



**DEPARTMENT OF NATURAL RESOURCES**

**POLICY CO-ORDINATION**



**MANAGEMENT OF THE MOUNT NEURUM ROSS SITE**

**ABRIDGED VERSION, COVERING EXTENT, ACCESS AND USE**

**DRAFT REPORT - FOR INTERNAL USE ONLY**

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## TABLE OF CONTENTS

<b>DISCLAIMER</b>	iv
<b>EXECUTIVE SUMMARY</b>	v
Purpose of the work	v
Action requested of the DoL representative on the ROSS committee	v
Recommendations for immediate consideration by the ROSS committee	v
Expand the area of the ROSS site	v
Road access to the plateau	v
Cadastral surveys	v
Fencing	v
Fire management	vi
Uses and infrastructure	vi
<b>1.0 ROSS AND MOUNT NEURUM</b>	1
1.1 Definitions	1
1.2 Site definition	1
1.3 Topography	1
1.4 Vegetation	1
1.5 Purchase history	2
1.6 The types of ROSS land	2
1.7 ROSS selection criteria	3
<b>2.0 ROAD ACCESS TO THE PLATEAU</b>	5
2.1 General	5
2.2 Batchelor (Batchell) Road	5
2.2.1 Location	5
2.2.2 Advantages	5
2.2.3 Disadvantages	5
2.2.4 Conclusion	6
2.3 Webb Road	6
2.3.1 Location	6
2.3.2 Advantages	6
2.3.3 Disadvantages	6
2.3.4 Conclusion	6
2.4 Perkins Road from Stanton Road	7
2.4.1 Location	7
2.4.2 Advantages	7
2.4.3 Disadvantages	7
2.4.4 Conclusion	7
2.5 Perkins Road from Fraser Road	7
2.5.1 Location	7
2.5.2 Advantages	7
2.5.3 Disadvantages	8
2.5.4 Conclusion	8

<b>3.0</b>	<b>PRELIMINARY WORK</b>	9
3.1	Boundary surveys	9
3.2	Biological survey	9
3.3	Weed control	9
3.4	Fence construction	9
	3.4.1 Boundary fences	9
	3.4.2 Internal fences	10
<b>4.0</b>	<b>FIRE MANAGEMENT</b>	11
4.1	The need	11
4.2	Site closure	11
4.3	The boundary fire breaks option	11
4.4	The plateau fire breaks option	11
4.5	The integrated fire management option	12
4.6	Implementation timetable	12
<b>5.0</b>	<b>USES AND INFRASTRUCTURE</b>	13
5.1	Community views	13
5.2	Cattle grazing	13
5.3	Horse riding	13
5.4	Active or noisy pursuits	13
5.5	Sight-seeing and hiking	14
5.6	Infrastructure	14
5.7	Access over Mount Neurum	14
<b>6.0</b>	<b>POTENTIAL EXPANSION OF THE ROSS SITE</b>	15
6.1	Location and status	15
6.2	Reasons for acquisition	15
6.3	Rationale for the recommended approach	15
<b>7.0</b>	<b>MAPS</b>	17
Map 1:	The location of Mount Neurum	17
Map 2:	Property boundaries on Mount Neurum	18
Map 3:	The topography of Mount Neurum	19
Map 4:	The developer's plan for Mount Neurum, showing the entrance from Batchelor Road	20
Map 5:	The developer's proposed road access to Mount Neurum, along Kropp Road and Batchelor (Batchell) Road	21
Map 6:	The developer's proposed road access to Mount Neurum, along Batchelor (Batchell) Road	22
Map 7:	South-west of Mount Neurum	23



<b>8.0</b>	<b>PHOTOGRAPHS</b>	<b>25</b>
Photograph 1:	The vegetation of Mount Neurum (northern end).....	25
Photograph 2:	The vegetation of Mount Neurum (central and southern end).....	26
Photograph 3:	Mount Neurum from Woodford .....	27
Photograph 4:	Mount Neurum from D'Aguilar .....	27
Photograph 5:	Mount Neurum from Mount Mee.....	28
Photograph 6:	Mount Neurum from Neurum.....	28
Photograph 7:	Mount Neurum from Villeneuve.....	29
Photograph 8:	Mount Neurum from Neurum Road, to the north.....	29
Photograph 9:	Possible Batchelor Road (south).....	30
Photograph 10:	Possible Batchelor Road (north) .....	30
Photograph 11:	Probable Webb Road .....	31
Photograph 12:	Perkins Road from the bitumen of Stanton Road.....	31
Photograph 13:	Fraser Road from the bitumen of Vidoni Road .....	32
Photograph 14:	The end of the formed section of Perkins Road from Fraser.....	32
Photograph 15:	The early terrain along the unformed Perkins Road access from Fraser Road .....	33
Photograph 16:	The former timber track up Mount Neurum .....	33
Photograph 17:	Looking down the timber track from its junction with the present 4WD track.....	34
Photograph 18:	Looking up to the plateau of Mount Neurum along the present 4WD track from its junction with the timber track .....	34
Photograph 19:	Typical terrain in the higher unformed stage of Perkins Road .....	35
Photograph 20:	The dam and typical vegetation on the plateau .....	35
Photograph 21:	Vegetation on the upper eastern slopes.....	36
Photograph 22:	A view to the north from the plateau .....	37
Photograph 23:	A view to the south down the present 4WD track.....	37

## DISCLAIMER

The views expressed in this report are solely those of the author. They are not necessarily the views of the Department of Lands, or those of the ROSS Committee.



## EXECUTIVE SUMMARY

### Purpose of the work

1. To examine the various road access options to the Mount Neurum ROSS site.
2. To examine various management options for the Mount Neurum ROSS site - the ROSS Committee has contracted the Caboolture Shire Council to create a more detailed management plan for Mount Neurum.

### Action requested of the DoL representative on the ROSS committee

Submit this report to the ROSS committee for its consideration.

### Recommendations for immediate consideration by the ROSS committee

#### *Expand the area of the ROSS site*

- 6.1: Regarding Lot 440 on CG1537:
  - a. Approve the Permit to Occupy for grazing;
  - b. Incorporate this block formally into ROSS (the Permit To Occupy can be revoked WHEN the ROSS site is developed and IF cattle grazing is later determined to be incompatible with the ROSS values of Mount Neurum.

#### *Road access to the plateau*

- 2.1: Develop the Perkins Road from Fraser Road access to Mount Neurum - this recommendation assumes that there will be no further property acquisitions.

#### *Cadastral surveys*

- 3.1: Conduct a line-of-sight survey of the boundaries of the Mount Neurum ROSS site, when the final extent of the site has been determined.

#### *Fencing*

- 3.2: Construct closed internal fences over some areas of the plateau to exclude cattle to monitor vegetation rehabilitation (If one aim is to discourage cattle grazing over the ROSS site, one exclusion area will be the dam).

### *Fire management*

- 4.1: Close the ROSS site at times of high fire danger, by erecting relevant signs and closing and locking gates, until the fire threat had passed.
- 4.2: If fire management of the Mount Neurum ROSS site has to be conducted independently of fire management of surrounding properties, construct unobtrusive fire breaks and conduct prescribed burns on the plateau of Mount Neurum.
- 4.3: Pursue (with appropriate sensitivity) a co-operative integrated fire management regime with neighbouring landholders.

### *Uses and infrastructure*

- 5.1: Seek (and seriously consider) the views of the local communities regarding the future use of Mount Neurum.
- 5.2: Retain cattle grazing at least until:
  - a. a sound fire management regime has been implemented;
  - b. sufficient knowledge has been gained of the effects of cattle grazing on Mount Neurum.
- 5.3: Allow horse riding as a recreational activity on Mount Neurum.
- 5.4: Ban active or noisy pursuits (such as trail bike riding).
- 5.5: Allow sight-seeing and hiking as a recreational activity on Mount Neurum.
- 5.6: Do not construct walking trails while the vegetation is open and the numbers of visitors remains small - the cattle would do more damage than the people.
- 5.7: Do not clear viewing areas (they would diminish the values of the major ROSS selection criteria for the site).
- 5.8: If funding permits, construct a single observation tower could be built say 10 metres above the tree canopy. The most likely location is the summit of Neurum Mountain at the southern end of the site.
- 5.9: Do not construct toilet and barbeques facilities, or provide garbage removal services while the numbers of visitors remains small - provide such facilities when increasing visitor numbers herald future health and litter problems.
- 5.10:
  - a. Create a 4WD track to the top of the plateau;
  - b. Create a parking area, log barrier and locked gate at the end of this 4WD track;
  - c. Continue this 4WD track beyond the gate along the plateau.



## 1.0 ROSS AND MOUNT NEURUM

### 1.1 Definitions

Open space is land and/or water that has its surface area open to the sky and is totally or predominantly undeveloped.

