BRICKWOOD RESERVE AND ADJACENT BUSHLAND, BYFORD

Boundary Definition: protected area/bushland (part taken to cadastre) boundary

SECTION 1:

Bush Forever Site no. 321
Area (ha): bushland 44.9
Map no. 67
Map sheet series ref. no. 2033–I SE, 2133–IV SW
Other Names: Location 10 (Keighery, BJ, and Trudgen 1992)
Local Authorities (Suburb): Shire of Serpentine-Jarrahdale (Byford)

SECTION 2: REGIONAL INFORMATION

LANDFORMS AND SOILS
Foothills
Colluvial Deposits (Qc: Csg)
Pinjarra Plain
Guildford Formation (Qpa: Cs)
Bassendean Dunes
Bassendean Sands (Qpb: S8)

VEGETATION AND FLORA
Vegetation Complexes
Foothills
Forrestfield Complex (Ridge Hill Shelf, Darling Plateau)
Pinjarra Plain
Guildford Complex
Floristic Community Types
Supergroup 1: Foothills/Pinjarra Plain
3a *Eucalyptus calophylla — Kingia australis* woodlands on heavy soils
Supergroup 2: Seasonal Wetland
9 Dense shrublands on clay flats (most northern representation)
Supergroup 3: Uplands centred on Bassendean Dunes and Dandaragan Plateau
20b Eastern *Banksia attenuata* and/or *Eucalyptus marginata* woodlands

WETLANDS
Wetland Types: palusplain, creek
Natural Wetland Groups
Pinjarra Plain
Keysbrook (P.1)
Wetland Management Objectives: Conservation (17.7ha), Multiple Use
Swan Coastal Plain Lakes EPP: none identified

THREATENED ECOLOGICAL COMMUNITIES
Not assessed, Critically Endangered (floristic community type 3a), Endangered (floristic community type 20b)

SECTION 3: SPECIFIC SITE DETAIL

Landscape Features: vegetated wetland, creek, vegetated uplands
Vegetation and Flora: limited survey (Gibson *et al.* 1994 (Brick 01–08), Keighery, BJ, and Trudgen 1992); detailed survey (part Site — Keighery, GJ, and Keighery 1993a)
Structural Units: mapping (Keighery, BJ, and Trudgen 1992, Keighery, GJ, and Keighery 1993a)
Uplands: *Eucalyptus calophylla* and *E. marginata* Woodland; *Banksia attenuata* and *B. menziesii* Woodland
Wetlands: *Eucalyptus calophylla* Open Woodland; *Melaleuca viminea, M. lateriflora* and *Viminaria juncea* Scrub; *Pericalymma ellipticum* Closed Low Heath; mixed Herbland; *Meeboldinia coangustata* and *Lepidosperma longitudinale* Sedgeland
Vegetation Condition: >80% Excellent to Very Good, <20% Good to Degraded, with areas of severe localised disturbance
Total Flora: 309 native taxa, 24 weeds (Keighery, GJ, and Keighery 1993a) (estimated >90% expected flora)
Significant Flora: *Schoenus pennisetis* (1), *Trichocline* sp. Treeton (BJK & NG 561) (2), *Stylidium mimeticum* (3), *Lambertia multiflora* var. *darlingensis* (3), *Drosera occidentalis* subsp. *occidentalis* (4), *Verticordia lindleyi* subsp. *lindleyi* (4); *Isopogon asper, Stylidium utricularioides, Johnsonia pubescens* subsp. *cygnorum* (one of three known populations), *Eucalyptus lane-poolei* (one of the few patches on the Swan Coastal Plain), *Jacksonia gracilis*

Fauna: structured survey for birds (28 species), native mammals (2 species), reptiles (12 species) and amphibians (5 species) (Harvey *et al.* 1997). Significant bird species: category 1 (1), category 3 (1), category 4 (4) including the Painted Button-quail. Significant mammal species: Quenda (Friend 1996 D, Harvey *et al.* 1997)
Linkage: adjacent bushland to the east (Site 350); part of Greenway 62, 106 (Tingay, Alan & Associates 1998a); part of a regionally significant fragmented bushland/wetland linkage (Part A, Map 7)
Other Special Attributes: Threatened or Poorly Reserved Plant Community (EPA 1994 GIS); recommended to be managed as a flora conservation area (Keighery, BJ, and Trudgen 1992); National Trust of Australia (WA) Classification; contains plant communities representative of the eastern side of the Swan Coastal Plain

SECTION 4: INTERNATIONAL AND NATIONAL SIGNIFICANCE

Listed on the Register of the National Estate; subject to protection under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*

SECTION 5: SELECTION CRITERIA AND RECOMMENDATIONS

Criteria: Representation of ecological communities, Diversity, Rarity, Scientific or evolutionary importance, General criteria for the protection of wetland, streamline and estuarine fringing vegetation and coastal vegetation
Recommendation: Site with Some Existing Protection; the existing care, control and management intent of the reserve is endorsed. The purpose of the reserve should be amended to include conservation and appropriate mechanisms applied in consultation with the management body (see Table 3, Volume 1).

BRICKWOOD RESERVE AND ADJACENT BUSHLAND, BYFORD

Boundary Definition: protected area/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. 321 **Map no.** 83, 84 **Map sheet series ref. no.** 2033–I SE, 2133–IV SW

Other Names
Location 10 (Keighery, BJ, and Trudgen 1992)

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

Ownership Categories
Private (including commercial organisation), Not identified

Area (ha): total 57.1; bushland 44.9

Zoning
MRS: Parks and Recreation, Urban
TPS: Landscape, Rural, Public Open Space, Public and Community Purposes

Lot/Location/Reserve numbers (Purpose), Street name
104 Soldiers Rd; 48, 104, 106, 107, 108 Turner Rd
Crown Reserve 17490 (Recreation)

SECTION 2: REGIONAL INFORMATION

LANDFORMS AND SOILS

Foothills
Colluvial Deposits (Qc: Csg)

Pinjarra Plain
Guildford Formation (Qpa: Cs)

Bassendean Dunes
Bassendean Sands (Qpb: S8)

VEGETATION AND FLORA

Vegetation Complexes

Foothills
Forrestfield Complex (Ridge Hill Shelf, Darling Plateau)

Pinjarra Plain
Guildford Complex

Floristic Community Types

Supergroup 1: Foothills/Pinjarra Plain
3a *Eucalyptus calophylla — Kingia australis* woodlands on heavy soils

Supergroup 2: Seasonal Wetland
9 Dense shrublands on clay flats (most northerly representation)

Supergroup 3: Uplands centred on Bassendean Dunes and Dandaragan Plateau
20b Eastern *Banksia attenuata* and/or *Eucalyptus marginata* woodlands

WETLANDS

Wetland Types: palusplain, creek

Natural Wetland Groups

Pinjarra Plain
Keysbrook (P.1)

Wetland Management Objectives: Conservation (17.7ha), Multiple Use

Swan Coastal Plain Lakes EPP: none identified

THREATENED ECOLOGICAL COMMUNITIES

Not assessed, Critically Endangered (floristic community type 3a), Endangered (floristic community type 20b)

SECTION 3: SPECIFIC SITE DETAIL

Landscape Features: vegetated wetland, creek, vegetated uplands

Vegetation and Flora: detailed survey (part Bushplan Site - Keighery, GJ, and Keighery 1993a); limited survey (Gibson *et al.* 1994 (Brick 01–08), Keighery, BJ, and Trudgen 1992)

Structural Units: mapping (Keighery, GJ, and Keighery 1993a, Keighery, BJ, and Trudgen 1992)
Uplands: *Eucalyptus calophylla* and *E. marginata* Woodland; *Banksia attenuata* and *B. menziesii* Woodland
Wetlands: *Eucalyptus calophylla* Open Woodland; *Melaleuca viminea, M. lateriflora* and *Viminaria juncea* Scrub; *Pericalymma ellipticum* Closed Low Heath; mixed Herbland; *Leptocarpus coangustatus* and *Lepidosperma longitudinale* Sedgeland

Vegetation Condition: >80% Excellent to Very Good, <20% Good to Degraded, with areas of severe localised disturbance

Total Flora: 309 native taxa, 24 weeds (Keighery, GJ, and Keighery 1993a) (estimated >90% expected flora)

Significant Flora: *Schoenus pennisetis* (1), *Trichocline* sp. Treeton (BJK & NG 561) (2), *Stylidium mimeticum* (3), *Lambertia multiflora* var. *darlingensis* (3), *Drosera occidentalis* (4), *Verticordia lindleyi* subsp. *lindleyi* (4); *Isopogon asper*, *Stylidium utricularioides*, *Johnsonia* sp. (GJK 5249) (one of three known populations), *Eucalyptus lane-poolei* (one of the few patches on the Swan Coastal Plain), *Jacksonia gracilis*

Fauna: multiple and structured survey by Western Australian Museum of Natural Science (Harvey *et al.* 1997) for birds (28), native mammals (2), reptiles (12) and amphibians (5). Significant bird species: category 1 (1), category 3 (1), category 4 (4) including the Painted Button-quail. Significant mammal species: Quenda (Friend 1996 D and Harvey *et al.* 1997)

Linkage: adjacent bushland to the east (BS350); part of proposed Greenway 92 (Tingay, Alan & Associates 1997a); part of a regionally significant fragmented bushland/wetland linkage (Volume 2A, Map 8)

Other Special Attributes: Threatened or Poorly Reserved Plant Community (EPA 1994 GIS); recommended to be managed as a flora conservation area (Keighery, BJ, and Trudgen 1992); National Trust of Australia (WA) Classification; contains plant communities representative of the eastern side of the Swan Coastal Plain

SECTION 4: INTERNATIONAL AND NATIONAL SIGNIFICANCE

Interim List of the Register of the National Estate

SECTION 5: SELECTION CRITERIA AND RECOMMENDATIONS

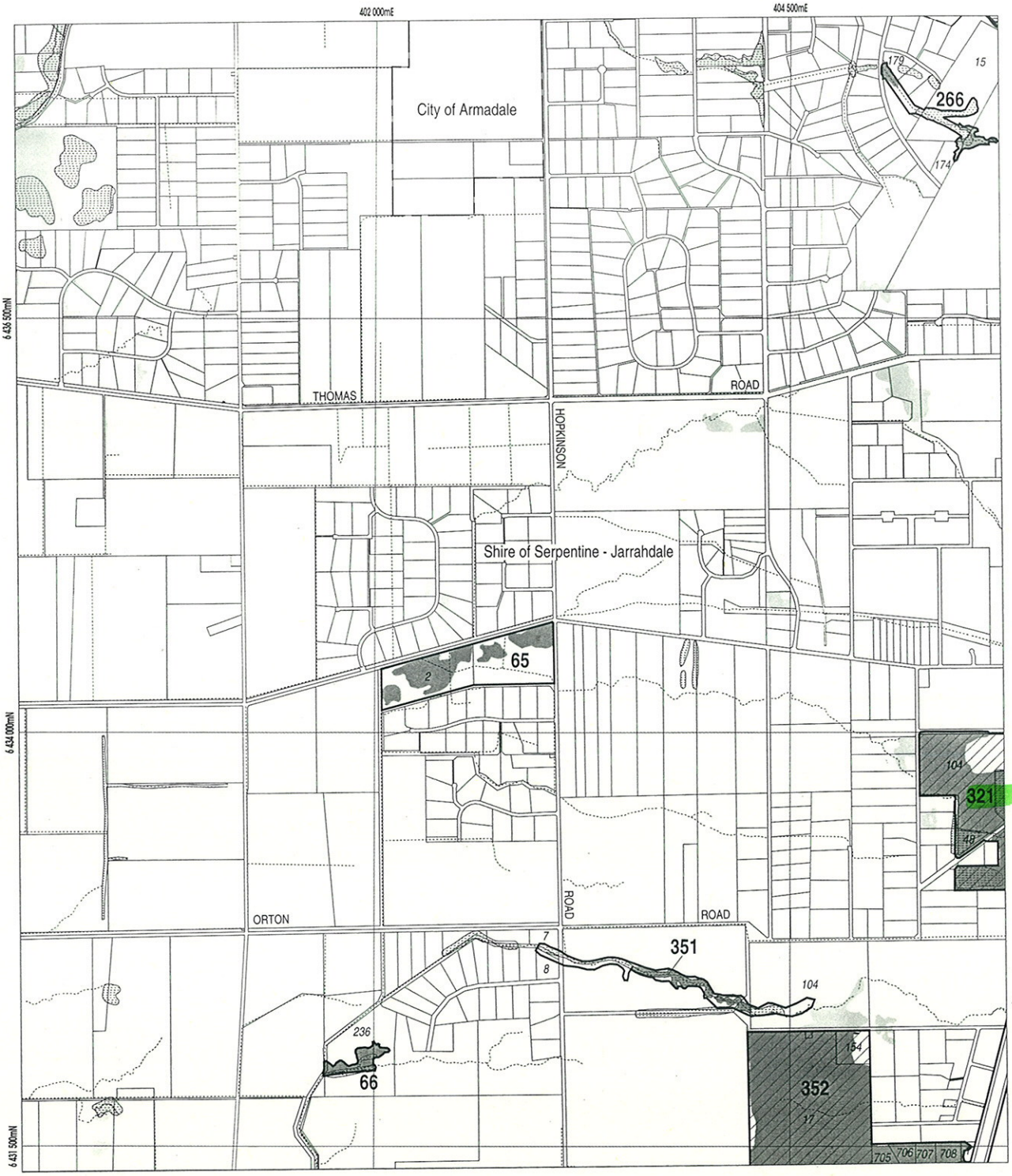
Criteria: Representation of ecological communities, Diversity, Rarity, Scientific or evolutionary importance, General criteria for the protection of wetland, streamline and estuarine fringing and coastal vegetation

Opportunities and/or Constraints

Opportunities: Bushplan Site/part Bushplan Site subject to Peel Inlet-Harvey Estuary EPP/SPP; location of Scheduled Fauna, conservation category wetlands; under MRS Parks and Recreation Reservation and TPS Landscape Zoning, Public Open Space Zoning, Crown Reserve

Constraints: private land; under MRS Urban Zoning

Recommendation: The existing care, control and management intent of the reserve is endorsed. Long-term security and support for conservation management of the Bushplan Site to be enhanced by: amending the purpose of the reserve to include conservation; and applying appropriate mechanisms in consultation with the reserve management body. The most appropriate mechanism for the protection of the remainder of this Bushplan Site to be considered through the public comment period in consultation with the land owner(s).



LEGEND

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

2033 - I SE

IV	NW / SW	NE / SE (83)
III	2033	II

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

PERTH'S BUSHPLAN MAP INDEX

1	2								
3	4	5							
6	7	8	9	10	11				
12	13	14	15	16					
17	18	19	20			21	22	23	
24	25	26	27	28	29	30			
	31	32	33	34	35	36			
	37	38	39	40	41	42			
	43	44	45	46	47	48			
		49	50	51	52	53	54		
		55	56	57	58	59			
		60	61	62	63	64			
65		66	67	68	69	70			
71	72	73	74	75	76	77			
78	79	80	81	82	83	84			
85	86	87	88	89	90	91			
	92	93	94	95	96	97			
	98	99	100	101	102				
		103	104	105	106				

N

SCALE

0 — 500 — 1000

Metres

Produced by Project Mapping Section
Land Information Branch, Ministry for Planning, Perth W.A. November 1998

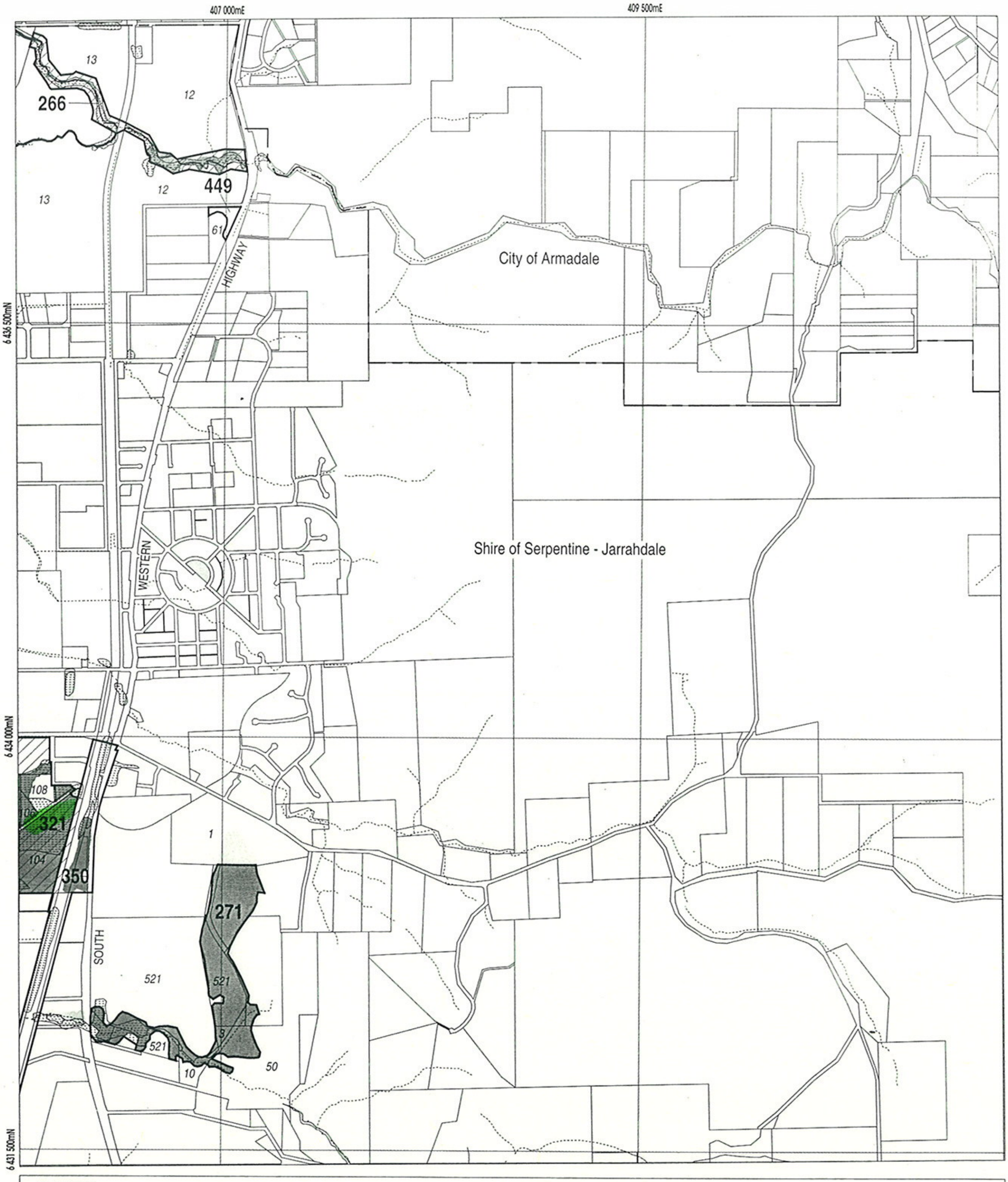
ntw-map9//environ/bushplan//bushv2_83.dgn

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

Bushplan Site Map



LEGEND

472 Bushplan Sites With Regionally Significant Bushland

Other Native Vegetation

Conservation Category Wetlands

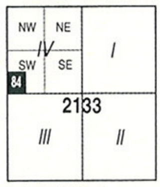
Bushplan Sites With Some Existing Protection

696 Lot Number, Location Number

Channel Wetlands

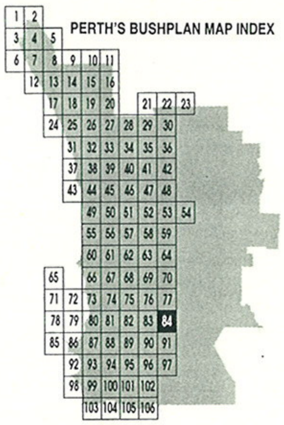
Local Government Boundary

2133 - IV SW



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

PERTH'S BUSHPLAN MAP INDEX



N

SCALE

0 500 1000

Metres

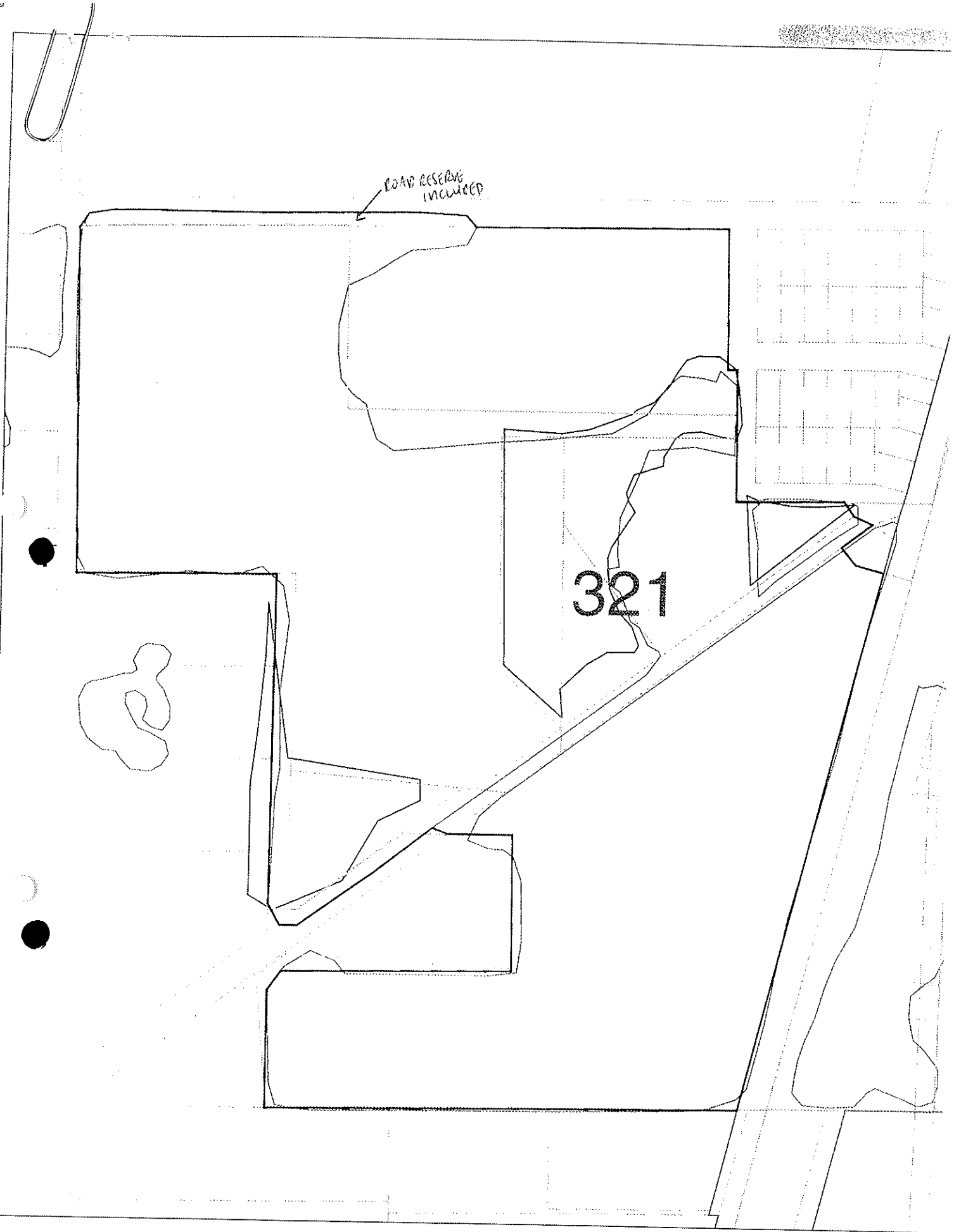
Produced by Project Mapping Section Land Information Branch, Ministry for Planning, Perth W.A. November 1998

ntw-map9//environ/bushplan//bushv2_84.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



