

DUCKPOND BUSHLAND, PEEL ESTATE

Boundary Definition: bushland (part taken to cadastre) boundary (Boundary adjusted after vegetation survey and negotiations with land owner(s) in response to a submission to draft *Perth's Bushplan*.)

SECTION 1: LOCATION INFORMATION

Bush Forever Site no. 70

Area (ha): bushland 8.8

Map no. 71

Map sheet series ref. no. 2033-II NE

Other Names: not known

Local Authorities (Suburb): Shire of Serpentine-Jarrahdale (Oldbury)

SECTION 2: REGIONAL INFORMATION

LANDFORMS AND SOILS

Bassendean Dunes

Bassendean Sands (Qpb: S8)

Bassendean Dunes/Pinjarra Plain

Bassendean Sands over Guildford Formation (Qpb/Qpa: S10)

VEGETATION AND FLORA

Vegetation Complexes

Pinjarra Plain

Guildford Complex

Bassendean Dunes

Bassendean Complex — Central and South

Floristic Community Types: *not sampled, type inferred

Supergroup 3: Uplands centred on Bassendean Dunes and Dandaragan Plateau

*21a Central *Banksia attenuata* — *Eucalyptus marginata* woodlands

WETLANDS

No wetlands mapped

THREATENED ECOLOGICAL COMMUNITIES

Not assessed

SECTION 3: SPECIFIC SITE DETAIL

Landscape Features: vegetated upland

Vegetation and Flora: limited survey (Clarke and Keighery 2000d, DEP 1998 roadside survey, Mattiske Consulting Pty Ltd 1997)

Structural Units: mapping (Clarke and Keighery 2000d)

Uplands: *Allocasuarina fraseriana* and *Eucalyptus marginata* Woodland; *Banksia menziesii*, *B. attenuata* and *B. ilicifolia* Woodland

Scattered Native Plants: not assessed

Vegetation Condition: >80% Excellent to Very Good, with areas of severe localised disturbance (Clarke and Keighery 2000d)

Total Flora: not known

Significant Flora: none recorded

Fauna: not known

Linkage: adjacent bushland to the north and east; part of a regionally significant potential bushland/wetland linkage (Part A, Map 7)

Other Special Attributes: mapped within area of the eastern side of the Swan Coastal Plain

SECTION 4: INTERNATIONAL AND NATIONAL SIGNIFICANCE

Not listed

SECTION 5: SELECTION CRITERIA AND RECOMMENDATIONS

Criteria: Representation of ecological communities, General criteria for the protection of wetland, streamline and estuarine fringing vegetation and coastal vegetation

Recommendation: Rural Complementary Mechanism (Conservation Zone) (see Table 3, Volume 1).

DUCKPOND BUSHLAND, PEEL ESTATE

Boundary Definition: bushland (part taken to cadastre) boundary

SECTION 1: CADASTRAL INFORMATION

(Lots, locations and derived information to be updated in the public submission period)

Bushplan Site no. 70 **Map no.** 89 **Map sheet series ref. no.** 2033-II NE

Other Names: not known **Area (ha):** total 23.8; bushland 23.5

Local Authorities (Suburb)
Shire of Serpentine-Jarrahdale (Oldbury)

Zoning
MRS: Rural
TPS: Rural
**Lot/Location/Reserve numbers (Purpose),
Street name**
41, 45 Duckpond Rd

Ownership Categories
Private

SECTION 2: REGIONAL INFORMATION

LANDFORMS AND SOILS

Bassendean Dunes

Bassendean Sands (Qpb: S8)

Bassendean Dunes/Pinjarra Plain

Bassendean Sands over Guildford Formation (Qpb/Qpa:S10)

VEGETATION AND FLORA

Vegetation Complexes

Pinjarra Plain

Guildford Complex

Bassendean Dunes

Bassendean Complex - Central and South

Floristic Community Types: *not sampled, types inferred

Supergroup 3: Uplands centred on Bassendean Dunes and Dandaragan Plateau

*21a Central *Banksia attenuata* — *Eucalyptus marginata* woodlands

WETLANDS

Wetland Types: palusplain

Natural Wetland Groups

Pinjarra Plain

Keysbrook (P.1)

Bassendean Dunes

Jandakot (B.3)

Wetland Management Objectives: Multiple Use

Swan Coastal Plain Lakes EPP: none identified

THREATENED ECOLOGICAL COMMUNITIES

Not assessed

SECTION 3: SPECIFIC SITE DETAIL

Landscape Features: vegetated wetland, vegetated uplands

Vegetation and Flora: limited survey (DEP 1998 roadside survey, Mattiske Consulting Pty. Ltd. 1997)

Structural Units

Uplands: *Eucalyptus marginata*, *Banksia attenuata*, *B. menziesii* and *Allocasuarina fraseriana* Woodland to Open Forest, with occasional *B. ilicifolia*; *Xanthorrhoea preissii*, *Macrozamia riedlei* and *Hibbertia hypericoides* Open Shrubland

Wetlands: no known information

Scattered Native Plants: not assessed

Vegetation Condition: >50% Excellent, >45% Very Good to Good, with areas of severe localised disturbance

Total Flora: not known

Significant Flora: none recorded

Fauna: no known information

Linkage: adjacent bushland to the north, south and east; part of a regionally significant potential bushland/wetland linkage (Volume 2A, Map 8)

Other Special Attributes: mapped within area of the eastern side of the Swan Coastal Plain

SECTION 4: INTERNATIONAL AND NATIONAL SIGNIFICANCE

Not listed



SECTION 5: SELECTION CRITERIA AND RECOMMENDATIONS

Criteria: Representation of ecological communities, General criteria for the protection of wetland, streamline and estuarine fringing and coastal vegetation

