



COTERRA
ENVIRONMENT

DER Clearing Application Technical Report

Lot 4800 Moseley Drive, The Vines

Revision 0, March 2017

This report was prepared by:

Coterra Pty Ltd trading as COTERRA ENVIRONMENT
ABN: 92 143 411 456

Our Ref: DBAELL01

Author(s): K. Watts

Reviewer: E. McSweeney

Report Version: Revision 0

Date: March, 2017

This report was prepared for:

Catholic Archdiocese of Perth
249 Adelaide Terrace
PERTH WA 6000

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TABLE OF CONTENTS

Page

1.0	INTRODUCTION	1
1.1	Proposal Details	1
1.2	Proposed Site Development	1
1.3	Background	1
	1.3.1 MRS Rezoning and Bush Forever.....	1
	1.3.2 The Vines Stage 5 Outline Development Plan.....	2
	1.3.3 Subdivision Approval.....	2
	1.3.4 Regulatory Authority Advice.....	2
1.4	Planning Instruments	3
2.0	SITE DESCRIPTION	4
2.1	Topography and Soils	4
2.2	Hydrology	4
2.3	Vegetation and Flora	4
2.4	Fauna and Habitat	7
3.0	ASSESSMENT AGAINST CLEARING PRINCIPLES	9
3.1	Native Vegetation should not be cleared if it comprises a high level of biological diversity	9
3.2	Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia	9
3.3	Native vegetation should not be cleared if it includes, or is necessary for the continued existence of rare flora	9
3.4	Native vegetation should not be cleared if it comprises the whole, or a part of, or is necessary for the maintenance of, a threatened ecological community	9
3.5	Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared	9
3.6	Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or a wetland	10
3.7	Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation	10



3.8 Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation areas..... 10

3.9 Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of the surface or underground water 10

3.10 Native Vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding 11

4.0 CONCLUSION 12

5.0 REFERENCES..... 13



PLATES (Compiled within the report)

	Page
Plate 1: Southern side of northern vegetation patch	5
Plate 2: Northern side of northern vegetation patch	5
Plate 3: Eastern side of northern vegetation patch	6
Plate 4: Central patch of vegetation from a distance	6
Plate 5: Eastern side of central vegetation patch	6
Plate 6: Western side of southern vegetation patch	7
Plate 7: Western side of southern vegetation patch	7

FIGURES (Compiled at the end of the report)

Figure 1: Proposed Clearing Extent
Figure 2: Geomorphic Wetland Mapping
Figure 3: Bush Forever

APPENDICES

Appendix A: The Vines – Stage 5 Development Plans
Appendix B: WAPC Subdivision Approval 128781
Appendix C: Plan of Subdivision
Appendix D: Certificate of Title and Deposited Plan
Appendix E: EPA and DoE Correspondence
Appendix F: Flora and Vegetation Survey (Weston, 1999)



1.0 INTRODUCTION

1.1 Proposal Details

The Catholic Archbishop of Perth purchased Lot 4800 Moseley Drive, The Vines (the site) for the purpose of constructing a private primary school on the site. The lot was identified for this purpose in the Outline Development Plan and also the subdivision applications which were submitted and approved for the site (see Section 1.3).

In order to commence preparation of the site for its future use as a primary school 1.6ha of native vegetation is required to be cleared. The proposed clearing extent is shown in Figure 1.

The timing of the vegetation clearing works onsite has been brought forward due to concerns raised by neighbouring residents and the City of Swan in relation to bushfire hazard and risk to surrounding properties. As such the works are now proposed to be undertaken within four months of the clearing permit being granted.

1.2 Proposed Site Development

The site is proposed to be developed as a Private Primary School. The buildings and infrastructure will include:

- Administration building
- Classrooms (Kindergarten to Year 6 and specialist skill rooms)
- Amenity buildings
- Sports ovals/courts
- Car parking

Given the size of the lot (4.0255ha), and that 4ha is identified by the Western Australian Planning Commission (WAPC) as the size required for a primary school site (WAPC, 1998), it is anticipated that school buildings and infrastructure will extend across the entire lot.

The detailed design of the site layout has not yet been finalised.

1.3 Background

1.3.1 MRS Rezoning and Bush Forever

The 'Stage 5 - The Vines' site which originally consisted of Lots 9011 and 808 Bordeaux Lane (within which Lot 4800 is now located), was originally zoned 'Rural' under the Metropolitan Region Scheme (MRS). The site was rezoned to 'Urban Deferred' due to the presence of a Waste Water Treatment Plant within the landholdings which was required to be decommissioned prior to the inclusion of the subject land within the 'Urban' zone. A further reason for the Urban Deferred zoning arose with the introduction of Bush Forever which included a portion of the site



within Bushfire Forever Site No. 23. The Urban Deferred zone was to remain over the land until an acceptable Negotiated Planning Solution (NPS) was reached.

Following discussions and the subsequent agreement of the Environmental Protection Authority (EPA), WAPC and the developer, a NPS was reached which involved:

- The ceding to the Crown free of cost the 16.0ha core area of the Bush Forever site which includes Conservation and Multiple Use wetlands;
- The ceding free of cost of 2.5ha of public open space; and
- Purchase of 7.2241ha of land for including in the Bush Forever Site No. 23.

The NPS allowed the eastern part of the original site, containing the better quality vegetation and preserved wetlands (approximately 40% of the Conservation Category Wetland) to be reserved within Bush Forever Site No. 23.

As a result of the successful negotiations for the transfer of the Bush Forever site, the 'Urban Deferred' zoning over the remainder of the land (Lot 9011) was lifted in April 2001. The Department of Environment/EPA while being involved in the NPS had not raised any objections or concerns in regards to the potential impact of urban development on existing wetlands at the time of this zoning change.

1.3.2 The Vines Stage 5 Outline Development Plan

Following agreement of the NPS, an Outline Development Plan (ODP) was prepared for The Vines – Stage 5. The ODP reflected the intent and outcome of the NPS in protecting the ecological values of the subject land and achieving a balance between preservation of significant environmental values and development.

This document identified Lot 4800 as a private primary school site.

An extract from the ODP which was approved by the City of Swan in 2006 is provided in Appendix A.

Since this time there have been a number of minor amendments approved in relation to the ODP design but the location of the primary school has remained consistent. A copy of the current development plan which continues to show the primary school site is also provided in Appendix A.

1.3.3 Subdivision Approval

A subdivision application was lodged to create the primary school site in 2005. The WAPC issued the subdivision approval in October 2005 (WAPC Ref: 128781). A copy of the subdivision approval is provided in Appendix B. The subdivision plan identifying Lot 4800 as a school site is provided in Appendix C. A copy of the resultant Certificate of Title and the Deposited Plan issued after the creation of the lot is provided in Appendix D.

1.3.4 Regulatory Authority Advice

As part of the ODP process, the proponent sought confirmation from the Environmental Protection Authority (EPA) and the Department of Environment (DoE) in



relation to the NPS agreement and ability to develop within areas mapped as wetlands outside of the agreed conservation area.

The EPA advised that the area proposed for subdivision was considered in developing the Bush Forever NPS and that it was recognised that wetlands outside this area would largely be lost (see EPA correspondence dated 21 December 2004; Appendix E).

The DoE confirmed that qualified support was provided for the ODP but recommended an increase in size in the Public Open Space (POS) located in the south west corner of the site (see DoE correspondence dated 9 March 2005; Appendix E).

Following receipt of this advice a revised ODP was then submitted to DoE. Upon review of this plan DoE confirmed that the revised ODP was considered acceptable (see DoE correspondence dated 19 May 2005; Appendix E).

1.4 Planning Instruments

A Development Application has been lodged with the City of Swan to seek approval for clearing of vegetation onsite. A copy of the outcome of this assessment and approval will be forwarded to the Department of Environment Regulation (DER) when available.



2.0 SITE DESCRIPTION

2.1 Topography and Soils

The site is generally flat with an elevation of 33 to 34mAHD. The north eastern corner rises to an elevation of 37mAHD (DoW, 2017).

Regional scale mapping indicated that soils at the site generally comprise Peaty Clays which are described as dark grey and black with variably sand content (Gozzard, 1986).

2.2 Hydrology

The Perth Groundwater Atlas online, indicates the water table occurs at approximately 32mAHD in this location (DoW, 2017). The general groundwater flow direction is easterly.

The Geomorphic Wetlands mapping indicated that the site comprises a palusplain (seasonally waterlogged flat) wetland which has been assigned a Conservation management category (Landgate, 2017). It is noted that the wetland mapping in this location is not current as much of the mapped wetland extent now comprises housing or has been cleared. The wetland mapping is shown on Figure 2.

As discussed in Section 1.3, a NPS outcome was agreed for this site which has resulted in conservation of a large wetland area within Bush Forever Site 23 and the south western POS within Woburn Park (to the east of Tattow Way, Woburn Park). Approval for development of the remainder of the landholding was granted by the City of Swan and the Western Australian Planning Commission (WAPC) with the support of the EPA and DoE.

2.3 Vegetation and Flora

A Flora and Vegetation survey over this area was undertaken by Dr Arthur Weston in 1999 (Appendix F). We note that the survey report references Bushplan Site 23, but this was the original extent of the site (prior to the NPS) which covered the entire Stage 5 - The Vines site boundary. Following the NPS the current Bush Forever Site boundary, as shown on Figure 3 was set. As such this report covers the area which now comprises Lot 4800.

The flora and vegetation survey identified the following vegetation types to be present within Lot 4800 at that time:

- Er - *Eucalyptus rudis* open to closed forest
- B - Banksia low woodland
- A - *Acacia saligna* open to closed tall scrub
- CI - Cleared



The vegetation remaining onsite comprises *Eucalyptus rudis*, *Melaleuca preissiana* and *Acacia saligna* dominated vegetation area. Photographs of this vegetation are provided below.



