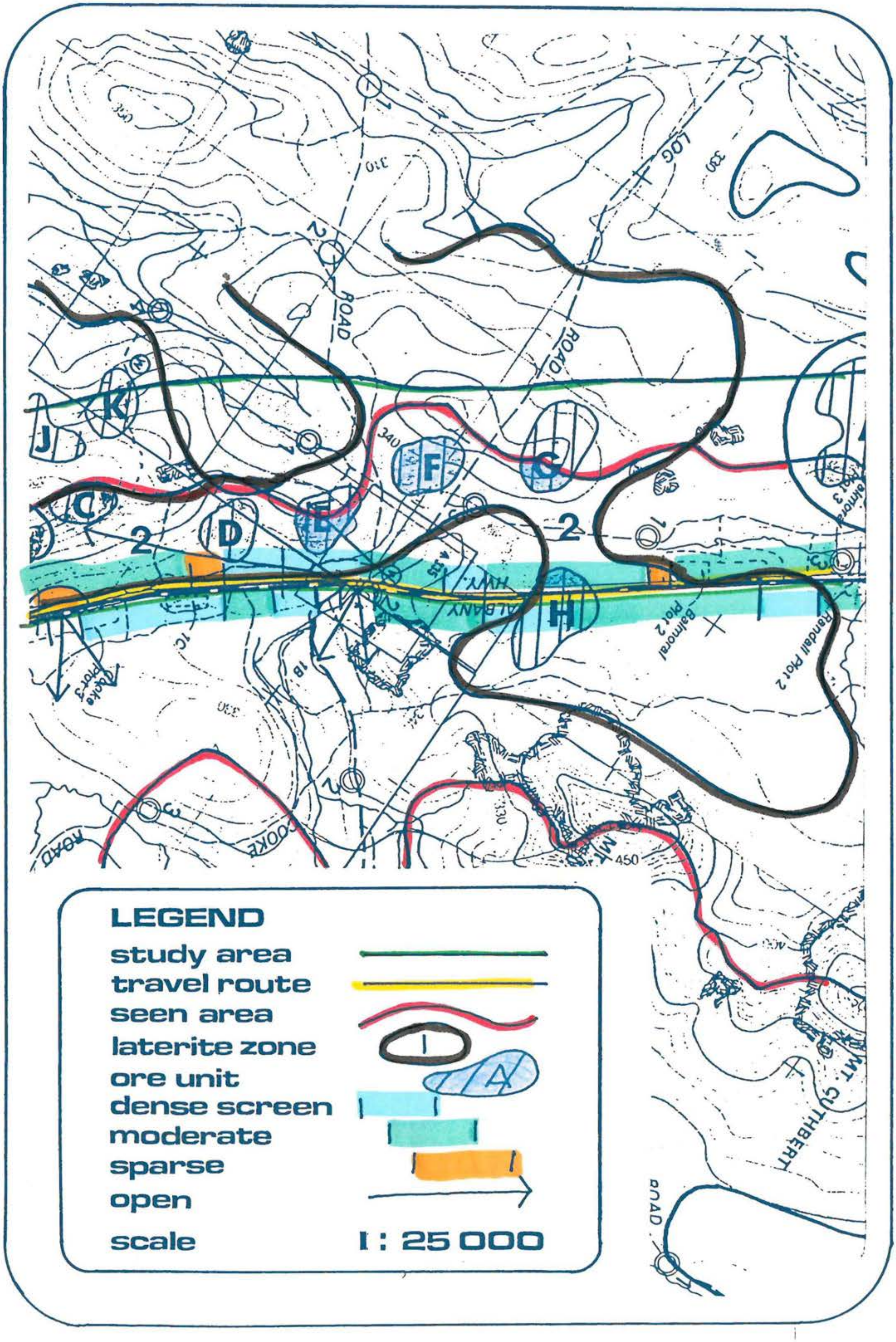
- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: High
  Discussion: Dominant Alteration

- **ASSESSMENT/RECOMMENDATION** Unacceptable, long term Negative impact certain

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** ***Number*** 2
- **PROBABLE ORE UNIT** ***Letter*** D
- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Sparce to dense on highway, Open from Sullivan Rock
  Discussion:
- **VIEW ANALYSIS**
  Number of Primary View Points: highway, views mostly screened; walking track
  Critical Travel Direction: northbound
  Angle of View: 30-45° fg northbound; feature view from Sullivan Rd track, also fg.
  Duration of View: short from hwy, long from track
  Other: ore unit very close to highway
- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: in dieback prone area - roadside screen doubtful, open from track
  Discussion:
- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: High - Dominant
  Discussion: Alteration from track; Moderate from Highway - Apparent Alteration
- **ASSESSMENT/RECOMMENDATION** Unacceptable


LEGEND
study area
travel route
seen area
laterite zone
ore unit
dense screen
moderate
sparse
open
scale
1 : 25 000
ROAD
ROAD
LOG
ALBANY HWY.
Balmoral Plot 2
Rendall Plot 2
Balmoral Plot 3
Cooke Plot 3
COOKE
MT. CUTHBERT
A
C
D
E
F
G
H
J
K

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** ***Number*** 2

- **PROBABLE ORE UNIT** ***Letter*** E

- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Dense to Mod. dense adjacent to hwy; open from Sullivan Rock
  Discussion:

- **VIEW ANALYSIS**
  Number of Primary View Points: highway, and Sullivan Rock Mt. Vincent
  Critical Travel Direction: southbound
  Angle of View: 15-30° feature view along hwy alignment; viewer above from Sullivan Rk.
  Duration of View: short on highway; long for walkers
  Other: panorama from S. Rock to units B, C, D, E, F+G

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: dieback prone; unstable
  Discussion:

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: Moderate - Apparent Alteration from highway; Dominant Alteration from S. Rock, Mt. Vincent
  Discussion:

- **ASSESSMENT/RECOMMENDATION** Unacceptable

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** ***Number*** 2

- **PROBABLE ORE UNIT** ***Letter*** F

- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Moderate to dense
  adjacent to highway; Open from Sullivan Rock + Mt. Vincent
  Discussion:

- **VIEW ANALYSIS**
  Number of Primary View Points: highway - currently screened
  Walking Track to Mt. Vincent
  Critical Travel Direction: —
  Angle of View: feature views from walking track
  Duration of View: long
  Other:

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable:
  roadside dieback prone but currently stable
  Discussion:

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: Low - Inevident
  Discussion: Alteration from highway: High - Dominant
  Alteration from Sullivan Rock, Mt. Vincent

- **ASSESSMENT/RECOMMENDATION**
  Unacceptable

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** ***Number*** 2

- **PROBABLE ORE UNIT** ***Letter*** G

- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Moderately dense to dense roadside; Open from Sullivan Rk track, Mt Vincent
  Discussion: Only eastern part of unit seen from surveyed viewpoints.

- **VIEW ANALYSIS**
  Number of Primary View Points: Sullivan Rock; highway - currently screened., Mt Vicient
  Critical Travel Direction: none
  Angle of View: feature view from Sullivan Rock
  Duration of View: long
  Other: located on ridgeline as seen from S. Rock Track

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: diebackprone
  Discussion:

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: High - Dominant Alteration from Sullivan T.
  Discussion: Low - Inevident from highway. Western portion of unit could be mined if no vegetation on ridgeline were disturbed - No notch on Skyline

- **ASSESSMENT/RECOMMENDATION**
  No mining on ridge or east side - also check view from Mt. Vincent.
  West Side - likely OK All seen from Vincent

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** *Number* 2

- **PROBABLE ORE UNIT** *Letter* H

- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Much of unit lies UNDER the highway. Open from Sullivan Rock and Mt. Vincent.
  Discussion: Portions of unit are outside Reserve - Screening is dense to mod. dense adjacent to road

- **VIEW ANALYSIS**
  Number of Primary View Points:
  Critical Travel Direction: everywhere
  Angle of View: on top - fg
  Duration of View: long and intense
  Other:

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: dieback prone but stable at present
  Discussion:

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: High - Dominant Alteration
  Discussion:

- **ASSESSMENT/RECOMMENDATION** Unacceptable

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** ***Number*** 2

- **PROBABLE ORE UNIT** ***Letter*** I, J, K

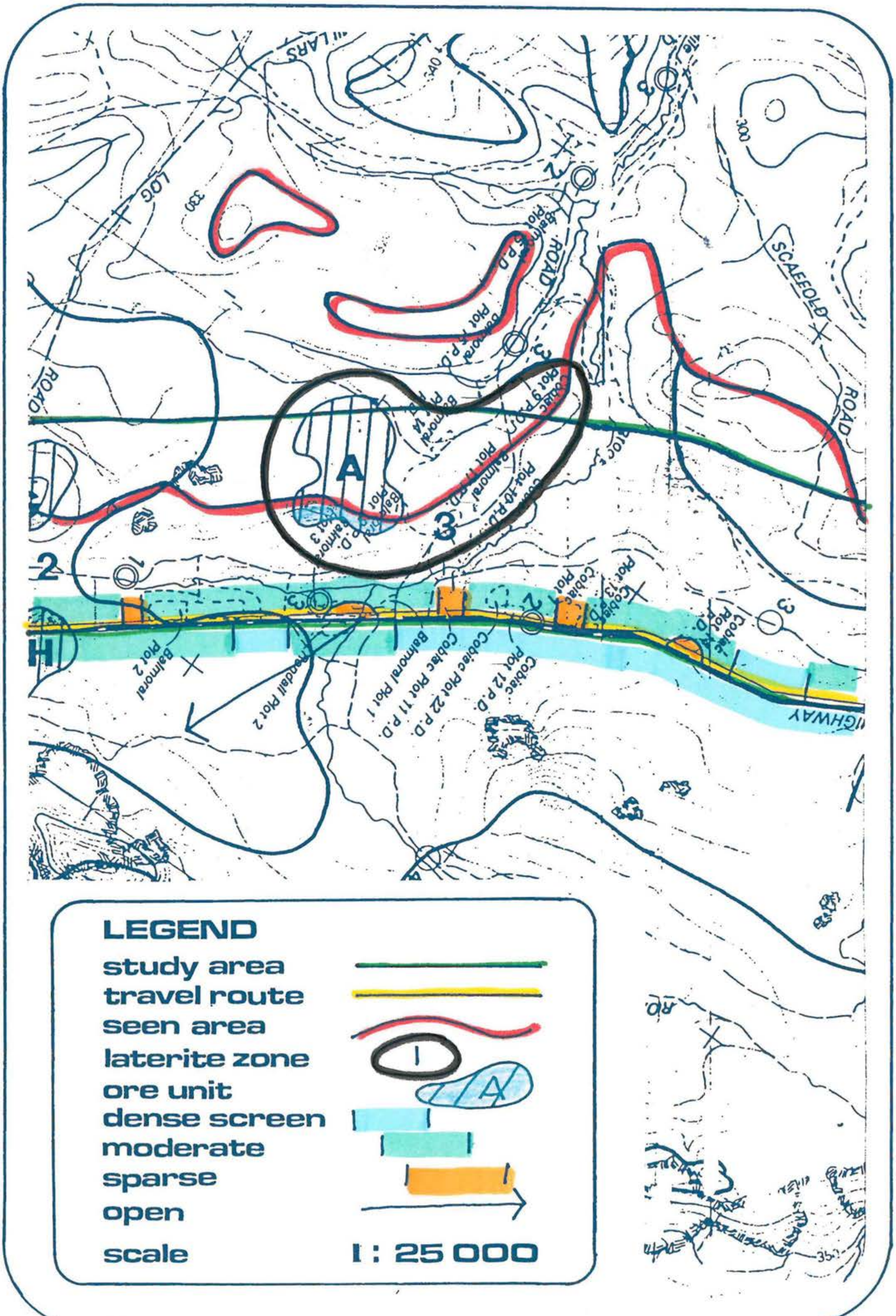
- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Land form screening
  Discussion: Expect to be seen from Mt. Vincent and other high points within Monadnocks Reserve