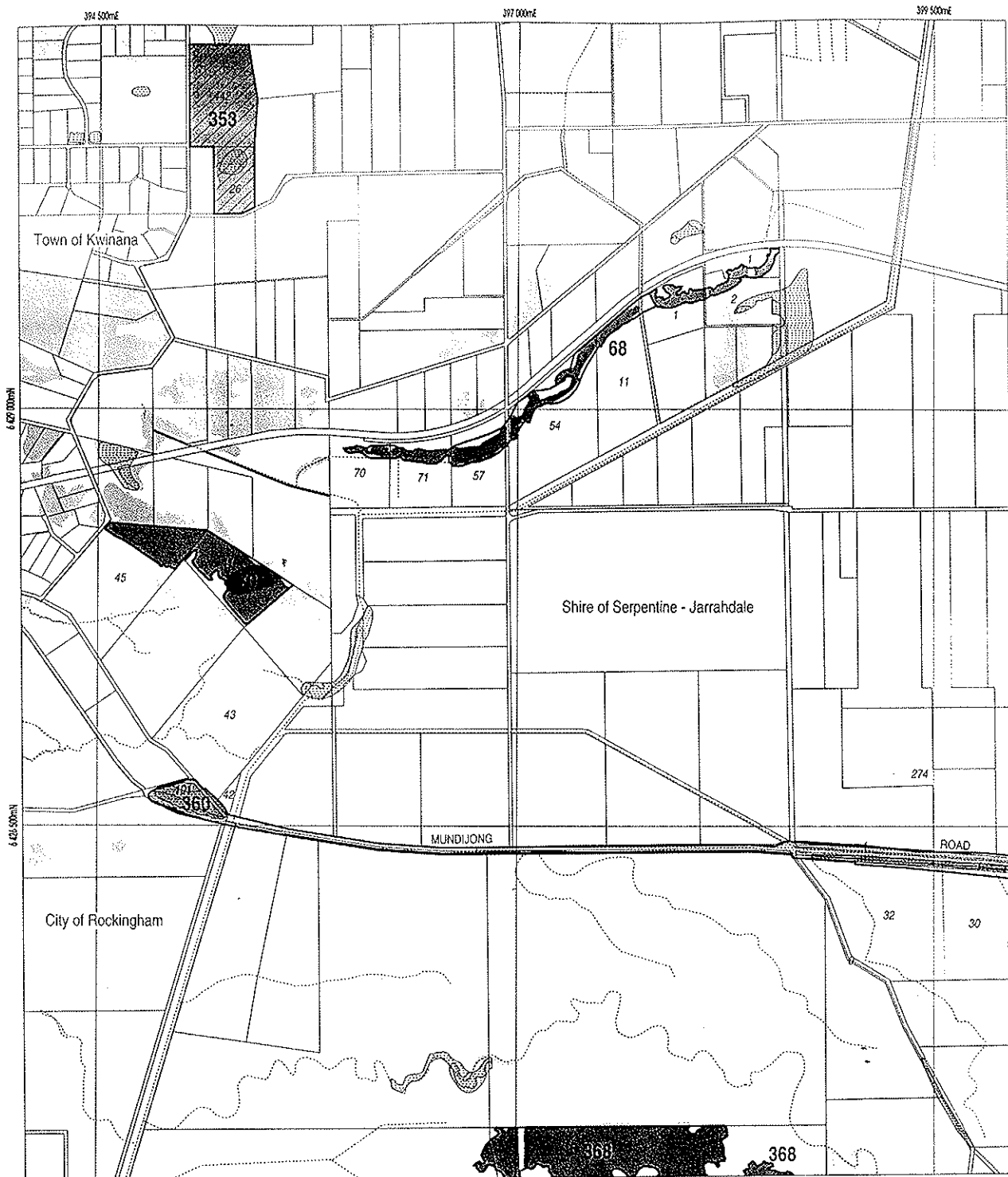
Opportunities and/or Constraints

Opportunities: Bushplan Site subject to Peel-Harvey Estuary EPP/SPP








Constraints: private land; under General Mineral Resource Area (clay)

Recommendation: The most appropriate mechanism for the protection of this Bushplan Site be considered through the public comment period in consultation with the land owner(s).





LEGEND

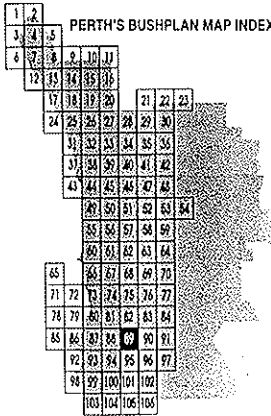
-  Bushplan Sites With Regionally Significant Bushland
-  Other Native Vegetation
-  Conservation Category Wetlands
-  Bushplan Sites With Some Existing Protection
-  Lot Number, Location Number
-  Channel Wetlands
-  Local Government Boundary


2033 - II NE

IV	I
2033	
III	89
	NE
	SE

1 : 25 000 AMG Reference Grid showing Perth's Bushplan Map Sheet Breakdown

PERTH'S BUSHPLAN MAP INDEX





SCALE

0 500 1000

Metres

Produced by Project Mapping Section
Land Information Branch, Ministry for Planning, Perth W.A. November 1998
ntw-map9/environ/bushplan/bushw2_89.dgn
Cadastral Data supplied by Department of Land Administration, W.A.
Wetlands Data supplied by Water and Rivers Commission
Native Vegetation Extent for Study Area supplied by Agriculture Western Australia

DRAFT PERTH'S BUSHPLAN

**VEGETATION ASSESSMENT OF BUSHPLAN SITE 70 –
DUCKPOND BUSHLAND, PEEL ESTATE**

Department of Environmental Protection
K. Clarke and B. Keighery
July 2000

A handwritten signature in black ink, appearing to be 'G. Wh...' with a long horizontal stroke extending to the right.

BACKGROUND

Bushplan Site 70 encompasses 23.5 ha of remnant vegetation on the eastern side of the Swan Coastal Plain (Map 1, Government of Western Australia 1998a). This vegetation occurs on private land owned by Edward Love on Lot 45 Banksia Rd and Lot 41 Duckpond Rd. Mr Love operates a dairy farm on his property and has protected the remnant bushland on Lot 45 from major disturbance by fencing and excluding stock. He is investigating placing a conservation covenant on this area to protect it for future generations. In contrast the remnant vegetation on Lot 41 has been subject to significant disturbance in the past, the landowner believes it was cleared prior to World War II. Mr Love wishes to retain the right to use Lot 41 for non-conservation purposes. Mr Love requested a site visit to review the inclusion of the remnant vegetation on Lots 45 and 41 in Perth's Bushplan.

A field inspection was made by Karen Clarke, Sean Collingwood and Catherine Thomson (MfP) and Bob Huston (CALM?) on 9/12/1999. Approximately three hours were spent traversing the bushland on foot and by vehicle. Being December there were relatively few plants flowering and annually renewed plants were dormant. Therefore, vegetation condition assessments are subject to revision on a mid/late spring inspection.