Plate 1: Southern side of northern vegetation patch

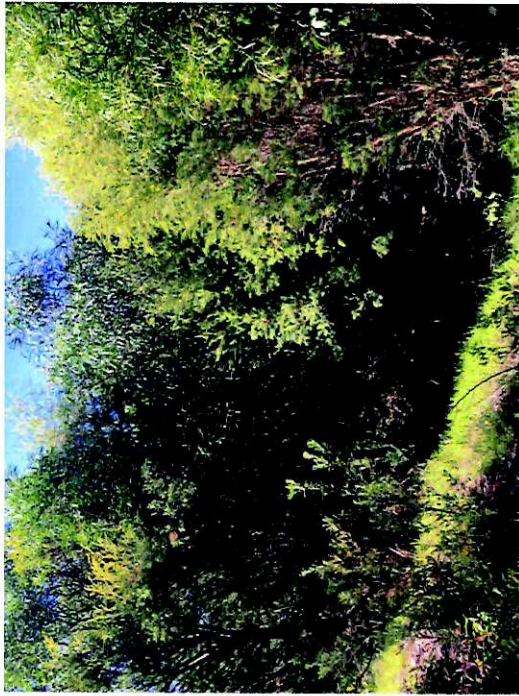


Plate 2: Northern side of northern vegetation patch

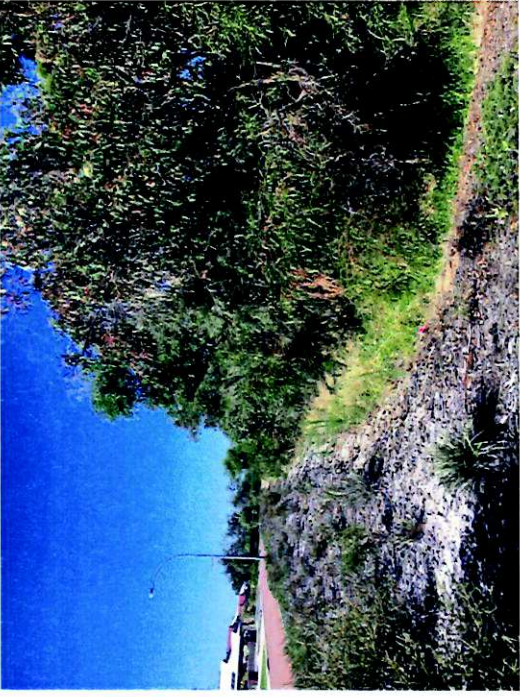


Plate 3: Eastern side of northern vegetation patch



Plate 4: Central patch of vegetation from a distance



Plate 5: Eastern side of central vegetation patch



Plate 6: Western side of southern vegetation patch

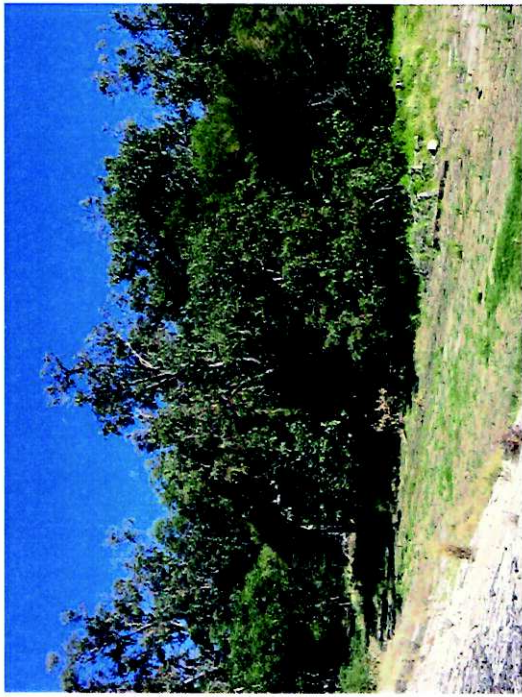


Plate 7: Western side of southern vegetation patch

As can be seen from the photographs the vegetation remaining onsite has been impacted by weeds and disturbance.

Bush Forever Site 23 contains vegetation likely to represent two Threatened Ecological Communities as follows:

- TEC 11 – Shrublands and Woodlands on Muchea Limestone
- TEC 14 – Shrublands on Calcareous Silts

These vegetation types are not present within Lot 4800 (Weston, 1999).

2.4 Fauna and Habitat

Given the small size, fragmented nature and isolated position of the vegetation onsite it is not anticipated that this area would provide significant fauna habitat opportunities.



As a precaution, clearing undertaken on the lot will commence in the northern end and move towards the south to encourage any remnant fauna to move towards the vegetated POS area south of Moseley Drive.



3.0 ASSESSMENT AGAINST CLEARING PRINCIPLES

3.1 Native Vegetation should not be cleared if it comprises a high level of biological diversity

The vegetation within Lot 4800 has been impacted by previous clearing and associated edge effects and degradation processes, including weed invasion. As such the biological condition and diversity are reduced. Photographs of the current condition of the vegetation are provided in Plates 1 to 7.

The NPS agreed for the site identified the area considered to be of the greatest conservation value and included this within Bush Forever Site 23.

3.2 Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia

Given the small size, fragmented nature and isolated position of the vegetation onsite is it not anticipated that this area would provide significant fauna habitat opportunities.

Large area of remnant vegetation are present within Bush Forever Site 23 - Cardinal Drive Bushland, Ellenbrook (26.8ha) and Bush Forever Site 300 - Maralla Road Bushland, Ellenbrook/Upper Swan (641.5ha) which provide protected and managed habitat opportunities for local fauna.

3.3 Native vegetation should not be cleared if it includes, or is necessary for the continued existence of rare flora

The flora and vegetation survey undertaken for the site did not identify the presence of any Declared Rare Flora within Lot 4800. One species of DRF *Grevillea curviloba* subsp. *curviloba*, was found during the survey (Weston, 1999). The two sites where this species were found were protected within Bush Forever Site 23 (RPS BBG, 2004).

3.4 Native vegetation should not be cleared if it comprises the whole, or a part of, or is necessary for the maintenance of, a threatened ecological community

The vegetation within Lot 4800 is not representative of a Threatened Ecological Community (Weston, 1999). The site is separated by over 300m to Bush Forever Site 23 which contains the closest TEC vegetation. Clearing of Lot 4800 is not expected to have any impact on this TEC vegetation.

3.5 Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared

The site is located 300m from Bush Forever Site No.23 and approximately 800m south of Bush Forever Site 300. The Maralla Road Nature Reserve (BF Site 300)



encompasses an expansive area of remnant vegetation (641.5ha) representing both upland and dryland areas.

As such vegetation within Lot 4800 is not a significant remnant in this location.

3.6 Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or a wetland

The vegetation within Lot 4800 is mapped as a palusplain wetland. Clearing and development of this area was supported by the EPA, DoE, WAPC and the City of Swan as part of the rezoning. Bush Forever NPS, Outline Development Plan and subdivision applications and approvals.

As part of these processes the area with the highest conservation values (including wetland and vegetation values) was selected and set aside for conservation purposes within Bush Forever Site 23.

3.7 Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation

The site is ultimately proposed to be developed as a primary school. As such the land surface will be stabilised with buildings, infrastructure and landscaping.

Prior to this time the site will be temporarily stabilised through the spreading of hydromulch containing a grass seed mixture to avoid windblown sand movement.

3.8 Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation areas

The site is separated from the adjacent vegetated POS by a public road. As the clearing and development of Lot 4800 has been factored into the planning and design for the area, the finished ground levels, local drainage etc. have all taken this development scenario into account. As such no impacts are anticipated on the POS from the clearing of Lot 4800.

The next closest conservation area is Bush Forever Site 23, which is over 300m to the east. Impacts to this site are also not anticipated.

3.9 Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of the surface or underground water

As noted above, the clearing of Lot 4800 has been taken into consideration during the planning and design of the development. Water management for this area was considered as part of the Urban Water Management Plan prepared for the site. This report was assessed and approved by the Department of Water.



Clearing of the small remaining patches of vegetation onsite is not anticipated to have a detrimental impact on surface or groundwater resources.

3.10 Native Vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding

As discussed above, the hydrological planning for this area has taken into account the clearing and development of Lot 4800. The drainage system and final site topographic contours have been designed to ensure flooding does not occur.

Given this planning, and the small area of vegetation present on Lot 4800, the clearing is not considered likely to impact the local hydrological characteristics.



4.0 CONCLUSION

Clearing of three patches of vegetation totalling 1.6ha within Lot 4800 Moseley Drive, The Vines has been reviewed against the DER's native vegetation clearing principles. This has found that the clearing is not at variance to most of the principles.

It is noted that the clearing may be at variance with Principle (f) (Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or a wetland). The vegetation to be cleared is mapped as a wetland, but the overall wetland conservation requirements for this area have been historically assessed and agreed between the EPA, DoE, WAPC and City of Swan, with the outcome being that wetland and vegetation retention at this site is not required. As such the clearing of this vegetation in the context of the historical agreements and approvals is appropriate.



5.0 REFERENCES

- Department of Water. 2017. *Perth Groundwater Atlas online*. Accessed 6/2/17. <http://www.water.wa.gov.au/maps-and-data/maps/perth-groundwater-atlas>
- Gozzard, J.R. 1986. *Perth Sheet 2034 III and 2134 III*. Perth Metropolitan Region Environmental Geology Series, Geological Survey of Western Australia.
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- RPS Bowman Bishaw Gorham. 2004. *Stage 5 The Vines, Ellenbrook – Environmental Assessment*. Report No. G04009. Report prepared for LWP Property Group.
- Western Australian Planning Commission. 1998. *School Sites –Policy No. DC 2.4* (October 1998). WAPC, Perth.
- Weston, A. 1999. *Vegetation and Significant Flora of Bushplan Site 23 (Muehea Limestone) The Vines*. Report prepared for Bowman Bishaw Gorham.

