ELLENBROOK MANAGEMENT PTY LTD

ELLENBROOK
PUBLIC ENVIRONMENTAL REVIEW
TABLES & DIAGRAMS

Volume 2

Feilman Planning Consultants

TABLES

Table 1

Lexia Scheme		Groundwater Scheme INCLUDED		Groundwater Scheme EXCLUDED	
Conservation Area		90 ha	410 ha	90 ha	410 ha
WATER LOAD (Mm^3)					
Catchment:	Northern	0.9	0.7	1.3	1.0
	Southern	1.4	1.4	1.4	1.4
	Eastern	0.8	0.8	0.8	0.8
	TOTAL	3.1	2.9	3.5	3.2
If No Intercatchment Pumping Increase by		0.2	0.2	0.3	0.3
If State Forest Excluded Decrease Load by		0.1		0.2	
P EXPORTED (kg)					
Catchment:	Northern	20	19	46	44
	Southern	7	7	8	8
	Eastern	10	10	10	10
	TOTAL	37	36	64	62
If No Intercatchment Pumping Increase by		5	5	14	15
If State Forest Excluded Decrease P by		1		4	
P RETAINED (kg)					
Catchment:	Northern	105	98	339	316
	Southern	66	68	75	77
	Eastern	35	35	35	35
	TOTAL	206	201	449	428
If No Intercatchment Pumping Increase by		5	5	14	16
If State Forest Excluded Decrease P by		7		26	

TABLE 2	ELLENBROOK DEVELOPMENT ECONOMIC OUTPUT									
	Lot Construction					Dwelling Construction				
Year	No. of Lots	Direct Expenditure	1st Round [1]$M	Subsequent [1] $M	Total Output $M	No. of Dwellings	Direct Expenditure	1st Round[1] $M	Subsequent[1] $M	Total Output $M
1993	300	7.5	3.72	3.20	6.9	300	13.5	6.7	5.8	12.5
1994	620	15.4	7.7	6.6	14.3	620	27.9	13.0	11.9	24.9
1995	1040	25.8	12.9	11.1	24.0	1040	46.8	23.4	20.1	43.5
1996	1500	37.3	18.6	16.0	34.6	1500	67.5	33.7	29.0	62.7
1997	1500	37.3	18.6	16.0	34.6	1500	67.5	33.7	29.0	62.7
1998	1500	37.3	18.6	16.0	34.6	1500	67.5	33.7	29.0	62.7
1999	1500	37.3	18.6	16.0	34.6	1500	67.5	33.7	29.0	62.7
2000	1500	37.3	18.6	16.0	34.6	1500	67.5	33.7	29.0	62.7
2001	1500	37.3	18.6	16.0	34.6	1500	67.5	33.7	29.0	62.7
2002	1600	39.7	19.8	17.0	36.8	1600	72.0	36.0	30.9	66.9
2003	1600	39.7	19.8	17.0	36.8	1600	72.0	36.0	30.9	66.9
2004	1600	39.7	19.8	17.0	36.8	1600	72.0	36.0	30.9	66.9
2005	1600	39.7	19.8	17.0	36.8	1600	72.0	36.0	30.9	66.9
2006	1600	39.7	19.8	17.0	36.8	1600	72.0	36.0	30.9	66.9
2007	1600	39.7	19.8	17.0	36.8	1600	72.0	36.0	30.9	66.9
TOTAL	**20560**	**510.7**	**254.7**	**218.9**	**473.6**	**20560**	**925.2**	**461.3**	**397.2**	**858.5**
	Total Direct Expenditure			**$510.7**		**Total Direct Expenditure**			**$925.2**	
	Total Output			**$473.6**		**Total Output**			**$858.5**	