COMMENTS ON SITE INSPECTION

Vegetation in this Bushplan Site is generally typical of the Bassendean Dunes and the transitional area between the Bassendean Dunes and the Pinjarra Plain. The Site lies on the boundary between the Bassendean Vegetation Complex – Central and South to the north and the Guildford Vegetation Complex to the south (Heddl *et al.* 1980). The areas of these complexes proposed for protection under Draft Perth's Bushplan are 13% and 4% respectively. From interpretation of aerial photography, wetland mapping (Hill *et al.* 1996a) and inspection of the Site from the road prior to the release of Draft Perth's Bushplan, it was predicted that the Site consisted of vegetated uplands and vegetated wetlands. The Site Description (see Appendix 1) summarises the values of this Bushplan Site.

A number of wetlands occur in the general area of this Bushplan Site including wide expanses of seasonally waterlogged flat, termed palusplain. A small area of Multiple Use category palusplain is mapped as occurring along the northern boundary of Lot 41 (see Map 1). The remainder of the Site is mapped as upland.

The site inspection on 9/12/99 revealed that all of Bushplan Site 70 is vegetated upland, it being part of a large dune running south-east to north-west across Lots 45 and 41. The dune reaches its highest along the northern boundary of Lot 45 with large *Eucalyptus marginata* (jarrah) trees dominating the ridge line. The vegetation along the ridge line on Lot 45 consisted of:

- *Allocasuarina fraseriana* and *Eucalyptus marginata* Woodland over *Banksia attenuata* and *Banksia menziesii* Low Woodland over *Xanthorrhoea preissii* Open Heath over *Hibbertia hypericoides* and *Bossiaea eriocarpa* Open Low Heath over *Dasypogon bromeliifolius*, *Corynotheca micrantha* and *Conostylis aculeata* Herbland (Site 1, AfEmW on Map 2, Figure 1)

This vegetation was in Excellent condition where sampled at the western end of the site. Down slope on Lot 45 *Banksia* spp dominated the overstorey with a more open understorey as described below:

- *Banksia menziesii*, *Banksia attenuata* and *Banksia ilicifolia* Woodland over *Kunzea ericifolia* Tall Open Shrubland over **Briza maxima* Very Open Grassland and *Phlebocarya ciliata*, *Dasypogon bromeliifolius* and *Opercularia vaginata* Very Open Herbland and *Desmocladius flexuosus* Sedgeland (Site 3, BW on Map 2, Figure 2).

The area sampled, beside a track bisecting Lot 45, was in Very Good condition with only non-aggressive weed species present, such as **Briza maxima*.

On Lot 41 past clearing activities have led to extensive regrowth of *Kunzea ericifolia* (spearwood). *K. ericifolia* grows naturally in both wetlands and low lying *Banksia* Woodlands in this area of the Swan Coastal Plain but after disturbance often dominates making it difficult to distinguish wetland from upland if few other native species return. Among the *K. ericifolia* there were scattered native species typical of

NB: This is informal advice and should not be regarded as formal Section 38 advice under the Environmental Protection Act but represents DEP Bushplan advice subject to ratification through Coordination Group sign off.

Banksia woodland - *Banksia attenuata*, *Banksia ilicifolia*, *Jacksonia furcellata*, *Corynotheca micrantha*, *Conostylis aculeata* and *Dasypogon bromeliifolius*. Therefore, the vegetation on this Lot was most likely low lying *Banksia* Woodland prior to disturbance. At present it can be described as:

- *Kunzea ericifolia*, *Banksia attenuata* and *Banksia ilicifolia* Woodland over **Ehrharta calycina* and **Briza maxima* Closed Grassland and *Desmocladius flexuosus* Very Open Sedgeland (Site 2, KeBW on Map 2, Figure 3).

Throughout Lot 41 this vegetation is in a Degraded to Good condition ranging from pure stands of *Kunzea ericifolia* to *K. ericifolia* mixed with various *Banksia* sp. and a limited range of native shrubs and herbs.

GENERAL COMMENT/CONCLUSION

Inspection of the site on 9/12/99 confirmed the mapping in Draft Perth's Bushplan of the extent of the remnant vegetation. However, there were no vegetated wetland areas on the Site as previously indicated by the mapping of Hill *et al.* (1996a).

The remnant bushland on Lot 45 is of a type and quality that meets the criteria for regional significance. The intent of the landowner, Mr Love, to place a conservation covenant over this area should be supported and encouraged.

On Lot 41 the condition of the vegetation and the fact that it does not form part of a vegetated wildlife corridor between areas of better quality bushland mean that it can not be considered to be of regional significance. The remnant bushland on Lot 41 could be excluded from Perth's Bushplan without compromising the conservation values of Bushplan Site 70. This does not mean, however, that this remnant vegetation should be cleared. All remaining native vegetation on the eastern side of the Swan Coastal Plain is of conservation value due to heavy clearing of this area in the past. Thus, the vegetation on Lot 41 is of local conservation significance and its conservation should be addressed by appropriate mechanisms at local government level.

REFERENCES

(Unlisted references can be found in Draft Perth's Bushplan Volume 2B)

DEP (2000) Perth's Bushplan Survey 2000. Unpublished bushland plot and area records. Department of Environmental Protection, Perth Western Australia

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APPENDIX 1: DESCRIPTION FOR BUSHPLAN SITE 70 - DUCKPOND BUSHLAND, PEEL ESTATE

Boundary Definition: bushland (part taken to cadastre) boundary

SECTION 1: CADASTRAL INFORMATION

(Lots, locations and derived information to be updated in the public submission period)

Bushplan Site no. 70 **Map no.** 89 **Map sheet series ref. no.** 2033-II NE
Other Names: not known **Area (ha):** total 23.8; bushland 23.5

Local Authorities (Suburb)
Shire of Serpentine-Jarrahdale (Oldbury)

Zoning
MRS: Rural
TPS: Rural
**Lot/Location/Reserve numbers (Purpose),
Street name**
41, 45 Duckpond Rd

Ownership Categories
Private

SECTION 2: REGIONAL INFORMATION

LANDFORMS AND SOILS

Bassendean Dunes

Bassendean Sands (Qpb: S8)

Bassendean Dunes/Pinjarra Plain

Bassendean Sands over Guildford Formation (Qpb/Qpa:S10)

VEGETATION AND FLORA

Vegetation Complexes

Pinjarra Plain

Guildford Complex

Bassendean Dunes

Bassendean Complex — Central and South

Floristic Community Types: *not sampled, types inferred

Supergroup 3: Uplands centred on Bassendean Dunes and Dandaragan Plateau

*21a Central *Banksia attenuata* — *Eucalyptus marginata* woodlands

WETLANDS

Wetland Types: palusplain

Natural Wetland Groups

Pinjarra Plain

Keysbrook (P.1)