FIGURES

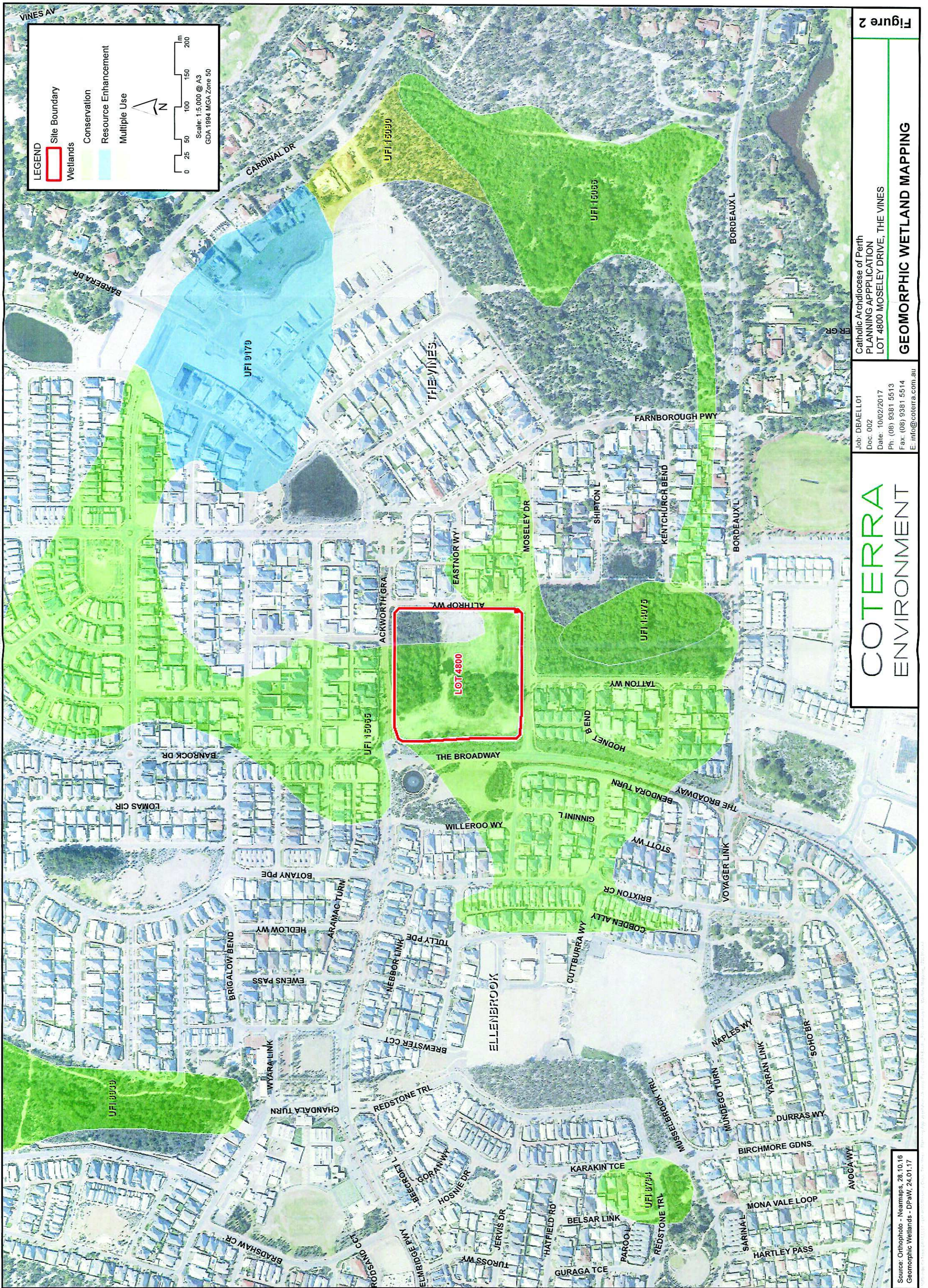


Catholic Archdiocese of Perth
 LOT 4800 MOSELEY DRIVE, THE VINES
PROPOSED CLEARING EXTENT

Job: DBAELL01
 Doc: 001
 Date: 30/01/2017
 Ph: (08) 9381 5513
 Fax: (08) 9381 5514
 E: info@coterra.com.au

COTERRA
 ENVIRONMENT

Source: Cadastre - Landgate, 2015
 Orthophoto - Nearmaps, 28.10.16



LEGEND

- Site Boundary
- Wetlands
- Conservation
- Resource Enhancement
- Multiple Use

Scale: 1:5,000 @ A3
GDA 1984 MGA Zone 50

0 25 50 100 150 200 m

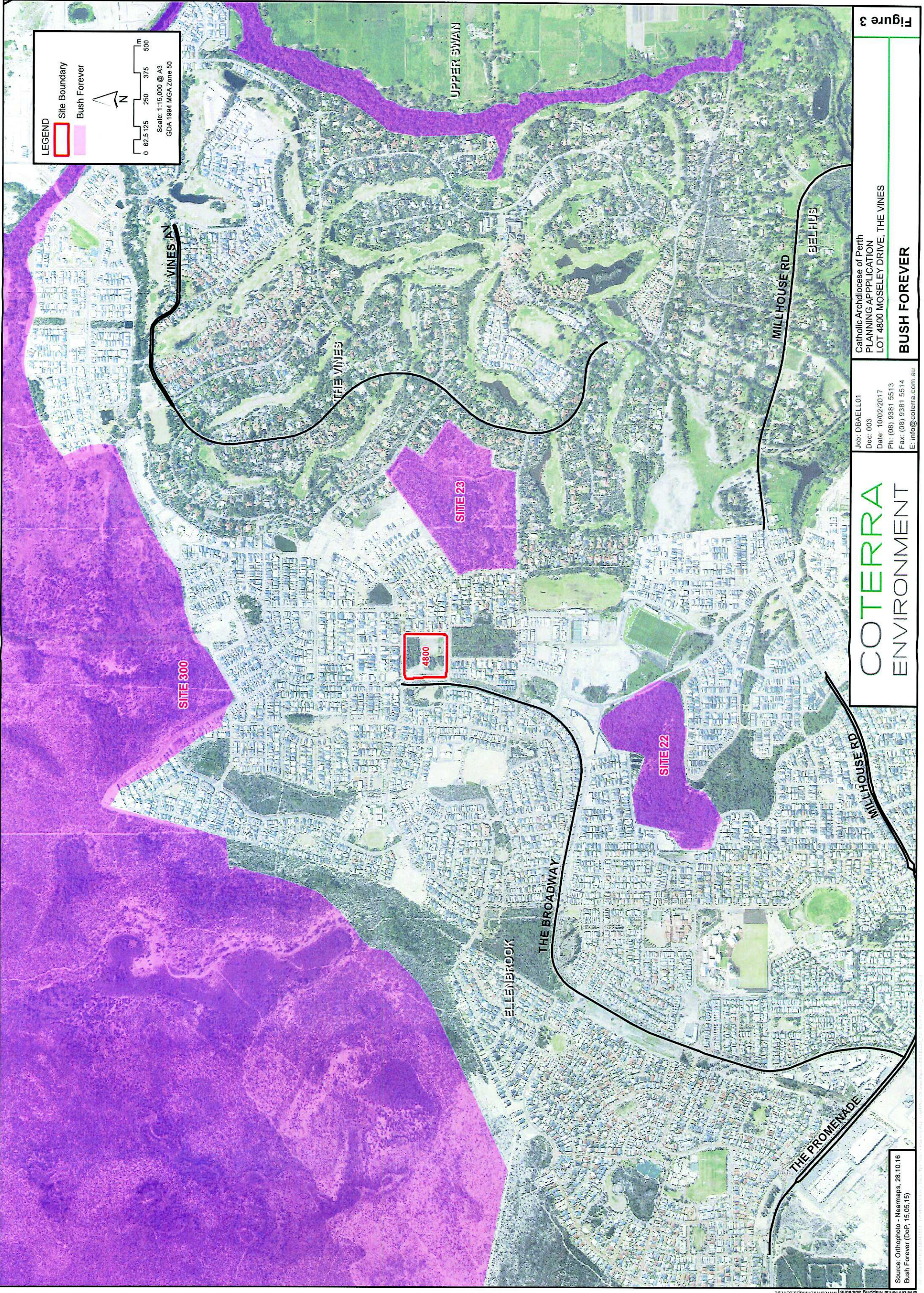
Figure 2

Catholic Archdiocese of Perth
 PLANNING APPLICATION
 LOT 4800 MOSELEY DRIVE, THE VINES
GEOMORPHIC WETLAND MAPPING

Job: DBAELL01
 Doc: 002
 Date: 10/02/2017
 Ph: (08) 9381 5513
 Fax: (08) 9381 5514
 E: info@coterra.com.au

COTERRA
 ENVIRONMENT

Source: Orthophoto - Neamaps, 28.10.16
 Geomorphic Wetlands - DPwW, 24.01.17



LEGEND

- Site Boundary
- Bush Forever

Scale: 1:15,000 @ A3
 GDA 1994 MGA Zone 50

Figure 3

Job: DBAELL01
 Doc: 003
 Date: 10/02/2017
 Ph: (08) 9381 5513
 Fax: (08) 9381 5514
 E: info@coterra.com.au

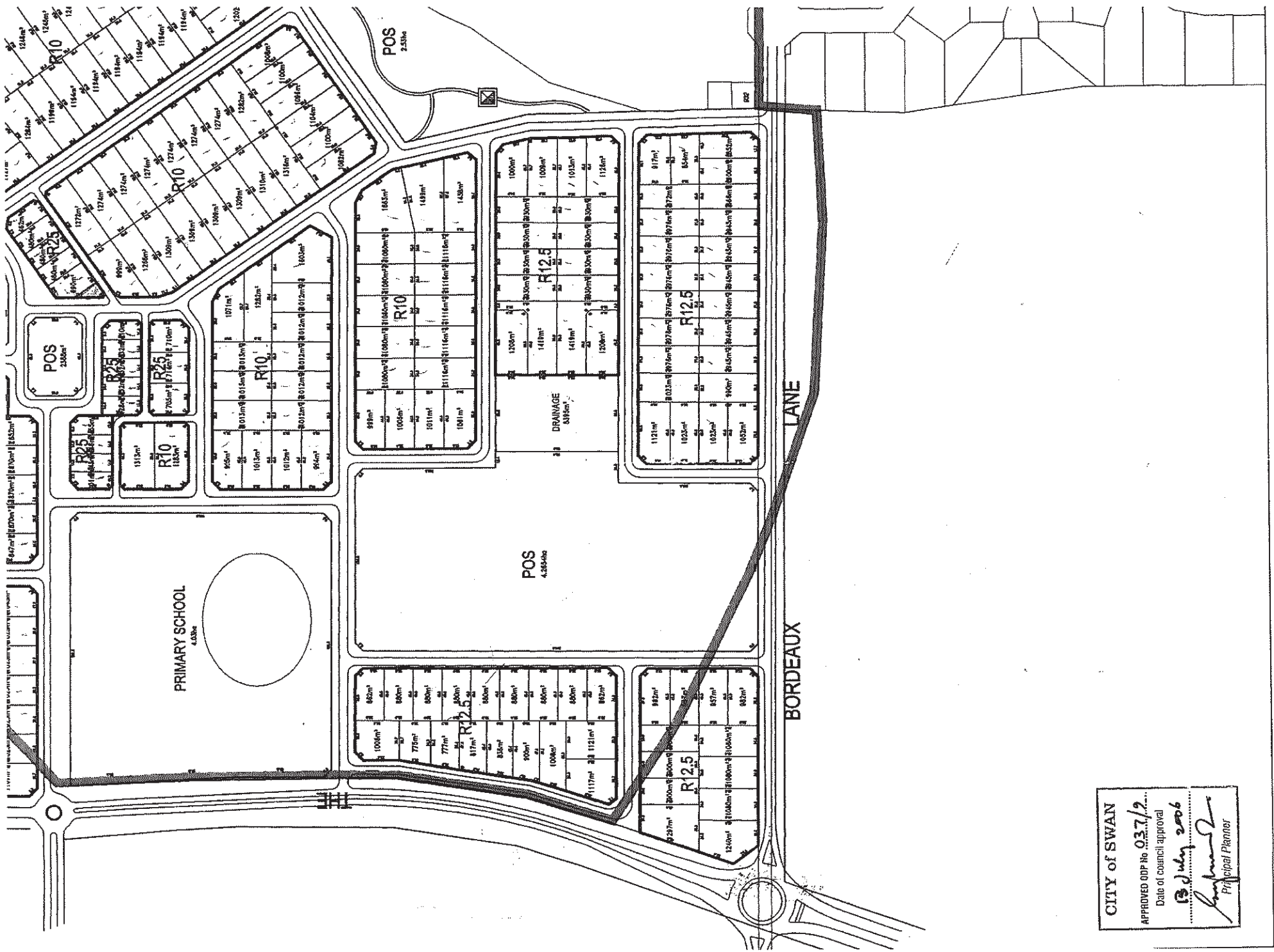
COTERRA
 ENVIRONMENT

Catholic Archdiocese of Perth
 PLANNING APPLICATION
 LOT 4800 MOSELEY DRIVE, THE VINES
BUSH FOREVER