ROSS (Regional Open Space System) is a spatial network of open space having regional significance, in both public and private ownership, protected by a range of proprietorial or regulatory mechanisms.

### 1.2 Site definition

Mount Neurum is a massif, located 5 km south-west of Woodford and 39 km west of Caboolture (Map 1).

The Mount Neurum ROSS blocks are:

- a. Lot 327 on CG1552 (177.227 ha); and
- b. Lot 328 on CG1537 (171.865 ha),  
Parish of Durundur, County of Stanley (Map 2).

These properties total 349.092 ha (860 acres), with a common external perimeter of approximately 10.4 km.

### 1.3 Topography

The topography of the Mount Neurum ROSS blocks can be summarised as follows:

- a. The highest point is Neurum Mountain at 507 metres, on Lot 328 of CG1537.
- b. Subsidiary peaks lie on a ridge to the north, with heights of 382, 376, 357, 346 and 302 metres, on Lot 327 of CG1552.
- c. Neurum Mountain and the ridge are separated by a saddle with a height of 250 to 275 metres.
- d. The two lots contain much (but by no means all) of the highest land on the feature, known as Mount Neurum.
- e. Most of the timbered slopes of Mount Neurum are not included in the two lots (Map 3).

### 1.4 Vegetation

The vegetation cover of Mount Neurum and its surrounds can be seen in the 1991 Nambour aerial photography:

- |                                 |   |
|---------------------------------|---|
| a. northern end                 | - run 13, number 53 (Photograph 1); and |
| b. central and southern end     | - run 14, number 79 (Photograph 2);     |
| c. south-west wildlife corridor | - run 14, number 77 (Photograph 28).    |

The area is presently heavily timbered, but with very little understorey. This would be due to the cattle grazing and to the high-intensity wildfire that swept through the area in 1994. Tree types found commonly on the site include tallow-wood, ironbark, gum, box and messmate. Microflora include mosses and lichens.

### 1.5 Purchase history

The two blocks were purchased by the State from Frieda Muller in March 1995 for inclusion in the ROSS estate. The purchase cost to the State was \$275,000.

### 1.6 The types of ROSS land

THE TYPES OF ROSS LAND	APPLICABILITY TO MOUNT NEURUM
1. Existing public land of regional scale and quality (designated as national or environmental park, marine park, public park, reserve, State forest, esplanade, or unallocated State land).	One boundary of Mount Mee State Forest lies only 4 km to the south-west of Mount Neurum.
2. Private land purchased to augment the ROSS (where the retention of a property's open space character cannot be guaranteed by planning or other non-purchase instruments).	Mount Neurum is zoned rural, where 18 ha lots are allowed. Subdivision approval would almost certainly be granted, if suitable access were provided. This would result in a patchwork quilt of clearing, similar to that now disfiguring Mount Mee.
3. Private properties (included by agreement with the landholders but remaining privately owned).	This is the only practical means of preserving the wildlife corridor to Mount Delaney and Mount Mee.



## 1.7 ROSS selection criteria

ROSS SELECTION CRITERIA	APPLICABILITY TO MOUNT NEURUM
1a. The land is special, for a regional framework (defining the limits and shape of urban areas).	A major acquisition criterion. Immediately to the south lies Mount Delaney and state forest. However, Mount Neurum dominates the landscape to the west, north and east: * north-east to Woodford (Photograph 3); * east to D'Aguilar (Photograph 4); * south-east to Mt Mee (Photograph 5); * west to Neurum (Photograph 6); * west to Villeneuve (Photograph 7); * north to Neurum Road (Photograph 8).
1b. The land is special, for recreation (passive or active).	A minor acquisition criterion. No active recreation use is likely. The most likely passive recreation uses are bushwalking and picnicking. Its location in a region of rapidly expanding population will increase its recreational value in the future.
1c. The land is special, for conservation (protecting the environment, culture, heritage, or habitat-linking corridors).	A moderate acquisition criterion. The biodiversity is currently restricted by cattle grazing. The dominant species are well represented in the Mount Mee State Forest Park, immediately to the south. Mount Neurum can be seen as the northern-most extension of the Mount Mee Park and is presently linked to the Mount Mee Park by a narrow wildlife corridor across private land.
1d. The land is special, for landscape protection (contributing to scenic quality, environmental amenity, or cultural enhancement).	A major acquisition criterion. The upper reaches of Mount Neurum are heavily timbered, with no observable man-made impacts - no clearing, no structures, no fencelines.
1e. The land is special, for its economic potential (facilitating sustainable economic activity by using natural or cultural resources without destroying their value).	Not applicable. Mount Neurum is used only for low-density cattle grazing. There is an indirect benefit by removing the need for the expensive infrastructure required to access and service subdivisional development of this isolated and rugged site. At present, there is no infrastructure - no formed roads, no water mains, no electricity supply.
2. The land is of regional importance	A minor acquisition criterion. If a wildlife corridor can be maintained south to Mount Delaney with the co-operation of the

ROSS SELECTION CRITERIA	APPLICABILITY TO MOUNT NEURUM
(separately or collectively).	intervening private landholders, Mount Neurum will remain part of a greater regional framework and not degenerate to an isolated feature.
3. The land forms part of a system of non-urban land which is subjected to a co-operative form of planning, development and management.	Not applicable at this time.



## **2.0 ROAD ACCESS TO THE PLATEAU**

### **2.1 General**

There is no formed road to the site.

The only present road access is via a 4WD track on private property (Lot 564 of C311015) from Delaney Creek Road. Another access route must therefore be found.

The only viable options are along the existing unformed road reserves (Map 2). None of these road reserves offer so much as a 4WD track.

### **2.2 Batchelor (Batchell) Road**

#### *2.2.1 Location*

Lot 327 on CG1552 is theoretically accessed via Batchelor Road from Kropp Road, on the eastern side. *This route was the preferred option in the developer's plans for Mount Neurum.* This route was referred to by the developer as Batchell Road (Maps 4, 5 and 6 - Maps 3, 4 and 5 in the developer's plans). Possible approximate locations are displayed in Photographs 9 and 10.

#### *2.2.2 Advantages*

1. It is the closest to Woodford and the D'Aguilar highway.
2. Much of Kropp Road is presently being upgraded.

#### *2.2.3 Disadvantages*

1. It would require approximately 2 km of road construction.
2. The steep slope (with an average grade of about 1 in 5) makes the formation of a road on this alignment a very expensive operation (The developer reputedly estimated road costs of about M\$1.2, most of which would have been expended on the Batchelor Road access. Maps 4 and 6 indicate the difficulty of road construction).
3. Batchelor Road would need to be resurveyed to determine the location of the road reserve. Any road survey will require 4 km of line-of-sight pegs (both sides of the road) in rugged, densely vegetated terrain. This work has been estimated to take about 15 days of on-site work at \$1,300 per day. With preliminary work and plan drawing, the total cost is estimated at \$25,000, with a minimum cost of \$20,000.

#### *2.2.4 Conclusion*

The cost is prohibitive for any low-profile, low-impact development of a ROSS site, where there is no economic return to justify the additional cost of the shorter access from the highway.

Do not develop this access route.

## **2.3 Webb Road**

### **2.3.1 Location**

Lot 328 on CG1537 is theoretically accessed via Webb Road from Kropp Road, on the south-east side. Webb Road accesses the eastern boundary of this lot, at the bottom of Mount Neurum. Webb Road lies along a creek gully at the foot of Mount Neurum (Photograph 11).

### **2.3.2 Advantages**

1. Although longer than the Batchelor Road access route, it is still close to Woodford and the D'Aguilar highway.
2. Much of Kropp Road is presently being upgraded.
3. The road construction is relatively simple, if no internal road to the plateau is required. Any internal road can be a simple 4WD track anywhere on Lot 328.
4. The survey cost will be much less than that for the Batchelor Road route, because the slope is gentle and the ground only lightly vegetated.

### **2.3.3 Disadvantages**

1. It would require about 2.5 km of road construction to the foot of Mount Neurum, plus another 1 km of internal track.
2. The access is along a creek gully, which will often flood in wet weather and thus threaten to trap visitors to the site. The continual flooding will damage the road surface and thus significantly increase maintenance costs.

### **2.3.4 Conclusion**

Continual flooding of the road introduces safety concerns and significant maintenance costs.

Do not develop this access route.



## **2.4 Perkins Road from Stanton Road**

### **2.4.1 Location**

Lot 328 on CG1537 is theoretically accessed via Perkins Road from Stanton Road, on the west side.

This is also the theoretical access to Lot 524 on C311081 and Lot 558 on C311567, which border the northern ROSS block (Lot 327 on CG1552). See Photograph 12.