Bassendean Dunes

Jandakot (B.3)

Wetland Management Objectives: Multiple Use

Swan Coastal Plain Lakes EPP: none identified

THREATENED ECOLOGICAL COMMUNITIES

Not assessed

SECTION 3: SPECIFIC SITE DETAIL

Landscape Features: vegetated wetland, vegetated uplands

Vegetation and Flora: limited survey ([DEP, 1998 #101] roadside survey, [Mattiske Consulting Pty Ltd, 1997 #285])

Structural Units

Uplands: *Eucalyptus marginata*, *Banksia attenuata*, *B. menziesii* and *Allocasuarina fraseriana* Woodland to Open Forest, with occasional *B. ilicifolia*; *Xanthorrhoea preissii*, *Macrozamia riedlei* and *Hibbertia hypericoides* Open Shrubland

Wetlands: no known information

Scattered Native Plants: not assessed

Vegetation Condition: >50% Excellent, >45% Very Good to Good, with areas of severe localised disturbance

Total Flora: not known

Significant Flora: none recorded

NB:This is informal advice and should not be regarded as formal Section 38 advice under the Environmental Protection Act but represents DEP Bushplan advice subject to ratification through Coordination Group sign off.

Fauna: no known information

Linkage: adjacent bushland to the north, south and east; part of a regionally significant potential bushland/wetland linkage (Volume 2A, Map 8)

Other Special Attributes: mapped within area of the eastern side of the Swan Coastal Plain

SECTION 4: INTERNATIONAL AND NATIONAL SIGNIFICANCE

Not listed

SECTION 5: SELECTION CRITERIA AND RECOMMENDATIONS

Criteria: Representation of ecological communities, General criteria for the protection of wetland, streamline and estuarine fringing and coastal vegetation

Opportunities and/or Constraints

Opportunities: Bushplan Site subject to Peel-Harvey Estuary EPP/SPP

Constraints: private land; under General Mineral Resource Area (clay)

Recommendation: The most appropriate mechanism for the protection of this Bushplan Site be considered through the public comment period in consultation with the land owner(s).

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APPENDIX 2: SITE DESCRIPTIONS

Site 1 (AfEmW on Map 2, Figure 1) – *Allocasuarina fraseriana* and *Eucalyptus marginata* Woodland over *Banksia attenuata* and *Banksia menziesii* Low Woodland over *Xanthorrhoea preissii* Open Heath over *Hibbertia hypericoides* and *Bossiaea eriocarpa* Open Low Heath over *Dasyogon bromeliifolius*, *Corynotheca micrantha* and *Conostylis aculeata* Herbland
Condition: Excellent

Site 2 (KeBW on Map 2, Figure 2) – *Kunzea ericifolia*, *Banksia attenuata* and *Banksia ilicifolia* Woodland over **Erharta calycina* and **Briza maxima* Closed Grassland and *Desmocladius flexuosus* Very Open Sedgeland
Condition: Degraded to Good

Site 3 (BW on Map 2, Figure 3) – *Banksia menziesii*, *Banksia attenuata* and *Banksia ilicifolia* Woodland over *Kunzea ericifolia* Tall Open Shrubland over **Briza maxima* Very Open Grassland and *Phlebocarya ciliata*, *Dasyogon bromeliifolius* and *Opercularia vaginata* Very Open Herbland and *Desmocladius flexuosus* Sedgeland.
Condition: Very Good

Karrakatta

273

Herdsmen.