Source: Orthophoto - Neamaps, 28.10.16
 Bush Forever (DoP, 15.05.15)



APPENDIX A – THE VINES – STAGE 5 DEVELOPMENT PLANS



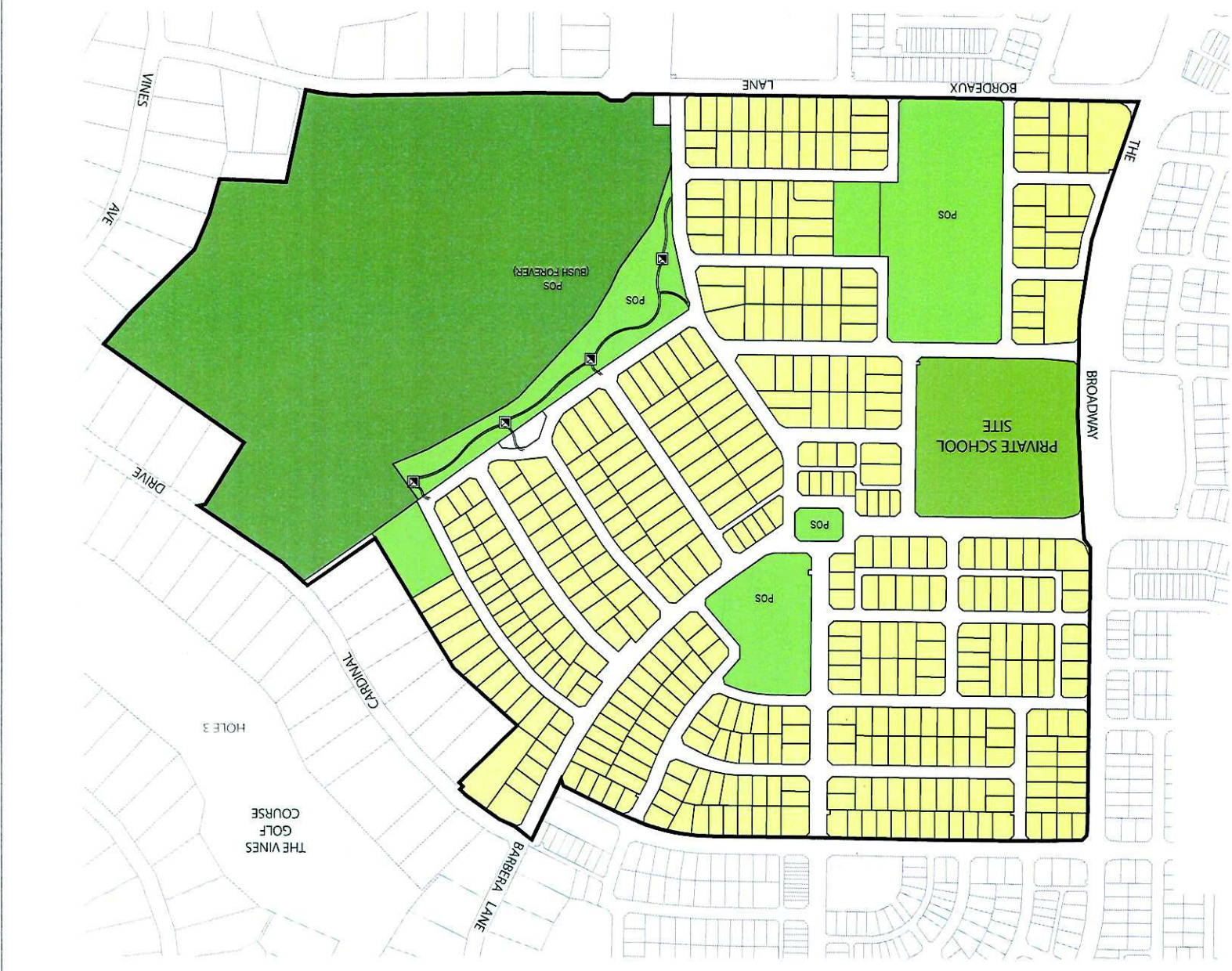
CITY of SWAN
 APPROVED ODP No. 037/2
 Date of council approval
 13 July 2006
[Signature]
 Principal Planner

NOTES
 - Prior to any subdivision a Detailed Site Assessment of potential Acid Sulphate Soil risk and if necessary an Acid Sulphate Soil Management Plan is to be prepared.
 - Prior to any subdivision a Detailed Site Assessment of all potential contaminants and a Site Remediation Management Plan detailing the removal of the contaminants is to be prepared.
 - Those lots abutting Public Open Space to be subject to Detailed Area Plans.



LEGEND

- Residential
- Private Clubs and Institution
- Reserve (Recreation)
- Reserve (Conservation Bush Forever)



robertsday.com.au planning&design@robertsday.com.au

AERIAL PHOTOGRAPHY
 SOURCE: NA
 YMWDD: NA
 CAUSTICAL INFORMATION
 SOURCE: NA
 YMWDD: NA
 SOURCE: NA
 YMWDD: NA
 PROJECTION: PCO4
 DIV: REF: Woburn-12107
 YMWDD: 12107

DISCLAIMER: ISSUED FOR DESIGN INTENT ONLY. ALL AREAS AND DIMENSIONS ARE SUBJECT TO DETAIL DESIGN AND SURVEY



REV	DESCRIPTION	YMWDD	HH	EE	APPRD
B	MINOR EDIT	16/09/23	HH	EE	
A	BASIC PLAN RD3 003E	16/09/22	HH	EE	

ZONING CLASSIFICATION
 Woburn Park, Ellenbrook
 City of Swain
 REF NO: RD3 005 B
 DRAW NO: REV



APPENDIX B – WAPC SUBDIVISION APPROVAL 128781



Your Ref : e/v vin
Enquiries : Sarah Cossick (Ph 9264 7627)

Roberts Day - Town Planning + Design
G P O Box 6369
EAST PERTH WA 6892

**Approval Subject To Condition(s)
Freehold (Green Title) Subdivision**

Application No : 128781 (Primary Schools)

Town Planning And Development Act (as amended)

Applicant : Roberts Day - Town Planning + Design
G P O Box 6369 EAST PERTH WA 6892
Owner : Department Of Housing And Works
C/- Ellenbrook Management Pty Ltd
Corner Coolamon Boulevard & Mornington Parkway
ELLENBROOK WA 6069 and
Kishu Railway Co Australia Pty Ltd 45 Ventnor Avenue
WEST PERTH WA 6005

Application Receipt : 28 June 2005

Lot number : 9011
Location : -
Diagram/Plan : 29325
C/T Volume/Folio : 2509/300
Street Address : Cardinal Drive, The Vines
Local Government : City of Swan

The Western Australian Planning Commission has considered the application referred to and is prepared to endorse a deposited plan in accordance with the plan date-stamped 28 June 2005 once the condition(s) set out have been fulfilled.

This decision is valid for three years from the date of this advice, which includes the lodgement of the deposited plan within this period.



The deposited plan for this approval and all required written advice confirming that the requirement(s) outlined in the condition(s) have been fulfilled must be submitted by 28 October 2008 or this approval no longer will remain valid.

Reconsideration - 28 days

Under section 24(5) of the Town Planning and Development Act 1928 (as amended), the applicant/owner may, within 28 days from the date of this decision, make a written request to the WAPC to reconsider any condition(s) imposed in its decision. One of the matters to which the WAPC will have regard in reconsideration of its decision is whether there is compelling evidence by way of additional information or justification from the applicant/owner to warrant a reconsideration of the decision. A request for reconsideration is to be submitted to the WAPC on a Form 3A with appropriate fees. An application for reconsideration may be submitted to the WAPC prior to submission of an application for review. Form 3A and a schedule of fees are available on the WAPC website: <http://www.wapc.wa.gov.au>

Right to apply for a review - 28 days

Should the applicant/owner be aggrieved by this decision, there is a right to apply for a review under section 26 of the Town Planning and Development Act 1928 (as amended). The application for review must be submitted in accordance with part V of the Act and should be lodged within 28 days of the date of this decision to: the State Administrative Tribunal, 12 St Georges Terrace, Perth, WA 6000. It is recommended that you contact the tribunal for further details: telephone 9219 3111 or go to its website: <http://www.sat.justice.wa.gov.au>

Deposited plan

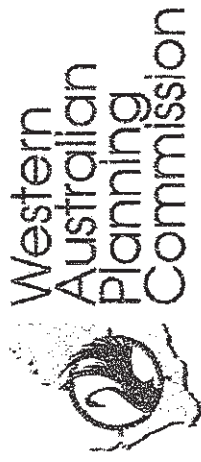
The deposited plan is to be submitted to the Department of Land Information (DLI) for certification. Once certified, DLI will forward it to the WAPC. In addition, the applicant/owner is responsible for submission of a Form 1C with appropriate fees to the WAPC requesting endorsement of the deposited plan. A copy of the deposited plan with confirmation of submission to DLI is to be submitted with all required written advice confirming compliance with any condition(s) from the nominated agency/authority or local government. Form 1C and a schedule of fees are available on the WAPC website: <http://www.wapc.wa.gov.au>

Condition(s)

The WAPC is prepared to endorse a deposited plan in accordance with the plan submitted once the condition(s) set out have been fulfilled.