### **2.4.2 Advantages**

1. It is 3.5 km closer to Woodford and the highway than the Fraser Road option.
2. Road construction is simple, because:
  - a. the slope is gentle;
  - b. the vegetation is light;
  - c. the route is flood-free.

### **2.4.3 Disadvantages**

1. It would require 4 km of road formation to access the southern ROSS block (Lot 328 on CG1537), when the same end point can be reached by formed road from the nearby bitumened Vidoni Road (See Section 2.5).

### **2.4.4 Conclusion**

Do not develop this access route.

## **2.5 Perkins Road from Fraser Road**

### **2.5.1 Location**

Lot 328 on CG1537 is theoretically accessed via Perkins Road and Fraser Road from Vidoni Road and Stanton Road, on the south-south-west side (Photographs 13 and 14).

### **2.5.2 Advantages**

1. It requires only 1 km of road construction to access the ROSS site and the vegetation cover is not dense (Photograph 15).
2. This access is easily accessible from D'Aguilar and Mount Mee, via Delaney Creek Road.
3. It links up with the present 4WD access track over Mount Neurum (Photographs 17 and 18).

### 2.5.3 Disadvantages

1. This access point is the longest distance (14 km) from the highway - 4 km further on from the Perkins-Road-from-Stanton-Road access point.
2. Road access limited to the road reserve will be difficult in the hilly rocky terrain (Photograph 19).

### 2.5.4 Conclusion

*Recommendation 2.1: Develop the Perkins Road from Fraser Road access to Mount Neurum.*



### **3.0 PRELIMINARY WORK**

#### **3.1 Boundary surveys**

Barry Andrews of J.F. Murray and Company estimated that:

- a. a survey to locate the boundary points of the ROSS blocks will cost \$10,000.
- b. a survey giving line-of-sight boundary markers will cost \$30,000 (this more-detailed survey will be required, for the proper management of the ROSS site).

*Recommendation 3.1: Conduct a line-of-sight survey of the boundaries of the Mount Neurum ROSS site, when the final extent of the site has been determined.*

#### **3.2 Biological survey**

A biological survey of the ROSS site is required prior to determining a detailed management plan.

The NatureSearch 2000 data for Mount Neurum is available and Caboolture Shire Council has requested a more detailed survey of the area by NatureSearch 2000.

#### **3.3 Weed control**

A cursory examination of the present ROSS blocks indicates that weed infestation is presently light. An early eradication program should thus not be expensive, while lengthy delays will allow minor infestations to become major infestations and dramatically increase the cost of eradication.

#### **3.4 Fence construction**

##### *3.4.1 Boundary fences*

It is desirable to exclude cattle, to re-invigorate the biodiversity of the ROSS site. However, other native fauna might also be disadvantaged by this restriction on movement.

The more-expensive, thicker-gauge barbed wire is needed to fence this bushland site - the cheaper high-tension wire snaps in bushfires. The rugged terrain and often shallow soils will also increase costs, as it will not be possible to access the entire boundary with fencing machinery.

A cost of \$8/metre for fencing is reasonable. At this cost, it would thus cost \$83,200 to fence the entire perimeter of the two ROSS blocks. This cost would be reduced significantly, by widespread use of existing trees as fence posts.

There would also be an ongoing monitoring and maintenance cost on the fence. Falling trees will cause breaks in the fence. However, most damage will be caused by cattle forcing their way through or over the fence - particularly in times of drought when feed is scarce outside the fence.

On the whole, perimeter fencing is desirable, but probably cost-prohibitive.

#### 3.4.2 Internal fences

Internal fences that enclose various areas of the ROSS site would allow researchers to determine the regeneration potential and rate of fuel load accumulation, when cattle are totally excluded.

Because fixed boundary lines do not have to be closely followed, existing trees (rather than fence posts) can be used to run the wire. Consequently, the cost of creating and maintaining such experimental plots will be affordable.

Grazing by cattle over the ROSS site can be substantially reduced (though not prevented) by fencing off the one dam on the site. Other water supplies are minor and seasonal.

Photograph 20 shows:

- a. the one dam;
- b. the relatively gentle ground on the plateau of the massif;
- c. the lack of undergrowth, caused by grazing and the 1994 fire.

*Recommendation 3.2: Construct closed internal fences over some areas of the plateau to exclude cattle to monitor vegetation rehabilitation (If one aim is to discourage cattle grazing over the ROSS site, one exclusion area will be the dam).*



## **4.0 FIRE MANAGEMENT**

### **4.1 The need**

Fires moving up the steep slopes from surrounding privately-held properties (particularly those with a westerly or north-westerly aspect) will be of very high intensity. Such fires are very damaging to the flora and very dangerous to any hikers or picnickers on the mountain.

If fuel loads grow to dangerous levels and a fire starts within the ROSS site, the fire intensity will be much reduced because the fire will have to move down steep slopes. However, neighbouring landholders will feel justified in blaming the State for land acquisition without management - even if the land had not been fire-managed when under previous private control.

### **4.2 Site closure**

Mount Neurum is relatively isolated from ranger control, either DEH or DPI. This relatively small ROSS site also does not warrant its own ranger. If fuel loads accumulate to greater than 8 to 10 tonnes per hectare, a fire (particularly one sweeping up the western escarpment) will present grave dangers to anyone in its path on the mountain.

*Recommendation 4.1: Close the ROSS site at times of high fire danger, by erecting relevant signs and closing and locking gates, until the fire threat had passed.*

### **4.3 The boundary fire breaks option**

The steep slopes require wide fire breaks.

The combination of steep slopes and rough terrain makes construction very difficult and consequently very expensive. Even if boundary fire breaks could be created, maintenance by slashing would be out of the question. However, without properly-maintained boundary fire breaks, it would be very difficult to quarantine perimeter prescribed burns inside the ROSS boundaries.

### **4.4 The plateau fire breaks option**

Fire breaks and prescribed burning on relatively level areas of the plateau are possible, if a 4WD track is constructed to the plateau.

Major healthy native trees would be maintained on the fire breaks - only the understorey would be slashed. This will prevent unsightly fire break lines being visible from surrounding areas.

The perimeter fire break would be 15 metres wide and the internal fire breaks would be 10 metres wide. Prescribed burning would take place in different vegetation blocks in different years, with an individual block being burnt every 5 to 7 years.

This is an achievable compromise between no fire management and recommended fire management practice. However, the slopes will be unmanaged.

*Recommendation 4.2: If fire management of the Mount Neurum ROSS site has to be conducted independently of fire management of surrounding properties, construct unobtrusive fire breaks and conduct prescribed burns on the plateau of Mount Neurum.*

#### **4.5 The integrated fire management option**

Optimal fire management can be achieved only by treating the plateau and the timbered slopes as a whole. This requires a management plan to be agreed upon by both the State and the affected private landholders.

The perimeter fire breaks would thus be on the forest/grassland interface on the gentler lower slopes. Fire breaks separating blocks on the slopes could be constructed where construction and maintenance is easiest.

Most - probably all - of the cost of such fire management should be borne by the State.

*Recommendation 4.3: Pursue (with appropriate sensitivity) a co-operative integrated fire management regime with neighbouring landholders.*

#### **4.6 Implementation timetable**

The high-intensity fires of 1994 removed the understorey. A high fuel load is not expected to accumulate until 1999 to 2001. There is thus no need for a rushed solution to the problems of fire management on Mount Neurum.



## 5.0 USES AND INFRASTRUCTURE

### 5.1 Community views

The surrounding communities will be the major users and beneficiaries of the ROSS site on Mount Neurum. It is right and sensible to seek their views, but a phoney consultation process will serve only to alienate the local communities.

*Recommendation 5.1: Seek (and seriously consider) the views of the local communities regarding the future use of Mount Neurum.*

### 5.2 Cattle grazing

Beef cattle from neighbouring properties currently graze free-of-charge on Mount Neurum and this grazing is facilitated by the presence of a dam. There are probably fewer than 50 cattle on Mount Neurum at any one time. This limited grazing:

- a. reduces the undergrowth and thus the fuel load (and thus is beneficial as a hazard reduction tool);
- b. reduces the biodiversity and compacts the soil (and thus creates ecological damage).

*Recommendation 5.2: Retain cattle grazing at least until:*

- a. a sound fire management regime has been implemented;
- b. sufficient knowledge has been gained of the effects of cattle grazing on Mount Neurum.

### 5.3 Horse riding

Horse riding on public lands in the area is presently restricted to road reserves and some pine plantations.

If unofficial cattle grazing of Mount Neurum is to continue, it would be inconsistent to ban horse riding. The horse riding benefits the general community, while the cattle grazing benefits only one or two neighbouring properties.