BUSHPLAN SITES CORRECTED

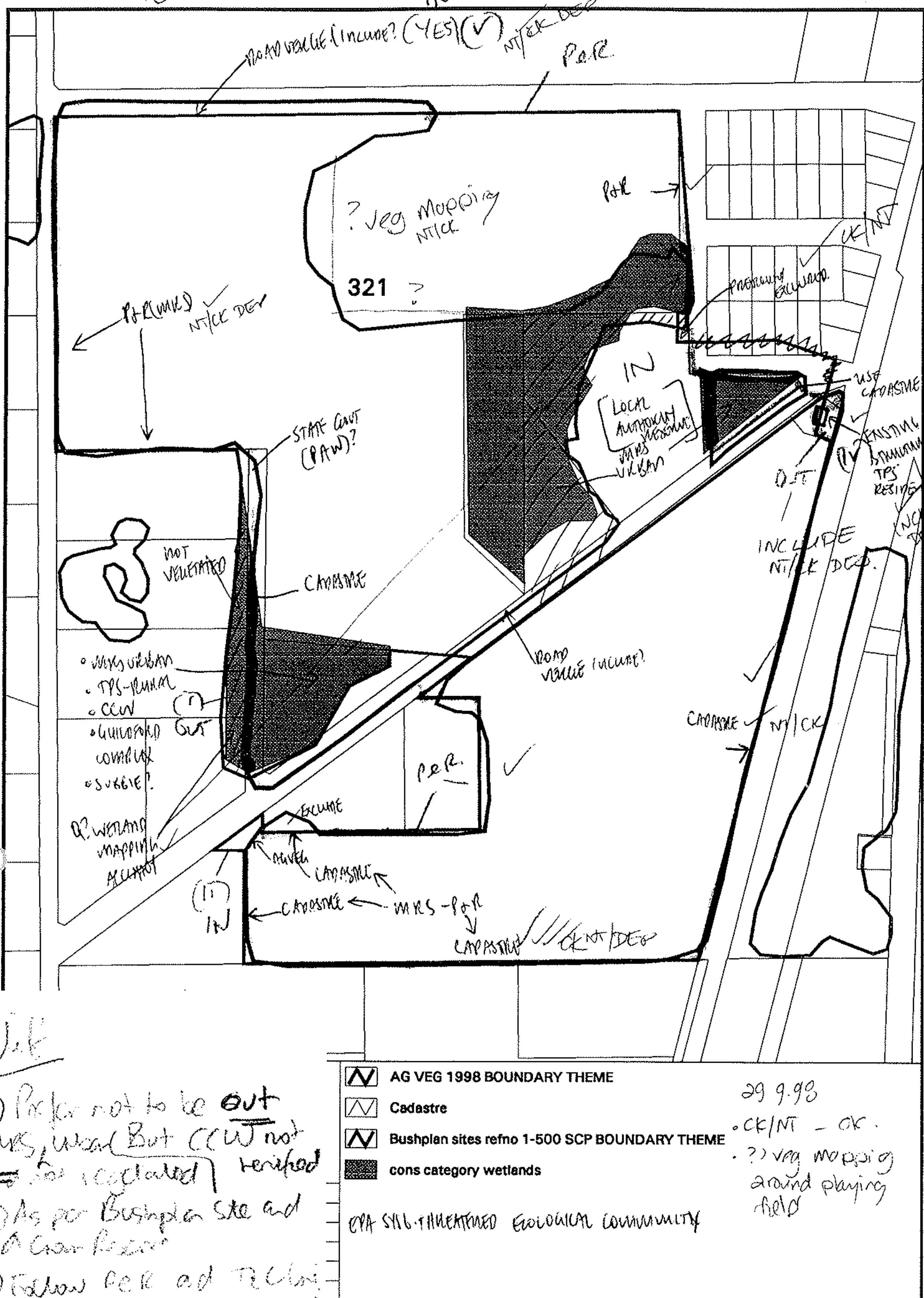
THE GOVERNMENT OF WESTERN AUSTRALIA

WESTERN AUSTRALIAN PLANNING COMMISSION

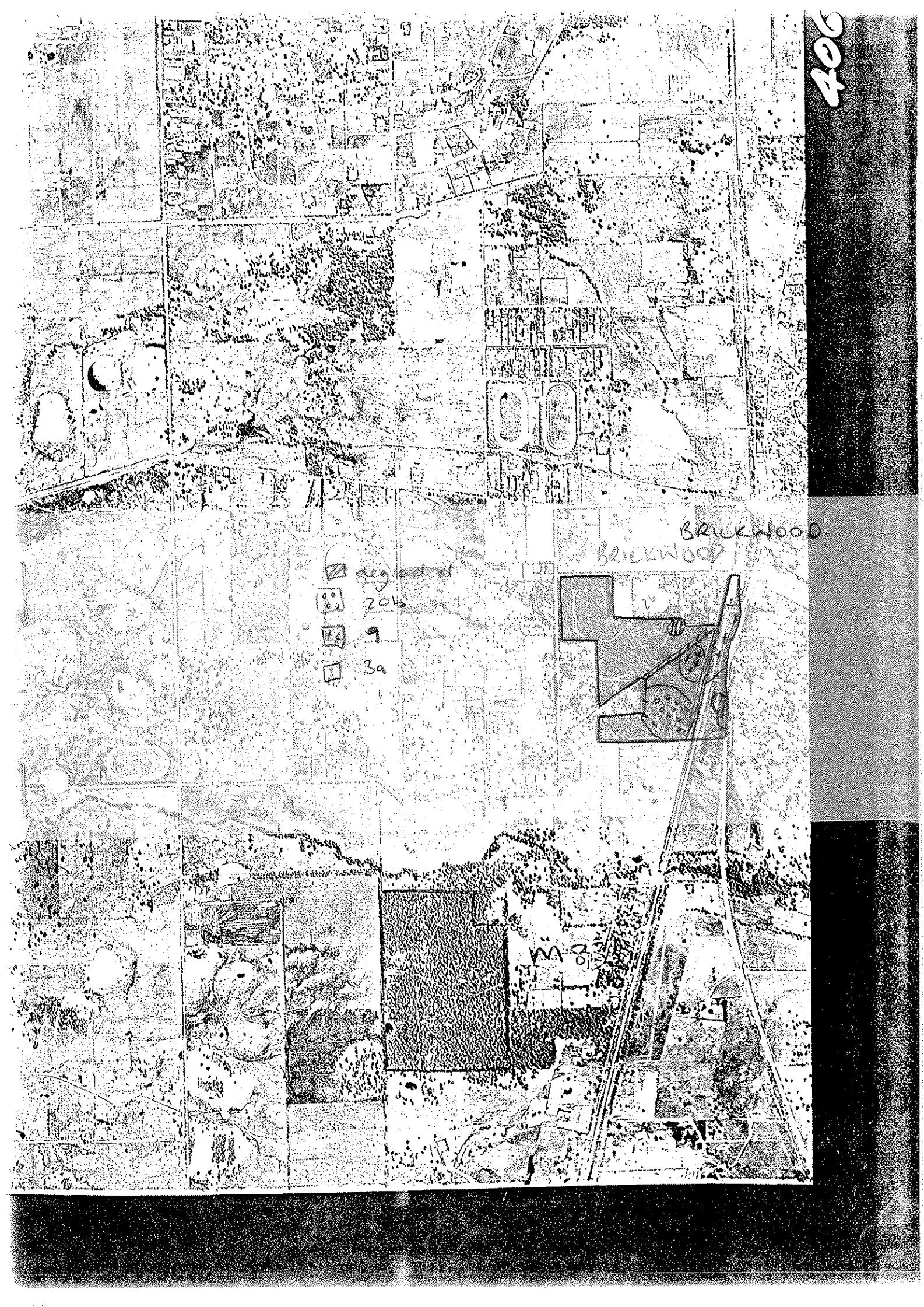
CUSTOMER FOCUS WESTERN AUSTRALIA

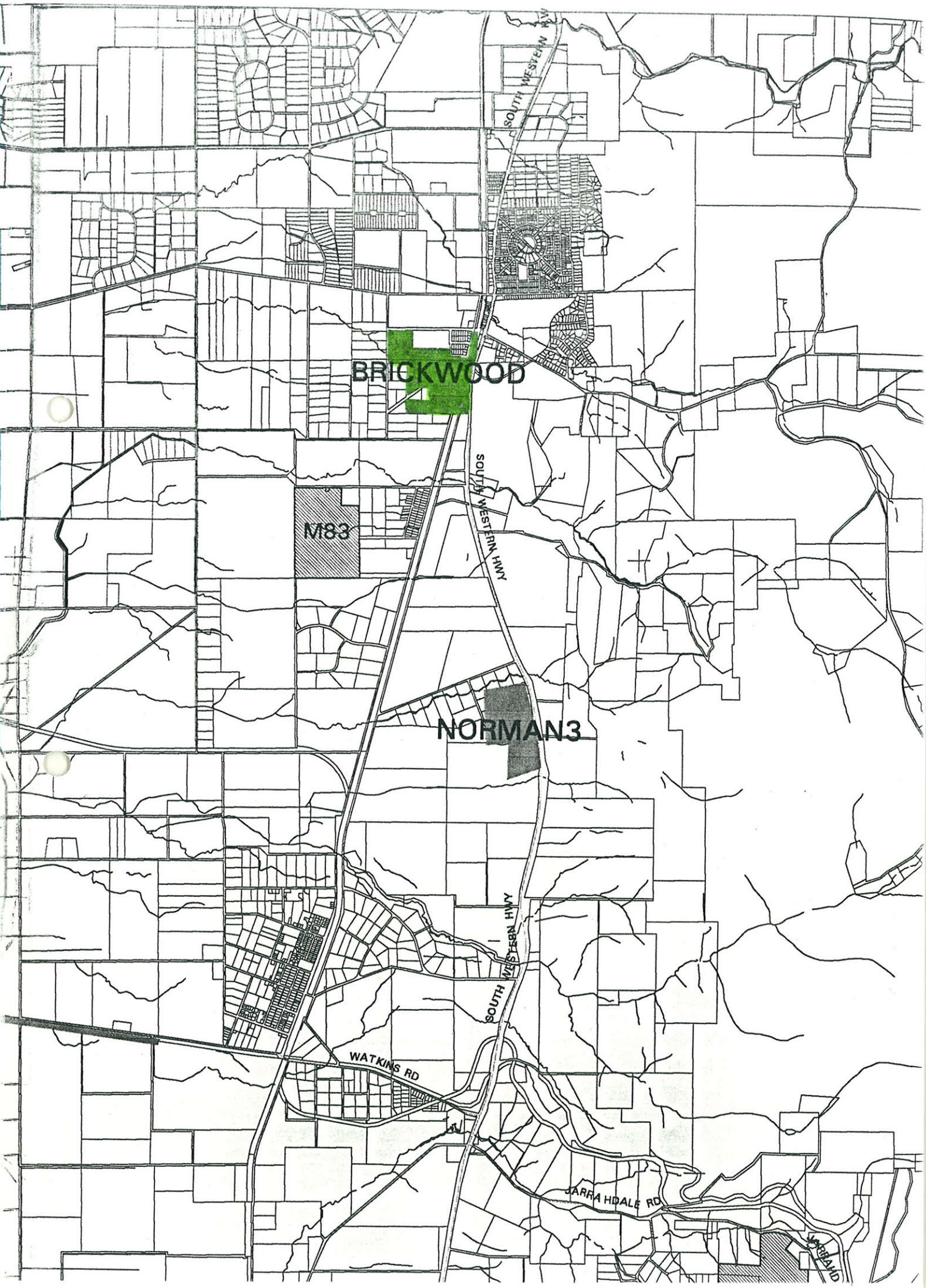
D BK 27/10/96

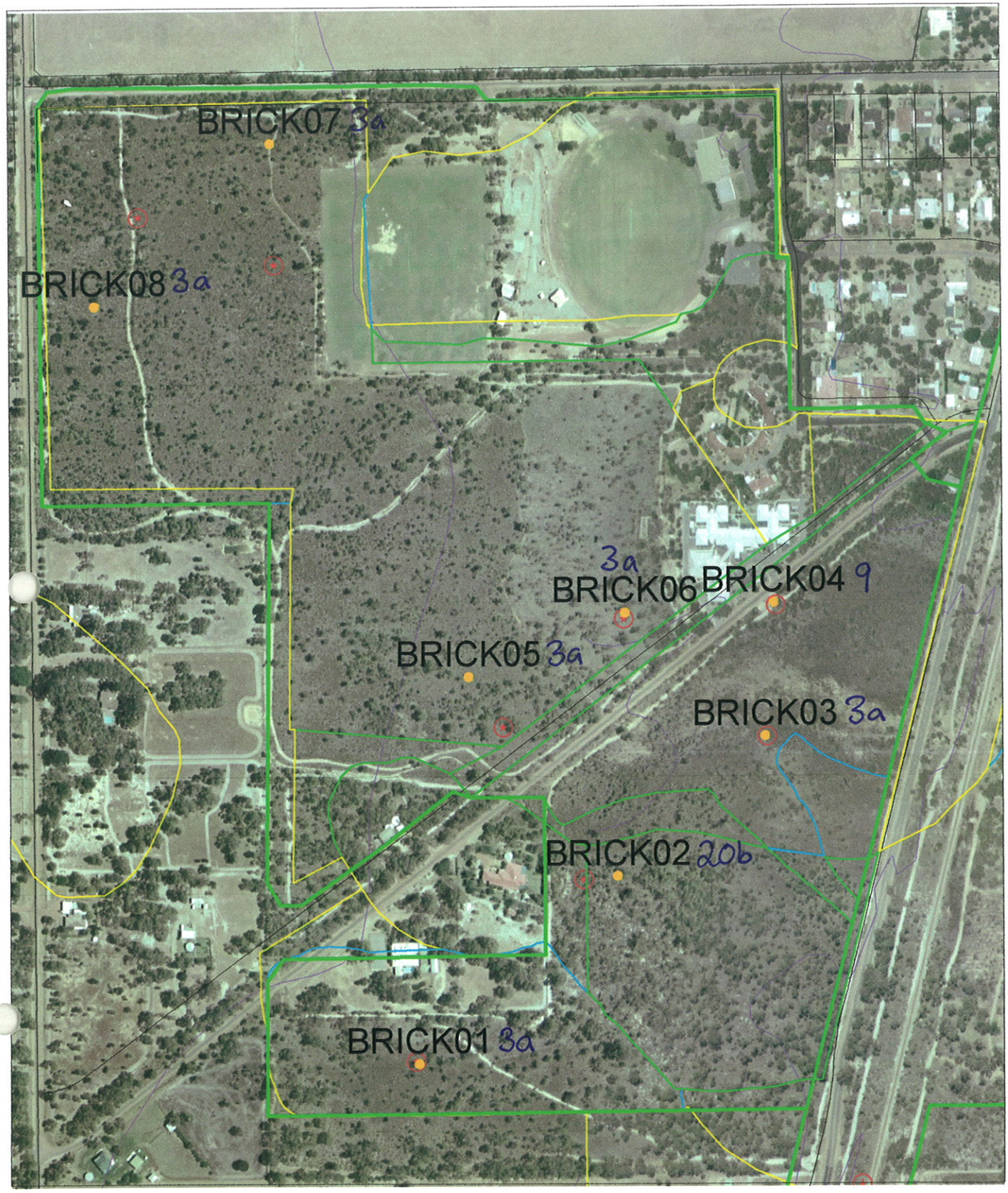
N



(I) Prefer not to be out
MRS Urban (But CCW not verified
...)
(II) As per Bushplan Site and A Class Reserve
(III) Follow P&R and TEC line
(IV) Proceed remove TPS Residential
(V) Road Reserve OK


BRICKWOOD
BRICKWOOD
20
9
3a


SOUTH WESTERN HWY
BRICKWOOD
M83
SOUTH WESTERN HWY
NORMAN3
SOUTH WESTERN HWY
WATKINS RD
JARRA HDALE RD



Bush Forever Sites
Local Government Authority Boundaries
Geomorphic Wetlands Feb04 by Evaluation
Conservation
Resource Enhancement
Multiple Use
Floristic Survey Sites of the Southern Swan Coastal Plain
GJKENV (Keighery 1996)
GRIFFIN (Griffen 1994)
SCP (Gibson et al 1994)
SYS6ENV (DEP 1996 and Trudgen & Keighery 1995)
SYS6ENV2 (DEP 1996 and Trudgen & Keighery 1995)
CALM Threatened Ecological Communities 2002
Roads - Perth Metropolitan

Bush Forever Site 321: Brickwood Reserve and Adjacent Bushland, Byford

0 100 200 300 400 Meters

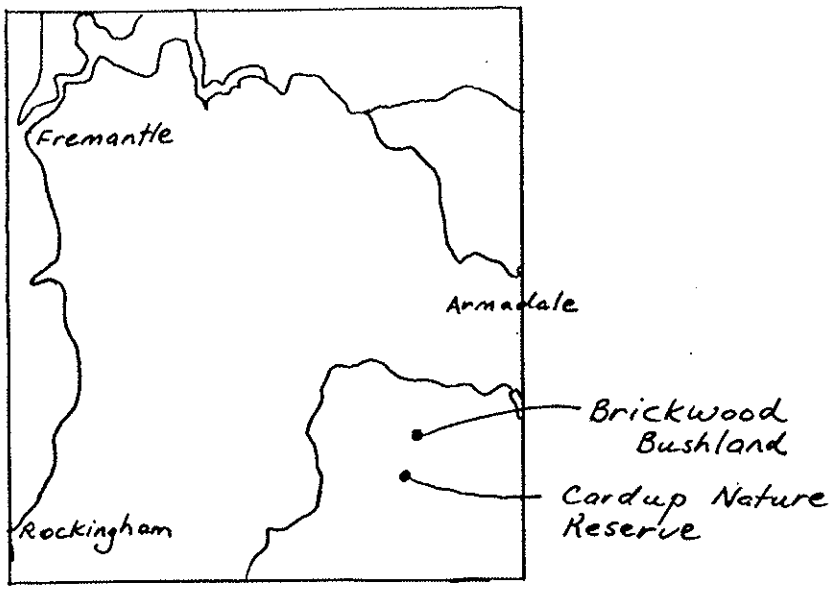
N

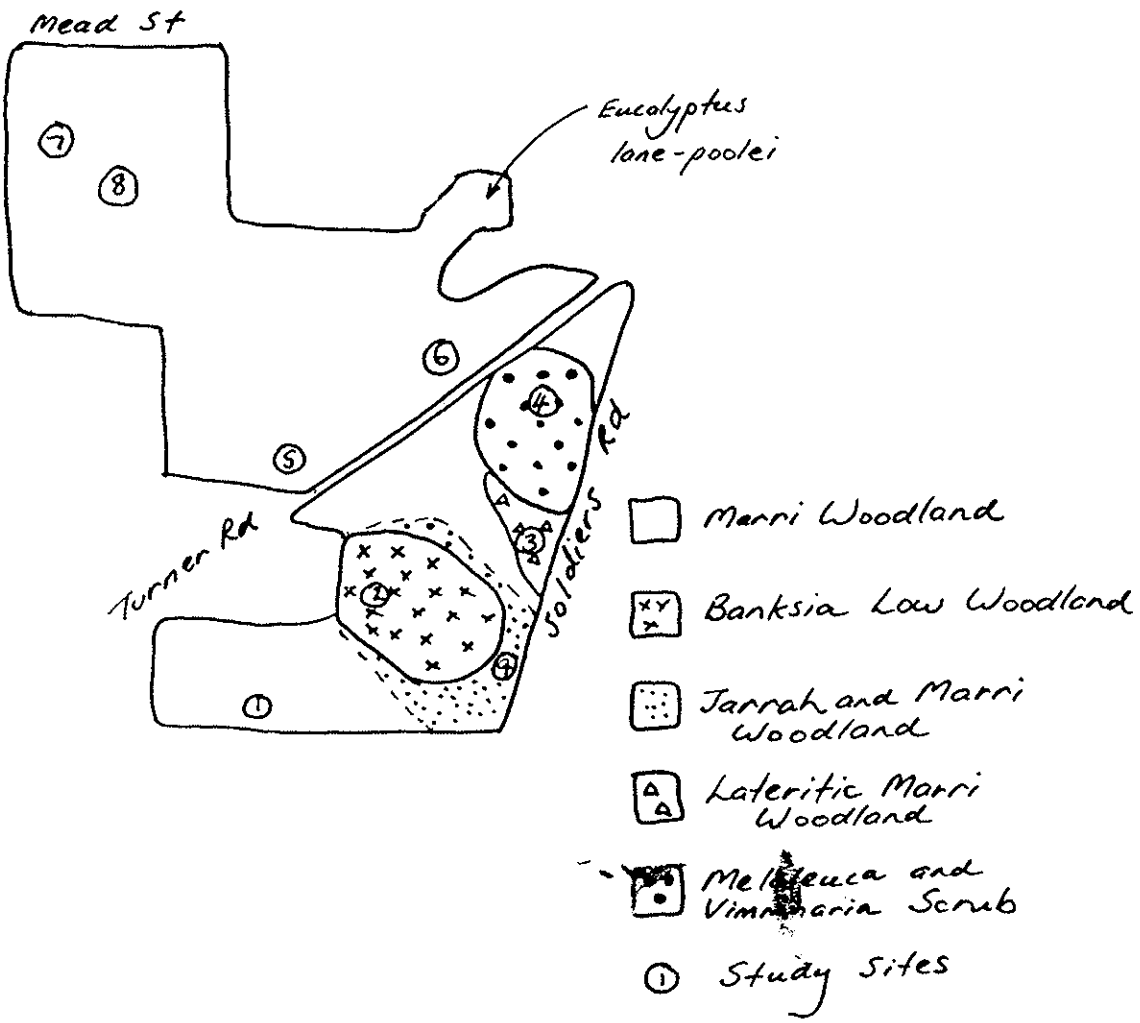
1:5000

Department of Environment

Data Sources:
Cadastre DLI
Aerial Phototography : Skyview DLI

Datum: GDA - Projection: MGA Zone 50


Fremantle
Armadale
Brickwood Bushland
Cardup Nature Reserve
Rockingham


Mead St
Eucalyptus lane-poolei
Turner Rd
Soldiers Rd
Marri Woodland
Banksia Low Woodland
Jarrah and Marri Woodland
Lateritic Marri Woodland
Melaleuca and Vimmaria Scrub
Study Sites

Reserve – vegetation in good condition, Council has carried out weed control with assistance from federal government grant. Paul Robinson Reserve – managed by Serpentine Bushland Group with support from Shire and Serpentine-Jarrahdale Landcare Centre through federal government grant. Recommendation: Amendment of the purpose of the rail reserve portion to include Conservation is supported. Change of vesting of Bella Cumming Reserve and Paul Robinson Reserves to include Conservation supported in-principle, with funding support from State Government.

iv. Brickwood Reserve Site [redacted] Vol 2 pg 96-98 Reserve currently vested for the purposes of Recreation. Council gives in-principle support to amending the purpose of the reserve to include conservation, or dividing the reserve into two reserves, one for recreation, the other Conservation, subject to funding support from State Government to assist with management. Current management levels low. Weed control and some fencing undertaken with assistance from federal government grant. Would benefit from greater involvement of surrounding landowners in management.

v. Cardup Brook Bushland Sites [redacted] Vol 2 98-100,; Site 66 – private land, not surveyed by Local authority; Site 271 – protection of the Cardup Brook vegetation has been secured as part of the rezoning process. The remainder of site 271 should be considered for inclusion within the Darling Range Regional Park; Site 351: included in the Rural policy area within Shire's Rural Strategy. Short-medium term protection could be encouraged by supporting the landowner to fence off the creek and mature vegetation. Little understorey present. Where private land is involved, the eo advise land owers of council's submission.

vi. Cardup Nature Reserve and adjacent bushland [redacted] Vol 2 pg 100-101. Council has proposed to CALM that the vegetated portion of the Local Reserve Lot 154 Cardup Siding Rd be amalgamated into CALM's Nature Reserve. The vegetation in the Bushlark Close subdivision (included in Bushplan site) provides extra habitat for fauna into the Nature Reserve State/Local Government partnership should look at developing a package of incentives/assistance for small block owners who have good bushland on their property.. The package may include written materials and free technical assistance, and make use of existing bushland support staff .

vii. Norman Road Bushland Site [redacted] Vol 2 pg 102, Council strongly supports protection of this bushland site, and opposes mineral sand mining on a number of grounds including the destruction of regionally significant bushland. The north side is under threat of gradual clearing by stock and other means.

viii. Jackson Road Bushland Site [redacted], Vol 2 pg 103105, There is an immediate need to assist the landowners to fence this wetland vegetation. Given the number of landowners involved and the high perimeter to area ratio it is important to have the co-operation of landowners. One-to-one consultation with landowners is required.

ix. Roman Road Bushland, Whitby Site [redacted] Vol 2 Pg 105 negotiation between landowners, Ministry and Local Authority in progress. Residential usage may be compatible with bushland conservation, subject to the style of residential use, landowner commitment and practical measures taken to protect bushland.

x. Mundijong Road Flora Reserve & Watkins Road Bushland (incl CALM Nature Reserve) Site [redacted], Vol 2 pg 106 – 108. Mundijong Road Flora Reserve – The reserve is currently unvested. Council is prepared to jointly vest with CALM, however CALM are unable to do this under their Act. The Shire is prepared to take on vesting of the land if assistance is forthcoming from CALM. Management of the reserve requires strong community involvement given that there are many adjacent private and public land managers and users. Weed control has been undertaken with the assistance of a Federal government grant. Watkins Road bushland including CALM reserve – no active management is carried out by CALM. No signage or fencing, heavy disturbance caused by rubbish dumping and bike use.

xi. Transit Road Bushland Site [redacted] Vol 2 pg 108-109, -Council notes the importance of this vegetation.

xii. Rapids Road Bushland Site [redacted] Vol 2 113-114 – 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 will be given

System 6 Update - Floristic Community Type Mapping Information DRAFT ONLY

AREA INFORMATION

System 6 Area (C or M) or Update Area (Update) Brickwood

Conservation Area	
Nature Reserve	
Reserve No	
National Park	
Reserve No	
Local Government	Shire of Serpentine - Jarrahdale
Reserve No	17490 (recreation)
Other	
Proposed Conservation Areas	
Local Government	
Reserve No	37404
Other	WA Baptist Hospital & Homes Trust Inc 40yr lease

Conservation Area

Nature Reserve	
Reserve No	
National Park	
Reserve No	
Local Government	
Reserve No	
Other	

TOTAL AREA

Bushland Area	58.438	hectares
Completely Degraded	9.751 ha	

AREA MAPPED FLORISTIC UNITS

Units	Site (Condition) Code G : BRICK	Bound	Area (ha)
3a	Ø1 (2) Ø3 (2) Ø5 (2)	B	30.937
	Ø6 (2) Ø7 Ø8 (2)		
9	Ø4 (3)	B	2.125
20b	Ø2 (2 5)	B	7.10
land east of Soldiers Rd unsuitable for sites			
9			4.875
3a			3.875

Boundaries determined by use of

aerial photograph	Metro Street Directory run 13 S167 4/1/91 also M83
orthophoto	2033 1 SE Aug 1991
vegetation map	Gibson et al
soil map	

Metro map 7

CONTACT DR N. GIBSON CALM WOODVALE for further information.
Flora list for Brickwood Reserve, Byford(extracted from Swan Coastal Plain database, Brick 1-8, 228 taxa, 9/5/1995).