TABLE 3	ELLENBROOK DEVELOPMENT EMPLOYMENT CREATION							
	Lot Construction			Dwelling Construction			Totals	
Year	No. of Lots	Direct [A1]	Indirect [B1]	No. of Dwellings	Direct [A2]	Indirect [B2]	[A1+A2]	[B1+B2]
1993	300	63	56	300	114	102	177	158
1994	620	130	117	620	236	212	366	329
1995	1040	219	196	1040	397	355	616	551
1996	1500	316	283	1500	572	512	888	795
1997	1500	316	283	1500	572	512	888	795
1998	1500	316	283	1500	572	512	888	795
1999	1500	316	283	1500	572	512	888	795
2000	1500	316	283	1500	572	512	888	795
2001	1500	316	283	1500	572	512	888	795
2002	1600	337	302	1600	610	546	947	848
2003	1600	337	302	1600	610	546	947	848
2004	1600	337	302	1600	610	546	947	848
2005	1600	337	302	1600	610	546	947	848
2006	1600	337	302	1600	610	546	947	848
2007	1600	337	302	1600	610	546	947	848
TOTAL	**20560**	**4330**	**3879**	**20560**	**7839**	**7010**	**12169**	**10896**

Table 4

CLASSIFICATION OF THE VEGETATION OF SOME TYPICAL WETLANDS OF THE ELLENBROOK PROJECT AREA

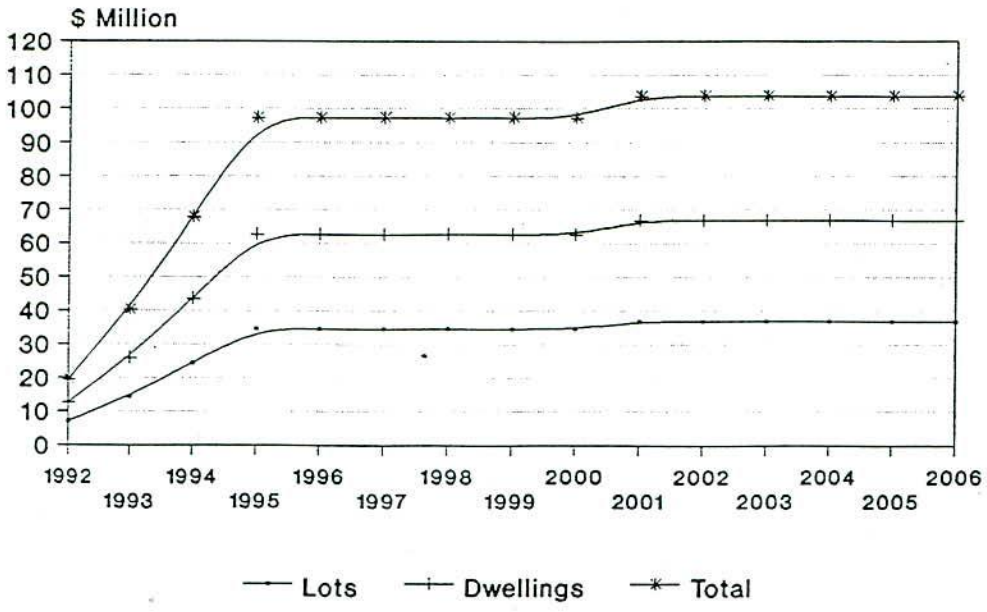
Ellenbrook Transect	*Type*	*Classification of Wetland After Semeniuk et al., 1990*	*Inventory of Assemblages*[1,2]
A1	sumpland	micro concentriform open forest/closed heath/closed sedgeland	*Melaleuca preissiana/Astartea fascicularis/Baumea articulata*
A2	dampland	meso maculiform open forest/closed heath/closed sedgeland	*Melaleuca preissiana/Hypocalymma angustifolium/Astartea fascicularis-Baumea articulata*
A3	sumpland	micro maculiform open forest/closed heath/closed sedgeland	*Melaleuca preissiana/Pericalymma ellipticum/Astartea fascicularis/Baumea articulata*
A4	sumpland	micro zoniform closed heath/closed sedgeland	*Astartea fascicularis/Baumea articulata*
A5	dampland	macro maculiform forest/closed heath	*Melaleuca rhaphiophylla/Pericalymma ellipticum/Astartea fascicularis/Eucalyptus spp.-Banksia spp.*[3]