The condition(s) of this approval are to be fulfilled to the satisfaction of the WAPC.

The condition(s) must be fulfilled before submission of a copy of the deposited plan for endorsement.



The agency/authority or local government noted in brackets at the end of the condition(s) identify the body responsible for providing written advice confirming that the WAPC's requirement(s) outlined in the condition(s) have been fulfilled. The written advice of the agency/authority or local government is to be obtained by the applicant/owner. When the written advice of each identified agency/authority or local government has been obtained, it should be submitted to the WAPC with a Form 1C and appropriate fees and a copy of the deposited plan.

If there is no agency/authority or local government noted in brackets at the end of the condition(s), a written request for confirmation that the requirement(s) outlined in the condition(s) have been fulfilled should be submitted to the WAPC, prior to lodgement of the deposited plan for endorsement.

Prior to the commencement of any site works or the implementation of any condition(s) in any other way, the applicant/owner is to liaise with the nominated agency/authority or local government on the requirement(s) it considers necessary to fulfil the condition(s).

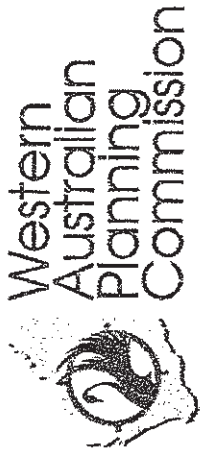
The applicant/owner is to make reasonable enquiry to the nominated agency/authority or local government to obtain confirmation that the requirement(s) of the condition(s) have been fulfilled. This may include the provision of supplementary information. In the event that the nominated agency/authority or local government will not provide its written confirmation following reasonable enquiry, the applicant/owner then may approach the WAPC for confirmation that the condition(s) have been fulfilled.

In approaching the WAPC, the applicant/owner is to provide all necessary information, including proof of reasonable enquiry to the nominated agency/authority or local government.

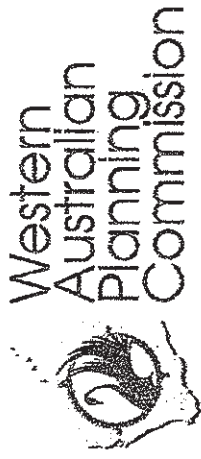
The condition(s) of this approval, with accompanying advice, are:

CONDITION(S):

1. Those lots not fronting an existing road being provided with frontage to a constructed road(s) connected by a constructed road(s) to the local road system and such road(s) being constructed and drained at the applicant/owner's cost. As an alternative the WAPC is prepared to accept the applicant/owner paying to the local government the cost of such road works as estimated by the local government subject to the local government providing formal assurance to the WAPC confirming that the works will be completed within a reasonable period as agreed by the WAPC. (Local Government)
2. All existing irrigation bores and delivery mains traversing the proposed lot to be realigned within proposed road reservation(s). (Local Government)
3. Street corners within the subdivision are to be truncated to the standard truncation of 8.5 metres. (Local Government)



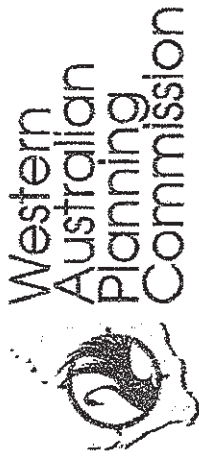
4. Prior to the commencement of any site works:
 - a preliminary site investigation shall be undertaken to determine whether acid sulfate soils are present on the land and, if present, their extent and severity;
 - if the site is found to contain acid sulfate soils, an acid sulfate soil management plan shall be submitted and approved by the Department of Environment; and
 - all site works shall be carried out in accordance with the provisions of the approved management plan. (Department of Environment)
5. A dual use path/cycleway being constructed by the subdivider to the specifications of the City of Swan. (Local Government)
6. A restrictive covenant to be imposed on the Certificate of Title of the proposed lot pursuant to section 129BA of the Transfer of Land Act (as Amended) at the expense of the applicant, for the benefit of the City of Swan, to prohibit vehicular access onto The Broadway. (Local Government)
7. The land being graded and stabilised. (Local Government)
8. The land being filled and/or drained at the subdivider's cost and any easements and/or reserves necessary for the implementation thereof, being granted free of cost. (Local Government)
9. The applicant/owner is to provide a geotechnical report certifying that the land is physically capable of development prior to the commencement of site works. (Local Government)
10. An integrated urban water management plan is to be prepared and implemented as part of the subdivisional works. (Department of Environment)
11. Suitable arrangements being made with the Water Corporation so that provision of a suitable water supply service will be available to lot(s) shown on the approved plan of subdivision. (Water Corporation)
12. Suitable arrangements being made with the Water Corporation so that provision of a sewerage service will be available to the lot/s shown on the approved plan of subdivision. (Water Corporation)
13. Suitable arrangements being made with the Water Corporation for the drainage of the land either directly or indirectly into a drain under the control of that body. (Water Corporation)
14. The provision of easements for existing or future water, sewerage and/or drainage infrastructure as may be required by the Water Corporation being granted free of cost to that body. (Water Corporation)



15. Suitable arrangements being made with Western Power for the provision of an electricity supply service to the lot(s) shown on the approved plan of subdivision. (Western Power)
16. Suitable arrangements being made with Western Power for the removal and relocation of electricity supply infrastructure, including plant and equipment, located on or near the lots shown on the approved plan. (Western Power)
17. The transfer free of cost of transformer and high voltage switchgear sites to the Western Power Corporation, with the locations of the sites being to the satisfaction of the Western Australian Planning Commission on the advice of the local government and Western Power Corporation. (Western Power)

ADVICE TO APPLICANT:

- i) The Commission's approval to the subdivision should not be construed as an approval to development on any of the lots proposed.
- ii) In relation to Condition 1, the applicant is advised that the Commission is not prepared to endorse the Deposited Plan for the creation of the proposed primary school site until the two 18 metre wide road reserves abutting the school site are constructed and identified on a plan so as to provide adequate road access to the school site.
- iii) In relation to Condition 7, the City of Swan advises that retaining walls must be designed by a Practising Structural Engineer and be capable of supporting all superimposed loads from building construction vehicles, fence structures and buildings.
- iv) In relation to Condition 9, the geotechnical report is to have particular regard to the existing and proposed site classification (AS2870), groundwater table and stormwater disposal for roof runoff.
- v) In relation to Condition 10, the integrated urban water management plan should be consistent with any local catchment precinct stormwater management plans as well as in accordance with the guidelines contained in the *Stormwater Management Manual for Western Australia* (Department of Environment, 2004).
- vi) In relation to Conditions 11 to 14, Water Corporation policy and practice for the locality may involve the provision of land (for plant and works), easements and/or the payment of financial contributions towards infrastructure. You are advised to contact the Water Corporation.
- vii) In relation to Condition 15, Western Power provides only one point of electricity supply per freehold (green title) lot and requires that any existing overhead consumer service is required to be converted to underground.



viii) The Department of Environment advises the applicant that:

- * clearing of native vegetation is prohibited, unless the clearing is authorised by a clearing permit obtained from the Department of Environment, or is of a kind that is exempt in accordance with Schedule 6 or Regulation 5 (Clearing of native vegetation Regulations) of the Environmental Protection Act 1986. Further information can be obtained at www.environment.wa.gov.au;
- * the subject land is located within the North Swan Sub Area of the Swan Groundwater Area. If the proposed development requires the need to dewater, the applicant is required to obtain a relevant licence from the Department of Environment;
- * the subject land is located within the Swan Groundwater Area under the Rights of Water and Irrigation Act (1914). Licensing in these areas in an option available to the Water and Rivers Commission to manage water, should it be required, for commercial purposes or irrigation of areas greater than 0.2 hectares in size. The issue of a licence is not guaranteed and the applicant may need to supply additional information on the impacts of the proposal on the environment and other water users. If a licence is issued it will contain a number of conditions including the quantity of water that can be pumped annually.

In relation to the above, the applicant is advised to liaise with the Department of Environment on 6250 8000.

- ix) The applicant is advised that the Department of Environment has prepared dust control guidelines for development sites, which inter alia, outline the procedures for the preparation of Dust Management Plans for development sites. Further information on the guidelines can be obtained from the Department of Environment.

A handwritten signature in black ink, appearing to read "R N Stokes".

for R N Stokes
Acting Secretary
Western Australian Planning Commission
28 October 2005