- **VIEW ANALYSIS**
  Number of Primary View Points: Outside of seen area from highway and Sullivan Rock Viewpoints. Very
  Critical Travel Direction: oblique view to unit K from Mt. Vincent
  Angle of View:
  Duration of View:
  Other:

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable:
  Discussion:

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: Low - Imperdent
  Discussion: Mod - unit K possibly seen from Mt. Vincent - Apparent but not dominant

- **ASSESSMENT/RECOMMENDATION** Uncertain, view from Mt. Vincent must be checked. Done 9.8.86 - I and J acceptable. K - ok but exact location should be [illegible] checked


LEGEND
study area
travel route
seen area
laterite zone
ore unit
dense screen
moderate
sparse
open
scale
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SCAFFOLD
ROAD
LOG
ROAD
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ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** ***Number*** 3

- **PROBABLE ORE UNIT** ***Letter*** A

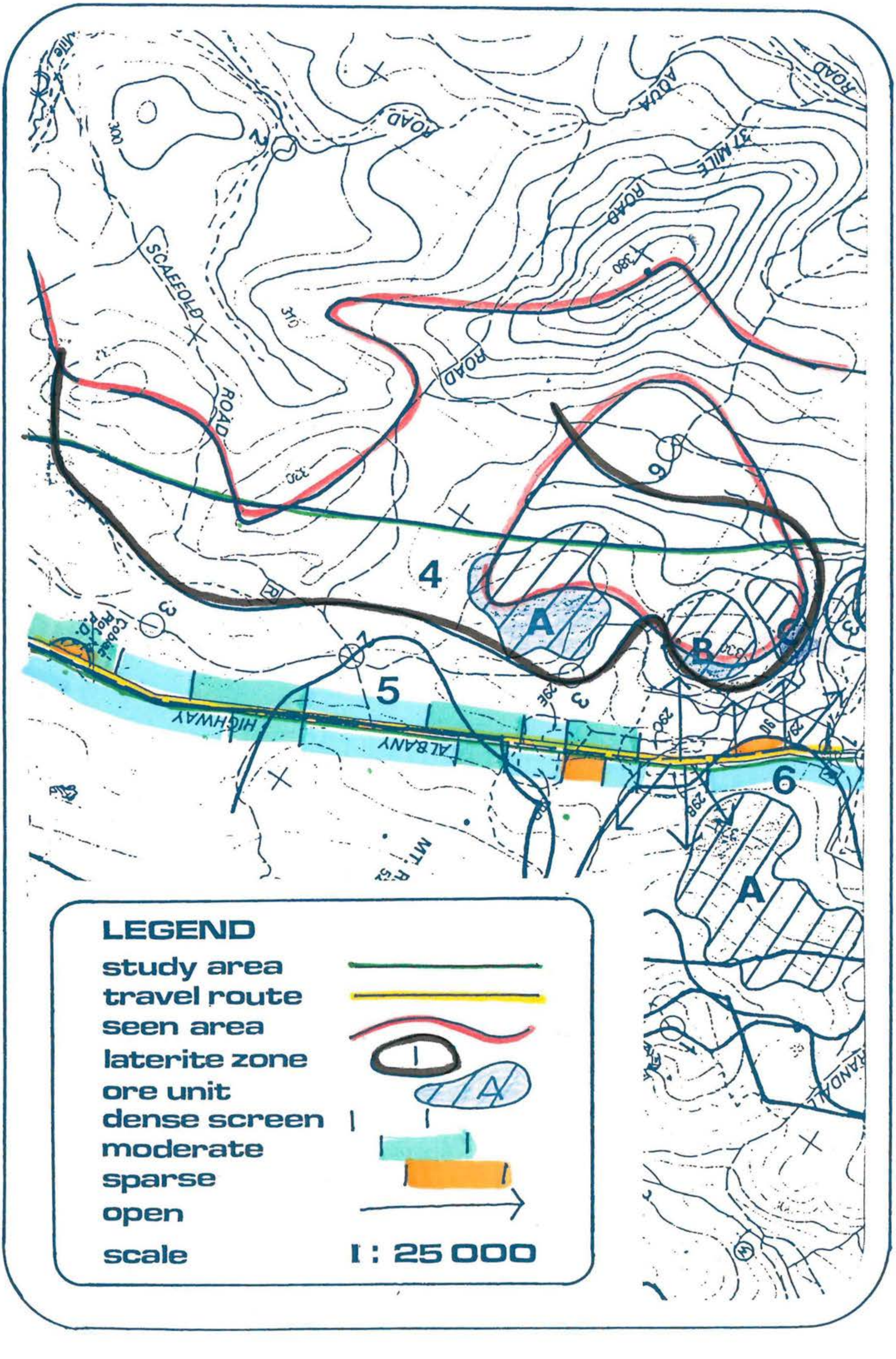
- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Sparce to moderately dense roadside
  Discussion: rolling landform visual impact but part of unit can be seen from highway - view filtered

- **VIEW ANALYSIS**
  Number of Primary View Points: several highway points Mt. Vincent
  Critical Travel Direction: both
  Angle of View: 78-90° - fg viewer level
  Duration of View: short
  Other:

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: Stable where present; oblique view increases screening capability.
  Discussion:

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: Moderate - Apparent Alteration
  Discussion: High from Mt. Vincent

- **ASSESSMENT/RECOMMENDATION**
  Possible, depending on exact location of ore body. Prefer mining to remain out of seen area completely. Unacceptable from Vincent perspective


SCAFFOLD ROAD
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dense screen
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ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** ***Number*** 4

- **PROBABLE ORE UNIT** ***Letter*** A

- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Moderately Dense with dense pockets
  Discussion: Broken overstorey but effective understorey screen.

- **VIEW ANALYSIS**
  Number of Primary View Points: highway
  Critical Travel Direction: both
  Angle of View: 45°-90° oblique
  Duration of View: moderate if screen removed
  Other: screening complete due to oblique view, veg + low landform

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: Dieback prone but effective
  Discussion:

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: Low - Inevident Alteration
  Discussion:

- **ASSESSMENT/RECOMMENDATION** Acceptable with caution

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** ***Number*** 4

- **PROBABLE ORE UNIT** ***Letter*** B and C

- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Open, recently cleared fg

  Discussion: only parts of both units extend into seen area

- **VIEW ANALYSIS**
  Number of Primary View Points: Highway and Mt. Randle

  Critical Travel Direction: both

  Angle of View: 45° - 90° as both fg and mg

  Duration of View: extended as focal view north to south
  moderate as seen south to north

  Other: ridgeline

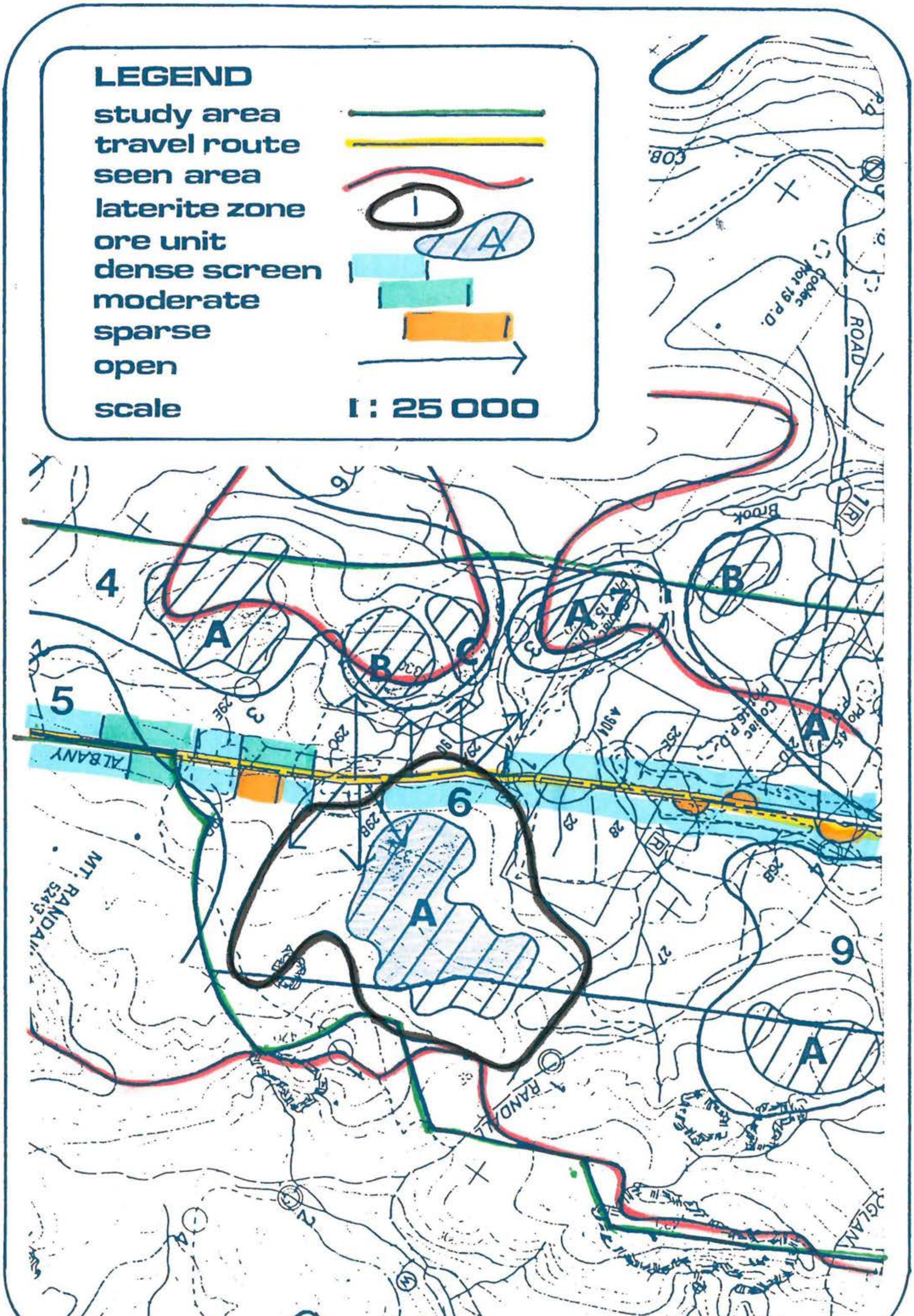
- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: in transition
  but likely to remain Sparce

  Discussion:

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: High - Dominant Alteration for

  Discussion: portions on and east of ridgeline.