353

68

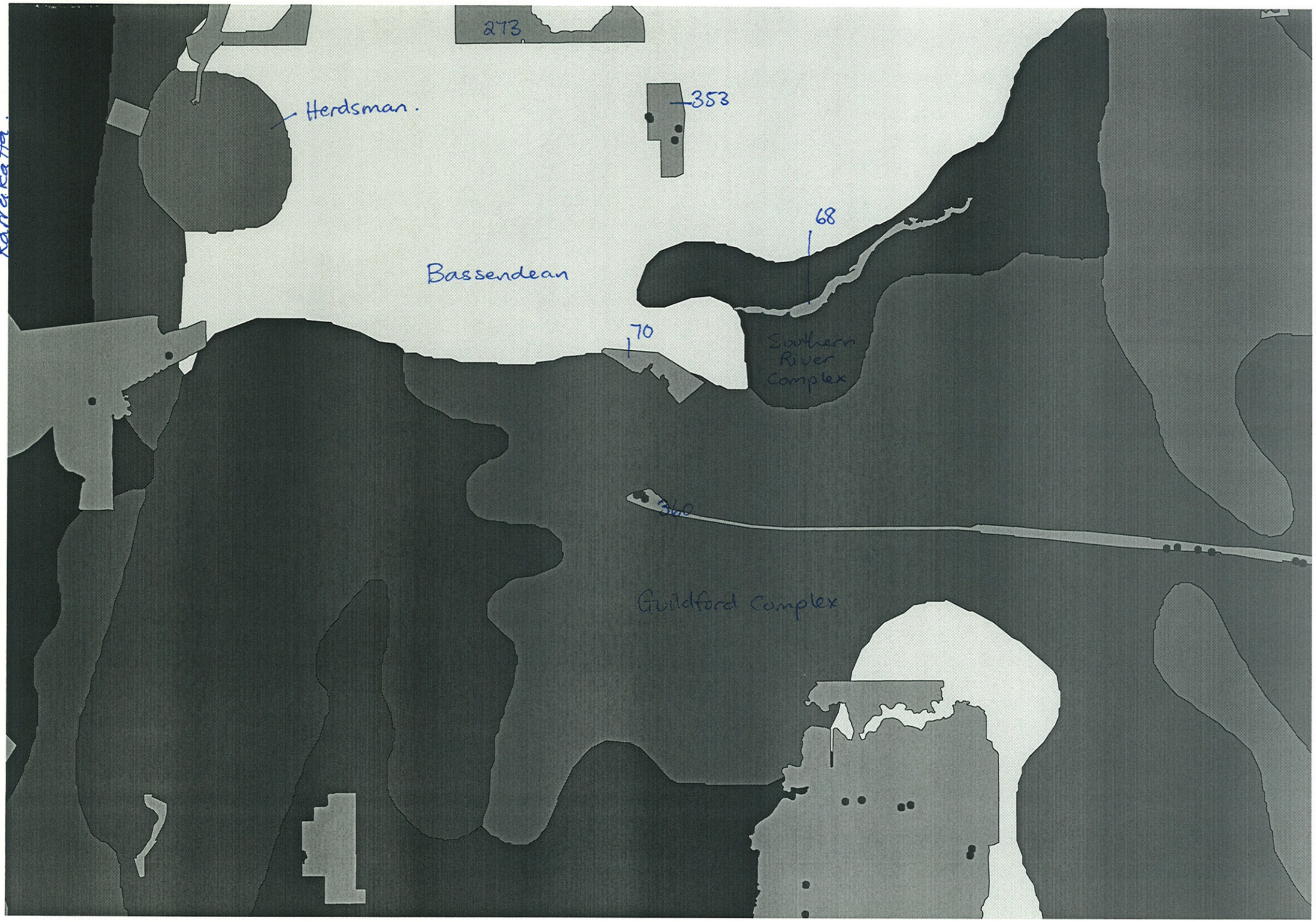
Bassendean

70

Southern River Complex

360

Guildford Complex





P. Swampland
C. Swampland

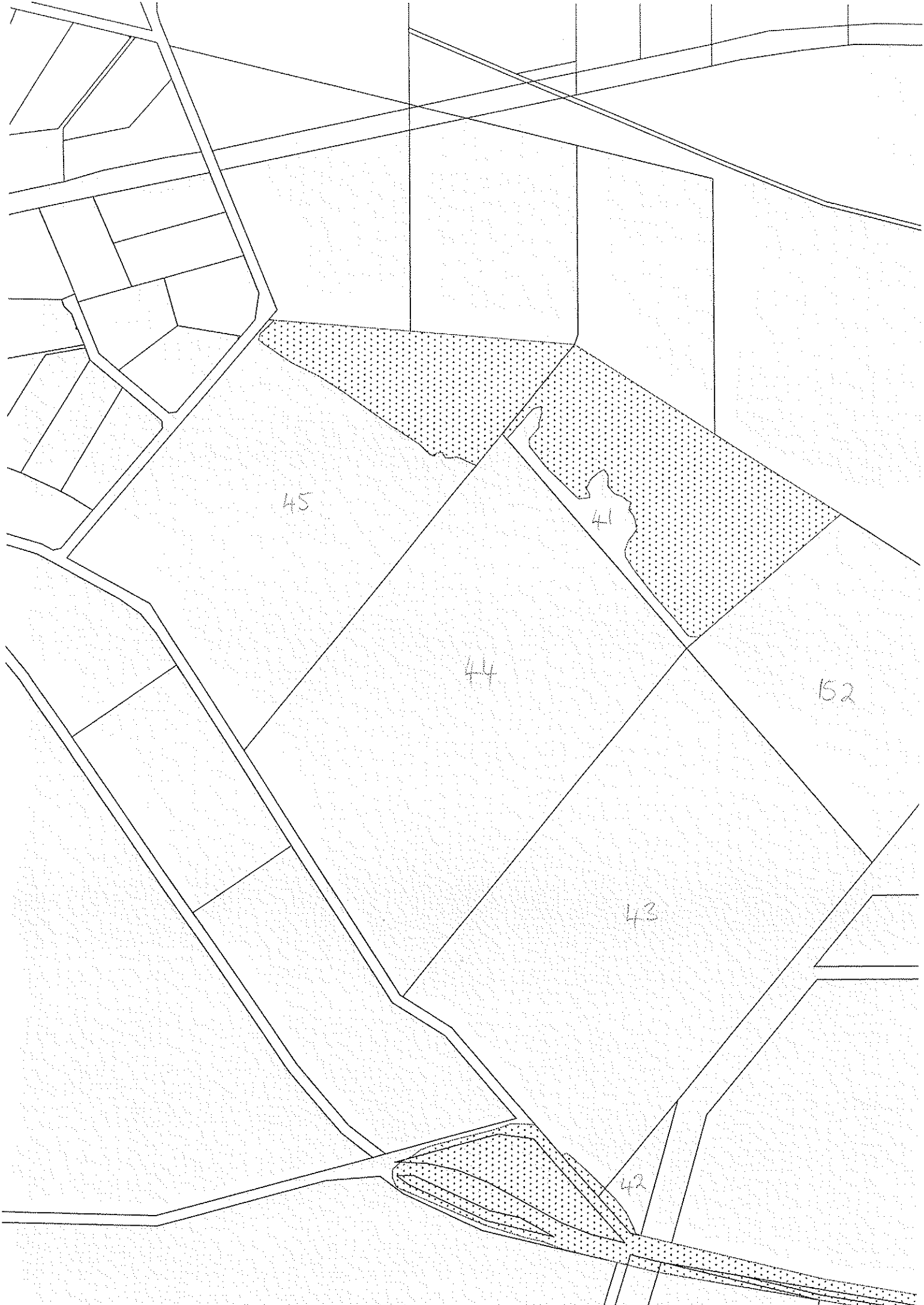
P. Swampland

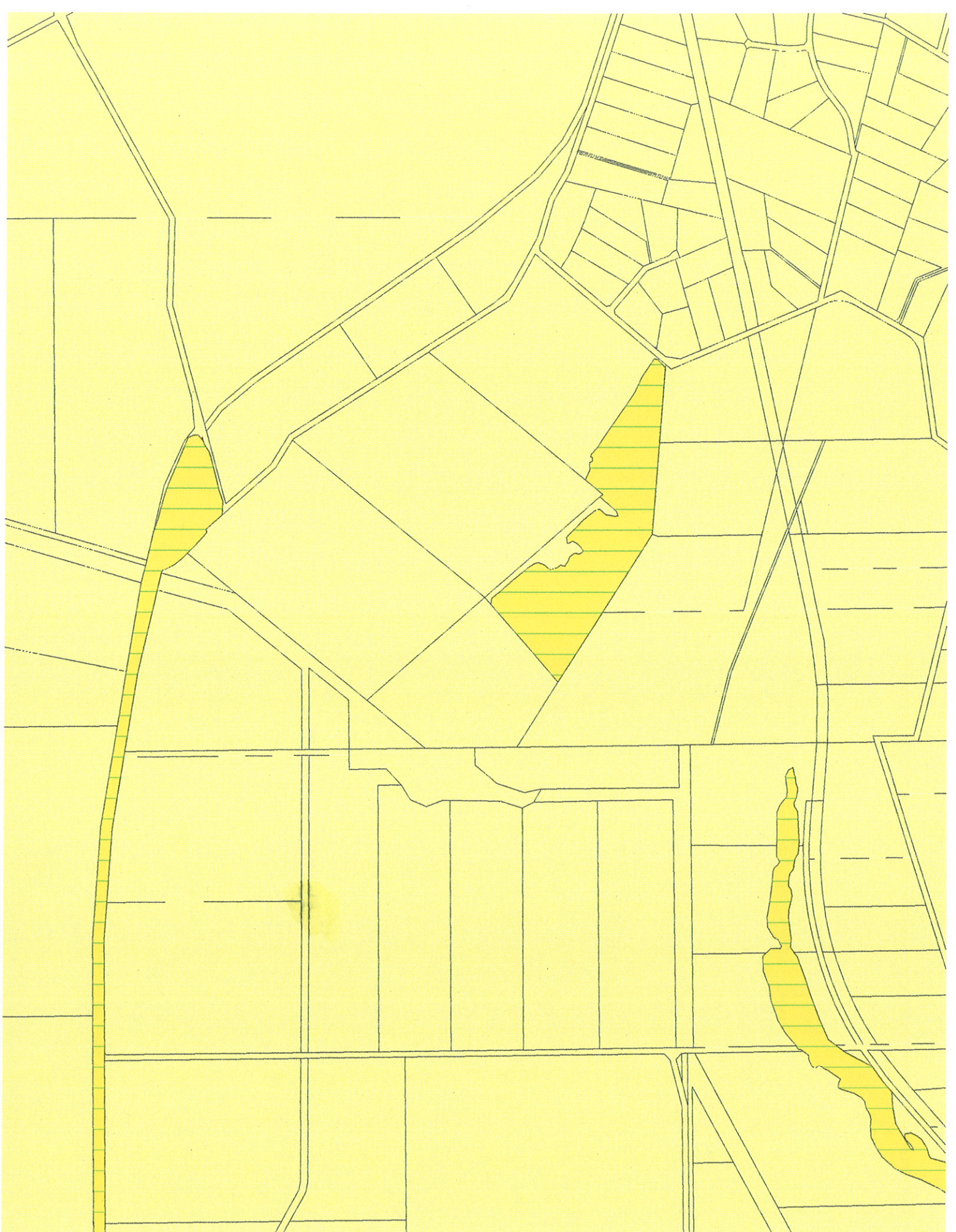