COTERRA
ENVIRONMENT

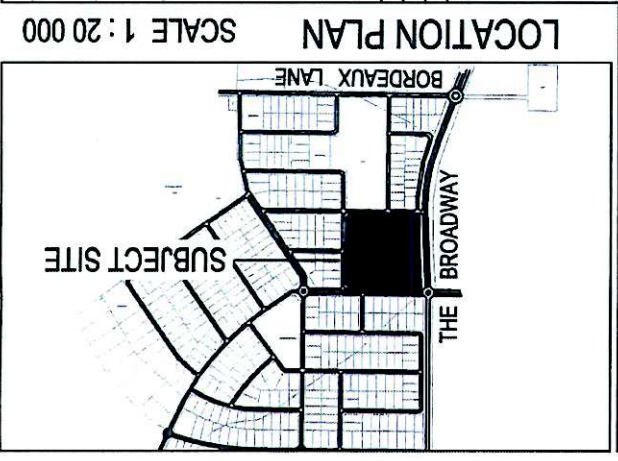
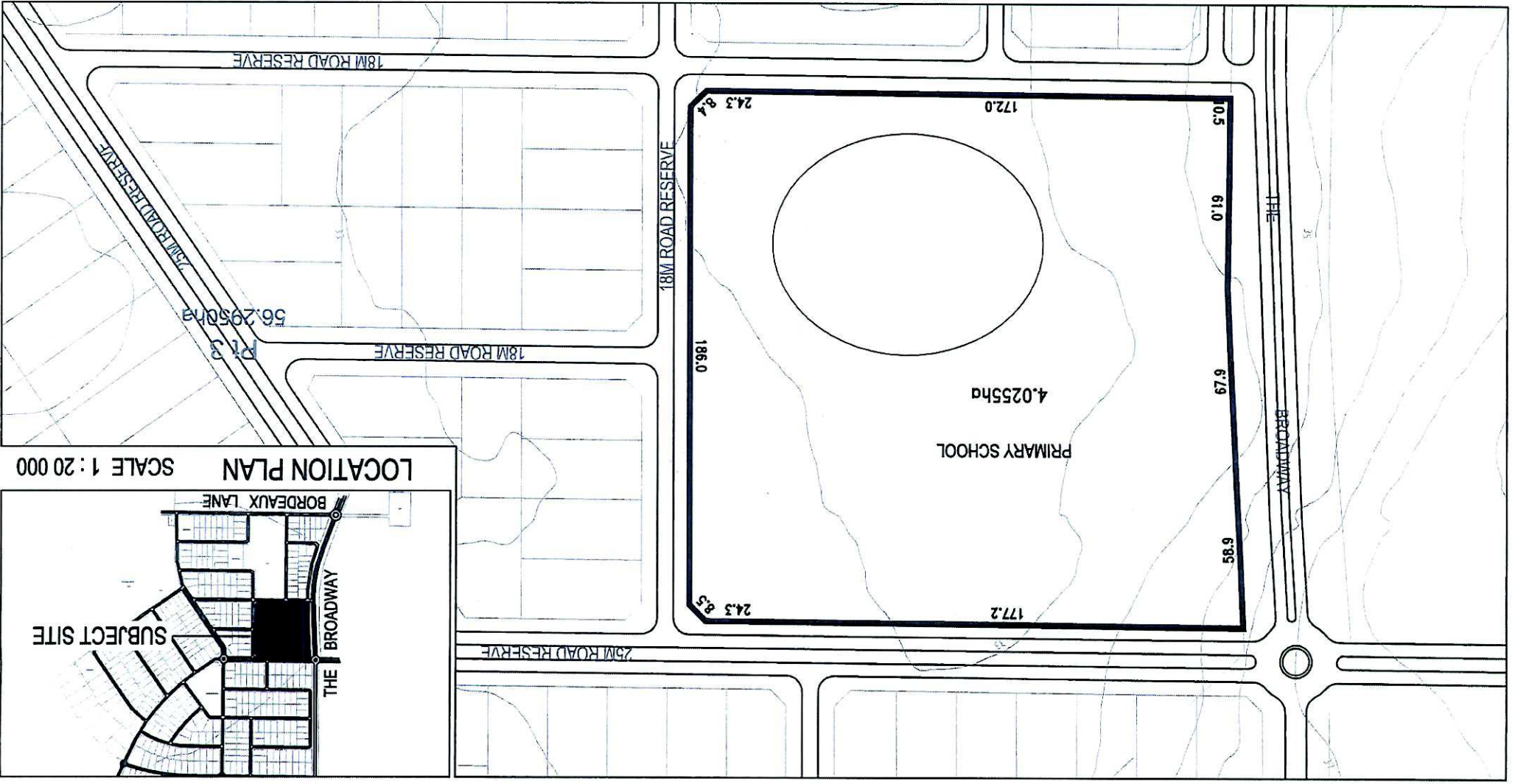
APPENDIX C - PLAN OF SUBDIVISION



PROPOSED SUBDIVISION
PRIVATE PRIMARY SCHOOL SITE - THE VINES
CITY OF SWAN

DPI REF:
 SINGLE : 0 LOTS
 GROUP : 0 LOTS
 NON RES : 1 LOT

- NOTE**
- Area Subject to Application
 - All Dimension and Areas are subject to further Survey, Engineering and Detailed Design.
 - Carriageways diagrammatic only.
 - All truncations are 6x6m unless otherwise shown.



scale : 1:2000 @ A
 draft: ES
 checked: JE
 approved: JE
 date: 10/06/05
 LWP
 Town Planning Division





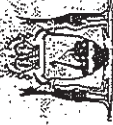
COTERRA
ENVIRONMENT

APPENDIX D – CERTIFICATE OF TITLE AND DEPOSITED PLAN

9716
Perth Patch
K251109



WESTERN



AUSTRALIA

REGISTRATION NUMBER	4800/DT52626
DUPPLICATION	2
DATE DULPLICATION ISSUED	30/7/2007

DUPLICATE CERTIFICATE OF TITLE
UNDER THE TRANSFER OF LAND ACT 1893

Volume 2601 Folio 1772

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.

RS Roberts
REGISTRAR OF TITLES

LAND DESCRIPTION:

LOT 14800 ON DEPOSITED PLAN 52626
REGISTERED PROPRIETOR:
(FIRST SCHEDULE)
THE ROMAN CATHOLIC ARCHBISHOP OF PERTH OF VICTORIA SQUARE, PERTH
(T K251109) REGISTERED 29 JUNE 2007
LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
(SECOND SCHEDULE)

1. I711792 EASEMENT BENEFIT REGISTERED 28.11.2003.
2. K234527 RESTRICTIVE COVENANT TO CITY OF SWAN - SEE DEPOSITED PLAN 52626 REGISTERED 20.6.2007.

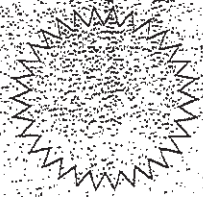
Warning: A current search of the certificate of title held in electronic form should be obtained before dealing on this land.
Lot as described in the land description may be a lot or location.

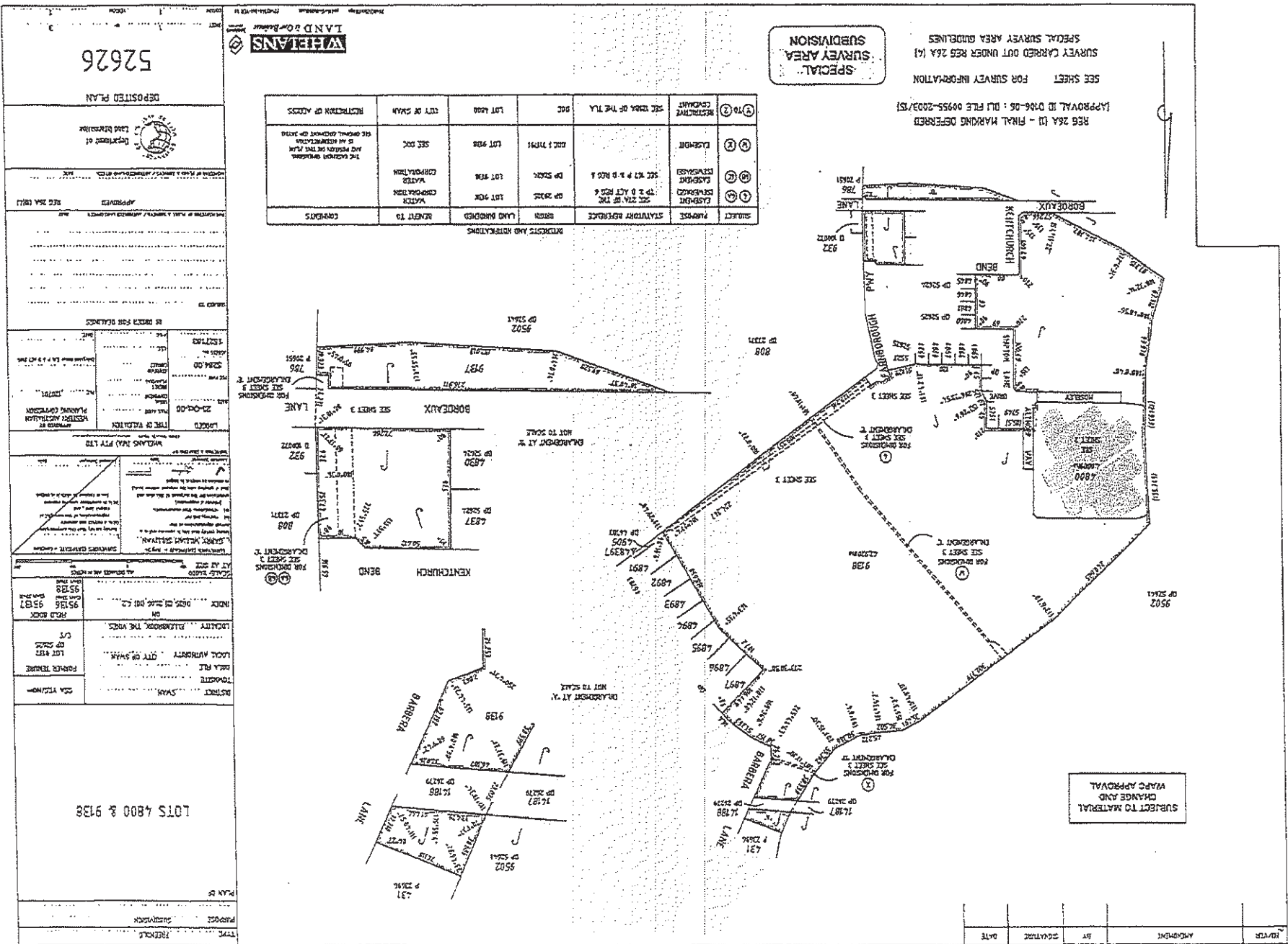
-----END OF DUPLICATE CERTIFICATE OF TITLE-----