- **ASSESSMENT/RECOMMENDATION**
  Portions Acceptable - if behind seen area and skyline vegetation is retained.


LEGEND
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ROAD
Brook
RAND

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** ***Number*** 6

- **PROBABLE ORE UNIT** ***Letter*** A

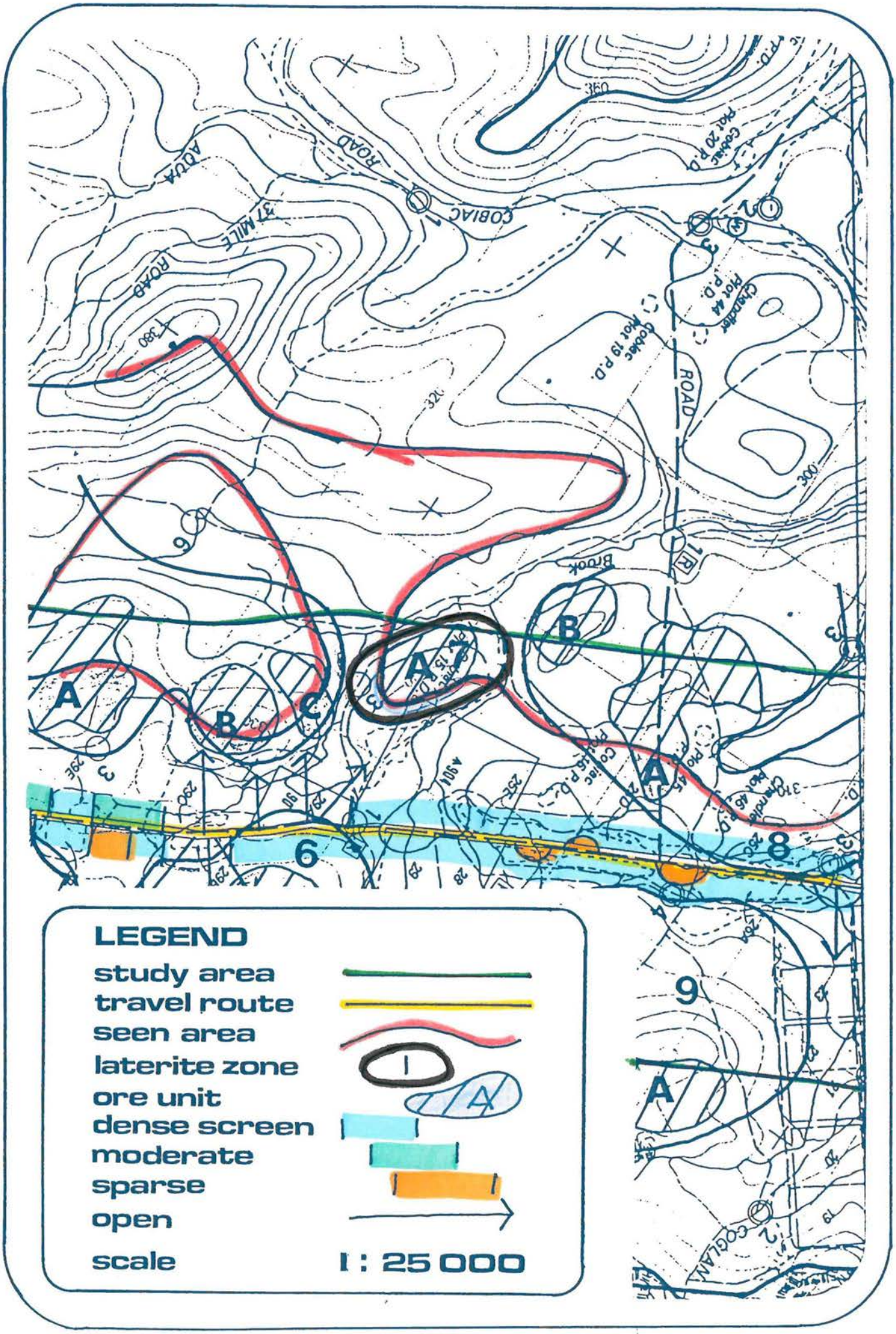
- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: full range - open to very dense; open from mg-highway, dense pine screen adjacent fg.
  Discussion:

- **VIEW ANALYSIS**
  Number of Primary View Points: numerous highway points Mt. Randall
  Critical Travel Direction: both - southbound most critical
  Angle of View: 10°-90° - fg; oblique from South to north, feature when southbound
  Duration of View: moderate to long
  Other:

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: Pine screen unpredictable, pockets already clear felled, other
  Discussion: areas dieback prone but currently stable. Essential to retain pine if mining to occur;

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: High - Dominant Alteration
  Discussion: from fg-mg viewpoints with Mt Randall as view focus, Potentially high from other hwy points if pine removed. Low to travelers northbound.

- **ASSESSMENT/RECOMMENDATION** Unacceptable


LEGEND
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ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** ***Number*** 7

- **PROBABLE ORE UNIT** ***Letter*** A

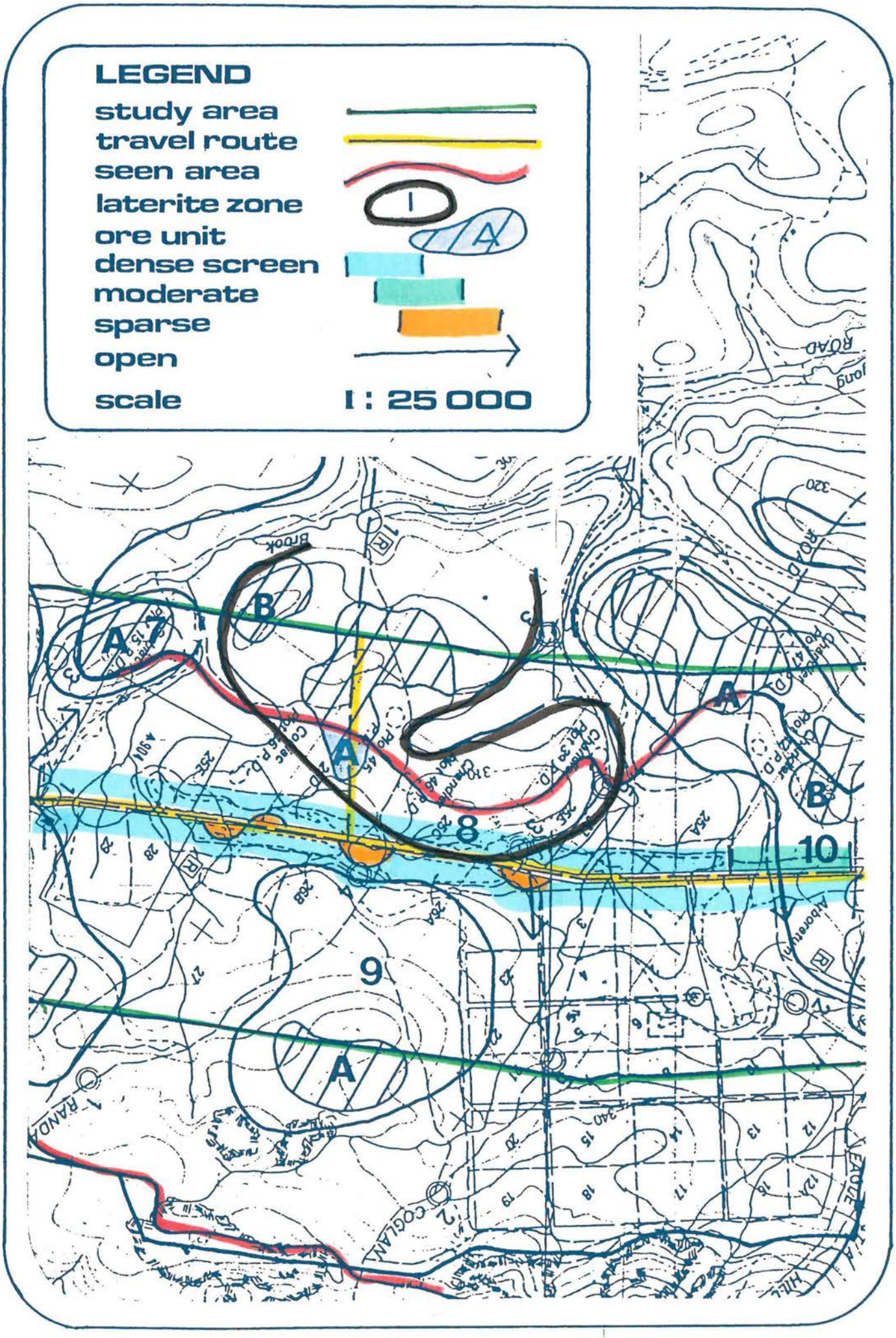
- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: open foreground to mod dense to dense mg screen.
  Discussion: Only edge of unit is within seen area from the highway

- **VIEW ANALYSIS**
  Number of Primary View Points: highway
  Critical Travel Direction: north
  Angle of View: 30° but distant
  Duration of View: moderate
  Other: Very critical skyline location

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: Open with little change anticipated
  Discussion: Low wet area to remain open.

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: High - Dominant Alteration if skyline vegetation is disturbed.
  Discussion: Low - Incident if behind seen area.

- **ASSESSMENT/RECOMMENDATION** Portions Acceptable - depending on exact boundaries of unit and extent of skyline disturbance.