Department of Environmental Protection System 6 Update: Site Based Flora List Brickwood Reserve, Byford
(extracted from the CALM Swan Coastal Plain database, Brick 1-8, 228 taxa, 9/5/95)

Anthericaceae
- Agrostocrinum scabrum
- Arnocrinum preissii
- Borya scirpoidea
- Caesia micrantha
- Caesia micrantha "large swamp form" scps (BJK&NG 094)
- Caesia occidentalis
- Chamaescilla corymbosa
- Laxmannia sessiliflora subsp. australis
- Sowerbaea laxiflora
- Thysanotus manglesianus
- Thysanotus patersonii
- Thysanotus sp. scps
- Thysanotus sparteus
- Thysanotus thyrsoideus
- Thysanotus triandrus
- Tricoryne elatior
- Tricoryne humilis

Apiaceae
- Hydrocotyle alata
- Hydrocotyle diantha
- Hydrocotyle pilifera
- Schoenolaena juncea
- Trachymene pilosa
- Xanthosia huegelii

Asteraceae
- * Aster subulatus
- Hyalosperma cotula
- * Hypochaeris glabra
- Quinetia urvillei
- Senecio quadridentatus
- Siloxerus humifusus
- * Sonchus asper
- * Sonchus oleraceus
- * Ursinia anthemoides
- Waitzia paniculata

Caesalpiniaceae
- Labichea punctata

Campanulaceae
- Wahlenbergia preissii

Casuarinaceae
- Allocasuarina humilis

Centrolepidaceae
- Aphelia cyperoides
- Centrolepis aristata
- Centrolepis drummondiana

CONTACT DR N. GIBSON CALM WOODVALE for further information.
Flora list for Brickwood Reserve, Byford(extracted from Swan Coastal Plain database, Brick 1-8, 228 taxa, 9/5/1995).

Colchicaceae
- Burchardia multiflora
- Burchardia umbellata
- Wurmbea dioica

Cyperaceae
- Baumea acuta
- Baumea juncea
- Chorizandra enodis
- Cyathochaeta avenacea
- * Cyperus tenellus
- * Isolepis marginata
- Lepidosperma angustatum
- Lepidosperma costale
- Lepidosperma eastern terete scps (BJK&NG 232)
- Lepidosperma leptostachyum
- Lepidosperma longitudinale
- Mesomelaena pseudostygia
- Mesomelaena stygia
- Mesomelaena tetragona
- Schoenus bifidus
- Schoenus brevisetis
- Schoenus nanus
- Schoenus odontocarpus
- Schoenus rodwayanus
- Schoenus spp. scps
- Schoenus subbarbatus
- Schoenus subbulbosus
- Schoenus subflavus
- Schoenus unispiculatus
- Tetraria octandra
- Tricostularia neesii var. neesii

Dasypogonaceae
- Calectasia cyanea
- Calectasia grandiflora
- Dasypogon bromeliifolius
- Kingia australis
- Lomandra brittanii
- Lomandra hermaphrodita
- Lomandra micrantha
- Lomandra odora
- Lomandra preissii
- Lomandra purpurea

Dilleniaceae
- Hibbertia acerosa
- Hibbertia huegelii
- Hibbertia hypericoides

Droseraceae
- Drosera erythrorhiza
- Drosera gigantea
- Drosera glanduligera
- Drosera heterophylla

Drosera menziesii
Drosera menziesii subsp. menziesii
Drosera paleacea scps subsp. paleacea
Drosera pallida
Drosera rosulata
Drosera stolonifera
Drosera subhirtella

Epacridaceae
Astroloma pallidum
Conostephium pendulum
Lysinema ciliatum

Euphorbiaceae
Poranthera microphylla
Stachystemon vermicularis

Goodeniaceae
Dampiera alata
Dampiera linearis
Goodenia caerulea
Goodenia pulchella
Goodenia sp indet scps
Lechenaultia biloba
Lechenaultia expansa
Scaevola glandulifera
Velleia trinervis

Haemodoraceae
Anigozanthos manglesii
Anigozanthos viridis
Conostylis aculeata
Conostylis juncea
Conostylis setigera
Haemodorum discolor
Haemodorum laxum
Haemodorum sp. scps
Haemodorum spicatum
Phlebocarya filifolia
Tribonanthes australis
Tribonanthes longipetala

Hypoxidaceae
Hypoxis occidentalis

Iridaceae
Patersonia occidentalis
Patersonia occidentalis (swamp form) sthcst
* Romulea rosea
* Watsonia bulbillifera
* Watsonia meriana

Juncaceae
* Juncus bufonius
Juncus holoschoenus

CONTACT DR N. GIBSON CALM WOODVALE for further information.
Flora list for Brickwood Reserve, Byford(extracted from Swan Coastal Plain database, Brick 1-8, 228 taxa, 9/5/1995).

Lauraceae
- Cassytha glabella

Lobeliaceae
- Lobelia tenuior

Loranthaceae
- Nuytsia floribunda

Mimosaceae
- Acacia drewiana
- Acacia lasiocarpa
- Acacia pulchella
- Acacia pulchella scps var. reflexa ms
- Acacia sessilis

Myrtaceae
- Baeckea camphorosmae
- Calytrix aurea
- Darwinia thymoides
- Eremaea asterocarpa subsp. asterocarpa
- Eucalyptus calophylla
- Hypocalymma robustum
- Kunzea micrantha
- Kunzea recurva
- Melaleuca lateriflora var. acutifolia FPR
- Melaleuca viminea
- Pericalymma ellipticum
- Verticordia densiflora
- Verticordia pennigera
- Verticordia plumosa

Orchidaceae
- Caladenia sp. scps
- Eriochilus dilatatus
- Leporella fimbriata
- Lyperanthus nigricans
- Prasophyllum drummondii
- Prasophyllum sp. scps
- Thelymitra crinita

Papilionaceae
- Aotus procumbens
- Bossiaea eriocarpa
- Daviesia decurrens
- Daviesia physodes
- Gompholobium aristatum
- Gompholobium marginatum
- Gompholobium tomentosum
- Isotropis cuneifolia
- Jacksonia sternbergiana
- * Lotus angustissimus
- Nemcia capitata
- Nemcia reticulata
- Viminaria juncea

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Flora list for Brickwood Reserve, Byford(extracted from Swan Coastal Plain database, Brick 1-8, 228 taxa, 9/5/1995).

Philydraceae
Philydrella pygmaea

Poaceae
Agrostis preissii
Amphipogon debilis
Amphipogon laguroides
Amphipogon turbinatus
* Briza maxima
* Briza minor
Danthonia caespitosa
Danthonia pilosa
* Eragrostis curvula
Eragrostis elongata
Neurachne alopecuroidea
* Pennisetum clandestinum
* Pentaschistis airoides
* Phleum pratense
Polypogon tenellus
Stipa compressa
Stipa semibarbata
* Vulpia bromoides
* Vulpia myuros

Polygalaceae
Comesperma calymega

Primulaceae
* Anagallis arvensis

Proteaceae
Adenanthos meisneri
Banksia attenuata
Banksia menziesii
Conospermum stoechadis
Dryandra nivea
Grevillea bipinnatifida
Grevillea pilulifera
Hakea ceratophylla
Hakea incrassata
Hakea prostrata
Hakea ruscifolia
Hakea sulcata
Hakea trifurcata
Hakea varia
Isopogon asper
Petrophile media scps var. juncifolius ms
Petrophile seminuda
Stirlingia latifolia
Synaphea petiolaris
Xylomelum occidentale

Restionaceae
Hypolaena exsulca
Leptocarpus coangustatus
Lepyrodia macra

CONTACT DR N. GIBSON CALM WOODVALE for further information.
Flora list for Brickwood Reserve, Byford(extracted from Swan Coastal Plain database, Brick 1-8, 228 taxa, 9/5/1995).

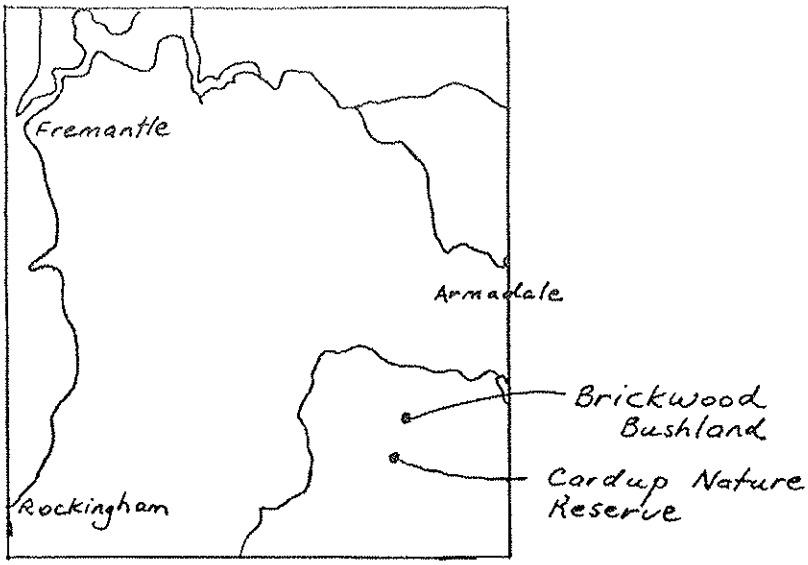
Loxocarya fasciculata
Lyginia barbata
Restio sinosus scps ms

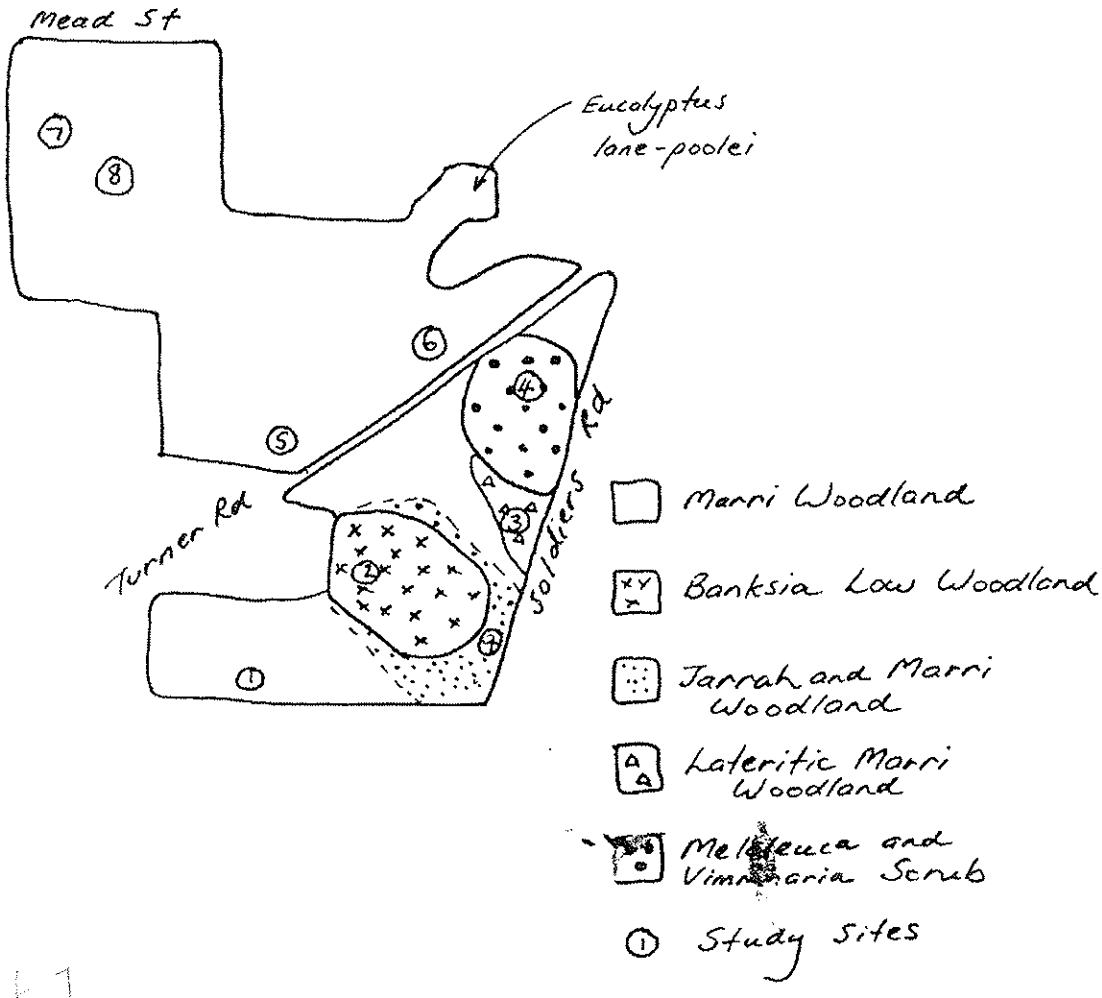
Rutaceae
Eriostemon spicatus

Stackhousiaceae
Tripterococcus brunonis

Stylidiaceae
Levenhookia pusilla
Levenhookia stipitata
Stylidium brunonianum
Stylidium dichotomum
Stylidium ecorne
Stylidium mimeticum
Stylidium petiolare
Stylidium piliferum
Stylidium pulchellum

Xanthorrhoeaceae
Xanthorrhoea preissii





brick 1
brick 2
brick 3
brick 4
brick 5
brick 6
brick 7
brick 8

Swan Coastal Plain Survey – SURVEY RECORDING SHEET

QUADRAT No. 1 (Brickwork) VEGETATION TYPE Marri Open Woodland

DATE TRIP 14th August 1991 BOTANIST Bronwyn K

VOLUNTEERS John, Margaret K., Mike, Ellen, Ann.

24/11/92 BJK

BRICK

Keighery and Keighery, 1990
Adapted from Griffin and Keighery, 1989
MOORE RIVER to JURIEN SANDPLAIN
SURVEY. WILDFLOWER SOCIETY of WA

1. LOCATION of the QUADRAT

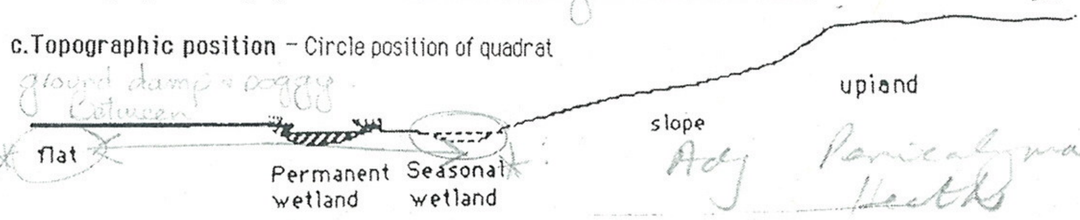
a. **Mud Map** Draw a sketch of the location of the quadrat the back of this sheet. →

b. **Photograph** Photographer's name Neil Gay

COND 2

c. **Topographic position** – Circle position of quadrat

ground damp + boggy between



Adj Pericalymma Heath

2. SITE DATA – Circle the correct response

Slope (flat) gentle steep Aspect N NE E SE S SW W NW

% Bare ground 0% Drainage well mod (poor) Wet All year (winter/spring)

Litter (% cover) 1% Surface soil Heavy Clay Sub-surface soil Clay.

3. VEGETATION STRUCTURE AND COVER Record appropriate cover class

	TREES: Marri; Nuytsia Floribunda (Xmas Tree)		MALLEES	
LIFE FORM	>15m or 5-15m	under 5m	MALLEE SHRUB less than 8m	MALLEE TREE 8m or more
COVER CLASS (%)	>15m 2-10%; 5-15m	under 2%	0%	0%

	SHRUBS: Xanthorrhoea / Preiss; Scott kingia					SHRUBS
LIFE FORM	over 2m	2.0-1.5m	1.5-1.0m	1.0m - .5m (Ac pulchella mixed)	under .5m	
COVER CLASS (%)	0%	(2→10%) 10-20%	0%	2-10%	2-10%	

Hox las, Hypocalymma, ex.

	MAT PLANTS	BUNCH GRASSES	HERBS: Borya, Scirp, Stylid, Lob	SEDGES: Cyath, Lepid; Meso tet, Tet oct	
LIFE FORM	under 10cm	under .5m	under .5m (except creepers)	over .5m 30-50%	under .5m
COVER CLASS (%)	0%	under 2%	2-10% 10-20	0%	(2-10%)

Cover Class – percentage classes: 0% | under 2% | 2-10% | 10-20% | 20-30% | 30-50% | 50-70% | over 70%

Height (metres): 15m, 10m, 5m; 3m, 2m, 1m; 2.0m, 1.5m, 1.0m, .5m

Old sheets, New sheets PC'ed & updated 16/5/96

4. SPECIES PRESENCE

- work systematically through the vegetation; start with the tallest stratum, i.e. trees
- within each stratum try to record the **most common species first** and the most uncommon last.
- as each species is collected **label** it with a numbered tag and use this number on your recording sheet
- indicate if the species is in **flower**

QUADRAT No. BRICK 1, 11/5/91, 24/11/91

Keighery and Keighery, 1990
Adapted from Griffin and Keighery, 1989
MOORE RIVER to JURIEN SANDPLAIN SURVEY. WILDFLOWER SOCIETY of WA

Trees	No	Fl
X [illegible] (Eucalyptus [illegible])	1	
X [illegible]	2	
		-
		-
		-
Mallees		
[illegible]		-
[illegible]		
[illegible]		-
		-
SHRUBS		-
X [illegible] var [illegible] ✓	3	✓
X [illegible] ✓	4	✓
X [illegible] ellipticum ✓	5	
X Eriostemon spicatus ✓	6	✓
X [illegible] ✓	7	
X [illegible] petiolaris ✓	8	✓
X [illegible] ✓	9	
X Hakea [illegible] ✓	10	
X Leschenaultia expansa 24/11	11	
X [illegible] fasciculata ✓	12	
X [illegible] linearis ✓	13	-
24/11/91		✓
✓ Acacia [illegible] ✓	(1)	✓
✓ Goodenia coerulea ✓	(4)	
		✓
		✓
HERBS 24/11/91		
✓ Amphipogon[illegible] [illegible] ✓	(8)	
✓ Xanthosia huegelii ✓	(12)	
✓ [illegible] glabra	(13)	
✓ [illegible] ✓	(18)	
✓ [illegible] ✓	(19)	-
		-
		-

24/11/91 [illegible]	No	Fl
		-
✓ [illegible] young many		-
✓ Drosera (neesii & scp)		-
✓ [illegible] elatior ✓		-
✓ [illegible] scabrum ✓		-
✓ Drosera [illegible] ✓		-
✓ Stylidium [illegible] ✓		
✓ Stylidium mimeticum ✓		-
✓ Hydrocotyle alata ✓		-
✓ [illegible] ✓		
✓ Levenhookia [illegible] ✓		
✓ [illegible] = pulchella ✓		
✓ [illegible] ✓		
		-
Mat Plants		-
		✓
Bunch Grasses		
[illegible] = 26	25	-
[illegible]	26	-
SCHOEN SUBARBATUS X	27	
		-
50? Danthonia pilosa ✓	(2)	
* Briza maxima ✓	(10)	
		-
[illegible]		-
Amphipogon [illegible] ✓	(11)	-
[illegible] = (2)	(12)	-
		1/0
		-
		-
		-
Herbs		
X Thysanotus [illegible] ✓	14	
X Stylidium dichotomum ✓	15	
✓ Phlebocarya [illegible] 34	30	

[illegible]	No	Fl
X [illegible] ✓ (ADD)	21	
X [illegible]	22	
X Tricoryne humilis ✓	23	
[illegible]	24	
X [illegible] ✓	18	
X [illegible] ✓	20	
X Burchardia [illegible]	32	✓
X [illegible] preissii	33	
X Haemodorum spicatum	31	
✓ Eriochilus [illegible] (Bunyan[illegible])	35	
X [illegible]	36	
X Patersonia [illegible] ?Swamp	39	
X Drosera gigantea ✓	20	
X [illegible]	[illegible]	
X Thysanotus [illegible] ✓	17	
✓ [illegible] micrantha X		
Sedges		
X Cyathochaeta avenacea ✓	16	
X [illegible]	17	
[illegible]	1	
X Mesomelaena [illegible] ✓	19	
24/11/92		
✓ [illegible] ✓	(6)	
✓ [illegible] brevicaulis ✓	(7)	✓?
✓ Schoenus [illegible] ✓		
✓ Schoenus [illegible] ✓		
✓ Aphelia cyperoides ✓		
X Xanthorrhoea [illegible] ✓	31	
✓ Thysanotus manglesii ✓	27	
✓ [illegible] ✓	31	
X Caesia [illegible] ✓	43	
ADDITIONAL		
[illegible]		
[illegible]		
[illegible]		

Swan Coastal Plain Survey - SURVEY RECORDING SHEET

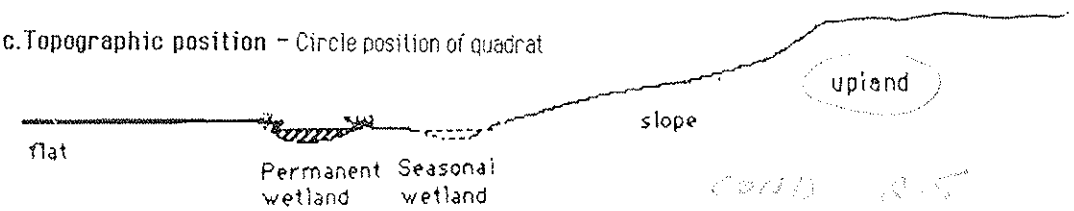
QUADRAT No. _____ VEGETATION TYPE _____
DATE TRIP _____ BOTANIST _____
VOLUNTEERS _____