*Recommendation 5.3: Allow horse riding as a recreational activity on Mount Neurum.*

### 5.4 Active or noisy pursuits

Noise on Mount Neurum will be easily heard on the surrounding lower land. ROSS has become an unnecessarily unpopular concept with landholders - further alienation of the local communities must be avoided.

*Recommendation 5.4: Ban active or noisy pursuits (such as trail bike riding).*

## 5.5 Sight-seeing and hiking

The area has been logged in the past and the relatively thin soils do not promote rapid regrowth. The forest type is dry sclerophyll rather than the more spectacular wet sclerophyll of some of the Mount Mee State Forest. However, the relatively open and undisturbed appearance of the plateau has its attractions and there are many areas of scenic interest (Photograph 21).

*Recommendation 5.5: Allow sight-seeing and hiking as a recreational activity on Mount Neurum.*

*Recommendation 5.6: Do not construct walking trails while the vegetation is open and the numbers of visitors remains small - the cattle would do more damage than the people.*

Views over the surrounding landscape are not dramatic, because most country to the east, north and north has been cleared for grazing (Photographs 22 and 23). The timber cover restricts the number and width of viewing sites.

*Recommendation 5.7: Do not clear viewing areas (they would diminish the values of the major ROSS selection criteria [1a, 1d] for the site).*

*Recommendation 5.8: If funding permits, construct a single observation tower could be built say 10 metres above the tree canopy. The most likely location is the summit of Neurum Mountain at the southern end of the site.*

## 5.6 Infrastructure

A relatively simple toilet system would cost about \$50,000. The provision of barbeque pits would not be expensive, but would encourage litter. Any garbage removal vehicle would require a 4WD capability.

*Recommendation 5.9: Do not construct toilet and barbeques facilities, or provide garbage removal services while the numbers of visitors remains small - provide such facilities when increasing visitor numbers herald future health and litter problems.*

## 5.7 Access over Mount Neurum

As the principal user purpose is passive recreation and relaxation, 4WD access along the plateau should be restricted to official vehicles - ambulances, fire fighting vehicles, litter removal vehicles, etc.

*Recommendation 5.10: a. Create a 4WD track to the top of the plateau;  
b. Create a parking area, log barrier and locked gate at the end of this 4WD track;  
c. Continue this 4WD track beyond the gate along the plateau.*



## 6.0 POTENTIAL EXPANSION OF THE ROSS SITE

### 6.1 *Location and status*

Special Lease 39527 is currently held by Mr. G W Roberts over Lot 440 on CG1537 on the eastern side of Mount Neurum. The 20-year lease will expire on 14 December 1995. The Department's latest advice to Mr Roberts is to offer a Permit to Occupy, rather than freeholding or a lease renewal, because of the potential inclusion of this block in ROSS.

Lot 440 on CG1537 is contiguous with one of the two Mount Neurum ROSS blocks - Lot 328 on CG1537 (Map 2).

### 6.2 *Reasons for acquisition*

1. The survey boundaries of the ROSS site would be simplified and the boundary surveying costs reduced, by reducing the number of edges and "squaring" the ROSS blocks.
2. The ROSS frontage to the more-cleared lowlands would be increased (thereby slightly reducing the management problems).
3. No ROSS purchase funds would be expended on its acquisition.

### 6.3 *Rationale for the recommended approach*

1. There is no pressure to develop the ROSS site (the Caboolture Shire Council will be trustee of the site and Council staff have expressed an intention to retain the site in its present undeveloped state, indefinitely).
2. Cattle are already illegally grazing the ROSS sites.
3. Grazing will reduce the fuel load and so reduce management costs (even though it will reduce biodiversity).
4. The Permit to Occupy can be withdrawn and the land formally included in ROSS, when the site is developed.
5. IF cattle grazing is later regarded as compatible with the ROSS values of the Mount Neurum site, the Permit to Occupy need not even be withdrawn.

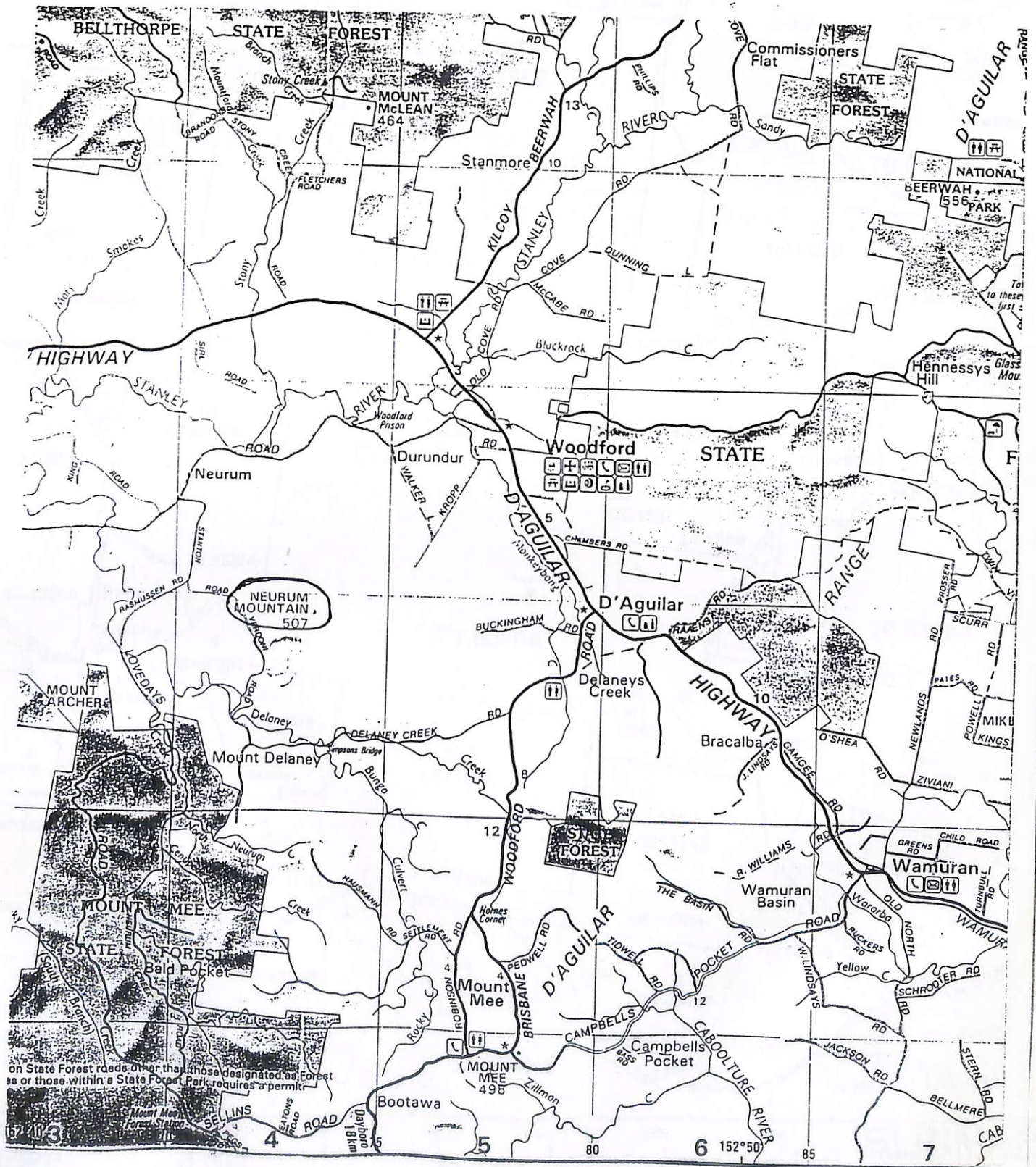
#### *Recommendation 6.1: Regarding Lot 440 on CG1537:*

- a. *Approve the Permit to Occupy for grazing;*
- b. *Incorporate this block formally into ROSS (the Permit To Occupy can be revoked WHEN the ROSS site is developed and IF cattle grazing is later determined to be incompatible with the ROSS values of Mount Neurum.*