P. Swampland

E.L. Dampland

M. Palusplain

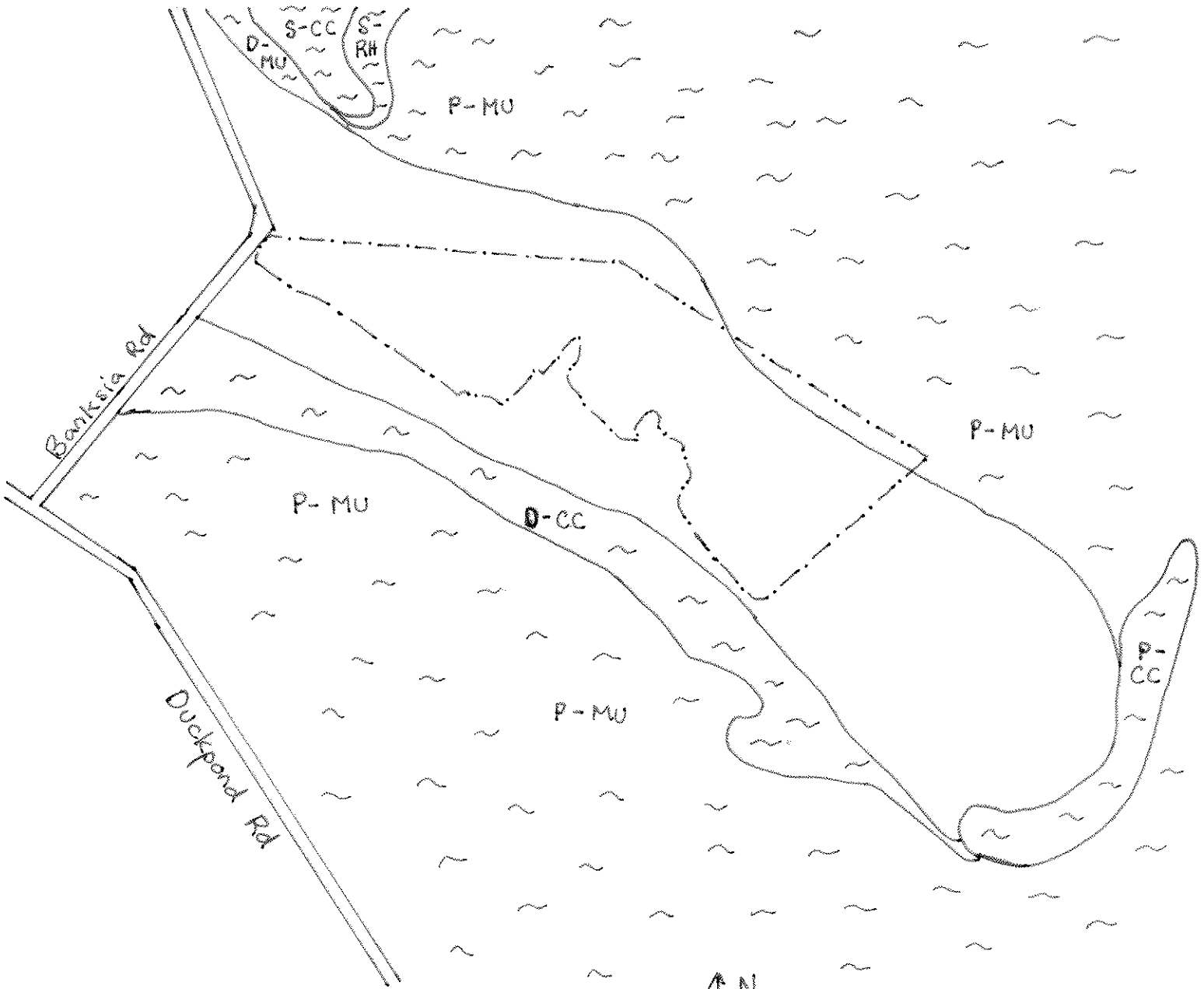
C. Palusplain








Map 1: Management Categories of the Wetlands in the vicinity of Bushplan Site 70 (after Semeniuk V & C Research Group 1997a)