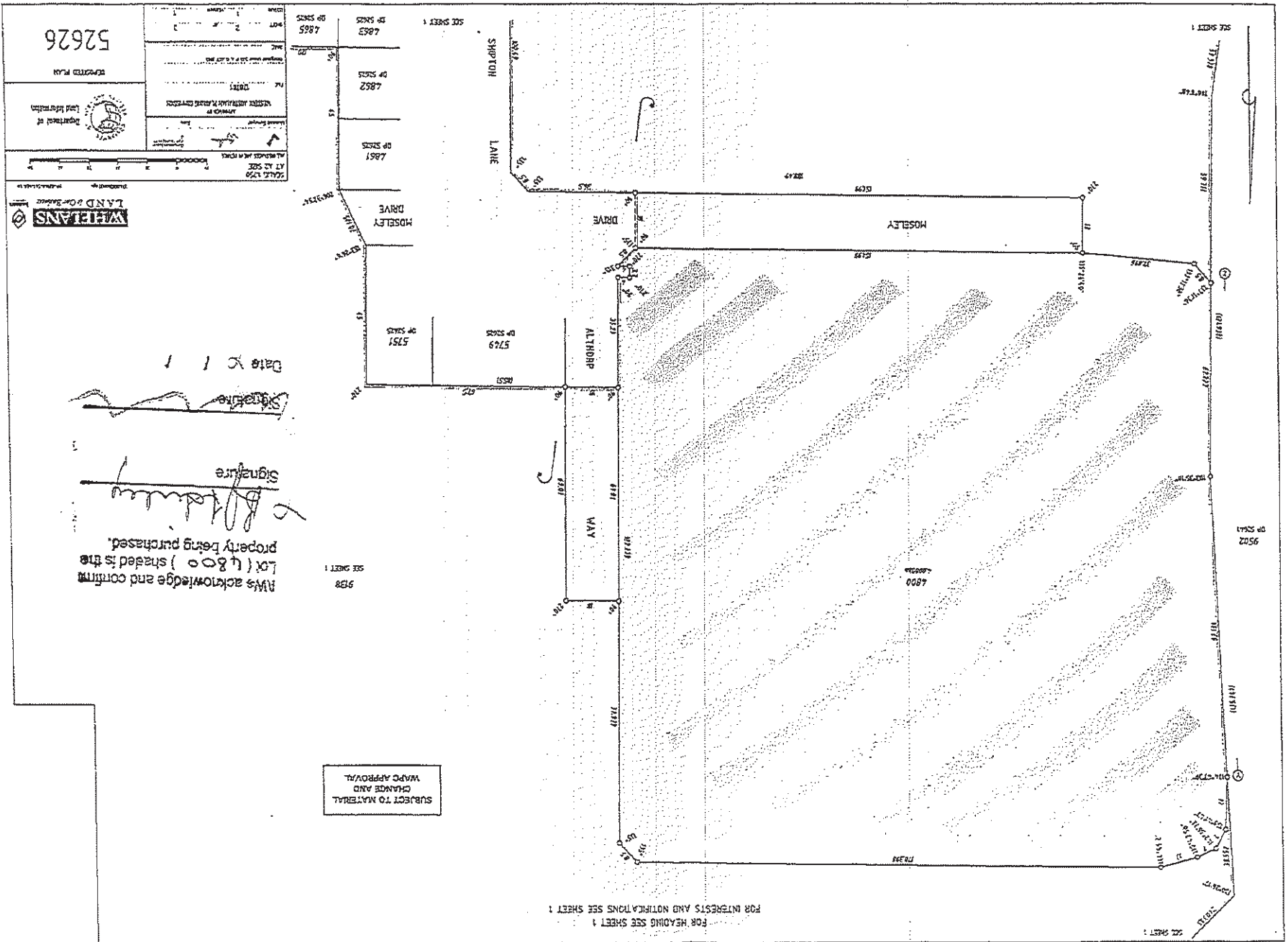
STATEMENTS:

The statements set out below are not intended to be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND: DP52626 (SHEET 1/2)
PREVIOUS TITLE: 2660-569.
PROPERTY STREET ADDRESS: NO STREET ADDRESS INFORMATION AVAILABLE.
LOCAL GOVERNMENT AREA: CITY OF SWAN.







AWs acknowledge and confirm Lot (4800) shaded is the property being purchased.

Signature

Date 10/1/11

SUBJECT TO MATERIAL CHANGE AND WAPC APPROVAL.

FOR HEADING SEE SHEET 1 FOR INTERESTS AND NOTIFICATIONS SEE SHEET 1

52626
 DEPOSITED PLAN
 Department of Land and Heritage
 LAND & HERITAGE
 WAPC APPROVAL



APPENDIX E - EPA AND DOE CORRESPONDENCE



Environmental Protection Authority

141 St Georges Terrace, Perth, Western Australia 6000,
Telephone: (08) 9222 7000. Facsimile: (08) 9222 7155.

Postal Address: PO Box K822,
Perth, Western Australia 6842.
Website: www.epa.wa.gov.au

Mr Danny Murphy
LWP Property Group
2/60 Coolamon Boulevard
ELLENBROOK WA 6069

Dear Mr Murphy

VINES STAGE 5 OUTLINE DEVELOPMENT PLAN/SUBDIVISION


I refer to the Vines Stage 5 subdivision application and recent discussion with the Environmental Protection Authority (EPA) and Department of Environment (DoE)

I confirm that the area proposed for the subdivision was considered in developing the Bush Forever plan and that it was agreed that key wetland and upland vegetation areas would be retained in Regional Open Space and Public Open Space to the east of the site. The subdivision application meets this requirement. In determining this position it was recognised that wetlands outside this area would largely be lost.

As advised, the EPA and DoE does not object to subdivision of the land, however requests that the existing subdivision design be reviewed with a view to better protecting the wetlands in the south west corner of the area, while at the same time, not increasing the overall Public Open Space provision of the subdivision.

If you have any queries regarding this advice, please contact me on 92227023.

Yours sincerely



K.J. Taylor
Director
Environmental Impact Assessment Division

21 December 2004

cc Mr Tim Trefry, Roberts Day Group
Ms Natalie Thorning, Department of Environment, Catchment Management Branch.

ENVYIN



Department of Environment

Your ref:
Our ref: SN18430
Enquiries: Hywel Phillips
Direct tel: 6250 8090

Chief Executive Officer
City of Swan,
PO Box 196
Midland WA 6936

Attn : Ryan Darby

Dear Mr Darby

RE: MODIFICATION TO ODP NO 37 - THE VINES, STAGE 5

Please refer to previous advice dated 22 September 2004 in response to your referral dated 18 August 2004, on the proposed modification to ODP No 37.

Following a meeting between Department of Environment (DoE) staff, Tim Trefry of Roberts Day and Phil Bailey of Bowman Bishaw Garham a modified plan of the ODP has been submitted to the DoE for comment.

The advice as per the previous correspondence stands with the exception of the advice on Wetlands.

The DoE's position on the revised ODP (submitted on 31 Jan 2005) is now as follows:

The DoE acknowledges that there is improvement in the revised ODP with the increase in size of POS in the south west corner to include wetland vegetation, however there is still considerable loss of draft EPP wetland areas.

The DoE therefore gives qualified support to the proposal but recommends that additional buffer areas in the south western section would greatly improve the plan.

Should you require further information please contact Hywel Phillips on 6250 8090.

Yours sincerely

Hywel Phillips

for
Carolyn Hills
A/PROGRAM MANAGER
SWAN GOLDFIELDS AGRICULTURAL REGION
9 March 2005

cc Tim Trefry



WESTERN AUSTRALIAN
environment
AWARDS

Swan Goldfields Agricultural Region
7 Eilam Street Victoria Park Western Australia 6100
Telephone (08) 6250 8000 Facsimile (08) 6250 8050
www.environment.wa.gov.au



Department of Environment

ESY Y/M

Your ref:
Our ref: SN19430
Enquiries: Cameron Sudintas
Direct tel: 8250 8009

Chief Executive Officer
City of Swan,
PO Box 196
Midland WA 6936

Attention: Phillip Russell

Dear Mr Russell,

RE: MODIFICATION TO ODP NO 37 - THE VINES, STAGE 5

Thank you for the above referral dated 2 May 2005. The Department of Environment (DoE) has considered the proposal and provides the following comments in addition to previous advice dated 22 September 2004 and 9 March 2005.

It is acknowledged that whilst there is still considerable loss of Draft EPP wetlands, there has also been an improvement in the revised ODP with the increase in size of POS in the south west corner to include wetland vegetation. The revised ODP is therefore considered acceptable to the DoE.

Should you require further information please contact Cameron Sudintas on 6250 8009.

Yours sincerely,

[Handwritten signature]

JOHN CONNOLLY
PROGRAM MANAGER
SWAN GOLDFIELDS AGRICULTURAL REGION

19 May 2005

FILE REF: M.ODP037
DOC REF: 685348
ASSESS No:
RECEIVED 20 MAY 2005
CITY OF SWAN
DEPT: Planning
OFFICER: PR
SIGN:





APPENDIX F - FLORA AND VEGETATION SURVEY (WESTON, 1999)

VEGETATION AND SIGNIFICANT FLORA
OF
BUSHPLAN SITE 23
(MUCHEA LIMESTONE)

THE VINES

Prepared for

Mike Bishaw
Bowman Bishaw Gorham,
Environmental Management Consultants
(1298 Hay Street)
PO Box 946

WEST PERTH WA 6872
Telephone (08) 9481 8588
Facsimile (08) 9481 8338

Prepared by

Arthur S Weston, PhD
Consulting Botanist
8 Pitt Street
ST JAMES WA 6102
Tel/Fax (08) 9458 9738

14 June 1999

TABLE OF CONTENTS

	Page
1.0 INTRODUCTION	1
1.1 LOCATION	1
1.2 OBJECTIVES	1
2.0 METHODS	1
3.0 RESULTS AND DISCUSSION	2
3.1 VEGETATION	2
3.2 SIGNIFICANT FLORA	5
4.0 LIMITATIONS	6
4.1 PLANT COMMUNITIES	6
4.2 SIGNIFICANT FLORA	6
5.0 REFERENCES	7

MAPS

1	VEGETATION. BUSHPLAN SITE 23. Approximate Scale 1:16 221
2	CONDITION. BUSHPLAN SITE 23. Approximate Scale 1:16 221
3	PHOTO LOCATIONS. BUSHPLAN SITE 23. Approximate Scale 1:16 221
4	SITE LOCATIONS. BUSHPLAN SITE 23. Approximate Scale 1:16 221

ACCOMPANIMENTS

Rare Flora location mud maps from CALM via BBG

Panairama aerial photograph printout, Approximate Scale 1:16 221.

From BBG: "Figure 2. BUSHPLAN RECOMMENDATIONS"

Table 11: Vegetation Structural Classes. Reproduced from *Perth's Bushplan* (Department of Environmental Protection 1998, Part A, Table 11, p. 37).

Condition Scale 1-6. Modified from *Perth's Bushplan* (Western Australian Planning Commission 1998, p. 53)

**VEGETATION AND SIGNIFICANT FLORA
OF
BUSHPLAN SITE 23
(MUCHEA LIMESTONE)**

THE VINES

1.0 INTRODUCTION

This report describes vegetation in Bushplan Site 23, Cardinal Drive Bushland, Ellenbrook (Department of Environmental Protection 1998 Part B, pp. 155-156) and searches for rare flora there.

The searches and vegetation survey were requested by Mike Bishaw, of Bowman Bishaw Gorham, around 19 March 1999.

1.1 LOCATION

The location of the survey area is shown in Map 1, which is also the vegetation map. It is in The Vines and is north of Bordeaux Lane, west of Vines Avenue and southwest of Cardinal Drive. It comprises approximately 80 ha of vegetated and cleared land.

1.2 OBJECTIVES

The principal requirements of the vegetation survey are to:

- to determine the condition of the vegetation of the Bushplan site, and
- to assess how well it is represented, if at all, in Bushplan Site 300, particularly the eastern wetlands 'Sawpit' reserve between Bushplan Site 23 and Maralla Road.

2.0 METHODS

The field work part of the project was done on Wednesday, 24 March 1999, when transects were driven along most of the tracks in the Bushplan site and next to it and walked into vegetation that had no tracks in it. Four transects were driven across and along the 'Sawpit' reserve. Notes on vegetation types, condition and principal species were made, plants were collected and photographs were taken along the transects.