1. LOCATION of the QUADRAT

a. Mud Map Draw a sketch of the location of the quadrat the back of this sheet →

b. Photograph Photographer's name _____

c. Topographic position – Circle position of quadrat



Keighery and Keighery, 1990
Adapted from Griffin and Keighery, 1989
MOORE RIVER to JURIEN SANDPLAIN SURVEY. WILDFLOWER SOCIETY of WA

2. SITE DATA – Circle the correct response

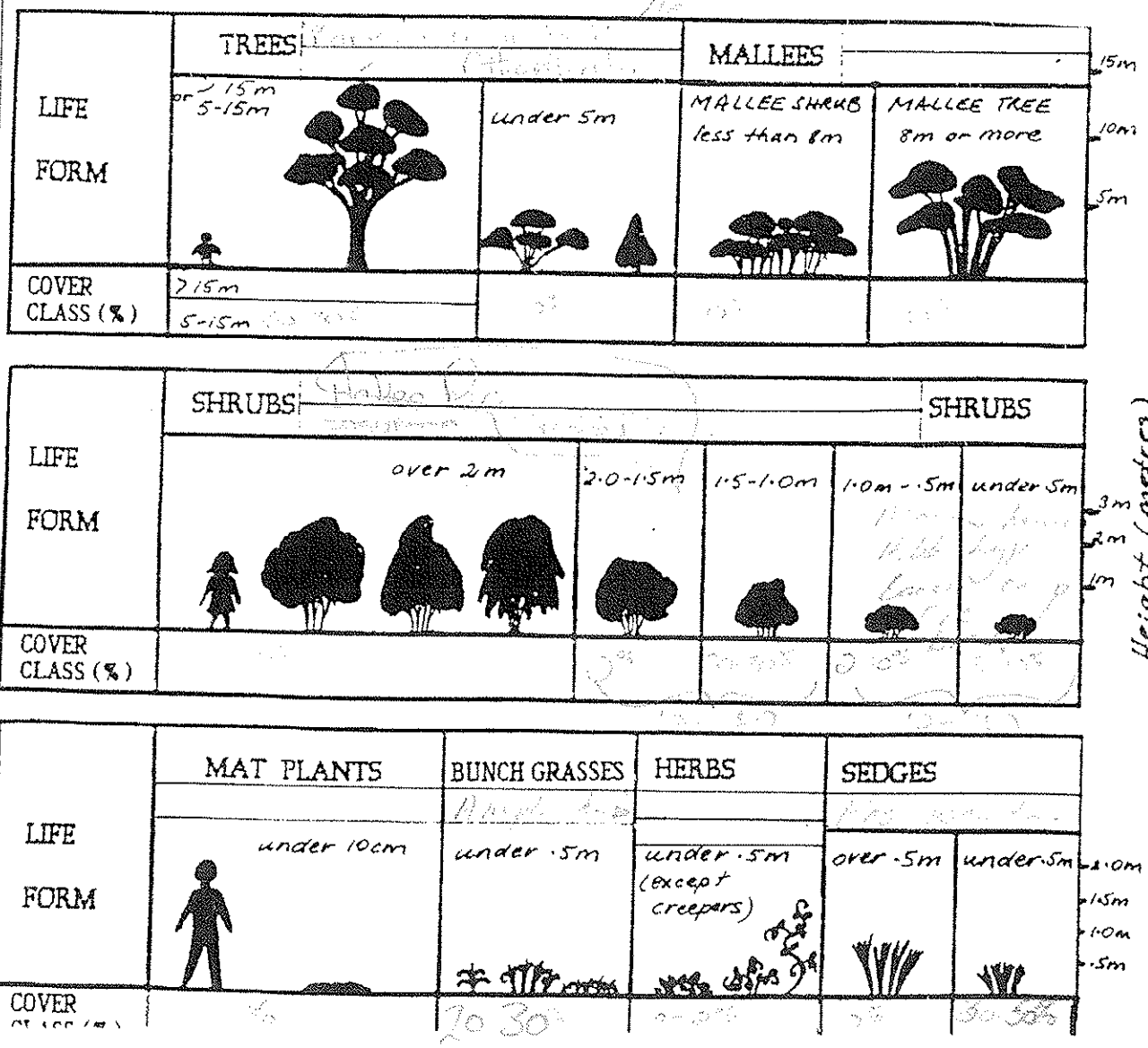
Slope (flat) gentle steep Aspect N NE E SE S SW W NW

% Bare ground _____ Drainage well mod poor Wet All year winter/spring

Litter (% cover) _____ Surface soil _____ Sub-surface soil _____

3. VEGETATION STRUCTURE AND COVER Record appropriate cover class

Cover Class – percentage classes: 0% | under 2% | 2-10% | 10-20% | 20-30% | 30-50% | 50-70% | over 70%

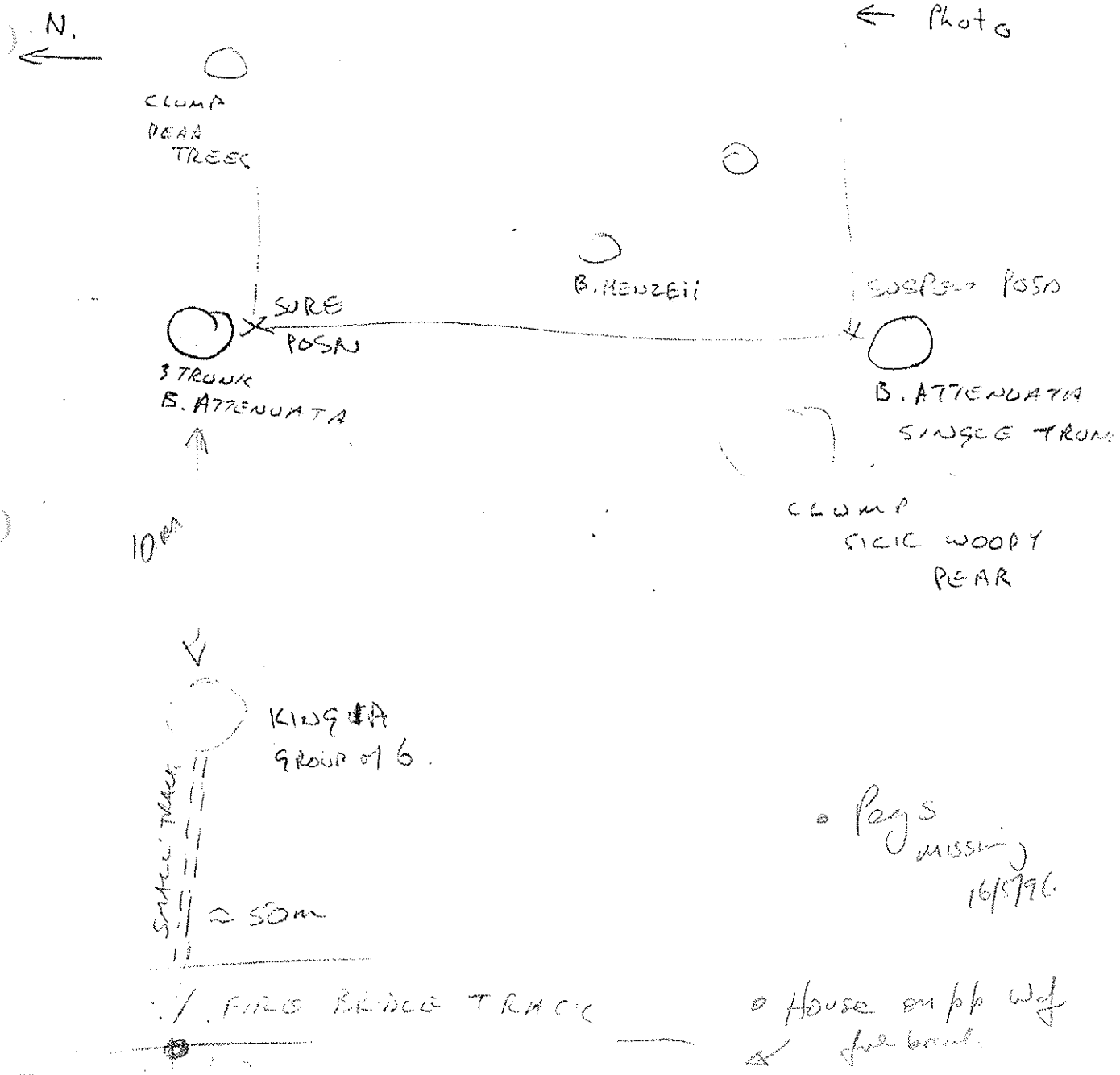


MAP 3.
KINGIA

BRICK L.
UPDATED MAP
16/5/96

PEG [illegible]

[illegible]



SPECIES PRESENCE

QUADRAT No.

- work systematically through the vegetation, start with the tallest stratum, i.e. trees
- within each stratum try to record the **most common species first** and the most uncommon last.
- as each species is collected **label** it with a numbered tag and use this number on your recording sheet
- indicate if the species is in **flower**

Keighery and Keighery, 1990
Adapted from Griffin and Keighery, 1989
MOORE RIVER to JURIEN SANDPLAIN
SURVEY. WILDFLOWER SOCIETY of WA

Trees

Mallees

SHRUBS

Mat Plants

Bunch Grasses

Herbs

Sedges

Brick 2

Adjacent S

Centrolepis drummondii }
Polypomp. multifidus } Adj Brick 1
Agrostis avenacea Adj Brick 4
Podolepis sp 'pink' = white Lane. Brick 4
Paspalum dilatatum Brick 4
Ptilotus manglesii Brick 4
Isolepis hypnoides Brick 4
Lolium angustifolia Brick 4.

ADJ Downslope Brick 2
Stylid. utric
Stylid calcaratum
Centrolepis aristata

Swan Coastal Plain Survey - SURVEY RECORDING SHEET

QUADRAT No _____ VEGETATION TYPE Mixed Open woodland

DATE TRIP _____ BOTANIST _____

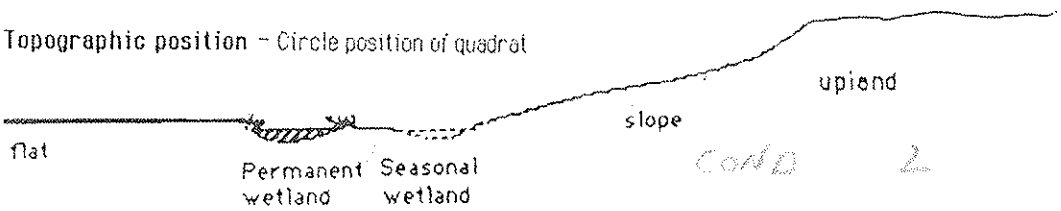
VOLUNTEERS _____

1. LOCATION of the QUADRAT

a. **Mud Map** Draw a sketch of the location of the quadrat the back of this sheet →

b. **Photograph** Photographer's name _____

c. **Topographic position** – Circle position of quadrat



Keighery and Keighery, 1990
Adapted from Griffin and Keighery, 1989
MOORE RIVER to JURIEN SANDPLAIN SURVEY. WILDFLOWER SOCIETY of WA

2. SITE DATA – Circle the correct response

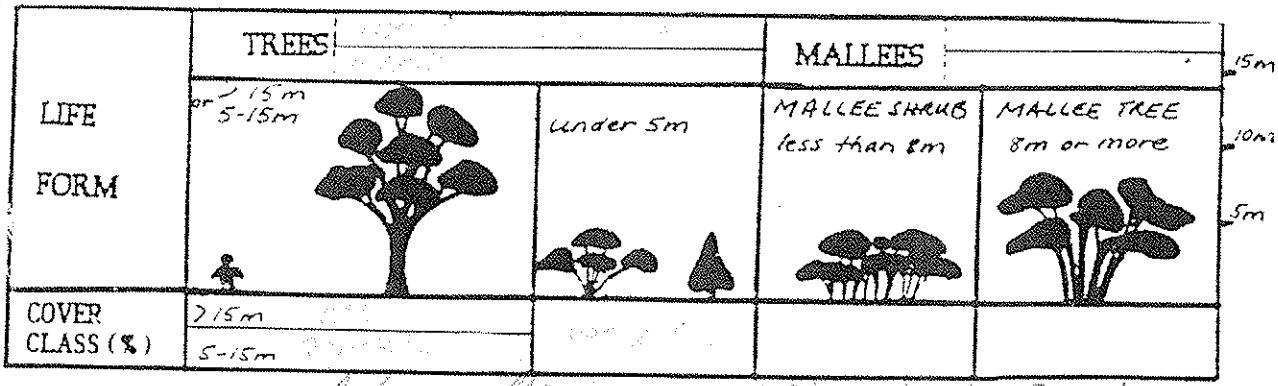
Slope flat gentle steep Aspect N NE E SE S SW W NW

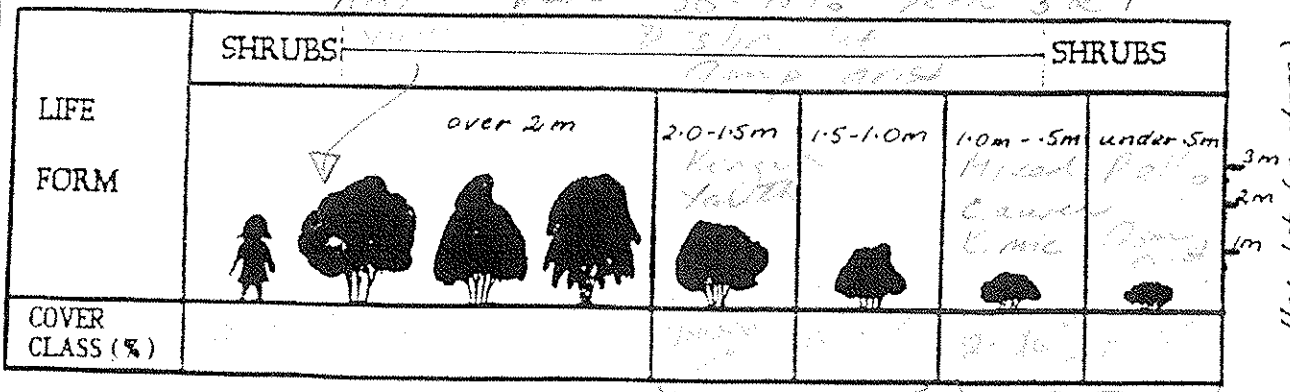
% Bare ground____ Drainage well mod poor Wet All year winter/spring

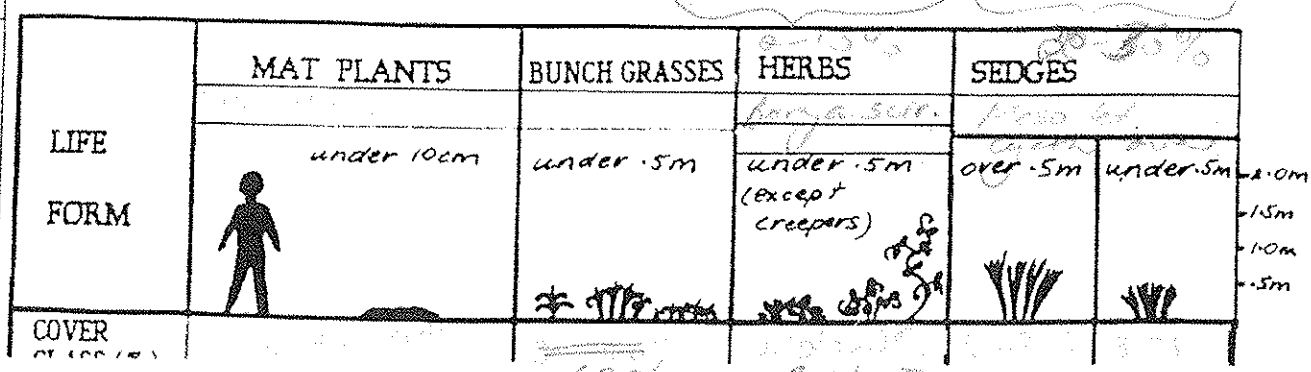
Litter (% cover)_____ Surface soil_____ Sub-surface soil _____

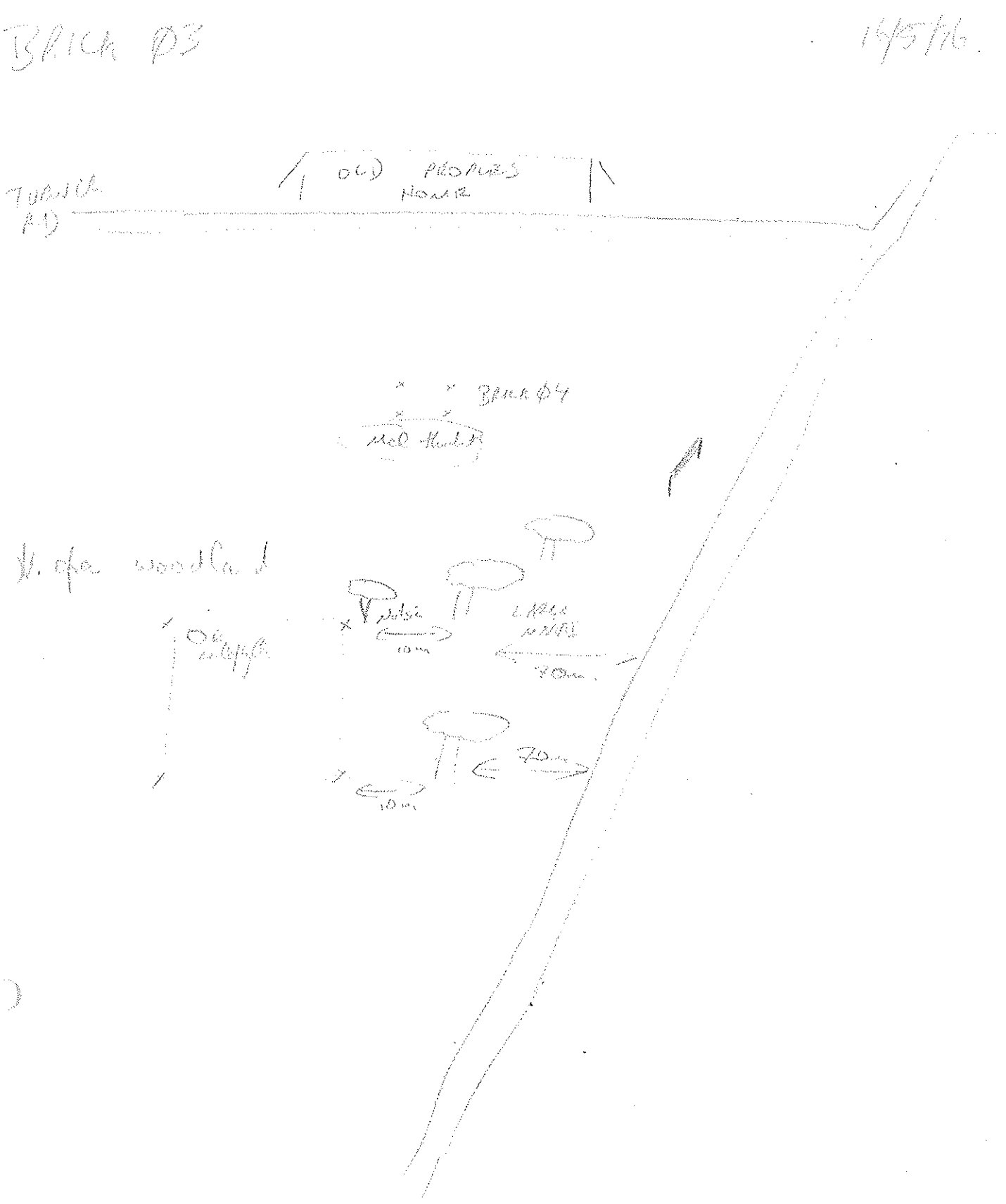
3. VEGETATION STRUCTURE AND COVER Record appropriate cover class

Cover Class – percentage classes: 0% | under 2% | 2-10% | 10-20% | 20-30% | 30-50% | 50-70% | over 70%








10 m
70 m
10 m

SPECIES PRESENCE

- work systematically through the vegetation: start with the tallest stratum, i.e. trees
- within each stratum try to record the most common species first and the most uncommon last
- as each species is collected label it with a numbered tag and use this number on your recording sheet
- indicate if the species is in flower

Keighery and Keighery, 1990
Adapted from Griffin and Keighery, 1989
MOORE RIVER to JURIEN SANDPLAIN
SURVEY. WILDFLOWER SOCIETY of WA

QUADRAT No.
BRIC 3 [illegible]

Trees

Species	No	ID
Eucalyptus [illegible]	2	
Nuytsia floribunda		

Mallees

Species	No	ID

SHRUBS

Species	No	ID
[illegible] capitatum	20	✓
[illegible] preissii	47	✓
Kunzea (ericifolia) [illegible]	22	✓
[illegible]	12	✓
Eremaea aff. brevifolia	7	✓
[illegible] australis	4	✓
[illegible]	9	✓
[illegible]	10	✓
Dryandra nivea	6	✗
Eriostemon spicatus	13	✗
[illegible]	5	✓
[illegible]	5	✓
Verticordia [illegible]	3	
[illegible] gracilis	29	
[illegible]	[illegible]	✗
[illegible]	34	
[illegible]	31	✓

SHRUBS

Species	No	ID
[illegible] 24/11		
[illegible]	6	✓
[illegible] 12	3	✓
[illegible] 20, 23	[illegible]	✓
Gastrolobium [illegible]	[illegible]	✓
[illegible]	12	✓
Stirlingia [illegible]	[illegible]	✓
[illegible]	[illegible]	✓
[illegible]	[illegible]	✓
[illegible]	13	✓
[illegible] linearis 27, 2	15	✓
[illegible]	29	✓
[illegible] pygmaea	[illegible]	✓
[illegible] SCP 26	[illegible]	✓

Bunch Grasses

Species	No	ID
[illegible]	[illegible]	VSP
[illegible] laguroides	22	
[illegible]	14	✓
	17	VSP
Agrostis preissii	30	✓

Herbs

Species	No	ID
[illegible]	20	✓
Hypochaeris glabra & 38	27	✓
[illegible]	19	✓
Drosera menziesii	28	✓
[illegible]	52	✓
[illegible]	54	✓
[illegible]	17	✓
[illegible] sp	37	
Conostylis [illegible]	43	✓
Cassytha [illegible]	49	✓
[illegible]	25	✗
[illegible]	75	✗
[illegible]	42	✓
[illegible] purpurea	28	✓
[illegible]	32	✗
Dampiera linearis 36	14	✗
Hydrocotyle [illegible]	46	✓
[illegible] 48 & 15		✓

Herbs

Species	No	ID
[illegible]	40	✓
[illegible] sp	44	✓
[illegible]	53	✓
[illegible] pilosa 3		✓
herb (seedling)	52	
herb (seedling)	53	
[illegible] hermaphrodita	21	
Drosera [illegible]	41	
Tribonanthes australis	50	
24/11		
[illegible] preissii	33	✓
[illegible]	32	✓
[illegible]	35	✓
[illegible]	141	✓
Schoenus [illegible] corymbosa	11	VSP

Sedges

Species	No	ID
~~[illegible]~~	~~[illegible]~~	✗
Loxocarya fasciculata	16	✗
Mesomelaena (stygia)	24	✗
("pseudo-") ??		
~~[illegible]~~	~~23~~	
~~[illegible]~~ below	~~18~~	
[illegible]	34	✓
Schoenus subbarbatus	[illegible]	✗
? Restionaceae sp	19	
Lepyrodia [illegible]	51	✗
Schoenus unispiculatus	35	VSP
[illegible]	10	✓
[illegible]	18	✓
[illegible]	16	✓
[illegible]	26	✓
Lepidosperma [illegible]	38	✓
[illegible]	17	VSP
[illegible]	21	✓
[illegible]	[illegible]	✓