LEGEND
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travel route
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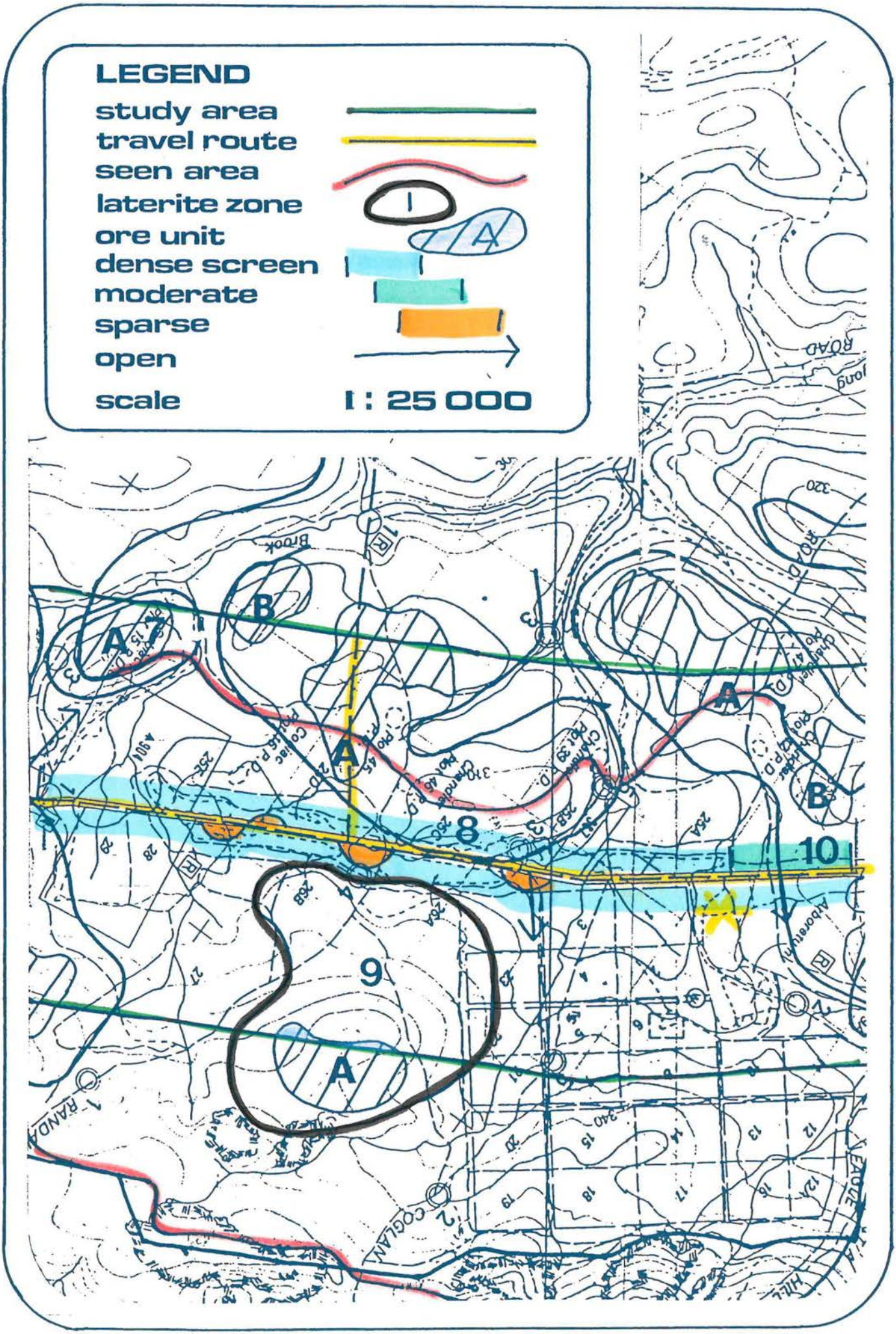
ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** ***Number*** 8
- **PROBABLE ORE UNIT** ***Letter*** A
- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Open at junction of Hwy with Jarradale Road. Dense pine
  Discussion:
- **VIEW ANALYSIS**
  Number of Primary View Points: Highway and Jarradale Road (designated scenic drives)
  Critical Travel Direction: neither
  Angle of View: 90°
  Duration of View: glimpse only unless turning into Jarradale Road. Potentially greater if pine is removed adjacent to hwy.
  Other:
- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: Unknown Status of pine
  Discussion:
- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: Moderate - Apparent Alteration
  Discussion: High - Dominant Alteration from Jarradale Road
- **ASSESSMENT/RECOMMENDATION**
  Could be Acceptable from Highway viewpoint - assuming long term retention of pine
  Unacceptable from Jarradale Road view points.


LEGEND
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ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** *Number* 9

- **PROBABLE ORE UNIT** *Letter* A

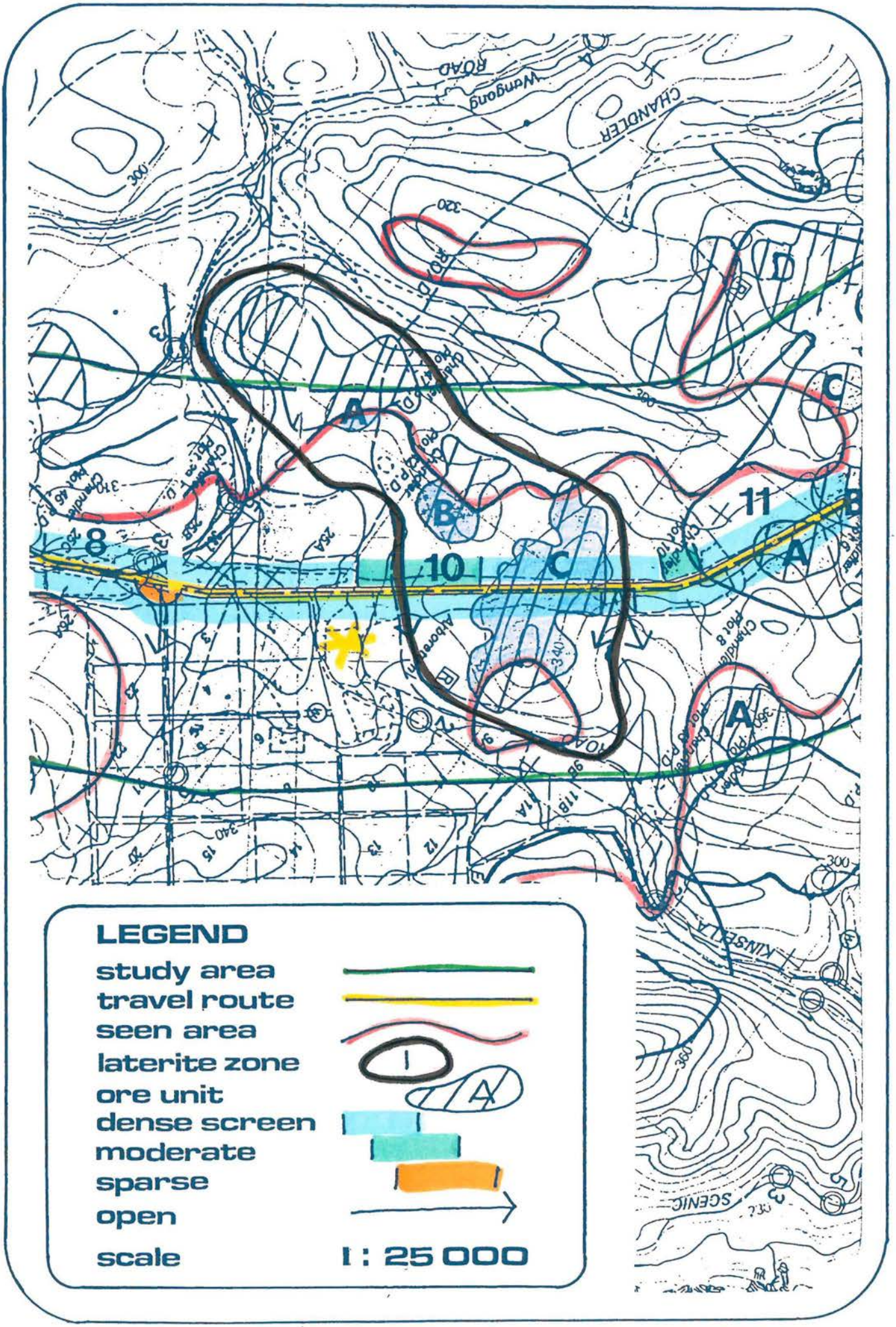
- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Dense screen;
  eventhough highway fg Sparce in 2 places
  Discussion:

- **VIEW ANALYSIS**
  Number of Primary View Points: highway, gleneagle picnicsite
  Critical Travel Direction: southbound
  Angle of View: 45° to 90°
  Duration of View: unknown, not sighted
  Other: very difficult to assess due to current pine screen

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable:
  unpredictable due to pine
  Discussion:

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: Low - Inevident Alteration assuming
  Discussion: retention of pine
  High Dominate Alteration if
  pine removed (possible, but not Varified)

- **ASSESSMENT/RECOMMENDATION** Very sensitive landscape
  within Monadnocks viewshed but mining
  might be acceptable. Further assessment required


Wrangong ROAD
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11
LEGEND
study area
travel route
seen area
laterite zone
ore unit
dense screen
moderate
sparse
open
scale
1 : 25 000

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** ***Number*** 10

- **PROBABLE ORE UNIT** ***Letter*** A

- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Dense screen

  Discussion:

- **VIEW ANALYSIS**
  Number of Primary View Points: None - most of unit outside seen area.

  Critical Travel Direction: None

  Angle of View: unseen with current screen and oblique view

  Duration of View: none

  Other:

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: dieback prone but currently stable

  Discussion:

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: Low Inevident

  Discussion:

- **ASSESSMENT/RECOMMENDATION** Acceptable, no visual conflict predicted

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** *Number* 10
- **PROBABLE ORE UNIT** *Letter* B
- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Dense to moderately dense

  Discussion:
- **VIEW ANALYSIS**
  Number of Primary View Points: highway

  Critical Travel Direction: northbound

  Angle of View: 30°-45°

  Duration of View: short term only.

  Other:
- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: dieback prone but currently stable with dense understorey.

  Discussion:
- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: Low - Inevident to Apparent

  Discussion:
- **ASSESSMENT/RECOMMENDATION** Acceptable with care

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** *Number* 10

- **PROBABLE ORE UNIT** *Letter* C

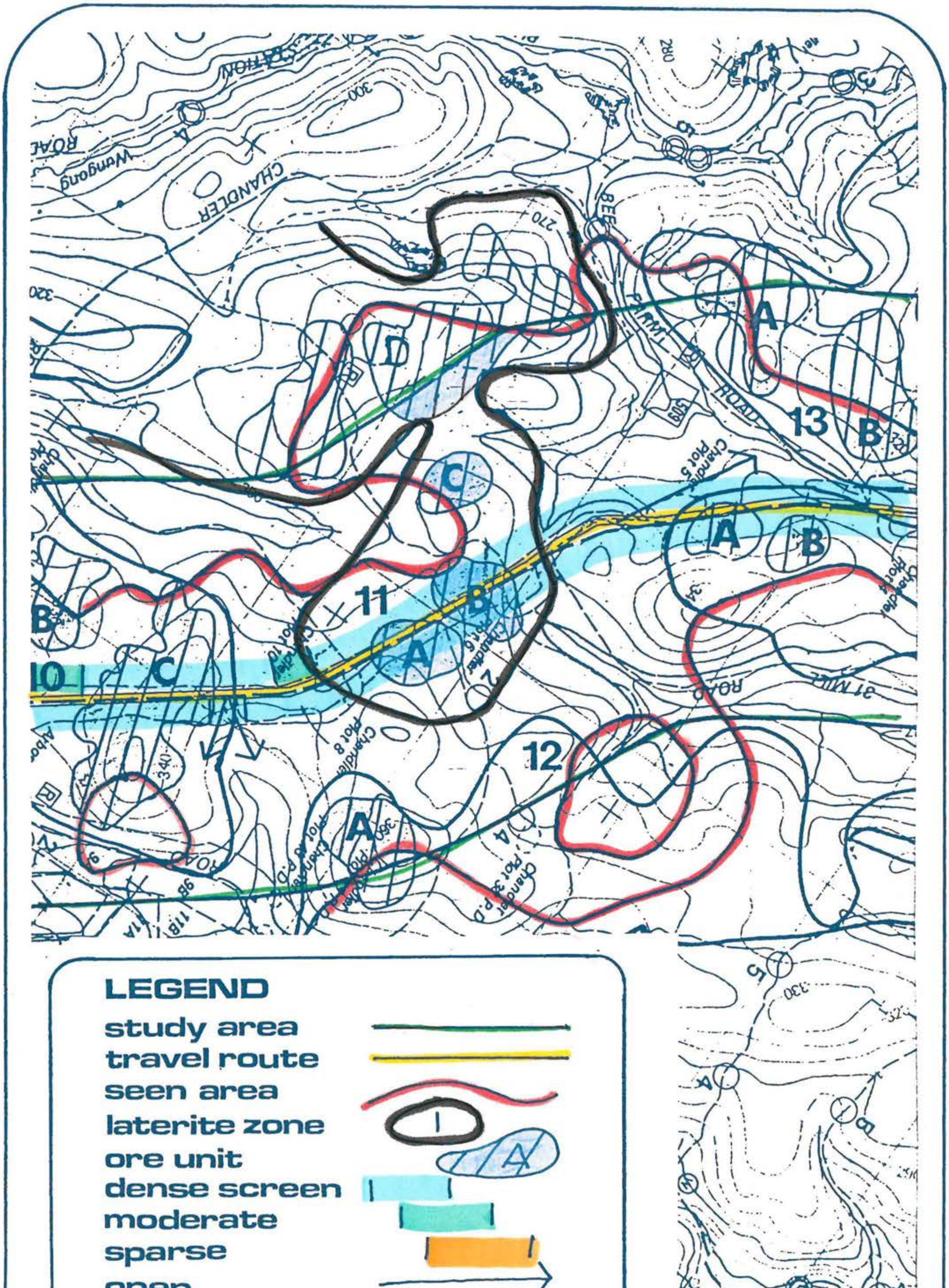
- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Open, as unit lies under the road; Dense adjacent to road.
  Discussion:

- **VIEW ANALYSIS**
  Number of Primary View Points: highway
  Critical Travel Direction: both
  Angle of View: 90° to both portions east + west of hwy.
  Duration of View: extended
  Other:

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: screen is dieback prone but currently stable.
  Discussion: Fg screen could effectively screen views to large portions of this unit.

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: High - Dominant Alteration would result.
  Discussion:

- **ASSESSMENT/RECOMMENDATION** Unacceptable for large portions of the unit. Possible for areas beyond roadside screen. Further assessment required if portions to be mined.


LEGEND
study area
travel route
seen area
laterite zone
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dense screen
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CHANDLER
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31 MILE
ROAD

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** *Number* 11

- **PROBABLE ORE UNIT** *Letter* A and B

- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Dense screen both sides

  Discussion: Units lie over the road

- **VIEW ANALYSIS**
  Number of Primary View Points: highway

  Critical Travel Direction: both

  Angle of View: 45°-90°

  Duration of View: short

  Other:

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: dieback prone but currently stable

  Discussion:

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: High - Dominant Alteration

  Discussion:

- **ASSESSMENT/RECOMMENDATION**
  No opportunity to mine any portion of these units without severe impact.

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** *Number* 11

- **PROBABLE ORE UNIT** *Letter* C and D

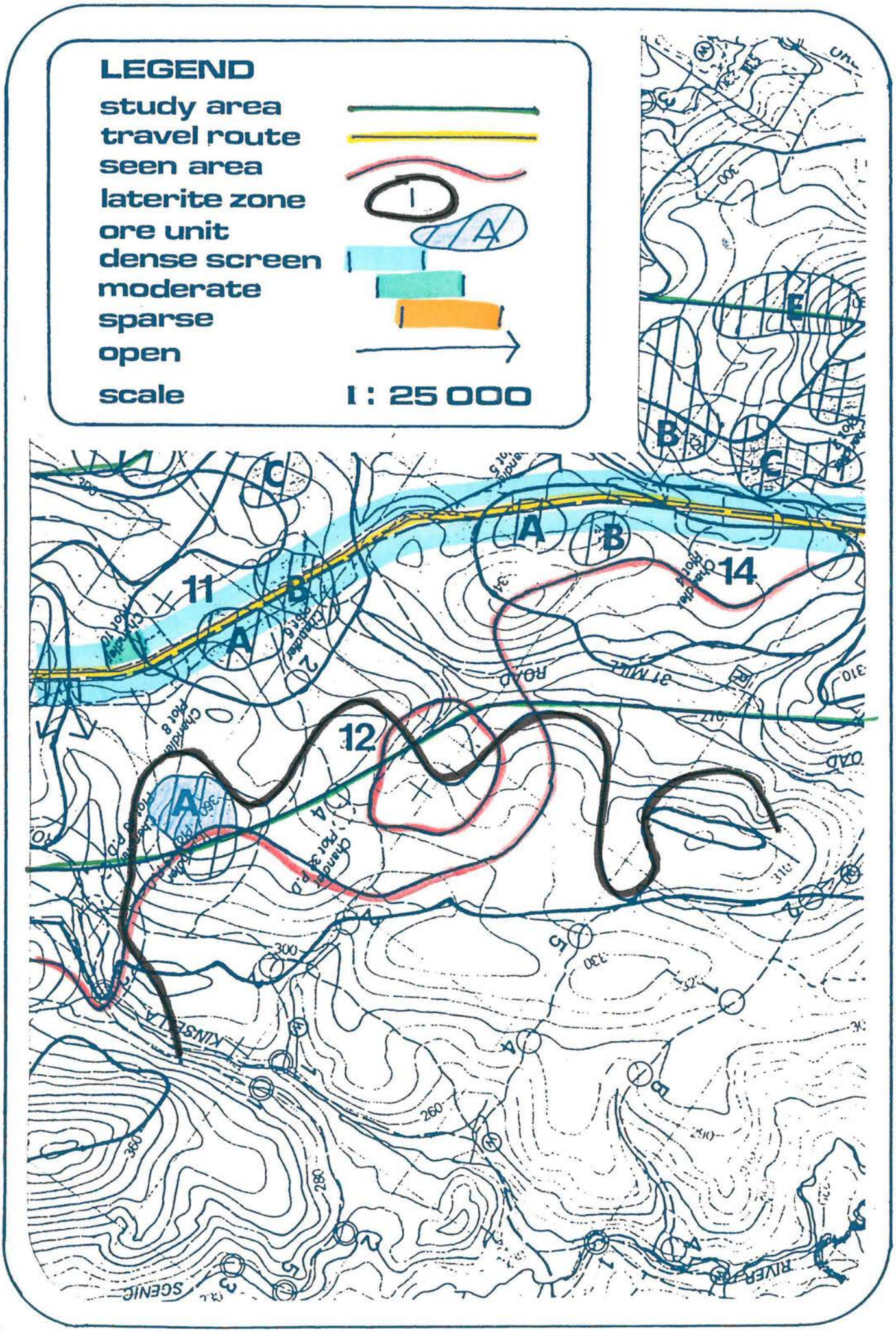
- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Open rock outcrop on roadside but dense screen behind
  Discussion:

- **VIEW ANALYSIS**
  Number of Primary View Points:
  Critical Travel Direction: South bound only
  Angle of View: 45°-60°
  Duration of View: short
  Other: rolling oblique landform

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: rock is stable and dense screen understorey appears stable
  Discussion:

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: Low Unevident Alteration
  Discussion:

- **ASSESSMENT/RECOMMENDATION**
  Acceptable but unit C may be of concern depending on exact location on the land. Must be carefully assessed on-site.


LEGEND
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KINSELLA
SCENIC
RIVER

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** *Number* 12

- **PROBABLE ORE UNIT** *Letter* A

- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Open to dense

  Discussion: open view occurs due to road alignment and elevation and topographic variation.

- **VIEW ANALYSIS**
  Number of Primary View Points: highway

  Critical Travel Direction: northbound only

  Angle of View: focal view to 30° - fg

  Duration of View: moderate

  Other: located on view Skyline

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable:

  Discussion: None at critical view point; roadside vegetation is stable but has no screening potential.

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: High - Dominant Alteration

  Discussion:

- **ASSESSMENT/RECOMMENDATION** Unacceptable

  Area outside seen area could be mined if Skyline veg is undisturbed.

LEGEND

study area

travel route

seen area

laterite zone

ore unit

dense screen

moderate

sparse

open

scale 1 : 25 000

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** *Number* 13

- **PROBABLE ORE UNIT** *Letter* A

- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Dense, both pine and native
  Discussion: Unseen from highway

- **VIEW ANALYSIS**
  Number of Primary View Points: highway potential
  Critical Travel Direction: both if seen
  Angle of View: Viewer level - oblique only
  Duration of View: none at present
  Other:

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: pine-unknown; native-stable
  Discussion: Removal of pine would only slightly open views to this unit

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: Low - Inconsident Alteration
  Discussion:

- **ASSESSMENT/RECOMMENDATION** Acceptable

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** *Number* 13

- **PROBABLE ORE UNIT** *Letter* B and C

- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Dense - pine with mod dense native stand behind pine
  Discussion:

- **VIEW ANALYSIS**
  Number of Primary View Points: highway views now screened but potential high.
  Critical Travel Direction: both potentially
  Angle of View: 30°-90° viewer below - fg.
  Duration of View: none
  Other: very close to roadside

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: Pine - unknown but recommended for removal
  Discussion:

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: Low - with pine screen
  Discussion: High - Dominant Impact if pine removed.

- **ASSESSMENT/RECOMMENDATION** Unacceptable
  Portions of unit outside seen area - acceptable

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** ***Number*** 13

- **PROBABLE ORE UNIT** ***Letter*** D

- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Dense on roadside fg. Open in mg viewpoint on hwy south; large portions of unit currently screened from hwy viewpoints
  Discussion:

- **VIEW ANALYSIS**
  Number of Primary View Points: highway
  Critical Travel Direction: northbound
  Angle of View: focal point on skyline
  Duration of View: moderate length of view
  Other: on skyline for some of unit - critical

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: pine - uncertain if pine removed more of unit will be visible
  Discussion: pine is recommended for removal

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: LOW - if ridge is avoided, no skyline knotch and pine is retained
  Discussion: High if pine is removed - skyline is disturbed

- **ASSESSMENT/RECOMMENDATION**
  Unacceptable - assuming removal of pine.