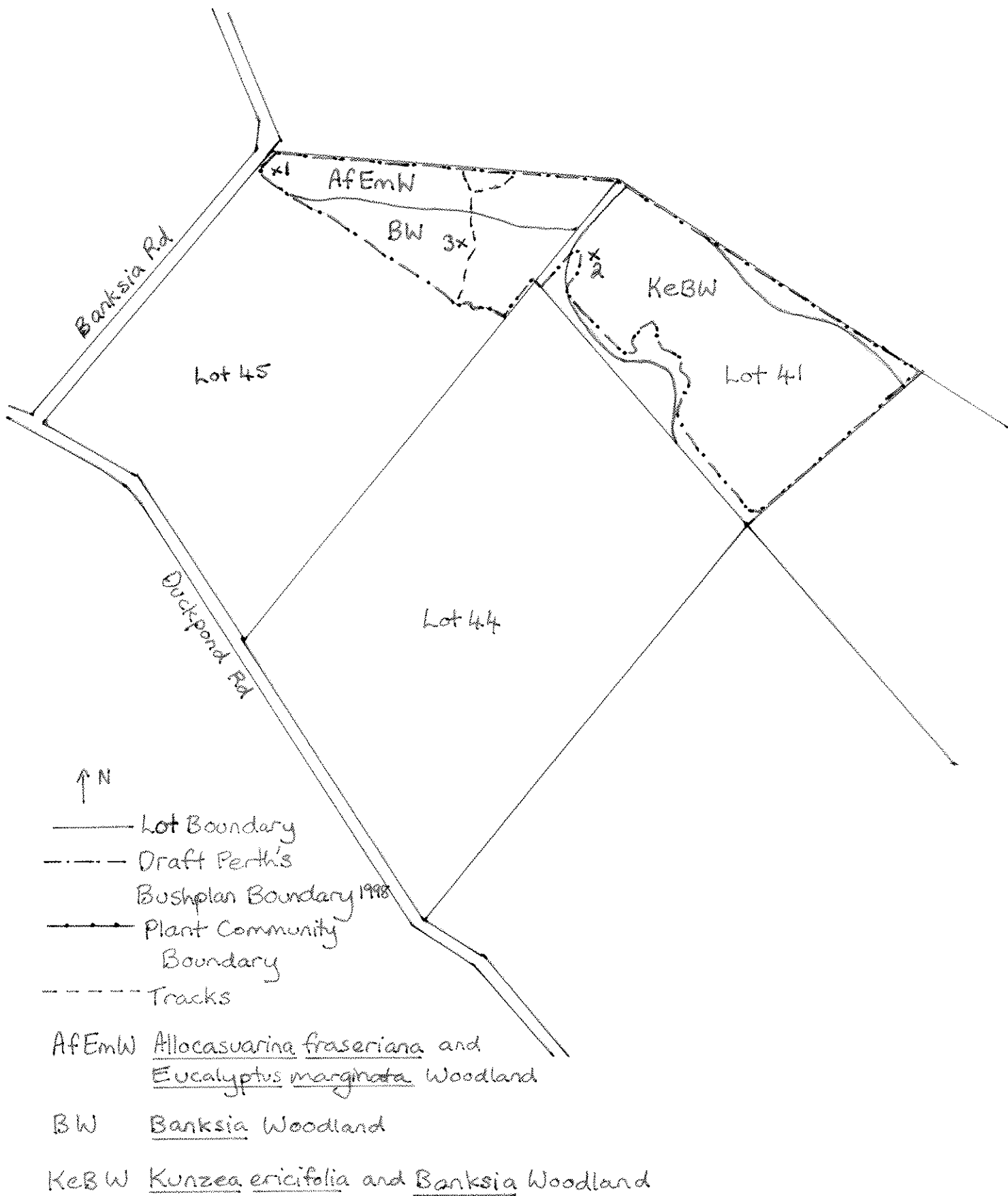
 Wetland

----- Draft Perth's Bushplan Boundary 1998

————— Wetland Boundary

- D Dampland
- S Sumpland
- P Palusplain
- CC Conservation
- RH Resource Enhancement
- MU Multiple Use

Map 2: Vegetation Map of Bushplan Site 70 (DEP 2000)



- to incorporating this area in the Shire's Conservation Zone Policy Area, through the Rural Strategy Review process. (Area 33.2 ha)
- xiii. Serpentine National Park & adjacent bushland Site [redacted] Vol 2 115-116 CALM managed land. Major need for weed control in National Park and adjacent state government lands.
 - xiv. Kingsbury Drive Bushland Site [redacted] Vol 2 Pg 117 Council notes the importance of this vegetation and believes that protection and management of the site's vegetation is best achieved by working directly with the affected landowners. Consideration may be given to incorporating this area in the Shire's Conservation Zone Policy Area, through the Rural Strategy Review process. (Area 40.6 ha). One-to-one consultation with landowners is required.
 - xv. Myara Brook Bushland Site [redacted] Vol 2 pg 118 -119, known locally as the Myara Brook Reserve; currently undergoing vesting change to be vested with Local Authority for the purposes of protection of Indigenous Flora and Fauna. Active management by local authority and community with support of federal and state government grants. Council supports retention of reserve, with assistance from State Government to fund management.
 - xvi. Anketell Road Bushland [redacted] 347, Vol 2 Pg 213-214; Shire supports inclusion of land within Jandakot Botanical Park, except for cleared areas which should be assessed for alternative or complementary uses. Council proposes to site the Oakford voluntary Fire Brigade and a small meeting place on a 4000 m2 lot on the Pony Way frontage. This site is surrounded by a clearing of over 20 ha. Usage of this small portion of the clearing for community uses is complementary to the protection of the remaining 558.1 ha.
 - xvii. Modong Nature Reserve and adjacent bushland [redacted] Vol 2 pg 219 - Council notes the importance of this vegetation and the inclusion of private property.
 - xviii. Duckpond Bushland Site [redacted] Vol 2 pg 222. Council notes the importance of this vegetation. Council believes that protection and management of the site's vegetation is best achieved by working directly with the affected landowners. Consideration may be given to incorporating this area in the Shire's Conservation Zone Policy Area, through the Rural Strategy Review process (area: 23.5 ha). One-to-one consultation with landowners is required.
 - xix. Banksia Road Nature Reserve Site [redacted] Vol 2 pg 223-224. CALM estate.
 - xx. Lowlands Bushland Site [redacted] & [redacted] Vol 2 pg 224-227. Council notes the inclusion of this site in Perth's Bushplan. These sites are two of three properties currently before the Ministry for Planning for rezoning to Conservation. It is important that the rezonings be finalized as a matter of priority, so that an example is set for the Perth Metropolitan Area.
 - xxi. Henderson Road Bushland Site [redacted] Vol 2 pg 229-230. Council notes the importance of this vegetation. Assistance needs to be given to landowners to fence off vegetation from stock. Council believes that protection and management of the site's vegetation is best achieved by working directly with the affected landowners. Consideration may be given to incorporating this area in the Shire's Conservation Zone Policy Area, through the Rural Strategy Review process. One-to-one consultation with landowners is required.
 - xxii. Yangedi Swamp and adjacent Bushland, Site [redacted], pg 230-231, Council notes the importance of this vegetation. Assistance needs to be given to landowners to fence off vegetation from stock. Consideration will be given to incorporating this area in the Shire's Conservation Zone Policy Area, through the Rural Strategy Review process. One-to-one consultation with landowners is required. The site also includes one property currently before the Ministry for Planning for rezoning to Conservation. It is important that the rezoning be finalized as a matter of priority, so that an example is set for the Perth Metropolitan Area and other landowners. One-to-one consultation with landowners is required.
 - xxiii. Wungong Brook Site [redacted] Vol 2 pg 402-403 Council notes the importance of this vegetation. Protection of the vegetation should be achieved through its inclusion in the proposed public reserve.