Swan Coastal Plain Survey - SURVEY RECORDING SHEET

QUADRAT No. 2 VEGETATION TYPE _____

DATE TRIP _____ BOTANIST _____

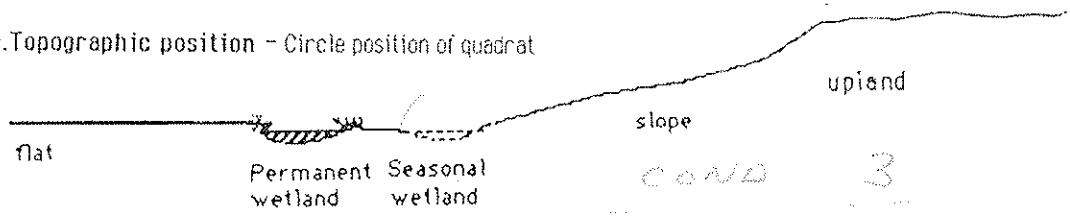
VOLUNTEERS _____

1. LOCATION of the QUADRAT

a. Mud Map Draw a sketch of the location of the quadrat the back of this sheet →

b. Photograph Photographer's name _____

c. Topographic position - Circle position of quadrat



Keighery and Keighery, 1990
Adapted from Griffin and Keighery, 1989
MOORE RIVER to JURIEN SANDPLAIN
SURVEY. WILDFLOWER SOCIETY of WA

2. SITE DATA - Circle the correct response

Slope flat gentle steep Aspect N NE E SE S SW W NW

% Bare ground____ Drainage well mod poor Wet All year winter/spring

Litter (% cover) 5 Surface soil _____ Sub-surface soil _____

3. VEGETATION STRUCTURE AND COVER Record appropriate cover class

Cover Class - percentage classes: 0% under 2% | 2-10% | 10-20% | 20-30% | 30-50% | 50-70% | over 70%

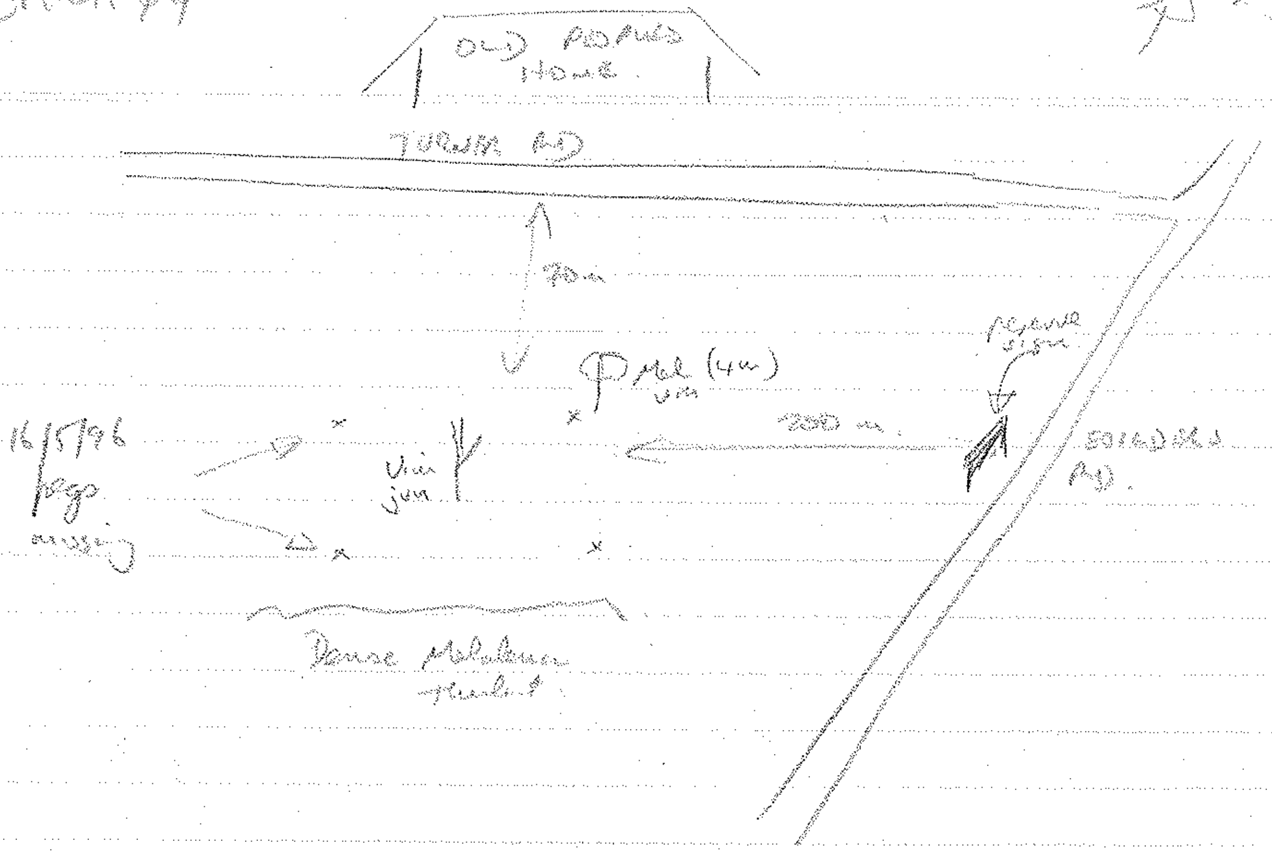
LIFE FORM					
TREES			MALLEES		15m
>15m or 5-15m	under 5m		MALLEE SHRUB less than 8m	MALLEE TREE 8m or more	10m
					5m
COVER CLASS (%)	>15m 5-15m				

LIFE FORM						
SHRUBS Melaleuca uncinata, M. lateritia, Viminaria juncea					SHRUBS	
over 2m	2.0-1.5m	1.5-1.0m	1.0m-.5m	under .5m		3m
						2m
						1m
COVER CLASS (%)	? 30-50%					

Height (metres)

LIFE FORM					
MAT PLANTS	BUNCH GRASSES	HERBS	SEDGES		2.0m
under 10cm	under .5m	under .5m (except creepers)	Chorizandra cuspidata over .5m	under .5m	1.5m
					1.0m
					.5m
COVER CLASS (%)					

BRICH 04


OLD PEOPLES HOME
TURUA RD
70m
Mel (4m)
200 m
reserve sign
SOLDIERS RD.
16/5/96
pegs missing
Dense Melaleuca thicket

4. SPECIES PRESENCE

QUADRAT No.

- work systematically through the vegetation; start with the tallest stratum, i.e. trees
- within each stratum try to record the **most common species first** and the most uncommon last.
- as each species is collected **label** it with a numbered tag and use this number on your recording sheet
- indicate if the species is in **flower**

Keighery and Keighery, 1990
Adapted from Griffin and Keighery, 1989
MOORE RIVER to JURIEN SANDPLAIN
SURVEY. WILDFLOWER SOCIETY of WA

Trees

Species	No	Fl
VIMINEA		

Mallees

Species	No	Fl

SHRUBS

Species	No	Fl
JUNCEA		✓
~~[illegible]~~		
✗ Melaleuca lateriflora ✓		
✓ Melaleuca viminea	(10)	=1

(Column 2)

Species	No	Fl
✓ Flowers yellow VSP		

Mat Plants

Species	No	Fl

Bunch Grasses

Species	No	Fl
= 5		
Eragrostis elongata		
* Eragrostis curvula		
24/11 [illegible]	(8)	✓
* [illegible] clandestinum	(10)	✓
* Eragrostis curvula = 5	(12)	✓
* Polypogon [illegible]	(2)	✓

Herbs

Species	No	Fl
TIFLORA		✓
* ASTER SUBULATUS		
* SIS		
* SONCHUS OLERACEUS		✓
* Lagurus ovatus	11	✗
Phleum pratense		

(Column 3)

Species	No	Fl
* Sonchus asper (thistle)		
* LOTUS ANGUSTISSIMUS		
(CHARA – ALGAE)		
* Hypochaeris glabra		
24/11 [illegible]	(5)	✓
" [illegible]	(5)	[illegible]
* [illegible]	(4)	✓
[illegible]	(7)	✓
[illegible]	(3)	✓

Sedges

Species	No	Fl
Chorizandra enodis		✓
* " [illegible]		✓
~~[illegible]~~		
(✓ = Chorizandra enodis		
✗ 24/11 = 11 VSP [illegible]		
ADJAC		
* ROMULEA ROSEA		
WURMBEA DIOICA		
20/11/91		
Juncus bufonius (✗)	(5)	[illegible]
ADJ [illegible]		✓
Lepidosperma [illegible]	(9)	✓
[illegible]	[illegible]	✓
[illegible]	[illegible]	✓
[illegible] (= [illegible])	[illegible]	✓
Isolepis marginata	[illegible]	✓
[illegible]	[illegible]	✓
Juncus [illegible]		

Swan Coastal Plain Survey - SURVEY RECORDINGSHEET

QUADRAT No. BRICK 5 VEGETATION TYPE [illegible]
DATE TRIP 11 AUG. 1991 BOTANIST [illegible]
VOLUNTEERS [illegible]

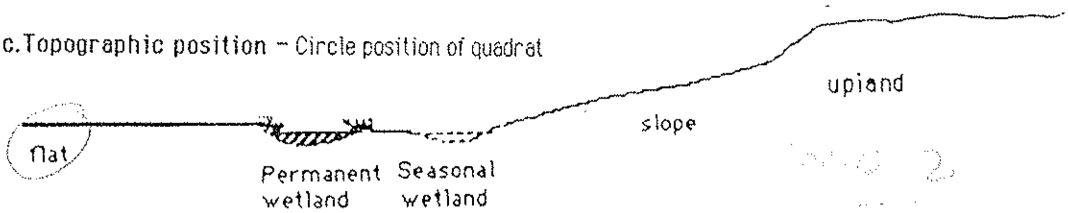
Keighery and Keighery, 1990
Adapted from Griffin and Keighery, 1989
MOORE RIVER to JURIEN SANDPLAIN
SURVEY. WILDFLOWER SOCIETY of WA

1. LOCATION of the QUADRAT

a. Mud Map Draw a sketch of the location of the quadrat the back of this sheet

b. Photograph Photographer's name

c. Topographic position - Circle position of quadrat



2. SITE DATA - Circle the correct response

Slope (flat) gentle steep Aspect N NE E SE S SW W NW

% Bare ground 12% Drainage well (mod) poor Wet All year (winter/spring)

Litter (% cover) 12% Surface soil Sandy Loam Sub-surface soil [illegible]

3. VEGETATION STRUCTURE AND COVER Record appropriate cover class

Cover Class - percentage classes: 0% | under 2% | 2-10% | 10-20% | 20-30% | 30-50% | 50-70% | over 70%

LIFE FORM	TREES >15m / 5-15m	TREES under 5m	MALLEES: MALLEE SHRUB less than 8m	MALLEES: MALLEE TREE 8m or more
COVER CLASS (%)	>15m: / 5-15m:	UNDER 2%	—	—

Height (metres): 15m, 10m, 5m

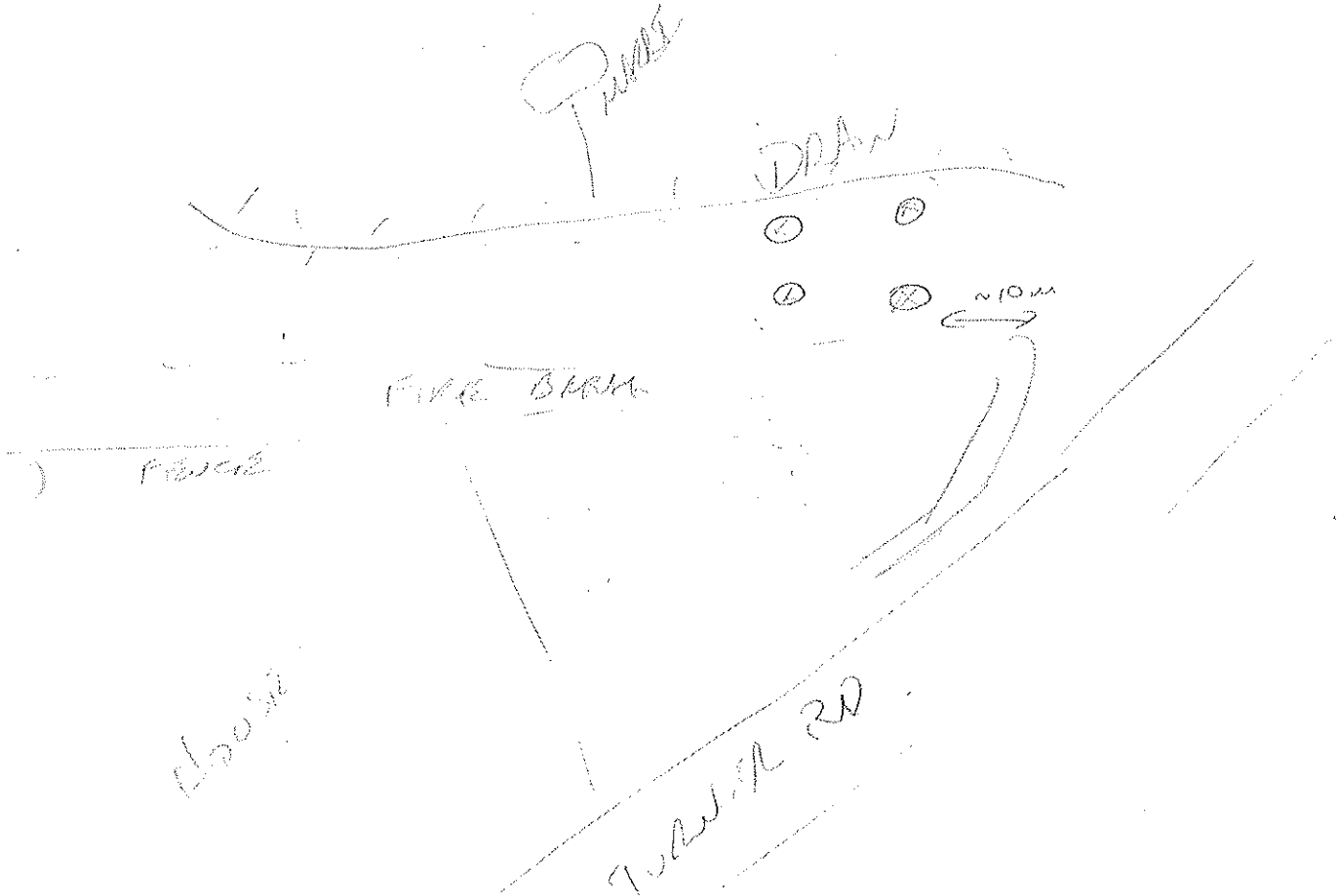
LIFE FORM	SHRUBS over 2m	2.0-1.5m	1.5-1.0m	1.0m-.5m (Pericalymma ellip[illegible])	under .5m
COVER CLASS (%)		UNDER 2%	2-10%	OVER 70%	2-10%

Height (metres): 3m, 2m, 1m

LIFE FORM	MAT PLANTS under 10cm	BUNCH GRASSES under .5m	HERBS under .5m (except creepers)	SEDGES over .5m	SEDGES under .5m
COVER CLASS (%)	UNDER 2%	0%	UNDER 2%	2-10%	UNDER 2%

Height (metres): 2.0m, 1.5m, 1.0m, .5m

BRICKS UPDATED map 16/5/96



4. SPECIES PRESENCE

QUADRAT No. [illegible]

- work systematically through the vegetation; start with the tallest sratum, i.e. trees
- within each stratum try to re[illegible]d the **most common species first** and the most u[illegible]mmon last.
- as each species is collected **label** it with a numbered tag and use this number on your recording sheet
- indicate if the species is in **flower**

Keighery and Keighery, 1990
Adapted from Griffin and Keighery, 1989
MOORE RIVER to JURIEN SANDPLAIN SURVEY. WILDFLOWER SOCIETY of WA

17/2/96

Trees	No	Fl
VIMINARIA JUNCEA ✓	1	X
Mallees		
STENBERGIANA		
SHRUBS JACKSONIA SPP	2	✓
VERTICORDIA [illegible]	3	X
HAKEA SULCATA ✓	4	X
HAKEA [illegible] ✓	5	X
BAECKEA CAMPHOROSMAE	6	X
XANTHORRHOEA PREISSII ✓	7	X
Hakea [illegible]	8	X
~~MELALEUCA [illegible]~~	~~9~~	X
SYNAPHEA PETIOLARIS ✓	10	✓
~~HAKEA~~ ✓	~~11~~	✓
~~PERICALYMMA [illegible]~~	~~13~~	X
STIRLINGIA LATIFOLIA ✓	15	X
~~PERICALYMMA [illegible]~~	~~16~~	✓
KUNZEA RECURVA ✓	17	X
~~HAKEA~~	~~24~~	X
GOMPHOLOBIUM MARGINATUM ✓	25	X
~~HAKEA [illegible]~~	~~26~~	X
MYRTACEAE [illegible]	27	X
ERIOSTEMUM SPICATUS ✓	28	✓
[illegible] ✓		

	No	Fl
Mat Plants MOSS + 4 LEAVED PLANT	29	X
DITTO (Delete)	30	
Bunch Grasses		
Herbs CAESIA PARVIFLORA	14	X
KALYPEACHARIS [illegible] ✓	18	X
URSINIA ANTHEMOIDES ✓	19	X
THYSANOTUS PATERSONII ✓	20	✓

	No	Fl
TETRARIA OCTANDRA ✓	23	
DAMPIERA LINEARIS ✓ (36)	31	X
WURMBEA DIOICA ✓	32	✓
[illegible]		
[illegible] occidentalis ✓		
[illegible] max. ✓		
[illegible] glabella		✓
Senecio ? [illegible] ✓		✓
Dampiera [illegible] ✓		X
[illegible] ✓		
[illegible] ✓		
Hypochaeris glabra ✓		
Podotheca ? pusilla ✓		
Trichocline [illegible] ✓	37	
Sedges		
MESOMELAENA TETRAGONA ✓	9	X
HYPOLAENA EXSULCA ✓	12	X
LEPTOCARPUS COANGUSTATUS ✓	21	X
CYATHOCHAETE AVENACEA ✓	22	X
[illegible] ✓		
Lyginia [illegible] ✓		
Schoenus [illegible]		
Lepidosperma ? [illegible]		
= 21		
= 4? = 21 ✓		
O Schoenus [illegible]	X	

O add to database

Swan Coastal Plain Survey - SURVEY RECORDING SHEET

QUADRAT No. ~~Bank~~ 6. VEGETATION TYPE Marri Woodland

DATE TRIP 11 Aug. 1991 BOTANIST D. Coultry

VOLUNTEERS Diana, Mary, Sam, Ron

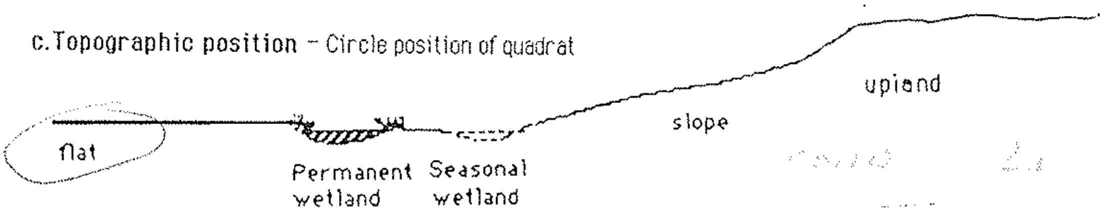
Keighery and Keighery, 1990
Adapted from Griffin and Keighery, 1989
MOORE RIVER to JURIEN SANDPLAIN SURVEY. WILDFLOWER SOCIETY of WA

1. LOCATION of the QUADRAT

a. Mud Map Draw a sketch of the location of the quadrat the back of this sheet

b. Photograph Photographer's name ________

c. Topographic position – Circle position of quadrat



2. SITE DATA – Circle the correct response

Slope (flat) gentle steep Aspect N NE E SE S SW W NW

% Bare ground 0-2 Drainage (well) mod poor Wet All year winter/spring

Litter (% cover) 2-10 Surface soil Sandy Loam Brown Sub-surface soil Sandy Loam Brown

3. VEGETATION STRUCTURE AND COVER Record appropriate cover class

Cover Class – percentage classes: 0% | under 2% | 2-10% | 10-20% | 20-30% | 30-50% | 50-70% | over 70%

	TREES: Marri		MALLEES	
LIFE FORM	>15m or 5-15m	under 5m	MALLEE SHRUB less than 8m	MALLEE TREE 8m or more
COVER CLASS (%)	>15m 10-20% / 5-15m	2-10%	—	—

	SHRUBS				SHRUBS
LIFE FORM	over 2m	2.0-1.5m	1.5-1.0m	1.0m-.5m	under .5m
COVER CLASS (%)	50-70%	10-20%	2-10%	2-10%	2-10%

	MAT PLANTS	BUNCH GRASSES	HERBS	SEDGES	
LIFE FORM	under 10cm	under .5m	under .5m (except creepers)	over .5m	under .5m
COVER CLASS (%)	2-10%	—	0-2%	—	10-20%

Height (metres): 15m, 10m, 5m; 3m, 2m, 1m; 2.0m, 1.5m, 1.0m, .5m

16/5/86

- Brick 6 appear to have disappeared under an old peoples home.
- GPS fixes corrected as necessary.