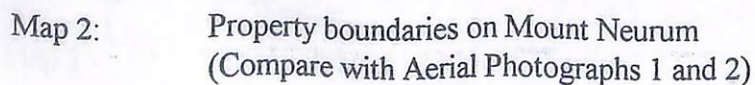


## 7.0 MAPS

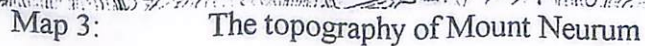


Map 1: The location of Mount Neorum



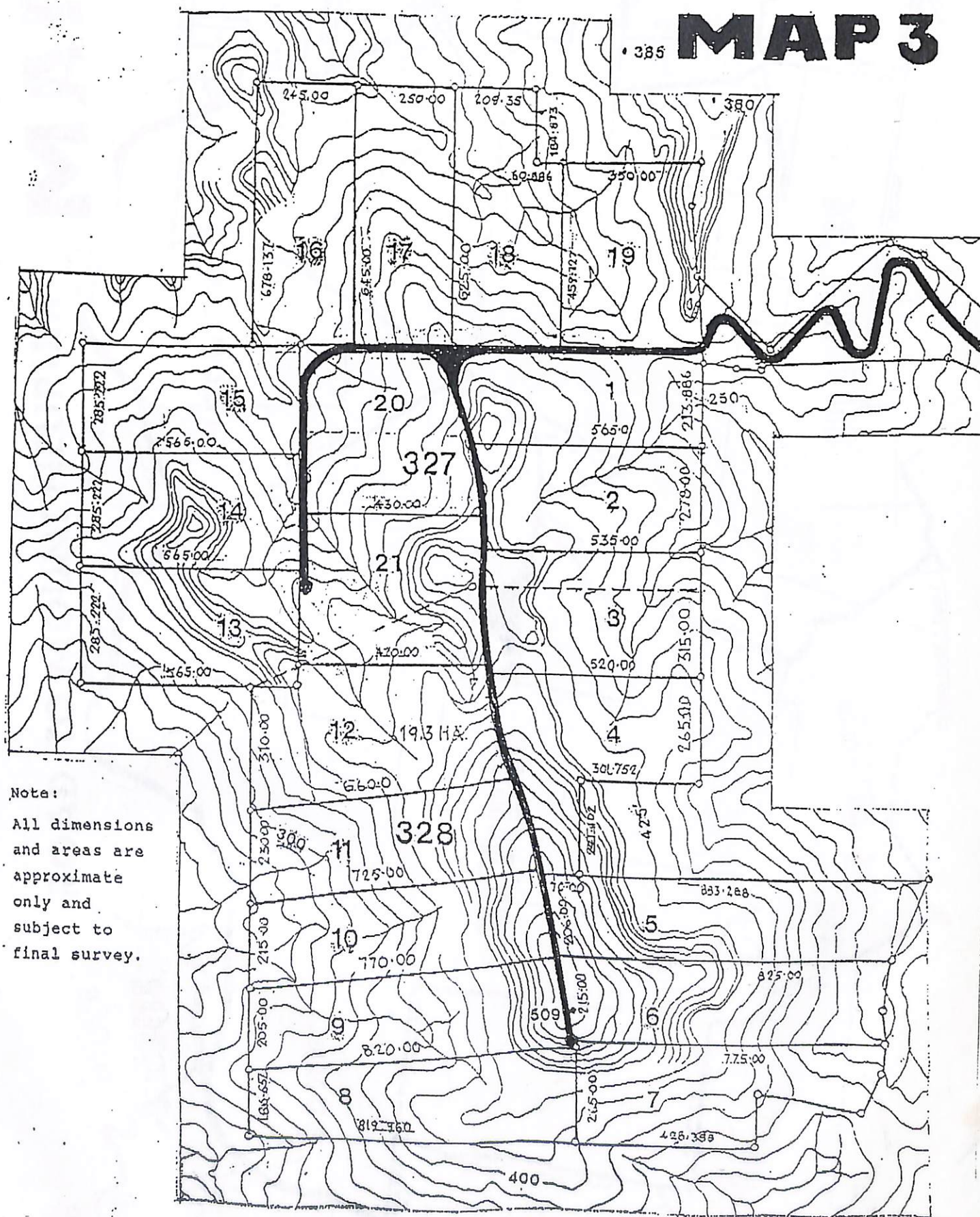






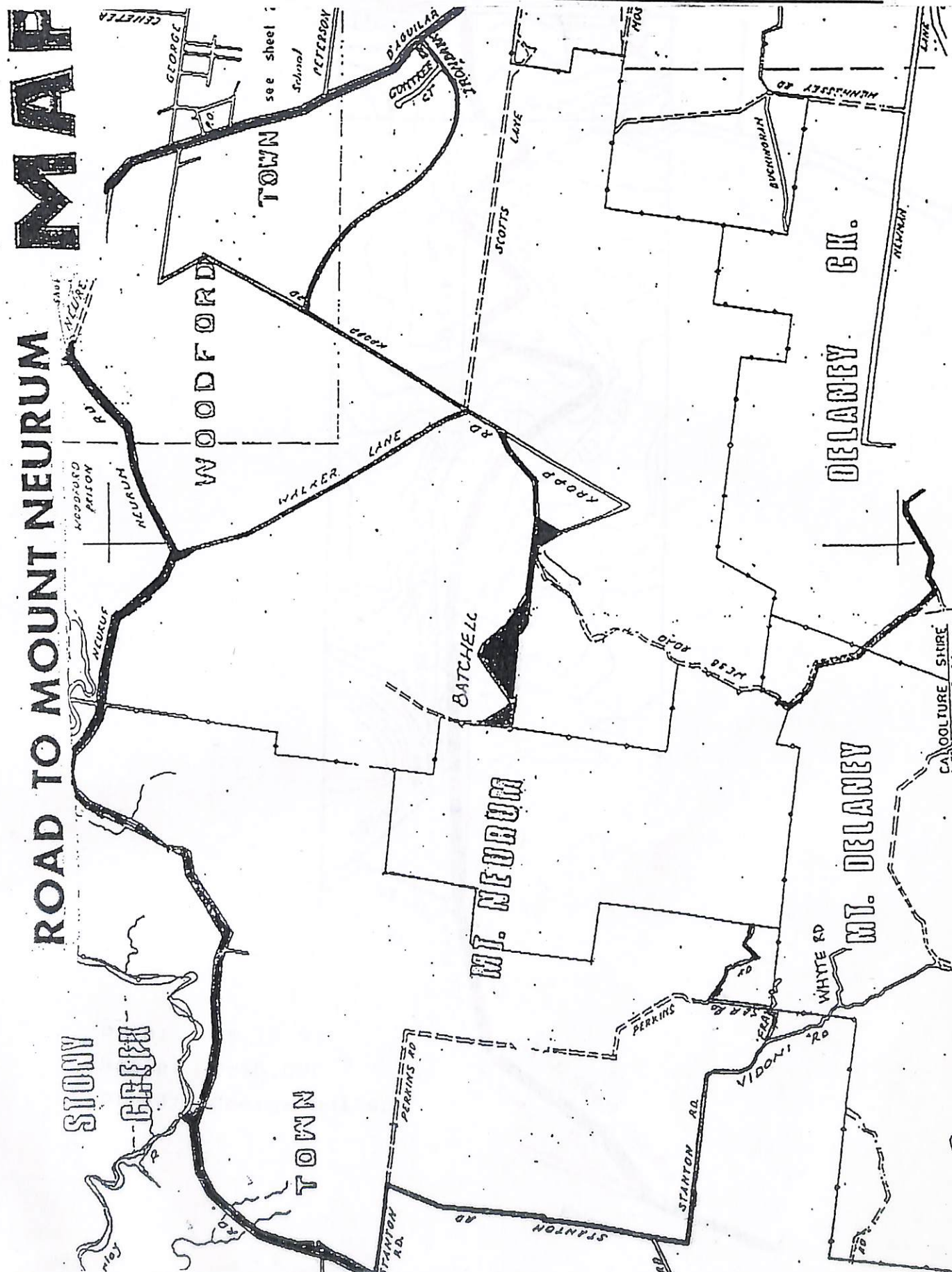
Map 3: The topography of Mount Neurum



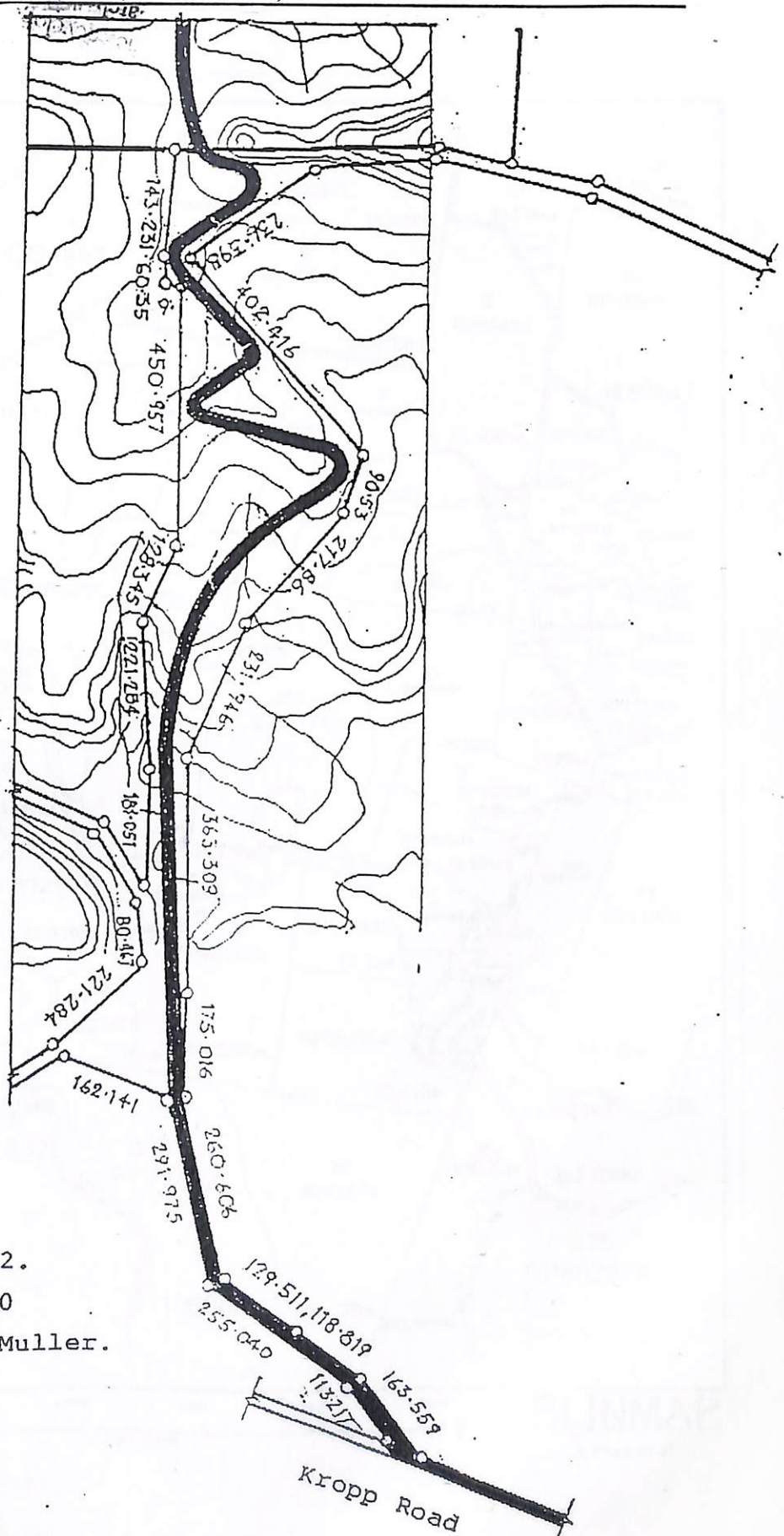


Map 4: The developer's plan for Mount Neurum, showing the entrance from Batchelor Road