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Nº 13037 152.72

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5022-1 268-56 100 0180 0260 56

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BUSHPLAN SITES CORRECTED

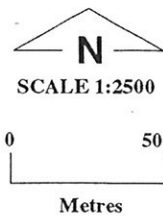


WESTERN
AUSTRALIAN
PLANNING
COMMISSION



CUSTOMER
FOCUS
WESTERN AUSTRALIA

B 70 22/10/98



SCALE 1:2500

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Metres



BUSHPLAN SITES CORRECTED



**WESTERN
AUSTRALIAN
PLANNING
COMMISSION**



**CUSTOMER
FOCUS**
WESTERN AUSTRALIA








SCALE 1:2500



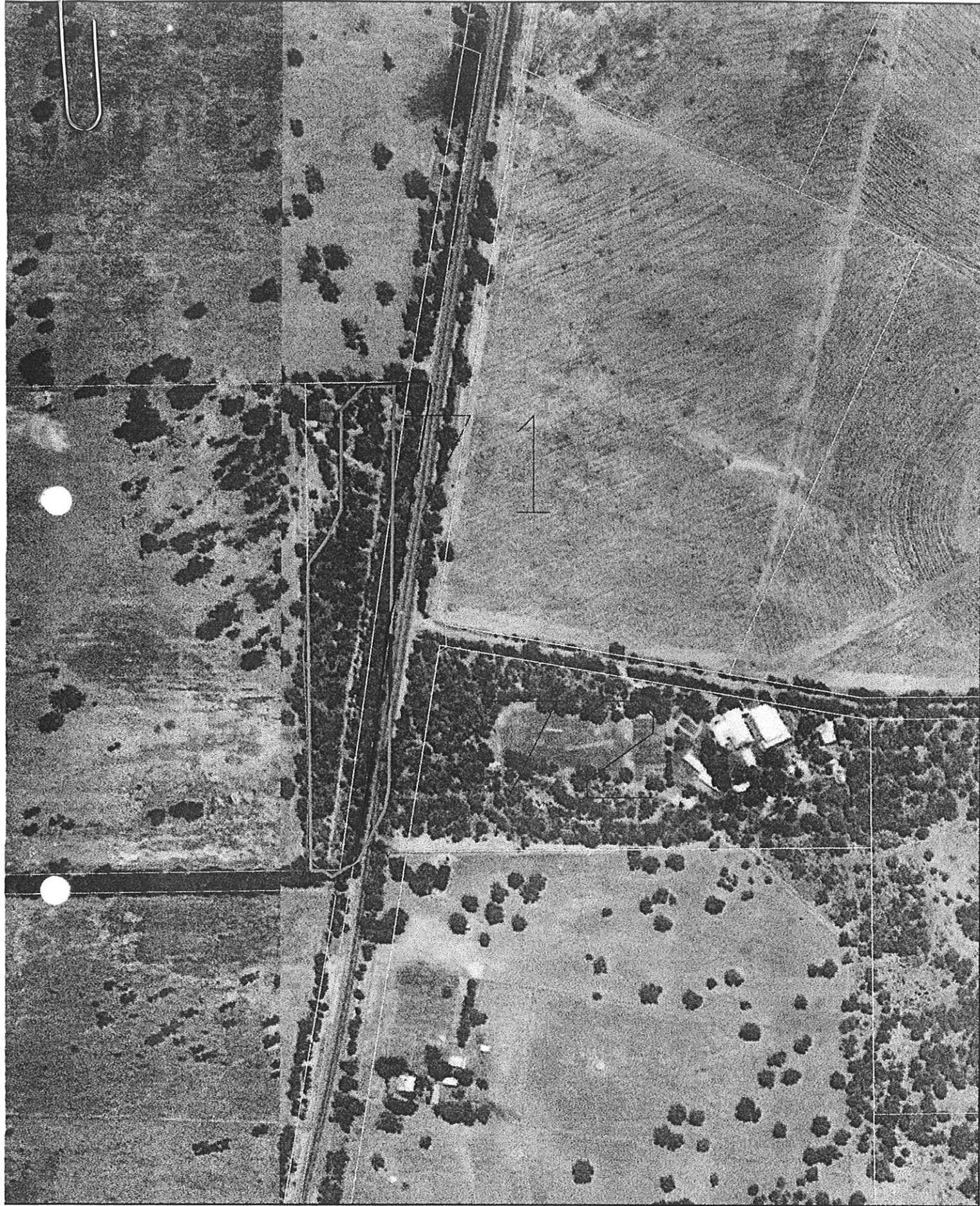
Metres

bp site 70

-  AG VEG 1998 BOUNDARY THEME
-  Cadastre
-  Bushplan sites refno 1-500 SCP BOUNDARY
-  cons category wetlands
-  Verified CCWs



MFP INTERNAL USE ONLY
Prepared By: Andrea Zappacosta
Prepared For:
Map Ident: plot980522_1
Date: 22 May 98
Scale 1: 6912



BUSHPLAN SITES CORRECTED

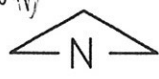


**WESTERN
AUSTRALIAN
PLANNING
COMMISSION**



**CUSTOMER
FOCUS
WESTERN AUSTRALIA**

CHANGE SITE BOUNDARY
TO ALIGN WITH VEG
CORRIDOR





Bushplan site 70 9-1-98