Brickwood

4. SPECIES PRESENCE

- work systematically through the vegetation; start with the tallest stratum, i.e. trees
- within each stratum try to re[illegible] the most common species first and the most u[illegible]mon last.
- as each species is collected label it with a numbered tag and use this number on your recording sheet
- indicate if the species is in flower

QUADRAT No. BRRK 6

Keighery and Keighery, 1990
Adapted from Griffin and Keighery, 1989
MOORE RIVER to JURIEN SANDPLAIN
SURVEY. WILDFLOWER SOCIETY of WA

Trees	No	Fl
EUC. CALOPHYLLA	1	×
Mallees		
SHRUBS HAKEA TRIFURCATA	2	✓
STIRLINGIA LATIFOLIA	3	✓
DRYANDRA NIVEA	4	✓
ISOPOGON ASPER	5	✓
ERIOSTEMON SPICATUM	6	✓
GREV. BIPINNATIFIDA	7	✓
SYNAPHEA petiolaris	8	✓
KUNZEA RECURVA	9	✓
HAKEA VARIA	10	×
PETROPHILE SEMINUDA	11	×
HAKEA PROSTRATA	12	×
KINGIA AUSTRALIS	15	×
XANTHORRHOEA PREISSII	19	×
GOMPHOLOBIUM ARISTATUM	22	×
NEMCIA CAPITATUM	24	✓
KUNZEA RECURVA	25	×
PERICALYMMA ELLIPTICUM	32	×
PETROPHILE SEMINUDA	35	×
~~DRYANDRA [illegible]~~	~~36~~	×
PETROPHILE SEMINUDA	37	×
HAKEA TRIFURCATA	38	×
PERICALYMMA ELLIPTICUM	39	×
VELLEIA TRINERVIS	42	×
PETROPHILE MEDIA VAR. [illegible]	44	×
GREVILLEA PILULIFERA	51	×
Pericalymma ellipticum ✓	[illegible]	
[illegible] plumosa	6[illegible]	

	No	Fl
Mat Plants NATIVE COUCH	33	×
UNNUMBERED MOSS.		
[illegible]	[illegible]	
[illegible]	[illegible]	
~~**Bunch Grasses**~~ HERBS 24/1/91		
[illegible]	[illegible]	
Hydrocotyle alata	[illegible]	
Lasthenia ? pusilla		
[illegible]	[illegible]	
Borya sciripodea	70	
Tri[illegible] [illegible]	71	
Herbs THYSANOTUS MANGLESIA	13	×
DROSERA ERYTHRORHIZA	16	×
~~HAKEA~~ DROSERA PALLIDA	17	×
HAEMODORUM LAXUM	18	×

	No	Fl
CASSIA PARVIFLORA	[illegible]	✓
[illegible] OCTANDRA	23	×
THYSANOTUS SP (sparkler)	28	×
CONOSTYLIS ACULEATA	29	×
CONOSTYLIS S[illegible]	30	×
~~[illegible]~~	~~31~~	
DAMPIERA LINEARIS	40	×
~~[illegible]~~	~~41~~	
PRASOPHYLLUM SP 43	43	×
Nemcia capitatum	46	×
[illegible] max	[illegible]	
Cassia parviflora ✓		
(neesii SCP) [illegible]		✓
[illegible] Summer ✓	[illegible]	
Goodenia [illegible] ✓		
Dampiera linearis ✓		
= 61		
[illegible] (neesii SCP) [illegible]		
[illegible] [illegible] ✓		
Sedges LOXOCARYA FASCICULATA	14	×
MESOMAELAENA TETRAGONA	21	×
TRICOSTULARIA NEESII	26	×
CYATHOCHAETA AVENACEA	27	×
UNKNOWN	34	×
HYPOLAENA EXSULCA	45	×
~~Schoenus sp~~	~~47~~	
~~[illegible]~~	~~48~~	✓
~~[illegible]~~	~~49~~	×
CYATHOCHAETA AVENACEA	50	×
RESTIO SINUOSUS	62	×
angustatum ✓	[illegible]	
Neurachne alopecuroidea = 65 ✓		
Schoenus brevisetis ✓		[illegible]
aciculare = 14		
Tricostularia neesii		
Schoenus subfascius	[illegible]	×

Swan Coastal Plain Survey - SURVEY RECORDING SHEET

QUADRAT No. BRICK MEAD ST 1 (=7) VEGETATION TYPE Marri Woodland on Dense Sedgeland

DATE TRIP 11/8/91 BOTANIST NG

VOLUNTEERS KATE, [illegible], HELEN

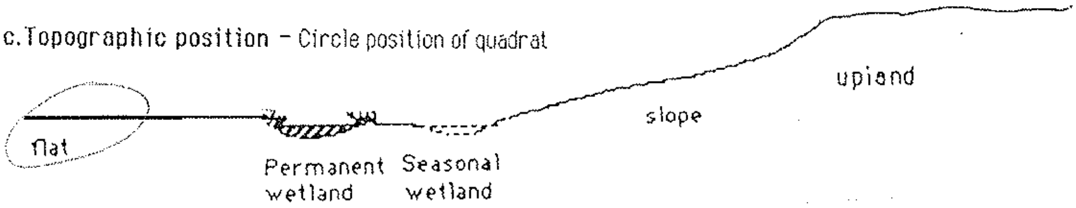
Keighery and Keighery, 1990
Adapted from Griffin and Keighery, 1989
MOORE RIVER to JURIEN SANDPLAIN
SURVEY. WILDFLOWER SOCIETY of WA

1. LOCATION of the QUADRAT

a. **Mud Map** Draw a sketch of the location of the quadrat the back of this sheet.

b. **Photograph** Photographer's name ______

c. **Topographic position** – Circle position of quadrat



2. SITE DATA – Circle the correct response

Slope (flat) gentle steep Aspect N NE E SE S SW W NW

% Bare ground 0 Drainage well mod (poor) Wet All year (winter/spring)

Litter (% cover) 10-20 Surface soil DARK SANDY LOAM Sub-surface soil GREY SANDY LOAM

3. VEGETATION STRUCTURE AND COVER Record appropriate cover class

Cover Class – percentage classes: 0% | under 2% | 2-10% | 10-20% | 20-30% | 30-50% | 50-70% | over 70%

LIFE FORM	TREES MARRI		MALLEES	
	>15m or (5-15m) DEAD TREES TO 15M	under 5m	MALLEE SHRUB less than 8m	MALLEE TREE 8m or more
COVER CLASS (%)	>15m; 5-15m 2-10%	< 2%		

LIFE FORM	SHRUBS ALLOCASUARINA [illegible]				SHRUBS
	over 2m	2.0-1.5m	1.5-1.0m	1.0m-.5m	under .5m
COVER CLASS (%)				10-20%	10-20%

LIFE FORM	MAT PLANTS	BUNCH GRASSES	HERBS	SEDGES [illegible]	
	under 10cm	under .5m	under .5m (except creepers)	over .5m	under .5m
COVER CLASS (%)			2-10%		30-50

Height (metres): 15m, 10m, 5m; 3m, 2m, 1m; 2.0m, 1.5m, 1.0m, .5m

4. SPECIES PRESENCE

- work systematically through the vegetation; start with the tallest sratum, i.e. trees
- within each stratum try to re[illegible] the most common species first and the most u[illegible]mmon last.
- as each species is collected label it with a numbered tag and use this number on your recording sheet 11/8/91
- indicate if the species is in flower

Keighery and Keighery, 1990
Adapted from Griffin and Keighery, 1989
MOORE RIVER to JURIEN SANDPLAIN
SURVEY. WILDFLOWER SOCIETY of WA

QUADRAT No. BRICK 7

Trees	No	Fl
X Euc [illegible]	1	
X Nuytsia floribunda	2	
~~[illegible]~~	~~3~~	
Mallees		
SHRUBS		
X Allocasuarina humilis	3	✓
X Kunzea [illegible]	4	
X [illegible]	5	
Eremaea [illegible]	6	✓
X Gastrolobium [illegible]	7	✓
[illegible] decuss[illegible]	8	
X Synaphea petiolaris	9	✓
X Stirlingia [illegible]	10	✓
X Daviesia [illegible]	11	
X Nemcia reticulata	12	✓
X Hakea cerat[illegible]	13	
~~[illegible] = 53~~		
X [illegible]	15	
X [illegible]	16	
X [illegible] ~~[illegible]~~ cernat[illegible]	17	
X Grevillea [illegible]	44	
Herbs		
X [illegible]	18	✓
X [illegible] laxum	19	✓
X [illegible] = 52		

24/11/91	No	Fl
* Briza minor X	50	
Neurachne alopecuroidea X		
[illegible] bulbiferum = 20 X		
Lepidosperma sp. = 19 = [illegible] X	53	
Thysanotus [illegible] X	54	
* Vulpia myuros X	55	[illegible]
Tribonanthes [illegible] X	56	
[illegible] X	57	
Kunzea micrantha X	58	
Trichocline [illegible] X	59	
Loxocarya [illegible] X	60	✓
Astroloma [illegible] X	61	
Xanthosia [illegible] X	62	VSF
Schoenus sp. = 33 X	63	
Mat Plants Phyllanthus [illegible] X	64	
[illegible] X	65	✓
+ [illegible] X	66	
Schoenus "annual" = Q8 54 X	67	
Schoenus subflavus X	68	VSF
Bunch Grasses		
~~✓ Grass [illegible]~~	~~23~~	
~~✓ ? Poa or [illegible]~~	~~22~~	
~~✓ ? Eragrostis [illegible]~~	~~25~~	
24/11/91 (cont)		
* Vulpia bromoides X	69	
Lepyrodia [illegible] X	70	
o Lepidosperma "[illegible]" X	71	VSF
[illegible] SCP X	71	
= many many		
o add to database		

	No	Fl
X Loxocarya [illegible]	21	
X Chamaescilla corymbosa	24	
X [illegible]		
X [illegible]	28	
X [illegible] ranunculifolius	29	
X [illegible]	30	
X Lomandra preissii	31	X
X [illegible]	32	X
X [illegible]	39	X
X * Briza maxima	41	X
X Danthonia caespitosa	42	X
X Dampiera sp. [illegible]	43	X
X Romulea rosea	96	X
X Cyathochaeta avenacea		X
Sedges		
X Schoenus brevisetus	37	X
X [illegible]	34	X
X Mesomelaena [illegible]	35	X
X Hypolaena exsulca	36	X
X [illegible]	37	X
X Haemodorum sp (unid)	38	X
X Tricoryne [illegible]	40	X
OUTSIDE PLOT 24/11/91		
/ [illegible]		X
/ Stylidium sp. [illegible]		X
/ [illegible]		X
/ [illegible]		X
/ [illegible]		X
/ [illegible]		X
/ [illegible]		X
/ [illegible]		X
/ [illegible]		X

219

Not in PLOT just very common [illegible]

Isopogon aspa.

Jacksonia sternbergiana

3 Acacia 1 pulchella.

Adenanthos sp cygnorum

brick 7

Swan Coastal Plain Survey - SURVEY RECORDING SHEET

QUADRAT No. MBA SL 2 (=8) BRICKS VEGETATION TYPE Marri woodland, open heath

DATE TRIP 7/8/91 BOTANIST NS

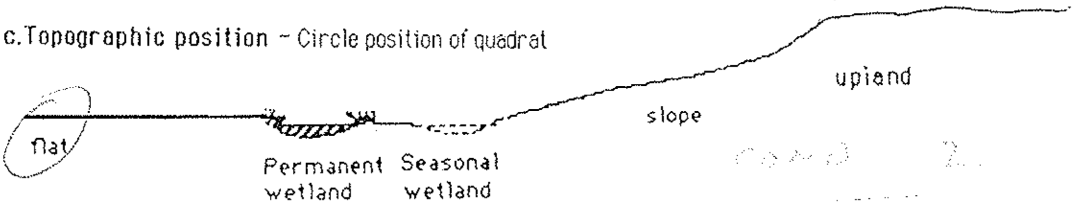
VOLUNTEERS Kato, Helen, Margaret

1. LOCATION of the QUADRAT

a. **Mud Map** Draw a sketch of the location of the quadrat the back of this sheet.

b. **Photograph** Photographer's name ____________

c. **Topographic position** - Circle position of quadrat



Keighery and Keighery, 1990
Adapted from Griffin and Keighery, 1989
MOORE RIVER to JURIEN SANDPLAIN SURVEY. WILDFLOWER SOCIETY of WA

2. SITE DATA - Circle the correct response

Slope (flat) gentle steep Aspect N NE E SE S SW W NW

% Bare ground <2 Drainage well mod (poor) Wet All year (winter/spring)

Litter (% cover) 2-10 Surface soil grey sandy loam Sub-surface soil sandy loam

3. VEGETATION STRUCTURE AND COVER Record appropriate cover class

Cover Class - percentage classes: 0% | under 2% | 2-10% | 10-20% | 20-30% | 30-50% | 50-70% | over 70%

LIFE FORM	TREES: Marri		MALLEES	
	or >15m / (5-15m)	under 5m	MALLEE SHRUB less than 8m	MALLEE TREE 8m or more
COVER CLASS (%)	>15m 5-15m 2-10	<2		

LIFE FORM	SHRUBS: Jacksonii				SHRUBS
	over 2m	2.0-1.5m	1.5-1.0m	1.0m-.5m	under .5m
COVER CLASS (%)	20-30	10-20			20-30

LIFE FORM	MAT PLANTS	BUNCH GRASSES	HERBS: Lomandra	SEDGES	
	under 10cm	under .5m	under .5m (except creepers)	over .5m	under .5m
COVER CLASS (%)			2-10		50-70

Height (metres): 15m, 10m, 5m; 3m, 2m, 1m; 2.0m, 1.5m, 1.0m, .5m

4. SPECIES PRESENCE

QUADRAT No. M2 8

- work systematically through the vegetation; start with the tallest stratum i.e. trees
- within each stratum try to record the **most common species first** and the most uncommon last.
- as each species is collected **label** it with a numbered tag and use this number on your recording sheet
- indicate if the species is in **flower**

Keighery and Keighery, 1990
Adapted from Griffin and Keighery, 1989
MOORE RIVER to JURIEN SANDPLAIN
SURVEY. WILDFLOWER SOCIETY of WA

11/8/91

Trees	No	Fl
X Euc calloph[yll]a (no spp)	1	
		✓
		✓
		✓
		✓
		✓
Mallees		✓
		✓
		✓
		✓
		✓
SHRUBS		✓
X Jacksonia sternbergiana ✓	2	✓
✓ Eremaea ? [illegible] ✓	3	✓X
✓ Daviesia physodes X	4	
✓ Daviesia [illegible] ✓	5	X
✓ Grevillea [illegible] ✓	6	X
✓ [illegible]	7	
✓ Acacia [illegible] ✓	8	X
✓ Hakea [illegible]	9	X
✓ [illegible]	10	
✓ Acacia sessilis	11	X
✓ Darwinia [illegible]	12	
✓ Hakea incrassata ✓	13	✓
✓ Acacia drewiana ✓	16	✓
✓ DRYANDRA [illegible]	19	X

	No	Fl
24/11/91		
Aphelia cyperoides —		
Tricoryne [illegible] X	25	
[illegible] X	50	
[illegible] X	51	
[illegible] \	52	
[illegible] X	53	
Schoenus "annual" = (51)	54	X
[illegible] glandulifera (No 67) X	55	✓
Drosera glanduligera X	56	
Drosera [illegible] X	57	
[illegible] X	58	
[illegible] X	31	
[illegible] X		
[illegible] drewiana X	60	
Mat Plants		
Stipa semibarbata \	61	[illegible]
[illegible] \		
[illegible] DICHOTOMUM X		
[illegible] \		[illegible]
Bunch Grasses		
[illegible]		
[illegible] \		[illegible]
[illegible] discolor X		
[illegible] X		
[illegible] X		
Thysanotus sparteus \	46	
[illegible]		
[illegible] \		
[illegible] \		
[illegible] \		
[illegible]		
Herbs		
[illegible] ✓	14	
[illegible] ✓	15	
[illegible] ✓	17	

	No	Fl
✓ LOXOCARYA [illegible] ✓	18	X
✓ HAEMODORUM [illegible] ✓	20	
✓ [illegible] [illegible]	21	
✓ [illegible] ✓	22	
✓ [illegible] ✓	23	
✓ Verreauxia reticulata ✓	24	X
✓ TRICHORYNE elatior ✓	25	
✓ DASYPOGON [illegible] ✓	26	
✓ THYSANOTUS [illegible] ✓	27	
✓ THYSANOTUS TRIANDRUS ✓	28	
✓ [illegible] ✓	29	
✓ CASSYTHA [illegible] ✓	30	
~~[illegible]~~	~~31~~	
GRASS SP 1	32	
✓ DROSERA menziesii ✓	33	
✓ SANTALACEAE ! Nuytsia floribunda		
✓ [illegible]	35	
Sedges		
✓ MESOMELAENA [illegible]	34	
✓ [illegible]	35	
✓ Baumea [illegible] ✓	36	
✓ TETRARIA OCTANDRA ✓	37	
✓ Cyathochaeta avenacea	38	
⌀ ✓ [illegible] "[illegible]" X	39	
✓ Lomandra hermaphrodita ✓	40	
✓ Tetraria octandra ?	41	
✓ [illegible] ✓	42	35
✓ [illegible] ✓	43	
✓ Tricostularia neesii ✓		

⌀ add to [illegible] (JX)

Evaluation of the National Estate value of remnant bushland on the Swan Coastal Plain between Moore River and Mandurah

BRICKWOOD BUSHLAND
BYFORD

Prepared by Mary Gray

For the Wildflower Society of WA (Inc.)

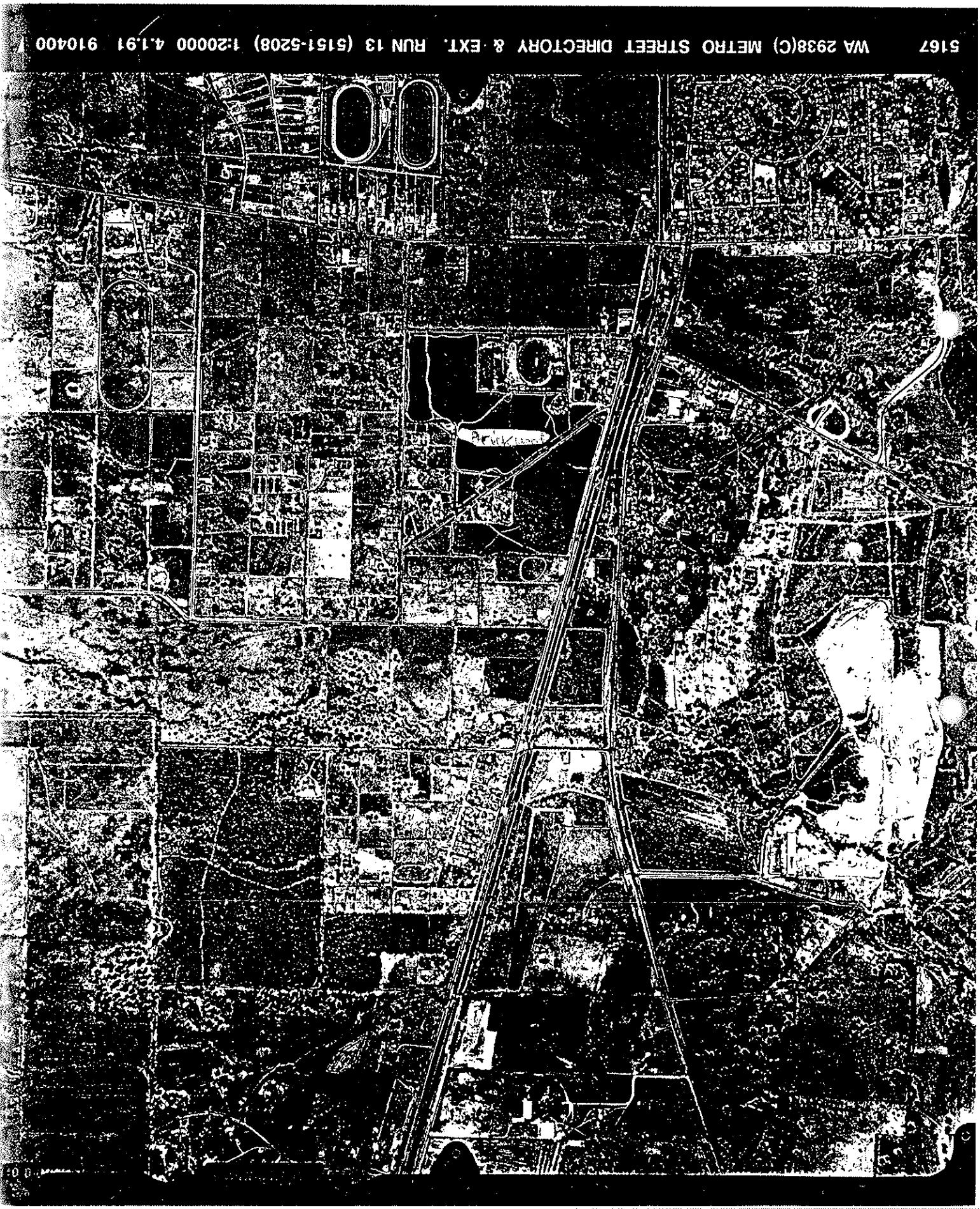
February 1994

This project was funded under the National Estate Program, a Commonwealth financed grants scheme administered by the Australian Heritage Commission (Federal Government) and the Heritage Council of WA (State Government).

Photocopy of Airphoto showing Brickwood Bushland

Scale 1: 20,000 (1991)

N

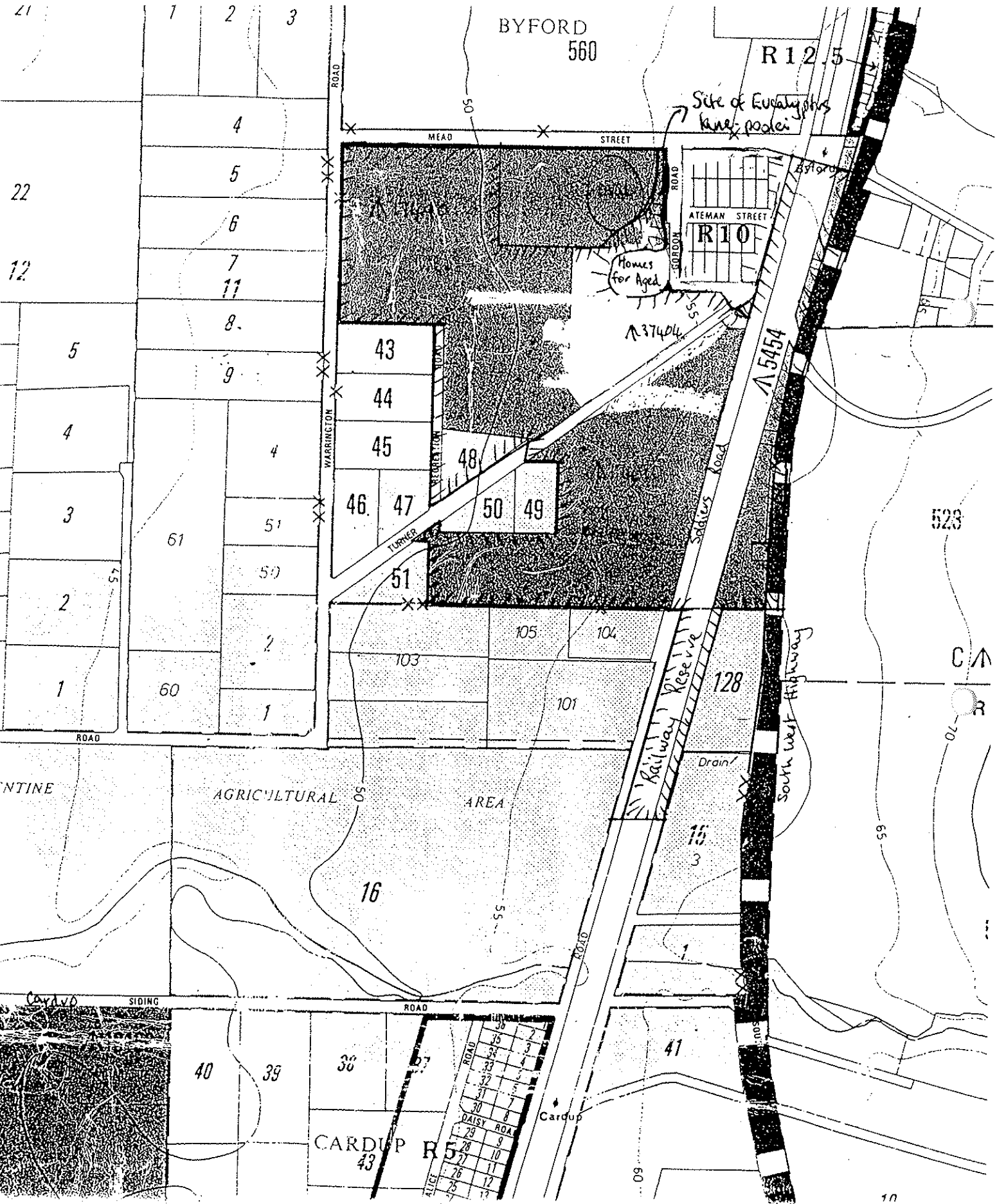


Location Map
Brickwood Bushland

Source: Location Map 11, Keighery & Trudgen 1992.
Scale 1:50,000

Map of Brickwood bushland

Source: Shire of Serpentine-Jarrahdale cadastral map.
Scale 1:10,000



Natural Environment Nomination for the Register of the National Estate

BRICKWOOD BUSHLAND, BYFORD

1. NAME OF PLACE Brickwood Bushland, Byford

Computer file name: Brickwd

2. LOCATION/BOUNDARIES

Brickwood Bushland is situated close to the Darling Scarp on the eastern side of the Swan Coastal Plain, approximately 33 km south east of Perth and 1 km south of Byford. on the west side of the South West Highway. It is bounded by Mead Street, Gordon Way, Moore Street, Soldiers Road, the South West Highway, private property and Warrington Road. The Bushland is dissected diagonally by Turner Road.

Administrative area

State: WA Local Government area: Shire of Serpentine-Jarrahdale

Area

Brickwood Reserve 17490	48 ha
part Reserve 37404	approx 10 ha
Railway Reserve	approx 1 ha
South West Highway Reserve	approx 2 ha
lot 48 Turner Road	approx 0.5 ha
Total	**approx 62 ha**

Property Details

1. Most of the area comprises Brickwood Reserve 17490 vested in the Shire of Serpentine-Jarrahdale for the purpose of recreation and flora and fauna conservation.
2. Reserve 37404 is vested in the Shire of Serpentine-Jarrahdale for public purposes as Homes for the Aged and Disabled. Approximately one third of the reserve which has been developed to date is excluded from the nomination. The remainder of the reserve is included.
3. Lot 48 Turner Road is private land and is managed as bushland.
5. The Railway Reserve is included between Mead Street in the north and opposite Lot 15 in the south.
6. The South West Highway Road Reserve is included between Mead Street in the north and the northern boundary of Lot 128 in the south.

3. NOMINATOR

Nomination prepared by Mary Gray, Consulting Environmental Scientist.
Organisation: Wildflower Society of WA (Inc.), PO Box 64 Nedlands 6009 WA. Telephone 09 383 7979.
Details of organisation may be released on request.