Map 5: The developer's proposed road access to Mount Neurum, along Kropp Road and Batchelor (Batchell) Road



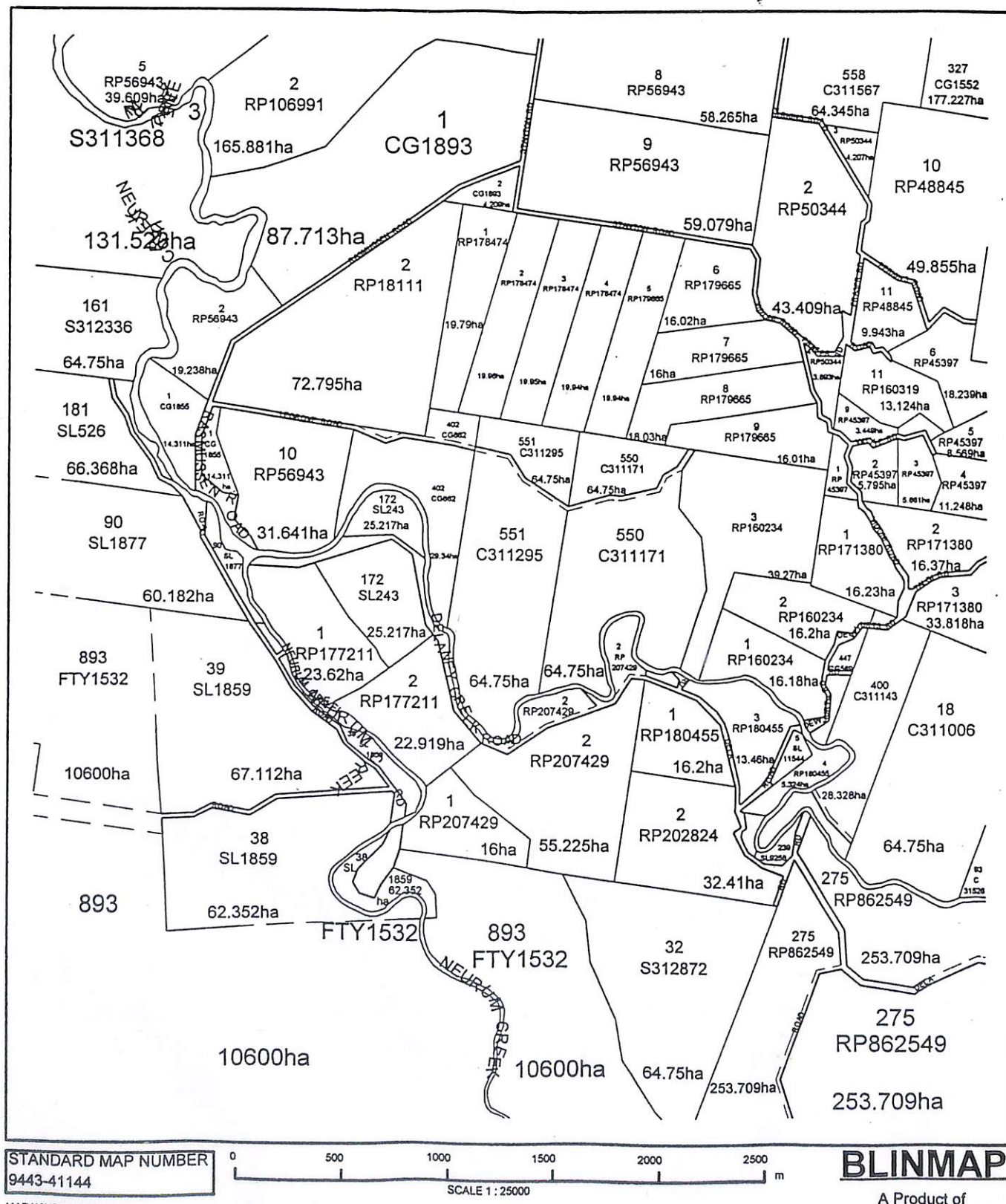
Date: 16/10/92.

Scale: 1:10.000

Drawn: George Muller.

Map 6: The developer's proposed road access to Mount Neurum, along Batchelor (Batchell) Road







## 8.0 PHOTOGRAPHS



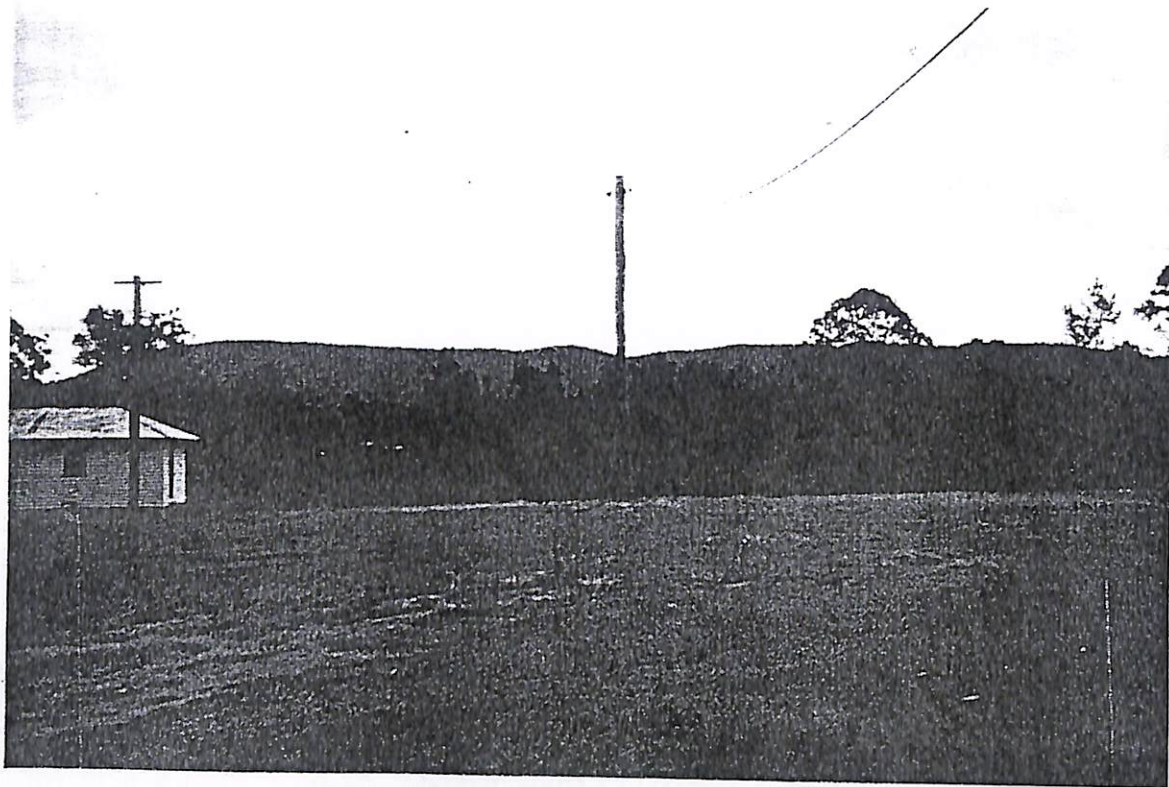
Photograph 1: The vegetation of Mount Neurum (northern end)