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** ***Number*** 13

- **PROBABLE ORE UNIT** ***Letter*** E

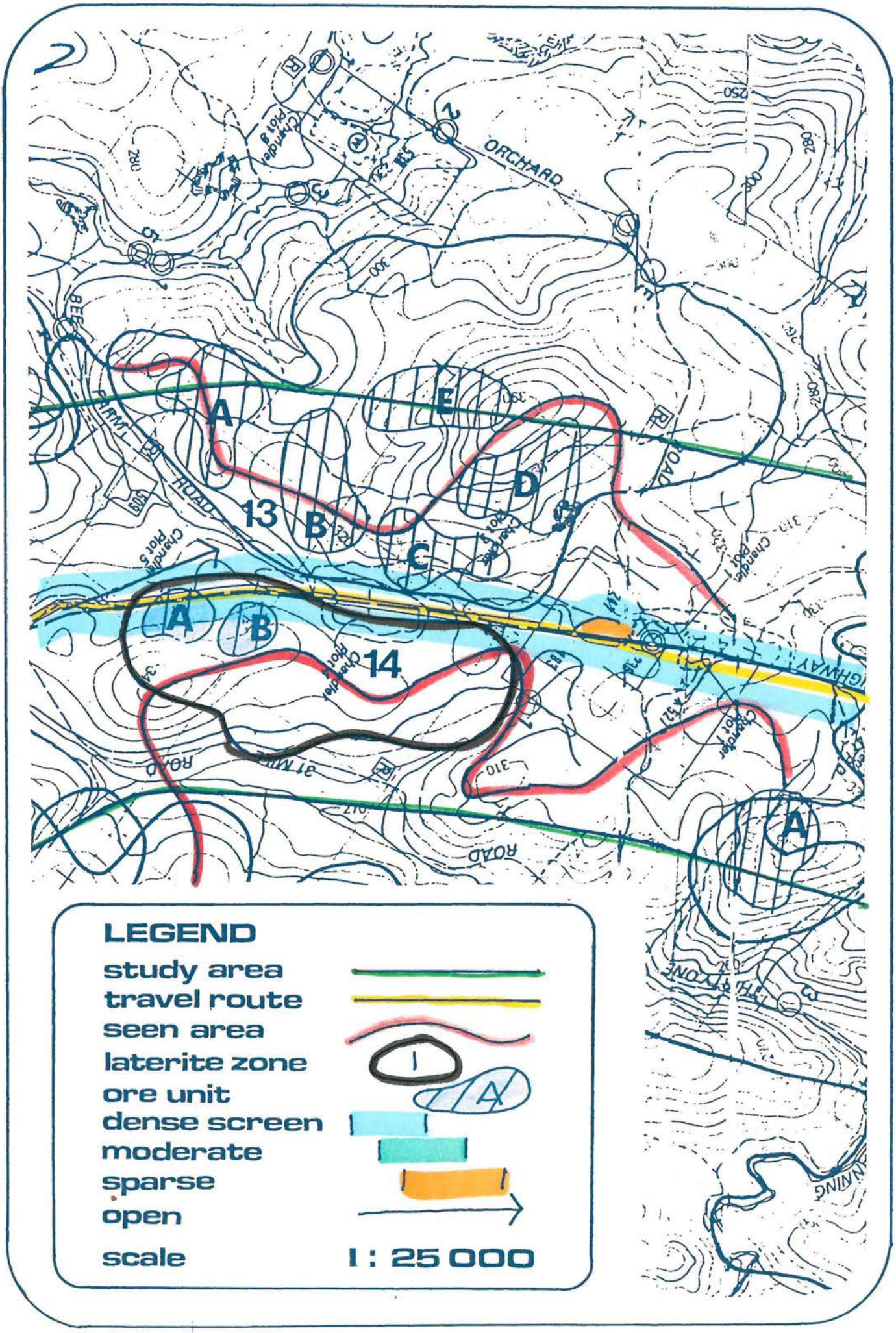
- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Dense on roadside - pine; Dense, native - also on roadside
  Discussion:

- **VIEW ANALYSIS**
  Number of Primary View Points: One primary viewpoint on highway South
  Critical Travel Direction: northbound
  Angle of View: 20° from focal, mg.
  Duration of View: Short
  Other: could be on latural skyline

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable:
  pine uncertain, native - stable but diebackprone
  Discussion: Critical view is without screening veg.

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: Probably LOW - but depends on
  Discussion: exact location of unit.
  Moderate - if skyline is disturbed

- **ASSESSMENT/RECOMMENDATION**
  Acceptable with caution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ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** *Number* 14

- **PROBABLE ORE UNIT** *Letter* A

- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Dense

  Discussion: Screen would be removed to mine this unit

- **VIEW ANALYSIS**
  Number of Primary View Points: highway points

  Critical Travel Direction: both

  Angle of View: unit lies over the road, fg

  Duration of View: long - both directions

  Other:

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable:
  Stable jarrah-association but dieback prone

  Discussion:

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: High - Dominant Alteration

  Discussion:

- **ASSESSMENT/RECOMMENDATION**
  Not acceptable

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** *Number* 14

- **PROBABLE ORE UNIT** *Letter* B

- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Dense

  Discussion:

- **VIEW ANALYSIS**
  Number of Primary View Points: highway points - currently screened

  Critical Travel Direction: both

  Angle of View: 45°-90° fg, viewer level

  Duration of View: moderate

  Other:

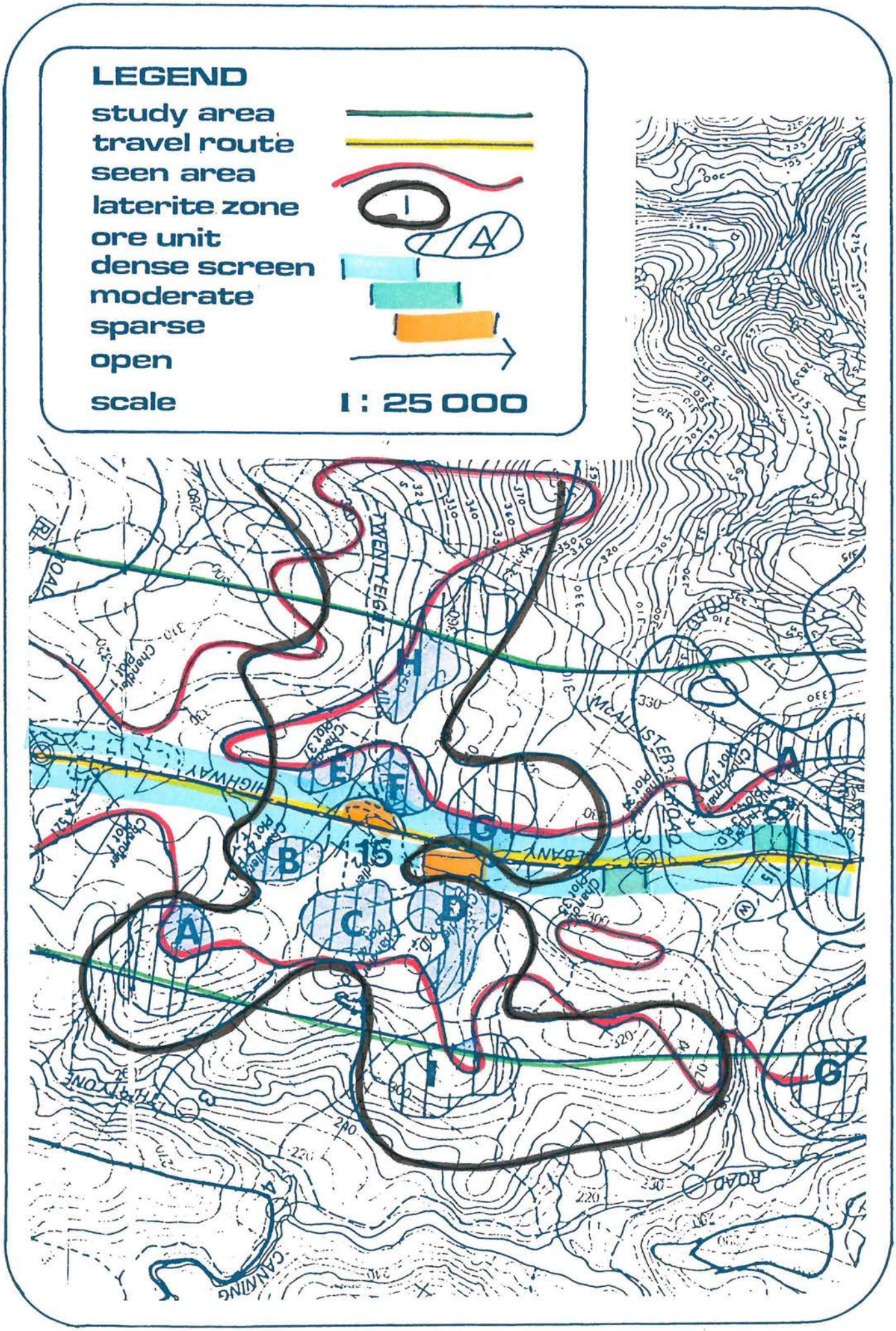
- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: Stable jarrah with dense understorey but dieback prone

  Discussion:

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: High adjacent to road

  Discussion: Retention of roadside screen could allow portions of the unit to be mined.

- **ASSESSMENT/RECOMMENDATION**
  Portions acceptable if screen maintained but not recommended as unit is small.


LEGEND
study area
travel route
seen area
laterite zone
ore unit
dense screen
moderate
sparse
open
scale
1 : 25 000
TWENTY-EIGHT
HIGHWAY
McALISTER
ROAD
CANNING
A
B
C
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H
I
15

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** ***Number*** 15

- **PROBABLE ORE UNIT** ***Letter*** A

- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Dense

  Discussion:

- **VIEW ANALYSIS**
  Number of Primary View Points: highway

  Critical Travel Direction: potentially both

  Angle of View: 90° fg but distant from viewer

  Duration of View: short potentially

  Other:

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: Dense jarrah a500. - stable but subject to dieback

  Discussion:

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: Low - Inevident Alteration

  Discussion:

- **ASSESSMENT/RECOMMENDATION** Acceptable

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** ***Number*** 15

- **PROBABLE ORE UNIT** ***Letter*** B

- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Dense - both pine and jarrah asso.
  Discussion:

- **VIEW ANALYSIS**
  Number of Primary View Points: highway
  Critical Travel Direction: South bound
  Angle of View: 10°-30°, never above, fg.
  Duration of View: moderate potential
  Other: alignment of road critical focus of view if pine removed.

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: Pine likely to be clearfelled as recommended by Corridor Study.
  Discussion: Native Screen - Stable but diebdek prone.

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: Low - Nevident Alteration if screen is maintained
  Discussion: Moderate - Apparent if pine is removed. - Need for reassessment once pine is removed to determine impact.

- **ASSESSMENT/RECOMMENDATION**
  Possible depending on screen removal and exact location of ore body.

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** **Number** 15

- **PROBABLE ORE UNIT** **Letter** C

- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Dense - pine, Dense - native
  Discussion: Dense pine screen immediately adjacent to highway.

- **VIEW ANALYSIS**
  Number of Primary View Points: highway
  Critical Travel Direction: both
  Angle of View: 45°-90° viewer above to level
  Duration of View: moderate potential
  Other:

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: Unstable - pine recommended for removal as it has silviculturally failed.
  Discussion: Native screen - stable but dieback prone

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: High - Dominant Alteration assuming pine removal
  Discussion: Low - Inevident if pine is retained

- **ASSESSMENT/RECOMMENDATION** Unacceptable

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** *Number* 15

- **PROBABLE ORE UNIT** *Letter* D

- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Sparce

  Discussion:

- **VIEW ANALYSIS**
  Number of Primary View Points: highway

  Critical Travel Direction: both, but primarily southbound

  Angle of View: focal point to 90°, viewer below, fg

  Duration of View: long

  Other:

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: Sparce but stable, little potential for increased screening unless planted.