Signature of nominator ..... Mary Gray ..... Date ...10-2-94.....
for Wildflower Society of WA (Inc)

4. PREVIOUS ASSESSMENTS

1. The area was identified as Brickwood Reserve and adjacent bushlands, Location 10, by Keighery and Trudgen (1992) in the Survey of Remnant Vegetation on the Alluvial Soils of the Eastern Side of the Swan Coastal Plain. Their report assessed the area as having very high conservation value recommended for representation of the poorly drained loamy rises of the Slightly Elevated Pinjarra Plain, and also as representation of sandy innundated flats and clayey flats of Wetlands of the Pinjarra Plain (Keighery and Trudgen pages 14-23). Their specific recommendation for this area was that CALM liase urgently with the Local Government Authority to retain and manage the entire area for its flora conservation values.

2. The area was the subject of detailed botanical study in the Swan Coastal Plain Survey conducted by the Wildflower Society of WA (Inc.). The Brickwood Bushland was compared and contrasted to Cardup Nature Reserve and Talbot Road Reserve which are all situated on the heavy soils of the eastern side of the Plain. The results are published by the Wildflower Society in Part VI of *'Floristics of Reserves and Bushland areas of the Perth Region (System 6) Parts V-IX'* by G.J. Keighery and B.J. Keighery 1992. Their report found that the three areas are significant complementary sites containing most of the plant communities considered characteristic of the eastern side of the Swan Coastal Plain. All illustrate the high level of plant diversity found on the eastern side of the Plain. Most of the Brickwood bushland was found to be in good to very good condition and the report concluded that it has outstanding flora conservation values due to its rich diversity of plant species and scarcity value.

5. DESCRIPTION

The Brickwood Bushland covering an area of about 62 hectares is one of the largest areas of remnant bushland on the eastern side of the Swan Coastal Plain. It is situated on Soldiers Road just south of the Byford township at the foot of the Darling Scarp. Most of the area is known as Brickwood Reserve.

The area consists of low lying flats or is slightly elevated and is either waterlogged or inundated in winter. The area comprises an unusual mix of soils from three landforms: Ridge Hill Shelf (Foothills), Pinjarra Plain, and Bassendean Sands. A well drained low sandy rise of Bassendean soil crossing the eastern section of Brickwood Reserve is recognised by its vegetation consisting of *Banksia* woodland. The differences in vegetation on the Ridge Hill Shelf and the Pinjarra Plain soils at this site are almost indistinguishable and are typical of the associations found on the flats of the Plain These associations have a close affinity with the flora of the Darling Plateau, sharing more than 20% of species found with Plateau flora.

The area has the most extensive Marri *(Eucalyptus calophylla)* Open Woodland with scattered *Kingia* known to still exist in the metropolitan region. The plant communities considered characteristic of the Pinjarra Plain, Marri Open Woodland with scattered *Kingia*, the Wetland Mosaic, and *Melaleuca* and *Viminaria* Scrub are the most widespread in the area. There is also a small area of Marri and Jarrah Open Woodland which is a community characteristic of the Ridge Hill Shelf. A small area of *Banksia* Woodland is characteristic of Bassendean soils.

The Marri Woodlands have an understorey of variable composition including shrubs, herbs and sedges. Common shrub plants include Grass Trees *Xanthorrhoea preissii*, *Kunzea micrantha*, *Calytrix aurea*, *Gompholobium aristatum*, *Perricalymma ellipticum*, *Hakea trifurcata*, and Blueboy *Stirlingia latifolia*. Herbland species include *Borya scirpoidea*, *Stylidium dichotomum*. Common Sedgeland species under Marri woodlands include *Cyathocaeta avenacea* *Mesomelaena tetragona*, *Loxocarya fasciculata*, *Tricostularia neesii*, and *Hypolaena exsulca*.

The *Banksia* woodland found on Bassendean sands in the area is characterised by plants such as *Banksia attenuata*, Firewood Banksia *B. menziesii*, *Hakea ruscifolia*, Smokebush *Conospermum stoechadis*, Sheoak *Allocasuarina humilis*, *Hibbertia hypericoides*, *Eremea* aff. *brevifolia*, *Baeckea camphorosmae*, the grass *Amphipogon turbinatus*, and the sedge *Mesomelaena pseudostygia*. Of particular interest is the presence of scattered *Kingia* which is not usually found in *Banksia* Woodland.

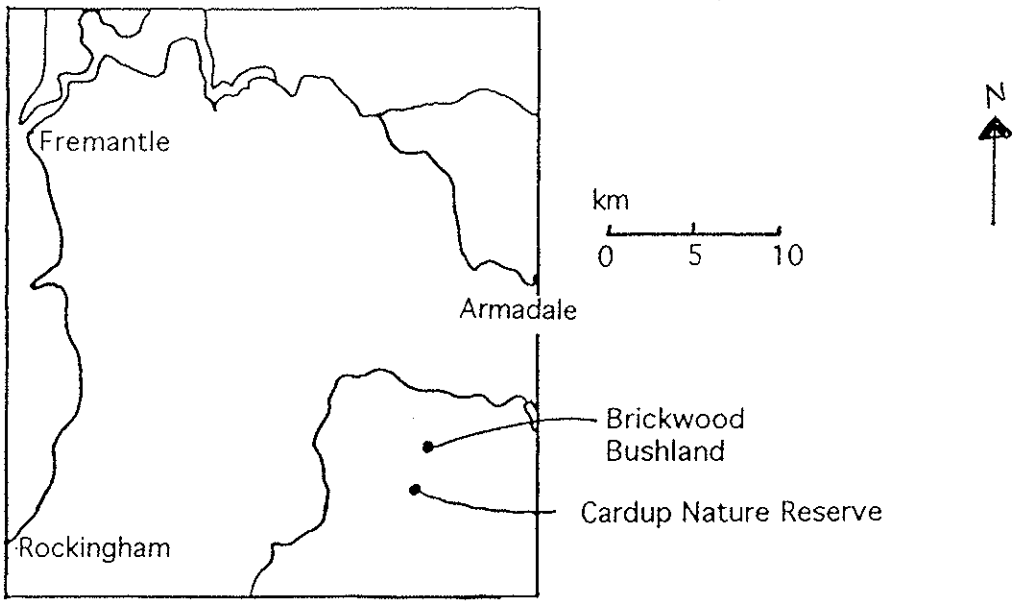
The *Melaleuca* and *Viminaria* scrub grow over open bunch grassland and *Chorizandra enodis*, *Leptocarpus co-angustatus*, and *Baumea* closed sedgeland. The *Pericalymma* heath is typified by underlying sedges such as *Leptocarpus co-angustatus*, *Cyathocaeta avenacea* and *Mesolamaena tetragona*.

The vegetation found along the Railway Reserve on Ridge Hill Shelf soils is similar to that found in the Brickwood Reserve but also has some additional significant species: *Melaleuca uncinata*, *Tribonanthes brachypetala*, and *Hakea erinacea*.

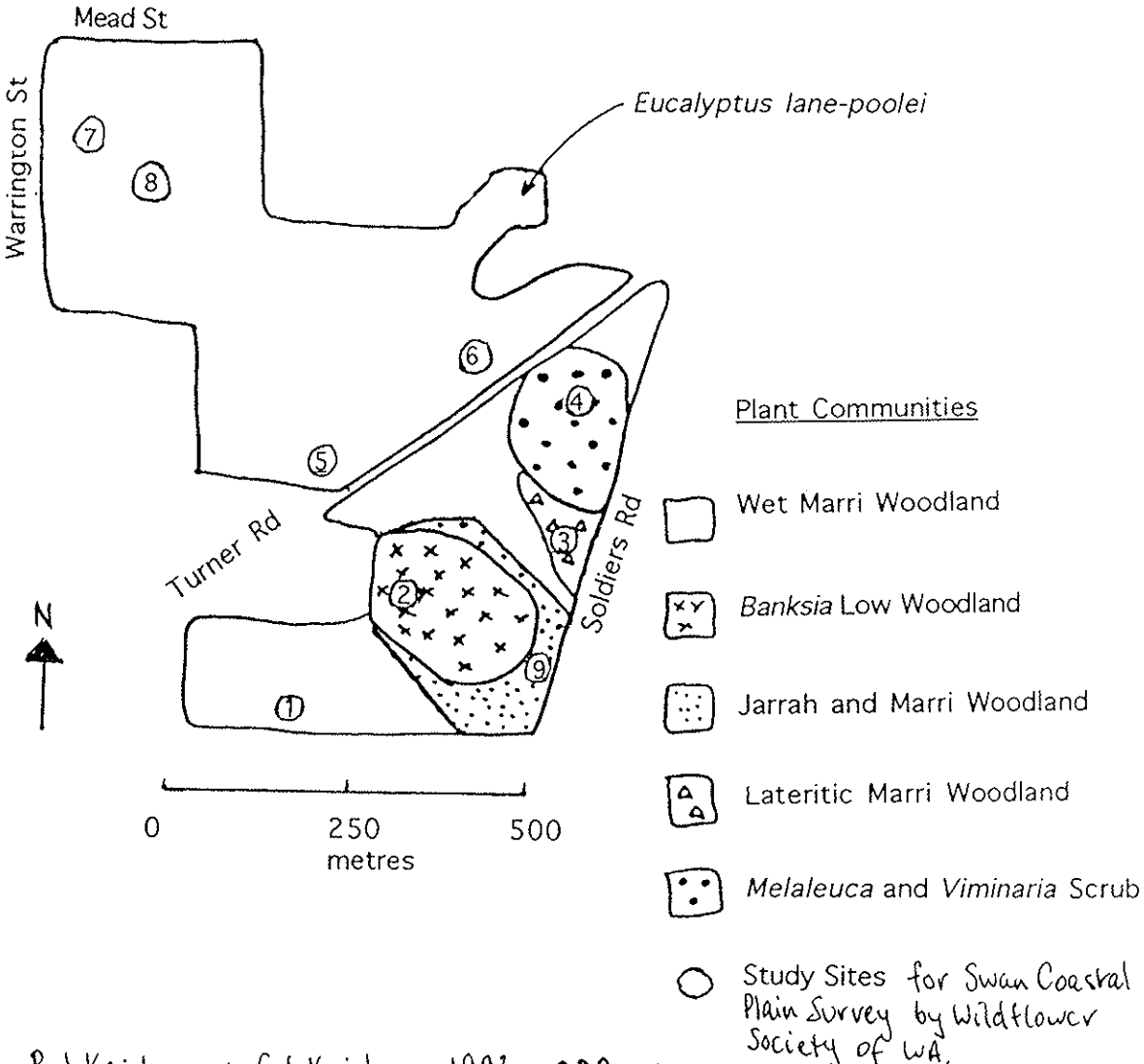
In total the area contains a diverse flora of over 309 native taxa, most of which occur in the dense shrub, herb and sedge strata. More than 92 taxa of plants are of special scientific interest. There are five endangered species of plant present which are classed as Priority taxa by the Department of Conservation and Land Management: *Daviesia physoides*, *Gonocarpus pithyoides*, *Verticordia lindleyi* ssp *lindleyi*, *Lambertia multiflora* var , and *Stylidium utricularioides*.

There are two rare plant communities present in the area, firstly the attractive white barked small tree *Eucalyptus lane-poolei*, and secondly a small pocket of *Harperia lateriflora* sedgeland. The region is well known by botanists for its high incidence of endemic species, eight of which occur in Brickwood. There are 67 plants of special interest because they are usually associated with the Darling Plateau rather than the Swan Coastal Plain.

Location of the Brickwood Bushland and Cardup Nature Reserve



Map of Plant Communities of the Brickwood Bushland



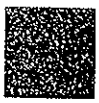
Source: B.J. Keighery & G.J. Keighery 1993, p20.
"Floristics of Reserves & bushland areas of the Perth Region (System 6), Parts V-IX."
Wildflower Society of WA (Inc.)

Key to Landforms and Soils

Source: van Gool 1990. (Relevant parts only.)

* Soils found at Brickwood bushland

The geomorphic elements described by Mcarthur & Bettenay (1960) provide the broad framework for the mapping units. These units have generalized soil and landform caracteristics which are relevant to land use and provide a base for the land capability assessment using the methods described by Wells and King (1989). The distinguishing features of the mapping units are shown below. Wherever possible the terminology of the Australian Soil and Land Survey Field Handbook (McDonald et al., 1984) has been used. Some of the terms are quantified at the foot of the legend.



Ridge Hill Shelf (Foothills): – Lateritized, low relief, foothills of the Darling Scarp comprising fossil shoreline bench sediments, Holocene colluvium and narrow bands of alluvial deposits. Slopes are very gently to gently inclined and soils are moderately well to well drained.

Note that the bracketed slopes in the descriptions indicate a more specific range applicable to this survey

* F1c Gently inclined slopes (5 to 8%) with well drained deep uniform yellowish brown sands which are generally free of laterite or gravel

F2 Very gently to gently inclined lower slopes (1 to 5%) with:

a. shallow to moderately deep, very gravelly acidic yellow duplex soils and common laterite.

b. moderately deep to deep, gravelly acidic yellow duplex soils and rare laterite

c. soils similar to F1c

F3 Very gently inclined (1 to 3%) lower slopes with deep, imperfectly drained yellow and, less commonly, acidic gley duplex soils

F4 Incised stream channels with deep acidic yellow duplex soils and sandy alluvial gradational brown earths

* F5 Poorly defined stream channels on lowest slopes and with soils similar to F4.

Pinjarra Plain: – Broad low relief plain west of the foothills, comprising predominantly Pleistocene fluvial sediments and some Holocene alluvium associated with major current drainage systems. Major soils are naturally poorly drained and many swamps occur.

* P1 Flat to very gently undulating plain with deep acidic mottled yellow duplex (or "effective duplex") soils comprising:

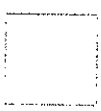
a. shallow pale sand to sandy loam over clay; imperfect to poorly drained and generally not susceptible to salinity

b. moderately deep pale sand to sandy loam over clay: imperfectly drained and moderately susceptible to salinity in limited areas

c. deep pale brown to yellowish sand to sandy loam over clay; imperfectly drained and moderately susceptible to salinity in limited areas

d. as for P1a, but moderately susceptible to salinity

* e. shallow pale sand to sandy loam over very gravelly clay; moderately well drained



Bassendean Dune and Sandplain System: – Very low relief, leached, grey siliceous Pleistocene sand dunes, intervening sandy and clayey swamps and gently undulating plains. These occur immediately west of, and partly overlie, the Pinjarra Plain. Topography becomes more subdued from west to east

* B1 Extremely low to very low relief dunes, undulating sandplain and discrete sand rises with deep bleached grey sands sometimes with a pale yellow B horizon or a weak iron–organic hardpan at depths generally greater than 2 metres; banksia dominant

B1a As for B1, but with a more intensely coloured yellow B horizon occurring within 1 metre of the surface; marri and jarrah dominant (redgum rises)

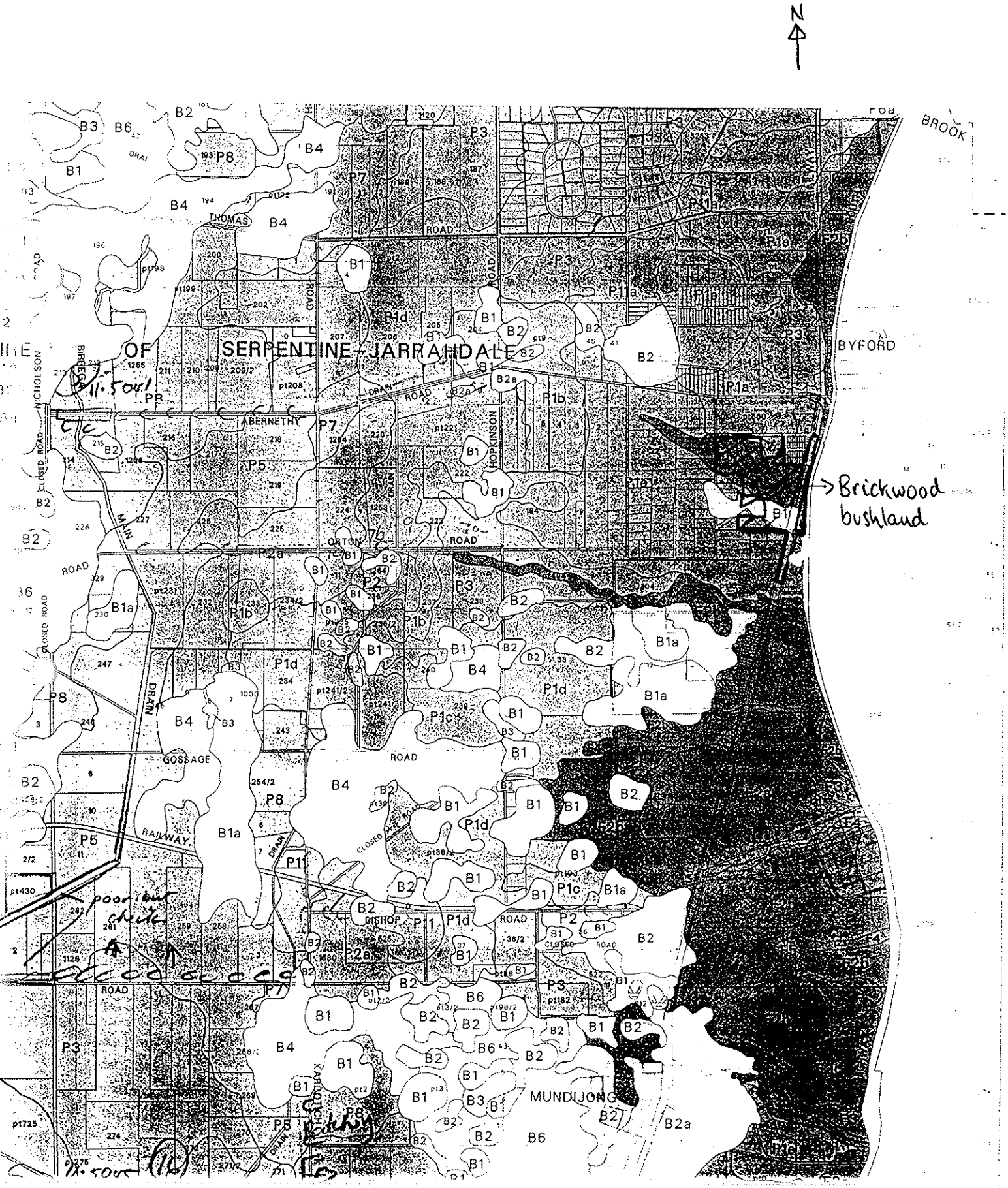
B2 Flat to very gently undulating sandplain with well to moderately well drained deep bleached grey sands with a pale yellow B horizon or a weak iron organic hardpan at 1–2 metres

B2a As for B2, but with a more intensely coloured yellow B horizon usually well within 1 metre of the surface

B3 Closed depressions and poorly defined stream channels with moderately deep, poorly to very poorly drained bleached sands with an iron–organic pan, or clay at generally less than 1 metre depth; surfaces are dark grey sand or sandy loam

Landforms and Soils

Source: van Gool, 1990



6. SIGNIFICANCE AGAINST REGISTER CRITERIA

A1. Importance in the evolution of Australian flora, fauna, landscapes, or climate.	**Endemic taxa** There are 8 taxa present out of a total of 43 in the region which are endemic to the Eastern Side of the Swan Coastal Plain: *Johnsonia* GJK 5249, *Trichocline* sp GJK 6382, *Acacia lasiocarpa, Verticordia lindleyi* ssp *lindleyi, Petrophile media* var *juncifolia, Stylidium utricularioides, Pimelia imbricata* var *major*, *Wurmbea dioica* 'Swamp Form' (Keighery and Keighery 1993).	**very high**
A3. Importance in exhibiting unusual richness or diversity of flora, fauna, landscapes, or cultural features.	**Flora** The area of 62 ha contains a highly diverse flora of 309 native taxa due principally to the dense shrub, herb and sedge strata. Diversity is also related to presence of soil types from 3 landforms, Ridge Hill Shelf, Pinjarra Plain and Bassendean sands, and to the inherently diverse flora of ephemeral wetlands on heavy soils (Keighery and Trudgen 1992). The shrub flora is particularly rich in species of Proteaceae, with good representation also of Fabaceae and Myrtaceae families. Due to wetland characteristics of the area the Cyperaceae and Restionaceae families are also highly diverse (Keighery and Keighery 1993). The high species diversity compares with 312 taxa at Forrestdale Lake in an area three times larger (G.J. Keighery 1992); and 228 taxa at Bold Park (Mitchell, McCotter and Ecoscape 1993) in an area ten times the size and also with three landforms.	**very high**
B1. Importance for rare, endangered, or uncommon flora, fauna, communities, ecosystems, natural landscapes or phenomena, or as a wilderness.	**Rare remnant bushland** As a result of human activities, little native vegetation remains on the eastern side of the Swan Coastal Plain. The Woodlands and Open Forests of the Pinjarra Plain are almost extinct, having been reduced by clearing to a few small isolated pockets (Keighery and Trudgen 1992). 97% of the land has been cleared (CALM 1990), and Beard noted in 1990 that there was 'no virgin vegetation left' in the area (Beard 1990). All bushland remnants on Ridge Hill Shelf and Pinjarra Plain landforms are now considered rare plant communities. The Brickwood Bushland is one of the few remaining areas encompassing the Ridge Hill Shelf and a substantial area of Pinjarra Plain (Keighery and Keighery 1993).	**very high**
	Rare vegetation communities Marri Woodlands are now considered rare plant communities (Keighery and Keighery 1993a). Brickwood Bushland has the most extensive area of the once widespread Marri Open Woodland with scattered *Kingia* found in surveys of the eastern side of the Swan Coastal Plain (Keighery and Trudgen 1992; Keighery and Keighery 1993). The composition of the Woodlands and ephemeral wetlands present is unusual and has a much greater affinity with the flora of the Darling Scarp than previously recognised (Keighery and Trudgen 1992).	**very high**

Endangered flora

Five taxa of endangered flora listed as Priority Species by the Department of Conservation and Land Management (Atkins 1992) occur in the area: *Daviesia physoides, Gonocarpus pithyoides, Verticordia lindleyi* ssp *lindleyi, Lambertia multiflora* var 'darlingensis' ms, and *Stylidium utricularioides.* There are two other rare plant communities of significance in the area: a small pocket of *Harperia lateriflora* sedgeland; and a stand of the attractive white-barked *Eucalyptus lane-poolei* woodland, which has limited distribution on the Ridge Hill Shelf and Darling Plateau in the Perth region, is found in a small grove in Gordon Way between the Aged Persons Home and the sporting grounds (Keighery and Keighery 1993). **very high**

New taxa

Four new taxa not yet described occur in the area. *Trichocline* sp GJK 6382 is one of two known populations with published records; *Johnsonia* sp GJK 5249 is one of three known populations which are endemic to the Byford area; *Podolepis gracilis* 'Swamp White' also thought to be endemic; and *Wurmbea dioica* 'Swamp Form' is also endemic (Keighery and Keighery 1993). **very high**

C1. Importance for information contributing to a wider understanding of Australian natural history, by virtue of its use as a research site, teaching site, type locality, reference or benchmark site.