Photograph 2: The vegetation of Mount Neurum (central and southern end)



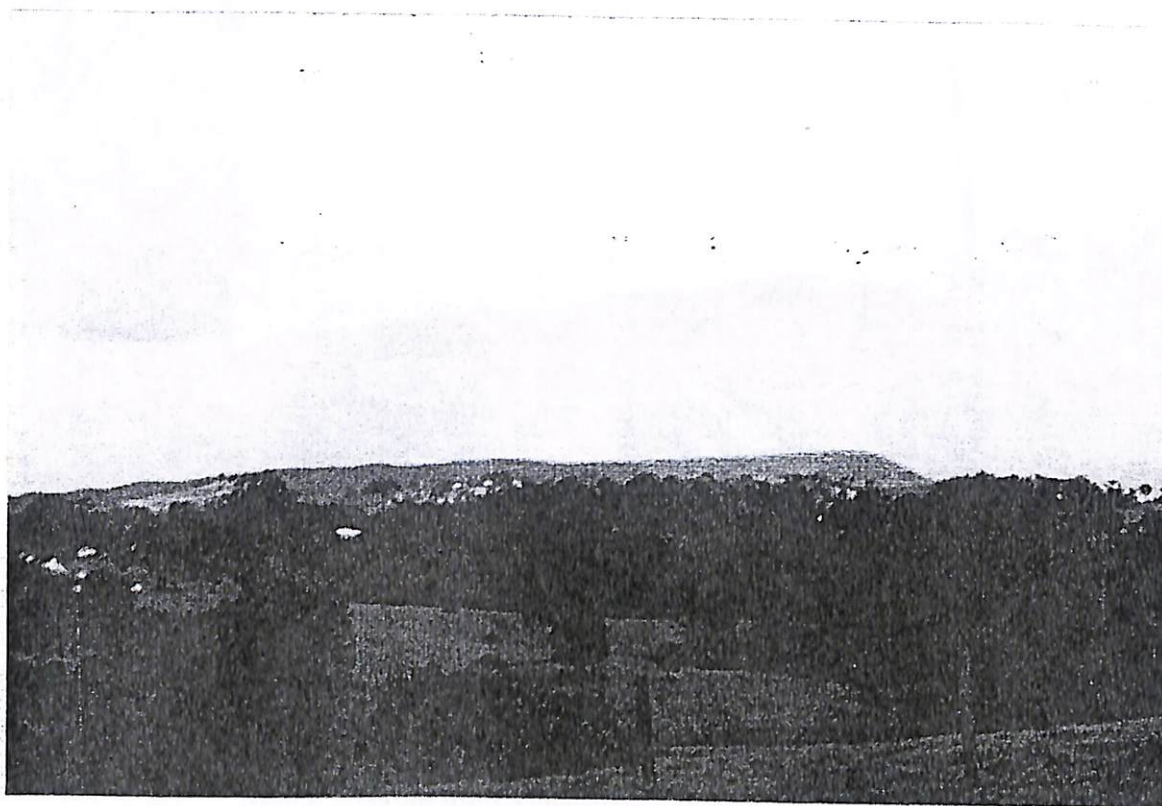


Photograph 3: Mount Neurum from Woodford

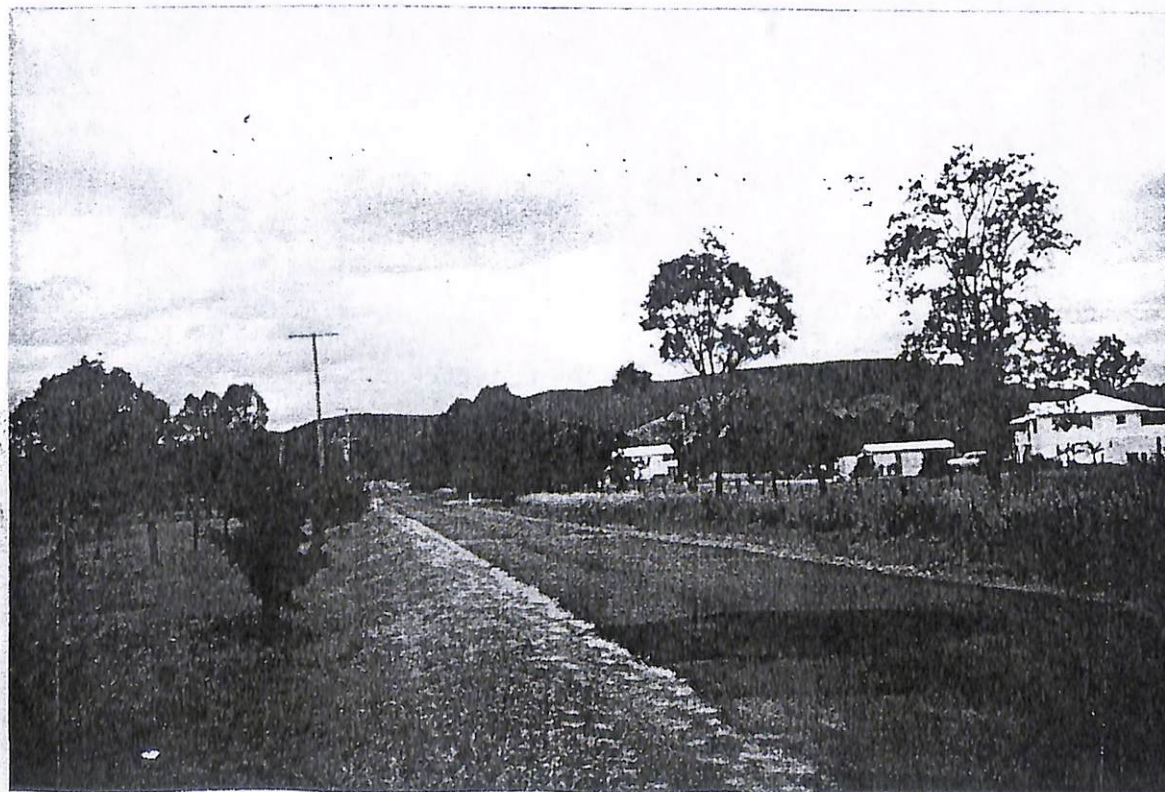


Photograph 4: Mount Neurum from D'Aguilar



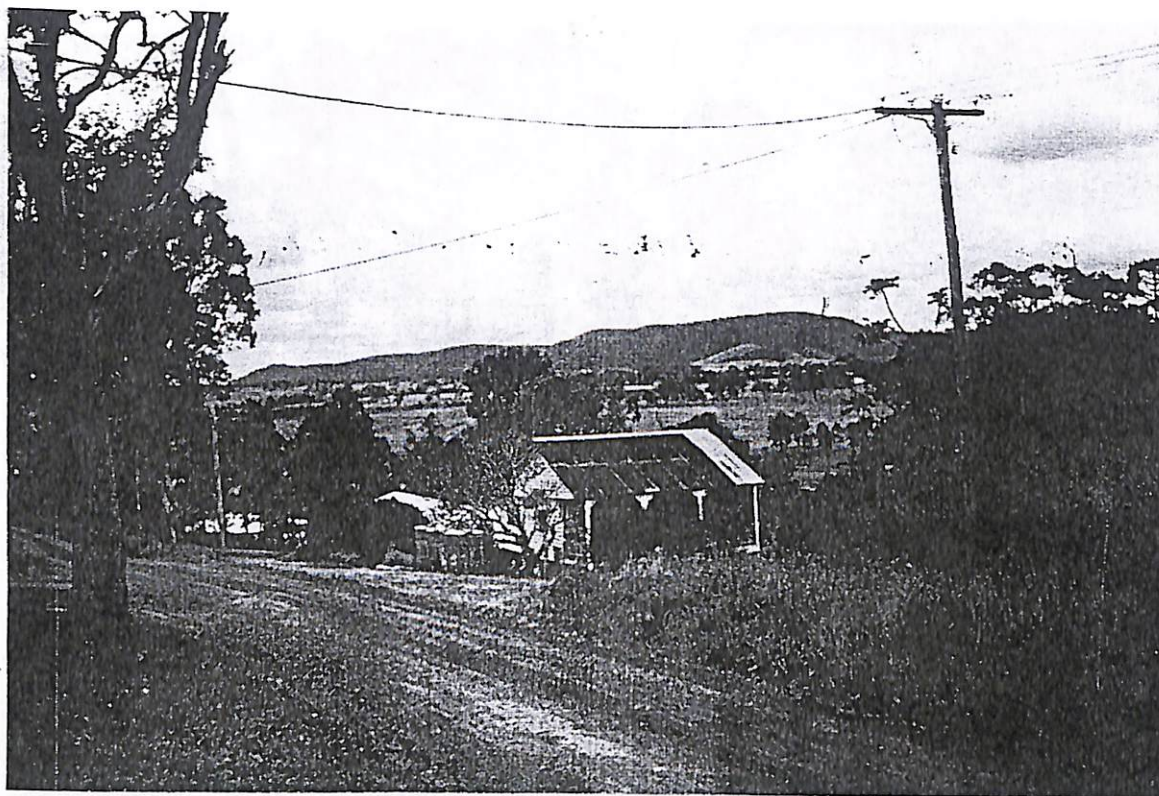


Photograph 5: Mount Neurum from Mount Mee

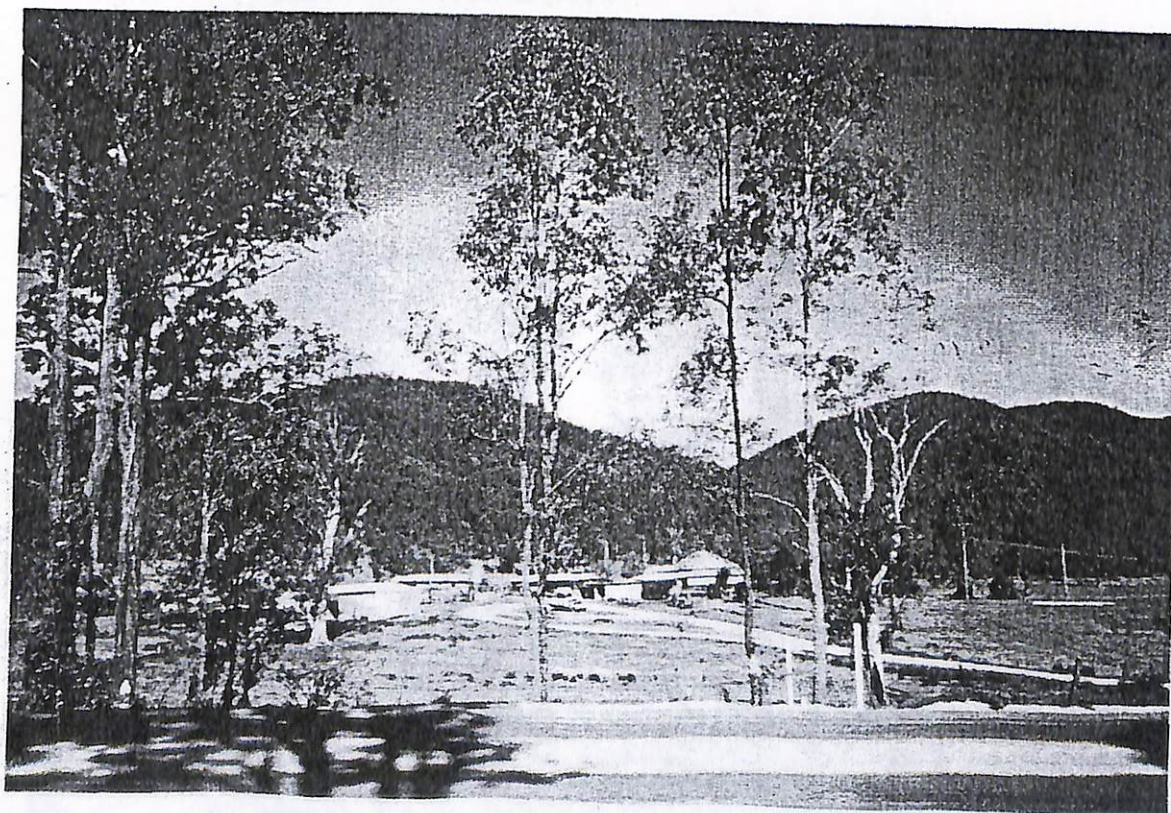


Photograph 6: Mount Neurum from Neurum





Photograph 7: Mount Neurum from Villeneuve



Photograph 8: Mount Neurum from Neurum Road, to the north





Photograph 9: Possible Batchelor Road (south)



Photograph 10: Possible Batchelor Road (north)





Photograph 11: Probable Webb Road



Photograph 12: Perkins Road from the bitumen of Stanton Road



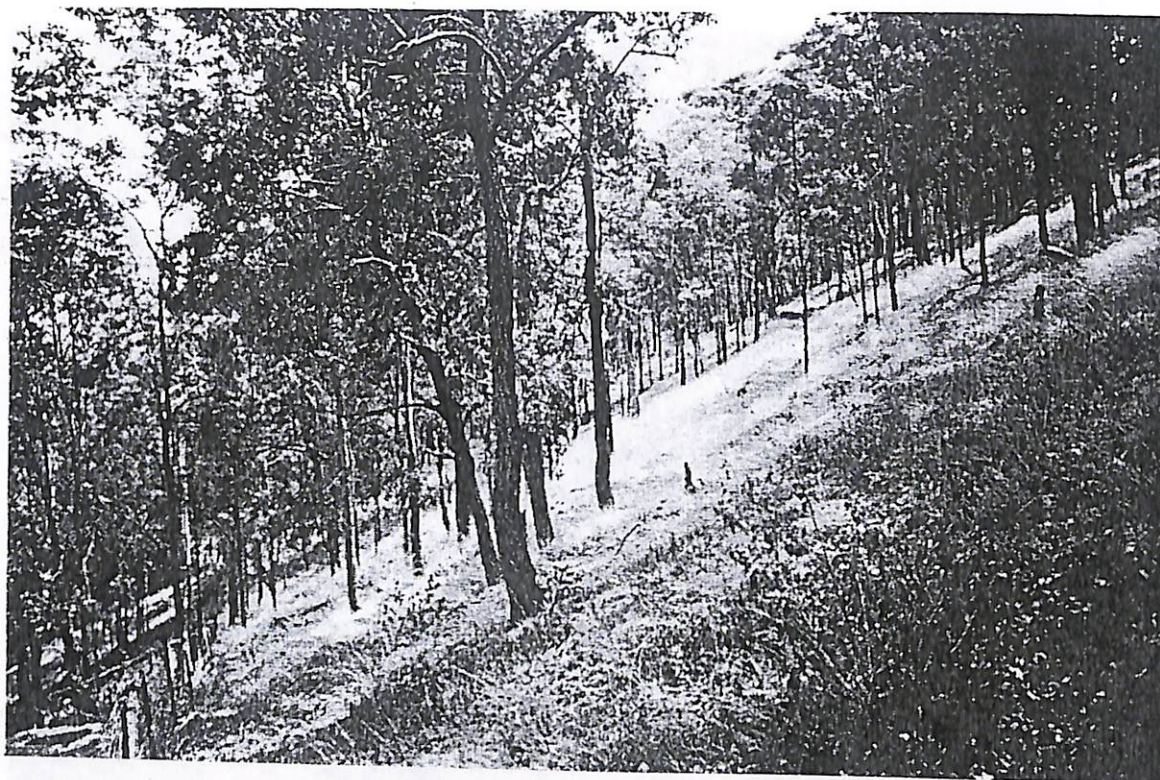


Photograph 13: Fraser Road from the bitumen of Vidoni Road



Photograph 14: The end of the formed section of Perkins Road from Fraser Road





Photograph 15: The early terrain along the unformed Perkins Road access from Fraser Road



Photograph 16: The former timber track up Mount Neurum





Photograph 17: Looking down the timber track from its junction with the present 4WD track



Photograph 18: Looking up to the plateau of Mount Neurum along the present 4WD track from its junction with the timber track





Photograph 19: Typical terrain in the higher unformed stage of Perkins Road



Photograph 20: The dam and typical vegetation on the plateau





Photograph 21: Vegetation on the upper eastern slopes





Photograph 22: A view to the north from the plateau



Photograph 23: A view to the south down the present 4WD track