  Discussion:

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: High - Dominant Alteration

  Discussion:

- **ASSESSMENT/RECOMMENDATION** Unacceptable

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** ***Number*** 15

- **PROBABLE ORE UNIT** ***Letter*** E and F

- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Sparce with a few open areas
  Discussion:

- **VIEW ANALYSIS**
  Number of Primary View Points: highway – recently realigned bit of roadway elevated thus enhancing visib potential
  Critical Travel Direction: both
  Angle of View: 45°-90° viewer level
  Duration of View: moderate
  Other:

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: Sparce screen stable - not likely to increase in screening potential
  Discussion:

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: High - Dominant Alteration
  Discussion:

- **ASSESSMENT/RECOMMENDATION** Unacceptable

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** ***Number*** 15

- **PROBABLE ORE UNIT** ***Letter*** G

- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Dense

  Discussion:

- **VIEW ANALYSIS**
  Number of Primary View Points: highway

  Critical Travel Direction: both, unit lies under highway

  Angle of View: fg

  Duration of View: long duration

  Other:

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: currently stable jarrah asso but dieback prone

  Discussion: Density could effectively screen parts of this unit.

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: High - Dominant Alteration -

  Discussion: in fg distance zone
  : Low - if fg screen is maintained

- **ASSESSMENT/RECOMMENDATION** Unacceptable for entire unit - east of ridge, possible for portions if screen effectively retained

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** ***Number*** 15

- **PROBABLE ORE UNIT** ***Letter*** H and I

- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Dense

  Discussion:

- **VIEW ANALYSIS**
  Number of Primary View Points:

  Critical Travel Direction:

  Angle of View: distant and oblique to viewer -

  Duration of View: fringe of seen area, unseen with screening vegetation

  Other:

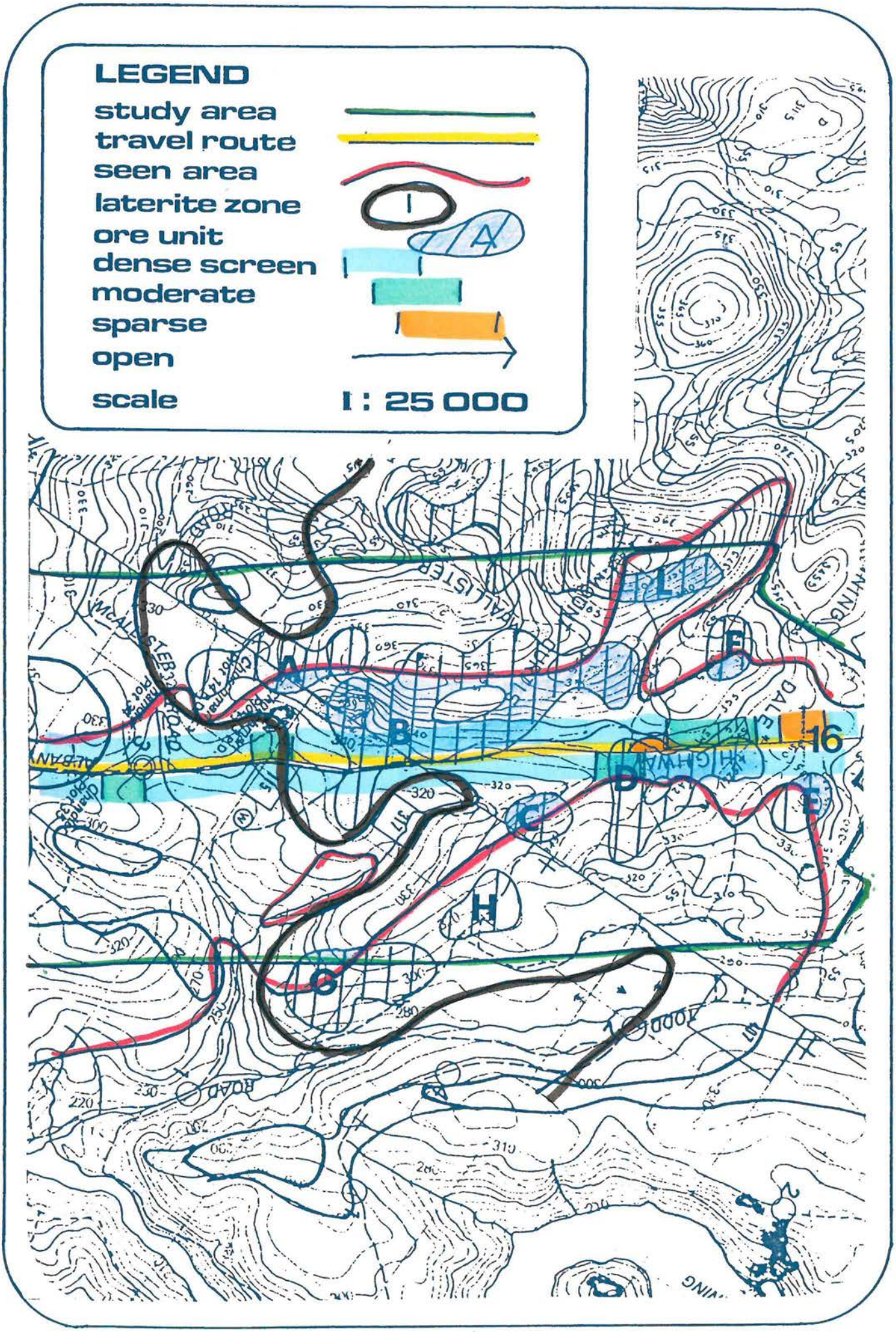
- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: Dense screen compounded by distance

  Discussion:

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: Low - Inevident Alteration

  Discussion:

- **ASSESSMENT/RECOMMENDATION** Acceptable


LEGEND
study area
travel route
seen area
laterite zone
ore unit
dense screen
moderate
sparse
open
scale
1 : 25 000
A
B
C
D
E
F
G
H
16

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** ***Number*** 16

- **PROBABLE ORE UNIT** ***Letter*** A

- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Sparce to rock formation on slope
  Discussion:

- **VIEW ANALYSIS**
  Number of Primary View Points: highway
  Critical Travel Direction: northbound
  Angle of View: 10° to 30°, fg
  Duration of View: short
  Other: could impinge on skyline

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable:
  Sparce but stable - dieback prone
  Discussion:

- **VISUAL IMPACT PROJECTION - ~~ASSUMING~~ EXTRACTION**
  High, Moderate, Low: High - Dominant alteration if expending onto skyline
  Discussion: : Low - Inevident if behind ridge

- **ASSESSMENT/RECOMMENDATION**
  Possible if no skyline breach

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** ***Number*** 16

- **PROBABLE ORE UNIT** ***Letter*** B

- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Dense

  Discussion:

- **VIEW ANALYSIS**
  Number of Primary View Points: highway

  Critical Travel Direction: both

  Angle of View: unit lies under road

  Duration of View: potentially long

  Other:

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: Stable - jarrahasso but dieback prone

  Discussion:

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: Variable - High to Low

  Discussion: Low if screen maintained for portions beyond immediate roadside

- **ASSESSMENT/RECOMMENDATION**
  Portions possible, portions unacceptable
  Careful analysis essential if mining to proceeds

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** ***Number*** 16

- **PROBABLE ORE UNIT** ***Letter*** C

- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Dense immediate fg but open from mg points South
  Discussion:

- **VIEW ANALYSIS**
  Number of Primary View Points: highway
  Critical Travel Direction: northbound
  Angle of View: focal to 30° - viewer level
  Duration of View: moderate
  Other: on lateral skyline

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: Stable fg but open area on hwy south to remain
  Discussion:

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: High - Dominant Alteration
  Discussion: Skyline notch likely

- **ASSESSMENT/RECOMMENDATION** Unacceptable

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** *Number* 16

- **PROBABLE ORE UNIT** *Letter* D

- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Moderately Dense to Dense

  Discussion:

- **VIEW ANALYSIS**
  Number of Primary View Points: highway

  Critical Travel Direction: both

  Angle of View: portions of unit under road

  Duration of View: long

  Other:

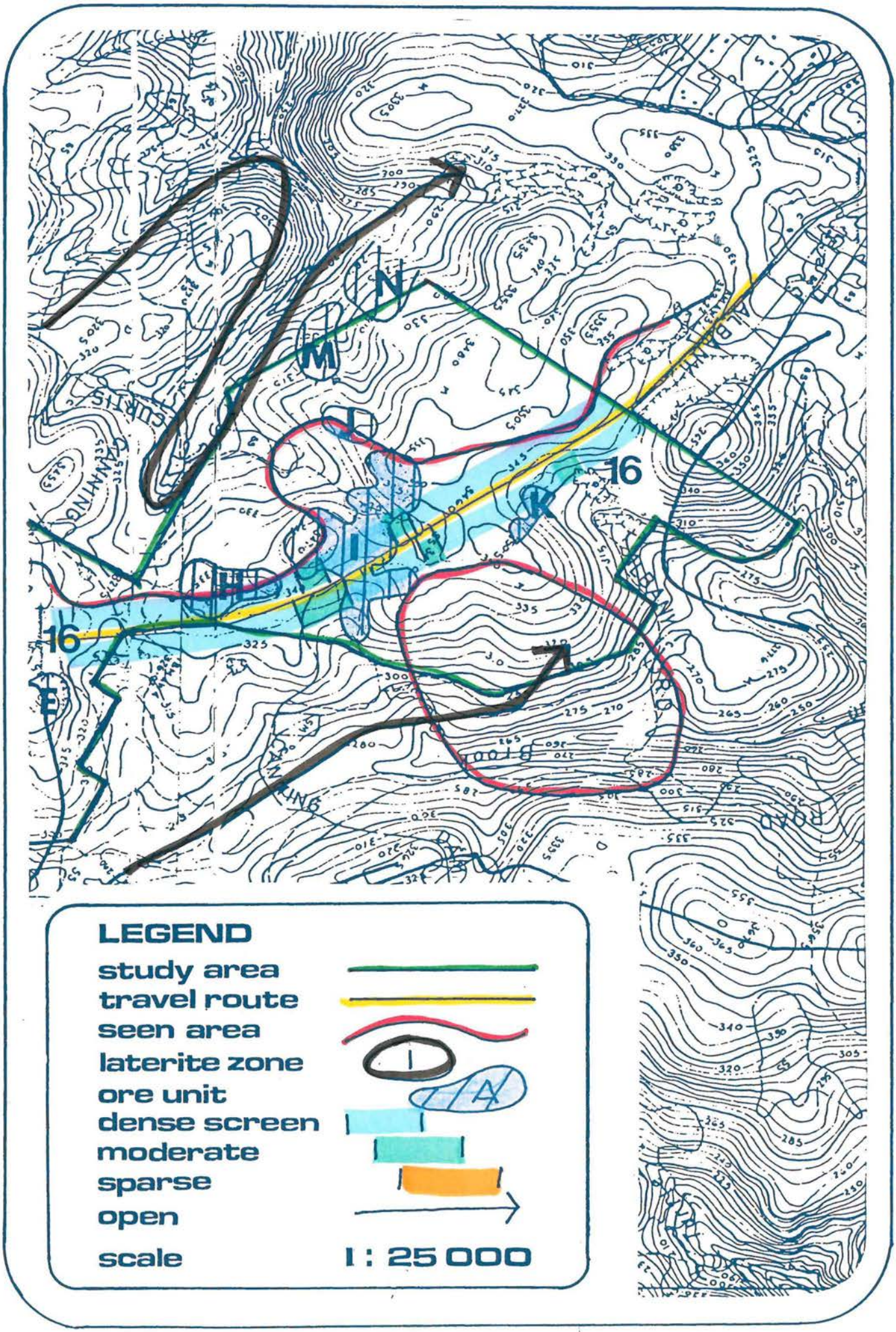
- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: Very stable with healthy understorey but dieback prone

  Discussion:

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: High - Dominant Alt. if mined to roadway.