B1	sumpland	micro concentriform forest/closed heath/low woodland/closed sedgeland	*Hypocalymma angustifolium/ Banksia littoralis/M. preissiana/Baumea acuta/Astartea fascicularis-Pericalymma ellipticum/Baumea articulata*
C1	seepage	lepto maculiform open woodland/closed heath	*M. preissiana/A. fascicularis-Lepidosperma sp.*
D1	seepage	meso maculiform woodland/open woodland	*B. littoralis-M. preissiana/E. rudis*
E1	dampland	lepto latiform closed heath	*Eremaea pauciflora*
F1	sumpland	micro concentriform forest/closed woodland/closed heath/closed sedgeland	*Melaleuca preissiana/Banksia littoralis-Lepidosperma gladiatum/ A. fascicularis/ Baumea acuta/B. articulata*
G1	sumpland	lepto concentriform open forest/closed heath/closed sedgeland	*Melaleuca preissiana-Hypocalymma angustifolium/Baumea acuta/Astartea fascicularis/B. articulata*
H1	sumpland	micro concentriform forest/closed heath/closed sedgeland	*Melaleuca preissiana/Hypocalymma angustifolium/Astartea fascicularis/Baumea articulata*
I1	sumpland	lepto concentriform open woodland/closed scrub/closed sedgeland	*Banksia littoralis/Astartea fascicularis/ Pericalymma ellipticum/Baumea acuta/B. articulata*
J1	dampland	micro heteroform closed low forest/closed sedgeland/closed heath	*Banksia littoralis/Baumea acuta/Pericalymma ellipticum*
K1	dampland	micro concentriform open forest/closed heath/closed sedgeland	*Melaleuca preissiana-Banksia littoralis/Calothamnus lateralis-Astartea fascicularis*
L1	dampland	lepto maculiform closed low forest/closed scrub	*Banksia littoralis/Melaleuca teretifolia-M. polygaloides*
M1	sumpland	micro gradiform closed sedgeland/closed scrub	*Baumea acuta/Lepidosperma longitudinale/Melaleuca teretifolia-Astartea fascicularis/Baumea articulata*
N1	sumpland	lepto concentriform closed woodland/closed heath/closed sedgeland	*M. preissiana-Banksia littoralis/Astartea fascicularis/Baumea acuta/Melaleuca lateritia/Baumea articulata*