The area is an important site contributing to understanding of the patterns of floral diversity on the eastern side of the Swan Coastal Plain. Studies of Brickwood Bushland together with other sites have contributed to the understanding of the relationship of flora present to that found on the Darling Scarp (Keighery and Trudgen 1992).
The relationship between plant communities of the Ridge Hill Shelf, Pinjarra Plain, and Darling Plateau is of particular interest at this site and in comparison with nearby remnants at Cardup Nature Reserve and Talbot Road Bushland. 46% (or 139 taxa) of the flora found at Brickwood is also present at the other two sites, and 22% (or 67 taxa) found at Brickwood also occur on the Plateau. Most of the area contains plant communities characteristic of the Pinjarra Plain: Marri Open Woodland with scattered *Kingia*, Wetland Mosaic, and *Melaleuca-Viminaria* scrub (Keighery and Keighery 1993). **very high**

There is an unusually high number of 92 taxa of flora of scientific significance present (Keighery and Keighery 1993). These include taxa endemic to the eastern side of the Swan Coastal Plain as listed in Criterion B1; endangered species classed as Priority species by the Department of Conservation and Land Management (Atkins 1992); uncommon or restricted taxa; poorly known taxa such as new taxa; and taxa common to both the eastern side of the Plain and to the Darling Plateau (Keighery and Keighery 1993). **very high**

D1. Importance in demonstrating the principal characteristics of the range of landscapes, environments or ecosystems, the attributes of which identify them as being characteristic of their class.	The area has outstanding value as a representative of the highly diverse flora of the eastern side of the Swan Coastal Plain: predominantly of Pinjarra Plain, together with smaller areas of Ridge Hill Shelf communities and Bassendean communities. There is no comparable area known . The plant communities of the Pinjarra Plain are particularly well represented: Marri Open Woodland with *Kingia*, Wetland Mosaic, *Melaleuca* and *Viminaria* scrub (Keighery and Keighery 1993). The area supports the most extensive area of the now rare Marri Woodlands with *Kingia* (Keighery and Keighery 1993) still remaining in the metropolitan area. There is only one other comparable area outside the metropolitan region just north of Waroona in the System 6 area C53 (Keighery and Keighery 1993). The rare communities of *Eucalyptus lane-poolei* and *Harperia lateriflora* sedgeland are also represented.	**very high**

7. STATEMENT OF SIGNIFICANCE

The Woodlands and Open Forests of the Pinjarra Plain and Ridge Hill Shelf are almost extinct, having been reduced by clearing to a few small isolated patches. Brickwood Bushland is one of the few areas encompassing a substantial area (62 hectares) of Pinjarra Plain and Ridge Hill Shelf. It supports the most extensive area of the once widespread Marri Open Woodlands with scattered *Kingia* still remaining in the metropolitan region, there being no comparable area known.

The area is an outstanding example of the highly diverse flora and plant communities characteristic of the Pinjarra Plain and the Ridge Hill Shelf. Plant communities of the Pinjarra Plain are especially well represented and in clude *Marri* Woodland with *Kingia;* complex Wetland Mosaics; and *Melaleuca-Viminaria* scrub. The rare communities of *Eucalyptus lane-poolei* and *Harperia lateriflora* sedgeland are also represented.

An outstandingly rich number of more than 309 native plant species are present in the 43 hectare area. This is due to the complexity of the wetland communities, the three different landforms and their different soil types, and the dense layers of shrubs, herbs and sedges which allow little weed invasion.

The region is noteworthy for the unusually high incidence of plant species which are confined in their natural distribution to the eastern side of the Swan Coastal Plain. Brickwood has 8 of these endemic taxa out of a total of 34 endemic taxa in the region: *Johnsonia* GJK 5249, *Trichocline* sp GJK 6382, *Acacia lasiocarpa, Verticordia lindleyi* ssp *lindleyi, Petrophile media* var *juncifolia, Stylidium utricularioides, Pimelia imbricata* var *major*, *Wurmbea dioica* 'Swamp Form'.

Botanical studies of Brickwood and other nearby sites have contributed significantly to the understanding of patterns of plant species diversity, and the relationship between plants found on the Darling Scarp and the Swan Coastal Plain. Unexpectedly 22% of plants found at Brickwood are also present on the Darling Scarp and this close affinity was not well understood until recent detailed botanical surveys were conducted in the early 1990's. Only 46% of plants found at Brickwood are also present at comparable bushland sites at Cardup Nature Reserve and Talbot Road, which is unusual for geographically similar areas.

The three sites both individually and together are outstanding examples of the diverse species and communities of plants which are characteristic of the alluvial soils of the eastern side of the Swan Coastal Plain, but which are now considered rare due to clearing and other land uses.

An unusually high number of 92 species of plants found at Brickwood are of special scientific interest: 8 are endemic to the east of the Plain (do not occur elsewhere) as already mentioned; 5 are endangered and are listed by the Department of Conservation and Land Management as Priority species, *Daviesia physoides*, *Gonocarpus pithyoides*, *Verticordia lindleyi* ssp *lindleyi*, *Lambertia multiflora* var 'darlingensis' ms, and *Stylidium utricularioides;* two form rare plant communities, a small pocket of *Harperia lateriflora* sedgeland, and a stand of the attractive white-barked *Eucalyptus lane-poolei* woodland; 4 are new undescribed taxa, *Trichocline* sp GJK 6382 is one of two known populations, *Johnsonia* sp GJK 5249 is one of three known populations which are endemic to the Byford area, *Podolepis gracilis* 'Swamp White' is also thought to be endemic, and *Wurmbea dioica* 'Swamp Form' is endemic; many plants are restricted in their natural distribution; and lastly many plants are of interest because they are common to both the Coastal Plain and to the Darling Plateau.

8. CONDITION

Overall Brickwood Bushland is in very good to good condition.
Most of the shrub, herb and sedge strata are in very good to good condition, the dense vegetation allowing little opportunity for weed invasion. There are indications that the tree and tall shrub layers are significantly affected by frequent fires. Most of the large Marri are dead or their crowns are stagged; ash beds are scattered through the area; there are remnants of large *Viminaria* shrubs; and there are dense stands of species which grow after hot fires, namely *Hakea trifurcata* and *Acacia saligna*. The Marri and *Viminaria*, however, have regenerated well and should mature if frequent fires are excluded. The *Banksia* canopy has generally withstood fire, although there is evidence of some deaths due to dieback on the sandy ridge in the Banksia Woodland.
Most of the vegetation communities contain non-aggressive weed species such as *Romulea rosea*, *Briza minor*, *Briza maxima*, *Hypocharis glabra* and *Ursinia anthemoides*. There is significant weed invasion only where bushland has been disturbed by tracks and firebreaks, developments, around margins of the area, and along an eroded drainage line resulting from road runoff. Aggressive weeds are spreading in this latter area, and include *Eragrostis curvula*, *Aster subulatus*, *Lotus angustissimus*, *Watsonia bulbillifera and Watsonia meriana*.
The vegetation around the railway line is generally in good to poor condition, with patches of degraded areas invaded by weeds especially adjacent to tracks.

9. RATIONALE FOR PROPOSED BOUNDARIES

The boundaries follow the margins of remnant vegetation in the area and exclude developments and cleared sections which encroach into the bush. Because there is so little remnant vegetation still intact on the eastern side of the Swan Coastal Plain, and it is in generally good or better condition, all sections of vegetation are included. This results in a jagged boundary along Moore Street, around the Retirement Home and the oval at Briggs Park, along part of Mead Street, part of Warrington Road, private property, Recreation Road (unmade), around private property back to the Turner Road-Warrington Road intersection, then due east to the Railway Reserve, then including a southerly extension of Railway Reserve, and a section of South West Highway Road Reserve from the northern boundary of Lot 128 in the south to Nettleton Road in the north.
Bushland in the Railway and Main Road Reserve is included because it has similar National Estate values to the adjoining Brickwood Reserve and also contains additional plant species and communities.

10. PERSONAL CONTACTS

1. Bronwen Keighery, Consulting Botanist, Swan Coastal Plain Survey, 224 Hamersley Rd., Subiaco. Telephone 09 381 4062.
2. Greg Keighery, Department of Conservation and Land Management (CALM), Woodvale Research Centre, Ocean Reef Rd., Woodvale. Telephone 09 405 5100.
3. Neil Gibson, CALM, Woodvale Research Station, Ocean Reef Rd., Woodvale. Telephone 09 405 5100.
4. Ken Atkins, CALM, Rare and endangered species of flora. Hayman Road Como, telephone 09 334 0333.

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12. ATTACHMENTS

Appendix: Flora list for Brickwood Bushland

Appendix Flora of the Brickwood Bushland

Records from quadrat data and opportunistic collecting, 1989-93. Families in alphabetical order and according to Marchant et al., (1987) unless indicated.

Key
opportunistic record
* non-native taxa

Plant Communities (see Map 2B, p20)
Wet *Melaleuca* and *Viminaria* Scrub(Site 4)
b W *Banksia* Low Woodland (Site 2)
m W Marri Woodland
wet Wet Marri Woodland (Site 1, 6, 7 & 8)
lat Lateritic Marri Woodland (Site 3)
jm W Jarrah and Marri Woodland (Site 9)
p H *Pericalymma* Heath (Site 5)

Taxon	Wet	bW	mW wet	mW lat	jmW	pH
Lycopsida (Fern Allies)						
Lycopodiaceae						
Phyllogiossum drummondii	+					
Selaginellaceae						
Selaginella gracillima	+					
Isoetaceae						
Isoetes australis	+					
Gymnosperms						
Zamiaceae						
#Macrozamia riedlei		+			+	
Angiosperms						
Amaranthaceae						
#Ptilotus manglesii			+			
Anthericaceae						
Arnocrinum preissii		+				
Borya scirpoidea			+	+	+	
#Borya shaerocephala	+					
Caesia micrantha	+			+	+	
Caesia occidentalis			+			
Chamaescilla corymbosa		+	+	+		
Johnsonia sp GJK 5249		+	+		+	
Laxmannia sessiliflora		+	+		+	
Sowerbaea laxiflora		+				
Thysanotus manglesianus			+		+	
Thysanotus multiflorus			+			
Thysanotus patersonii		+	+	+	+	
Thysanotus sparteus			+	+	+	
Thysanotus thyrsoides			+			
Thysanotus triandrus		+	+		+	

Flora of the Brickwood Bushland (cont.) Taxon	Wet	bW	mW wet	mW lat	jmW	pH
Tricoryne elatior		+	+	+	+	
Tricoryne humilis		+	+			
#Tricoryne tenella			+			
Apiaceae						
Hydrocotyle alata			+			
Hydrocotyle diantha				+		
Hydrocotyle pilifera				+		
#Schoenolaena juncea	+					
Trachymene pilosa		+		+		
Xanthosia huegelii		+	+	+	+	+
Asteraceae						
*Aster subulatus	+					
#*Dittrichia graveolens	+					
Hyalospermum cotula		+	+	+		
*Hypochaeris glabra	+	+	+	+	+	+
#Podolepis gracilis'Swamp White'[1]	+			+		
#Podotheca angustifolia					+	
Quinetia urvillei		+	+			
Senecio quadridentatus	+					+
Siloxeris humifusus	+					
Sonchus hydrophilus[2]	+					
*Sonchus oleraceus	+					
#Trichocline sp GJK 6382	+					
*Ursinia anthemoides	+		+			
#Waitzia paniculata		+				
Caesalpiniaceae						
Labichea punctata		+			+	
Campanulaceae						
Wahlenbergia preissii				+		
Casuarinaceae						
Allocasuarina humilis			+		+	
Allocasuarina microstachya			+			
Centrolepidaceae						
Aphelia cyperoides	+		+	+		
#Centrolepis alepyroides	+		+			
#Centrolepis aristata			+			
#Centrolepis drummondiana		+				
#Centrolepis glabra	+					
#Centrolepis humillima	+		+			
Colchicaceae						
Burchardia multiflora	+		+			
Burchardia umbellata		+			+	
Wurmbea dioica						+
Wurmbea dioica 'Swamp Form'[3]	+					

Flora of the Brickwood Bushland (cont.)

Taxon	Wet	bW		mW wet	mW lat	jmW	pH
Crassulaceae							
Crassula colorata		+					
Cyperaceae							
Baumea acuta	+						
Baumea juncea	+						
Baumea preissii	+						
Chorizandra enodis	+						
Cyathochaeta avenacea				+	+		+
#Cyathochaeta clandestina						+	
*Cyperus tenellus	+						
#Isolepis cernua	+						
Isolepis marginata	+			+			
Isolepis oldfieldiana	+						
Lepidosperma angustatum				+	+		+
Lepidosperma aff. angustatum		+					
#Lepidosperma leptostachyum		+					
Lepidosperma ?tenue					+		
#Mesomelaena graciliceps		+				+	
Mesomelaena pseudostygia		+			+		
Mesomelaena tetragona				+	+		+
#Schoenus asperocarpus				+			
Schoenus brevisetis		+		+	+		
#Schoenus bifidus	+						
Schoenus clandestinus					+		
#Schoenus curvifolius				+		+	
Schoenus nanus				+			
#Schoenus odontocarpus			+				+
#Schoenus rigens					+		
#Schoenus rodwayanus				+			
Schoenus subbulbosus		+				+	
Schoenus subflavus		+		+			
#Schoenus tenellus	+						
Schoenus unispiculatus	+				+		+
Schoenus sp				+			
Tetraria octandra		+		+			+
Tricostularia neesii		+		+		+	
Dasypogonaceae							
Calectasia cyanea		+					
Calectasia grandiflora					+		
Dasypogon bromeliifolius		+		+	+		
Kingia australis		+		+	+	+	
Lomandra britttanii				+		+	
#Lomandra caespitosa		+				+	
Lomandra hermaphrodita				+	+	+	
Lomandra odora				+			
Lomandra preissii				+		+	
Lomandra purpurea					+		
Dilleniaceae							
Hibbertia acerosa		+		+			

Flora of the Brickwood Bushland (cont.)

Taxon	Wet	bW		mW wet	mW lat	jmW	pH
Hibbertia huegelii		+					
Hibbertia hypericoides		+				+	
#Hibbertia stellaris	+			+			
#Hibbertia vaginata		+					
Droseraceae							
Drosera erythrorhiza		+		+			
#Drosera glanduligera				+			
Drosera gigantea				+			
Drosera heterophylla				+			
Drosera menziesii ssp menziesii				+	+		
Drosera menziesii ssp penicillaris					+		
#Drosera nitidula	+						
Drosera palacea ssp palacea		+					
Drosera pallida				+			
Drosera rosulata				+	+		
Drosera stolonifera		+		+			
Drosera subhirtella ssp subhirtella			+				
Epacridaceae							
Astroloma pallidum				+			
Conostephium pendulum		+				+	
Lysinema ciliatum		+					
Euphorbiaceae							
Poranthera microphylla		+					
Stachystemon vermicularis		+					
Fabaceae (Papilionaceae)							
#Aotus gracillima	+						
#Aotus procumbens				+			
Bossiaea eriocarpa		+					
Daviesia decurrens				+			
#Daviesia nudiflora		+					
Daviesia physodes				+			
#Daviesia preissii					+		
Gompholobium confertum				+		+	
Gompholobium aristatum		+		+	+		
Gompholobium marginatum		+		+			
#Gompholobium polymorphum						+	
Gompholobium tomentosum		+				+	
#Hovea trisperma		+				+	
#Jacksonia ?sericea						+	
#Jacksonia furcellata		+		+			
Jacksonia sternbergiana		+		+		+	+
#Kennedia prostrata		+		+	+		
*Lotus angustissimus	+						
Nemcia capitata				+	+		
Nemcia reticulata				+			
*Ornithopus compressus	+			+			
#Sphaerolobium vi[illegible]um					+		
Viminaria juncea	+				+		

Flora of the Brickwood Bushland (cont.)

Taxon	Wet	bW	mW wet	mW lat	jmW	pH
Gentianaceae						
#Centaurium erythraea	+					
Goodeniaceae						
Dampiera alata	+					+
Dampiera linearis		+	+	+	+	+
Goodenia caerulea			+	+		
Goodenia pulchella						
Lechenaultia biloba			+			
Lechenaultia expansa			+			
Scaevola glandulifera			+			
Scaevola lanceolata			+			
Velleia trinervis		+		+		
Haemodoraceae						
Anigozanthos manglesii			+			
Anigozanthos viridis			+			
Conostylis aculeata			+			
#Conostylis caricina			+			
Conostylis juncea		+			+	
Conostylis setigera			+	+		
Haemodorum discolor			+			
Haemodorum laxum		+	+	+		
#Haemodorum simplex			+			
#Haemodorum sparsiflorum			+			
Haemodorum spicatum			+			
#Phlebocarya ciliata		+				
Phlebocarya filifolia		+			+	
Tribonanthes australis	+		+			
#Tribonanthes longipetala			+			
Haloragaceae						
#Gonocarpus pithyoides				+		
Hypoxidaceae						
Hypoxis occidentalis	+		+			
Iridaceae						
#Patersonia juncea		+	+			
Patersonia occidentalis			+	+		+
Patersonia occidentalis 'Swamp Form'[4]			+			
*Romulea rosea			+			
*Watsonia bulbillifera	+		+			
*Watsonia meriana	+					
Juncaceae						
Juncus bufonius	+		+			
#*Juncus capitatus	+					
Juncus holoschoenus	+					

Flora of the Brickwood Bushland (cont.)

Taxon	Wet	bW	mW wet	mW lat	jmW	pH
Lauraceae						
#Cassytha flava	+		+			
Cassytha glabella			+			+
#Cassytha racemosa				+		
Lentibulariaceae						
#Polypompholyx multifida	+					
#Utricularia inaequalis	+					
Lobeliaceae						
#Isotoma hypocrateriformis					+	
Lobelia tenuior		+				
#*Monopsis simplex	+					
Loranthaceae						
Nuytsia floribunda			+	+		
*Lythraceae						
#*Lythrum hyssopifolia	+					
Mimosaceae						
Acacia drewiana			+			
#Acacia huegelii		+			+	
Acacia lasiocarpa			+			
#Acacia pulchella			+			
#Acacia saligna			+			
Acacia sessilis			+			
Acacia stenoptera					+	
#Acacia teretifolia					+	
Myrtaceae						
Baeckea camphorosmae		+				+
Calytrix angulata		+			+	
#Calytrix aurea				+		
Darwinia thymoides			+			
Eremaea aff brevifolia D.Coates MI175		+		+	+	
Eucalyptus calophylla			+	+	+	
#Eucalyptus lane-poolei			+			
#Eucalyptus marginata			+		+	
Hypocalymma robustum		+				
Kunzea micrantha	+		+	+		
Kunzea recurva			+			+
Melaleuca lateriflora	+					
Melaleuca preissiana			+			
Melaleuca viminea	+					
Pericalymma ellipticum			+	+		+
Verticordia densiflora			+			
#Verticordia lindleyi ssp lindleyi			+			
Verticordia pennigera			+			
Vertcordia plumosa			+			
#Verticordia serrata	+				+	

Flora of the Brickwood Bushland (cont.)

Taxon	Wet	bW	mW wet	mW lat	jmW	pH
Onagraceae						
#Epilobium billardierianum	+					
Orchidaceae						
#Caladenia sp	+		+			
#Diuris laxiflora			+			
Eriochilus dilatatus			+			
Leporella fimbriata		+				
Lyperanthus nigricans		+				
#Lyperanthus serratus					+	
#Microtis media		+			+	
#*Monadenia bracteata			+			
Prasophyllum drummondii	+					
Prasophyllum ?elatum		+	+			
Thelymitra crinita			+			
Philydraceae						
#Philydrella drummondii	+					
Philydrella pygmaea	+		+	+		
Phormicaceae						
#Agrostocrinum scabrum			+			
Pittosporaceae						
#Pronaya fraseri					+	
Poaceae						
#Agrostis avenacea			+		+	
Agrostis pleibia	+		+			
#*Aira caryophyllea	+				+	
Amphipogon debilis			+	+		
Amphipogon turbinatus		+				
*Briza maxima			+			+
*Briza minor	+		+	+		
Danthonia occidentalis			+			
Danthonia ?pilosa			+			
#*Ehrharta calycina		+	+			
*Eragrostis curvula	+		+	+		
Neurachne alopecuroidea			+	+		
#*Paspalum dilatatum	+					
*Pennisetum clandestinum	+					
*Pentachistis airoides			+			
#*Phleum pratense	+					
Polypogon tenellus	+					
#Stipa compressa			+			
Stipa ?semibarbata			+		+	
*Vulpia bromoides			+			
*Vulpia myuros			+			+
Polygalaceae						
Comesperma calymega		+				
#Comesperma virgatum		+	+			

Flora of the Brickwood Bushland (cont.)

Taxon	Wet	bW	mW wet	mW lat	jmW	pH
Primulaceae						
*#Anagallis arvensis	+	+				
Proteaceae						
#Adenanthos meisneri		+			+	
Banksia attenuata		+				
Banksia menziesii		+				
Conospermum stoechadis		+				
#Dryandra bipinnatifida			+			
Dryandra nivea		+	+	+		
#Dryandra sessilis					+	
Grevillea bipinnatifida			+			
Grevillea pilulifera			+			
#Grevillea quercifolia					+	
#Grevillea wilsonii					+	
#Hakea auriculata			+			
Hakea ceratophylla			+	+		+
Hakea incrassata			+			
#Hakea lissocarpha					+	
Hakea prostrata		+	+			
Hakea ruscifolia		+				
#Hakea stenocarpa					+	
Hakea sulcata						+
Hakea trifurcata			+			
#Hakea undulata					+	
Hakea varia						+
Isopogon asper			+			
#Lambertia multiflora var. 'darlingensis' ms						+
#Persoonia saccata					+	
#Petrophile linearis		+			+	
Petrophile media var. juncifolia			+			
#Petrophile striata					+	
Petrophile seminuda			+			
Stirlingia latifolia			+	+	+	
Synaphea petiolaris			+	+		+
#Xylomelum occidentale		+			+	
Restionaceae						
#Harperia lateriflora			+			
Hypolaena exsulca			+	+	+	+
#Leptocarpus aristatus			+			
Leptocarpus co-angustatus	+					+
Lepyrodia macra			+	+		
#Loxocarya cinerea			+			
Loxocarya fasciculata			+	+		+
Loxocarya flexuosa			+		+	
Lyginia barbata			+			
Restio leptocarpoides	+					
#Restio 'sinuosus' ms		+			+	
Rubiaceae						
#Opercularia vaginata					+	

Flora of the Brickwood Bushland (cont.)

Taxon	Wet	bW	mW wet	mW lat	jmW	pH
Rutaceae						
Eriostemon spicatus			+	+		+
Schrophulariacea						
#Grattiola peruviana	+					
Stackhousiaceae						
#Stackhousia huegelii			+			
Tripterococcus brunonis				+	+	
Stylidiaceae						
Levenhookia pusilla		+	+	+	+	+
Levenhookia stipitata		+	+		+	
Stylidium brunonianum		+	+			
#Stylidium bulbiferum			+			
Stylidium dichotomum			+	+		
Stylidium ecorne						
Stylidium mimeticum			+	+		
Stylidium petiolare				+		
Stylidium piliferum		+				
Stylidium pulchellum	+			+		
#Stylidium repens		+	+		+	
#Stylidium utricularioides	+		+			
Thymelaeaceae						
#Pimelea imbricata var major			+			
Tremandraceae						
#Tetratheca hirsuta			+			
Xanthorrhoeaceae						
Xanthorrhoea preissii		+	+	+		

1 A robust form found on the inundated Pinjarra Plain.
2 G.J.Keighery has determined *Sonchus* aff. *asper* as *Sonchus hydrophilus.*
3 A large form of *Wurmbea dioica*, also found at Brixton St (Keighery and Keighery, 1991)
4 A fine and more floriferous form of *Patersonia occidentalis.*

FLORISTICS of RESERVES and BUSHLAND AREAS of the PERTH REGION (SYSTEM 6)

Parts V - IX

G.J. Keighery and B.J. Keighery

The Wildflower Society of Western Australia has published these papers, parts of a continuing series, in the interest of the conservation of our unique flora. The Society considers it essential that decision makers and managers have available the necessary flora information before making irreversible land use decisions.

The Floristic Survey of the Swan Coastal Plain, of which the surveys of the flora of these areas was part, was carried out with the assistance of funds made available by the Commonwealth of Australia under the National Estate Grants Programme, and by the Australian Heritage Commission.

Wildflower Society of Western Australia (Inc.)
PO Box 64 Nedlands WA 6009

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REMNANT VEGETATION on the ALLUVIAL SOILS of the EASTERN SIDE of the SWAN COASTAL PLAIN

Prepared by

Bronwen Keighery and Malcolm Trudgen

for the Department of Conservation and Land Management. This project was funded under the National Estate Program, a Commonwealth-financed grants scheme administered by the Australian Heritage Commssion (Federal Government) and the Heritage Council of Western Australia (formerly the Western Australian Heritage Committee) (State Government).

5255 WA 3166(C) METRO REGIONAL AREA & EXT. RUN 15 (5215-5307) 1:20000 11-DEC-92 920676

5256 WA 3166(C) METRO REGIONAL AREA & EXT. RUN 15 (5215-5307) 1:20000 11-DEC-92 920676