Vegetation boundaries were marked onto 1:20 000 scale Metro Regional Area aerial photography flown in January 1998 before, during and after the field trip. The aerial photographs were stereoscopically viewed with magnifying lenses. Subsequently, boundaries and symbols representing vegetation units were drawn onto transparent film overlying one of the photographs. The film map was photocopied and enlarged to 1:10 000.

3.0 RESULTS AND DISCUSSION

3.1 VEGETATION

Map 1 shows the vegetation of the Bushplan site at scales of 1:20 000 and 1:10 000. The following 11 vegetation units are indicated on the map and are described and discussed in this section, and condition ratings for them are given. Locations where photographs were taken are shown on Map 3.

The 11 vegetation units and their map symbols are:

- B Banksia Low Woodland
- A *Acacia saligna* Open to Closed Tall Scrub
- Mv *Melaleuca vinea* Open to Closed Tall Scrub
- MvA *Melaleuca vinea* – *Acacia saligna* Open to Closed Tall Scrub
- CMvA *Melaleuca vinea* – *Acacia saligna* Open to Closed Tall Scrub
over *Calothamnus lateralis* Closed Heath
- Er *Eucalyptus rudis* Open to Closed Forest
- Mp *Melaleuca preissiana* Low Closed to Open Forest
- Mr *Melaleuca raphiophylla* Low Closed Forest
- EcMh *Eucalyptus (Corymbia) calophylla* Open Forest over *Melaleuca huegelii* Mixed Tall
Open Scrub and *Banksia littoralis* Low Open Forest
- W *Phytolacca-Coryza-Chenopodium-Lepidium-Juncus* Closed Tall [1-2 m] Herbland
- Cl Cleared

These vegetation units are described below and discussed in terms of:

- (1) photographs and notes,
- (2) condition,
- (3) location in Bushplan site,
- (4) similarity to the vegetation units of Griffin (Weston *et al.* 1993),
- (5) representation in the Bushplan Site 300 part of the Griffin study area and
- (6) probable Floristic Community Type counterpart.

The descriptions use the several strata system of structural units or plant communities used by Muir (1977) and modified by Keighery (1994) for *Perth's Bushplan* (Department of Environmental Protection 1998, Part A, Table 11, p. 37). A copy of the *Perth's Bushplan* table accompanies this report.

Assessments of condition of the plant communities are shown on Map 2, which is a transparency that overlies Map 1. The scale used for the assessments is the six-point scale developed by Trudgen (1991) and Keighery (1994) and used in *Perth's Bushplan* (Western Australian Planning Commission 1998, p. 53). The six steps in the scale are: 1 Pristine, 2 Excellent, 3 Very Good, 4 Good, 5 Degraded and 6 Completely Degraded.

A photocopy of the scale from *Perth's Bushplan*, with the six numbers added to it, accompanies this report. The photocopy gives definitions of the steps in the scale.

In general, the condition of the uncleared vegetation in Bushplan Site 23 was assessed as Excellent.

It should be noted, however, that it is, at this time of the year, impossible to accurately assess the nature and condition of the herbaceous plant ground layer.

Banksia Low Woodland (B)

- (1) ASW99.III.3-5, 6.
- (2) Condition 2 (1-3); there appears to be a patchy occurrence of dieback disease.
- (3) Raised sandy sites in the centre and in the eastern corner.
- (4) Probably A1.
- (5) A3 is poorly represented in the eastern, Sawpit part and is well-represented in the western, Lexia part.
- (6) Comprises one or more of the six Floristic Community Type *Banksia* woodlands listed by Keighery (1997a) for the Ellenbrook area.

Acacia saligna Open to Closed Tall Scrub (A)

- (1) ASW99.III.3-2. The recently burnt area between the cleared bands has much *Anthocercis littorea*; there is less in the long unburnt stands east of the cleared bands.
- (2) Overstorey Condition -- 2 (-3); understorey is mainly herbaceous plants and unassessable.
- (3) Low flats and drainage areas in the western part of the Bushplan site, on reddish loamy soils with limestone.
- (4) Possibly identical with J.
- (5) No representation of J.
- (6) The Floristic Community Type counterpart is probably S5 of Keighery (1997a).

Melaleuca viminea Open to Closed Tall Scrub (Mv)

- (1) ASW99.III.3-22.
- (2) Overstorey Condition -- 2 (-3); understorey is mainly herbaceous plants and unassessable.
- (3) Most of the low flat and drainage area in the northern part of the Bushplan site, on sandy loamy soils with limestone.
- (4) No Griffin counterpart, although Griffin had three sites with *Melaleuca viminea* in them.
- (5) The species, but not the community, is apparently represented in Bushplan Site 300, in Griffin Sites 2, 13 and 37.
- (6) The Floristic Community Type counterpart of this Muchea Limestone community is probably Type 18, Shrublands on Calcareous Silts.

Melaleuca viminea - Acacia saligna Open to Closed Tall Scrub (MvA)

- (1) ASW99.III.3-7, 8, 9, 10. This is a mixture and combination of the *Melaleuca viminea* and *Acacia saligna* Open to Closed Tall Scrubs. It is also the habitat and locality where there are several populations of the Declared Rare Flora *Grevillea curviloba* subsp. *curviloba*.
- (2) Overstorey Condition - 2 (-3); understorey is mainly herbaceous plants and unassessable.
- (3) Most of the low flat and drainage area in the southeastern part of the Bushplan site, on sandy loamy soils with limestone
- (4) No Griffin counterpart.
- (5) No representation.
- (6) This is probably a form of Floristic Community Type 18, Shrublands on Calcareous Silts.

Melaleuca viminea - Acacia saligna Open to Closed Tall Scrub over Calothamnus lateralis

Closed Heath (CMvA)

- (1) ASW99.III.3-19. This is a mixture and combination of the *Melaleuca viminea* and *Acacia saligna* Open to Closed Tall Scrubs with a dense understorey dominated by *Calothamnus lateralis*, a shrub recorded during the Griffin study but not recorded in any of his plots.
- (2) Condition - 1-2..
- (3) A small drainage area in the northeastern part of the Bushplan site mostly between the drain and Cardinal Drive, on loamy soils with limestone
- (4) No Griffin counterpart.
- (5) No representation.
- (7) This is probably a form of Floristic Community Type 18, Shrublands on Calcareous Silts.

Eucalyptus rudis - Melaleuca preissiana Open to Closed Forest (Er)

- (1) ASW99.III.3-23. This forest has varying proportions of *Eucalyptus rudis* and *Melaleuca preissiana* as dominants, with *Banksia littoralis*, *Xanthorrhoea preissii* and *Melaleuca raphiophylla* prominent in the understorey.
- (2) Condition - 1-2. This vegetation in the Bushplan site is regenerating after fire.
- (3) A north-south band depression or drainage line in the western part of the Bushplan site.
- (4) Probably the same as two Griffin units, depending on which species is dominant: E3 and H.
- (5) There are a few small representations of both E3 and H in the Sawpit part of Bushland Site 300 and a few of E3 in the Lexia part.
- (6) This is probably a form of Floristic Community Type 11, 13 or 14.

Melaleuca preissiana - Eucalyptus calophylla [Low] Closed to Open Forest (Mp)

- (1) ASW99.III.3-20. This community is a diverse and varying mixture of *Melaleuca preissiana*, *Eucalyptus calophylla*, *Banksia attenuata*, *Banksia menziesii*, *Allocasuarina fraseriana*, *Banksia littoralis* and *Acacia saligna*. There is also a small grove of *Melaleuca preissiana* north of this stand, in the middle of the flat.
- (2) Condition 2 (-1).
- (3) North of centre of Bushplan site on middle to lower slope of sandridge.
- (4) Possibly C1.
- (5) This may be the same unit as Griffin shows as being well-represented in a part of Bushplan Site 300 north of this site.
- (6) This is probably Floristic Community Type 4 or allied to it.

Keighery, G. and Keighery, B. (1995). *Muchea Limestones – Floristics*. Report for ANCA National Reserves Network. Unpublished report.

Muir, B.G. (1977). Biological Survey of the Western Australian Wheatbelt. Part II. Vegetation and habitat of Bendinger Reserve. *Records of the West Australian Museum*, Supplement No. 3.

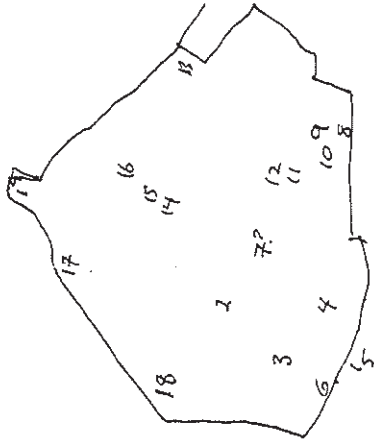
Olde, P. and Marriott, N. (1995). *The Grevillea Book, Volume Two*. Kangaroo Press, Kenthurst, NSW.

Trudgen, M.E. (1991). Vegetation Condition Scale. Unpublished. (see Keighery 1994 and Department of Conservation and Land Management 1998, Part B, Table 12, p. 40).

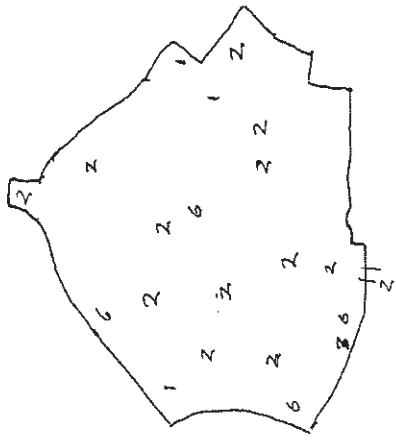
Western Australian Planning Commission (1998). *Perth's Bushplan 'Keeping the Bush in the City'*. Western Australian Planning Commission, Perth.

Weston, A., Griffin, E.A. and Trudgen, M. (1993). *Flora and Vegetation Conservation Values of the Ellenbrook Estate*. with: Bowman Bishaw Gorham *Urban Development and Conservation Requirements at Ellenbrook (Responses to Conditional Environmental Approval)*. Report No. M12154, prepared for Ellenbrook Management Pty Ltd.

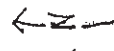
MAP
SITE LOCATIONS
BS23



MAP 2
CONDITION
BUSHPLAN SITE 23



MAP 3
PHOTO LOCATIONS
BUSHPLAN SITE 23



MAP 1
VEGETATION
BUSHPLAN SITE 23