  Discussion: Low - Inconsident if screen is maintained

- **ASSESSMENT/RECOMMENDATION**
  Unacceptable unless screen is retained.
  Portions outside Scenarea


16
16
LEGEND
study area
travel route
seen area
laterite zone
ore unit
dense screen
moderate
sparse
open
scale
1 : 25 000

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** ***Number*** 16

- **PROBABLE ORE UNIT** ***Letter*** E, F, G, L

- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Dense

  Discussion:

- **VIEW ANALYSIS**
  Number of Primary View Points: highway

  Critical Travel Direction: E+F southbound

  Angle of View: potential fg only

  Duration of View:

  Other:

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: Stable, jarrah asso but dieback prone

  Discussion:

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: Low - Inexcident Alteration

  Discussion:

- **ASSESSMENT/RECOMMENDATION** Acceptable - no visual conflict predicted unless screen is lost.

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** ***Number*** 16

- **PROBABLE ORE UNIT** ***Letter*** H

- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Dense

  Discussion:

- **VIEW ANALYSIS**
  Number of Primary View Points: highway

  Critical Travel Direction: both

  Angle of View: variable, fg

  Duration of View: moderate

  Other:

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: Stable but dieback prone

  Discussion:

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: High - where unit extends to highway

  Discussion: Low to Moderate - if screen can be retained or unit remains out of seen area completely

- **ASSESSMENT/RECOMMENDATION** Possible but must remain inevident, portion close to road unacceptable

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** ***Number*** 16

- **PROBABLE ORE UNIT** ***Letter*** 1

- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Dense

  Discussion:

- **VIEW ANALYSIS**
  Number of Primary View Points: highway

  Critical Travel Direction: both

  Angle of View: unit lies on roadway

  Duration of View: long

  Other:

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: Stable but dieback prone

  Discussion:

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: High - portion under road and adjacent : Low - portions retained behind veg fg screen

  Discussion:

- **ASSESSMENT/RECOMMENDATION**
  Unacceptable - roadside portion
  Possable behind effective screen

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** ***Number*** 16

- **PROBABLE ORE UNIT** ***Letter*** J

- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Dense

  Discussion:

- **VIEW ANALYSIS**
  Number of Primary View Points:

  Critical Travel Direction:

  Angle of View:

  Duration of View:

  Other:

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: Stable

  Discussion:

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: Low - Inevident Alteration

  Discussion:

- **ASSESSMENT/RECOMMENDATION** Acceptable

ALBANY HIGHWAY RESERVE - ALCOA PROPOSAL

Visual Resource Analysis and Assessment

- **LATERITE AREA** *Number* 16

- **PROBABLE ORE UNIT** *Letter* K

- **SCREENING CATEGORY from POTENTIAL HIGHWAY VIEWPOINTS**
  Dense, Moderately Dense, Sparce, Open: Dense

  Discussion:

- **VIEW ANALYSIS**
  Number of Primary View Points: highway

  Critical Travel Direction: both

  Angle of View: unseen but 45°-90°

  Duration of View: none at present

  Other:

- **STATUS of SCREEN**
  Stable, dieback prone, in transition, unpredictable: Stable but dieback prone

  Discussion:

- **VISUAL IMPACT PROJECTION - ASSUMING EXTRACTION**
  High, Moderate, Low: Low - if screen is maintained

  Discussion: Insufficient data available on this unit

- **ASSESSMENT/RECOMMENDATION** Possible depending on exact location and extent of unit

ASSESSMENT SUMMARY

Area 1, unit A
Low impact; no visual conflict anticipated.
Recommendation; Acceptable.

Area 2, units A,B,C,D,E and F
High impact; visual dominance certain if mined.
Recommendation; Unacceptable.

Area 2, unit G
High impact east of ridge; visually dominant.
Low impact west of ridge; visually inevident from highway view points.
Recommendation; Unacceptable-part; Possible-part.

Area 2, unit H
High impact; visual dominance certain if mined.
Recommendation; Unacceptable.

Area 2, units I,J,K
Low impact; visually inevident.
Recommendation; Acceptable.

Area 3, unit A
Moderate impact; visually apparent but not dominant due to topography and view angle.
Recommendation; Possible.

Area 4, unit A
Low impact; visually inevident.
Caution recommended.
Recommendation; Possible.

Area 4, units B & C
High impact; visual dominance certain east of ridge.
Low impact; visually inevident west of ridge out of seen area.
Recommendation; Unacceptable-part; Acceptable-part.

Area 5, No ore units within study area.

Area 6, unit A
High impact; visual dominance certain if mined.
Recommendation; Unacceptable.

Area 7, unit A
High impact; visual dominance certain east of ridge.
Low impact; visually inevident west of seen area ridge.
Retention of skyline vegetation intact - essestial.
Recommendation; Unacceptable-part; Acceptable-part.

Area 8, unit A
High impact; visual dominance certain from Jarrahdale Road and if pine screen is lost on the Highway.
Recommendation; Unacceptable.

Area 9, unit A
Unclear; more detailed study required if mining seriously considered.
Recommendation; Possible.

Area 10, unit A
Low impact; visually inevident.
Recommendation; Acceptable.

Area 10, unit B
Moderate impact; visually apparent but not dominant due to topography and vegetation screening.
Within seen area - caution required.
Recommendation; Possible.

Area 10, unit C
High impact; visual dominance certain.
Mining possible for portions of unit behind roadside screen.
Recommendation; Unacceptable-part; Possible-part.

Area 11, units A & B
High impact; visual dominance certain.
Recommendation; Unacceptable.

Area 11, unit C
Low impact; inevident.
Exact location of ore should be carefully monitored - caution is required as impact level could change.
Recommendation; Acceptable to Possible (more data required).

Area 11, unit D
Low impact; visually inevident.
Recommendation; Acceptable.

Area 12, unit A
High impact; visual dominance certain.
Recommendation; Unacceptable.

Area 13, unit A
Low impact; visually inevident.
Could be apparent if pine screen removed.
Recommendation; Possible.

Area 13, unit B
High impact east of ridge, visually dominant.
Low impact west of ridge, visually inevident.
Recommendation; Unacceptable-part; Acceptable-part.

Area 13, unit C & D
High impact; visually dominant assuming removal of roadside screen.
Recommendation; Unacceptable.

Area 13, unit E
Low impact; visually inevident depending on exact location of ore body.
Caution recommended.
Recommendation; Possible (more data required).

Area 14, unit A
High impact; visual dominance certain if mined.
Recommendation; Unacceptable.

Area 14, unit B
High impact; visual dominance certain adjacent to highway.
A small portion may be mined if roadside screen is maintained.
Recommendation; Unacceptable-part; Acceptable-part.

Area 15, unit A
Low impact; visually inevident.
Recommendation; Acceptable.

Area 15, unit B
Moderate impact; visually apparent.
Dependent on removal of roadside pine and exact location of ore.
Caution recommended.
Recommendation; Possible.

Area 15, units C,D,E & F
High impact; visual dominance certain if mined.
Recommendation; Unacceptable.

Area 15, unit G
High impact east of ridge; visual dominance certain.
Low impact west of ridge; inevident.
Recommendation; Unacceptable-part; Acceptable-part.

Area 15, units H & I
Low impact; inevident.
Recommendation; Acceptable.

Area 16, unit A
High impact east of ridge; visually dominant.
Low impact west of ridge.
Recommendatioin; Unacceptable-part; Acceptable-part.

Area 16, unit B
Variable from high to low impact - very large area requiring caution.
Recommendation; Unacceptable-part; Acceptable-part.

Area 16, unit C
High impact; visual dominance certain if mined.
Recommendation; Unacceptable.

Area 16, unit D
High impact west of ridge; visual dominance certain.
Low impact east of ridge; inevident.
Recommendation; Unacceptable-part; Acceptable-part.

Area 16, unit E, F & G
Low impact; inevident dependent on retention of roadside screen.
Recommendation; Possible.

Area 16, unit H
High impact east of ridge; visual dominance certain.
Low impact west of ridge; inevident.
Recommendation; Unacceptable-part; Acceptable-part.

Area 16, unit I
High impact certain for majority of unit.
Mining of screened portions possible with caution.
Recommendation; Unacceptable-part; Acceptable-part.

Area 16, unit J
Low impact; inevident.
Recommendation; Acceptable.

Area 16, unit K
Insufficient data supplied by ALCOA to assess this unit.
Recommendation; None.

Area 16, units L, M, N
Low impact; inevident.
Recommendation; Acceptable.

MONADNOCKS RESERVE - ASSESSMENT COMMENT

This report concentrates primarily on the viewshed from the Albany Highway. A detailed study and assessment of potential impacts within the viewshed of the Monadnocks Reserve walking track system has not been undertaken. Instead a brief summary of relevant factors follows for the consideration of the Reserves Committee.

An extensive system of walking tracks (formal and informal) exists throughout the Monadnocks Reserve. Most notable are tracks which access monadnock peaks such as Mt Cooke, 582m; Mt Vincent, 500m; Mt Cuthbert, 500m; Mt Randall, 523m and Eagle Hill, 480m. Usage figures are unknown but the tracks are known to be heavily promoted by the Western Walking Club, Perth Bushwalkers Club and the Campaign to Save Native Forests group through their publication, Forests on Foot. Outstanding scenic beauty, wildflowers, birds, views to the sea and hiking difficulty factor are prime attractants. It is assumed that walkers in this Reserve are exceptionally sensitive to man-imposed landscape changes and that the dominant expected image is one of undisturbed naturalness and ruggedness.

The viewshed from the peak walking track system is extensive. While a detailed seen area survey was not made, **it can be safely assumed that all but a few proposed bauxite units will be entirely or partially seen.** Most units will be visible in a middleground distance zone (from .5 to 6.5km) and from a "viewer above" position in the landscape. Variable factors which will help determine the level of impact resulting from any extraction will also include the actual topography of the ore body site, obliqueness of view, screening vegetation adjacent to the ore body and exact angle of view.

Views to the west from the Monadnock Reserve walking tracks already include numerous areas of mining excavation. As the distance between viewer and mine scar is shortened, perceivable impact will increase significantly.

Where mining disturbance does occur in the critical viewshed, reduction of the severity and length of disturbance is dependant upon factors such as size and configuration of ore bodies, number and proximity of active mine sites and effectiveness of rehabilitation procedures.

Negative visual impacts resulting from mining outside C-37 Reserve but adjacent to it in the Jarrahdale Block will undoubtedly be severe and of long duration. An excavation-free C-37 Reserve would provide an undisturbed buffer zone extending about 3 kilometres from the Monadnocks peak tracks.