1. The various assemblages are separated by a slash (/):
   Different species which occur within the same assemblage are separated by a dash (-).
2. For descriptions of the floristics of the wetlands see Appendix A.
3. This assemblage contains a mixture of woodland and wetland species.

GRAPHS

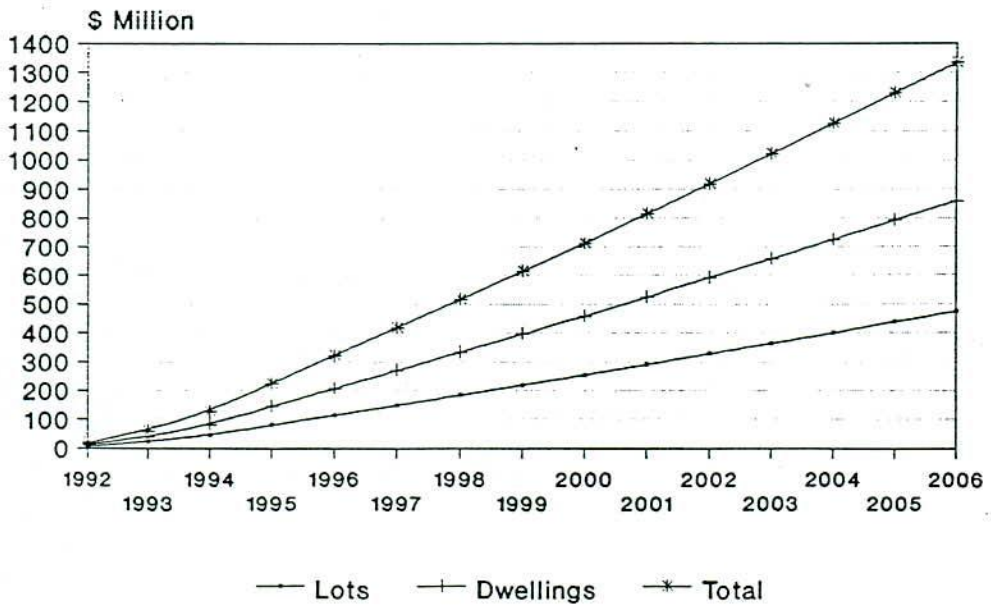
Graph 1

Per Annum Output Creation
Lot & Dwelling Construction



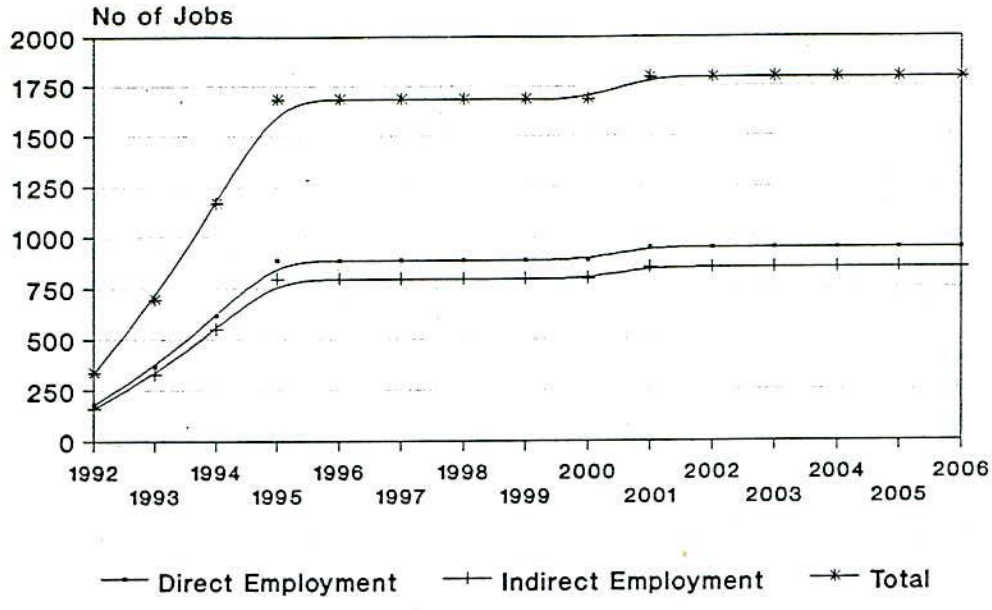
Graph 2

Cumulative Output Creation
Lot & Dwelling Construction



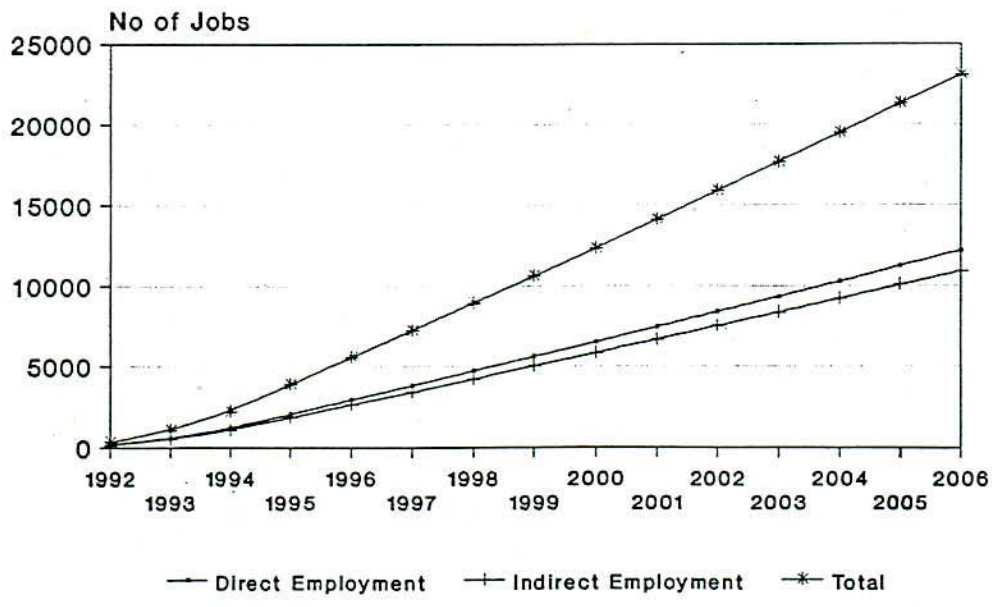
Graph 3

Per Annum Employment Creation Total Lot & Dwelling Construction



Graph 4

Cummulative Employment Creation Total Lot & Dwelling Construction



FIGURES

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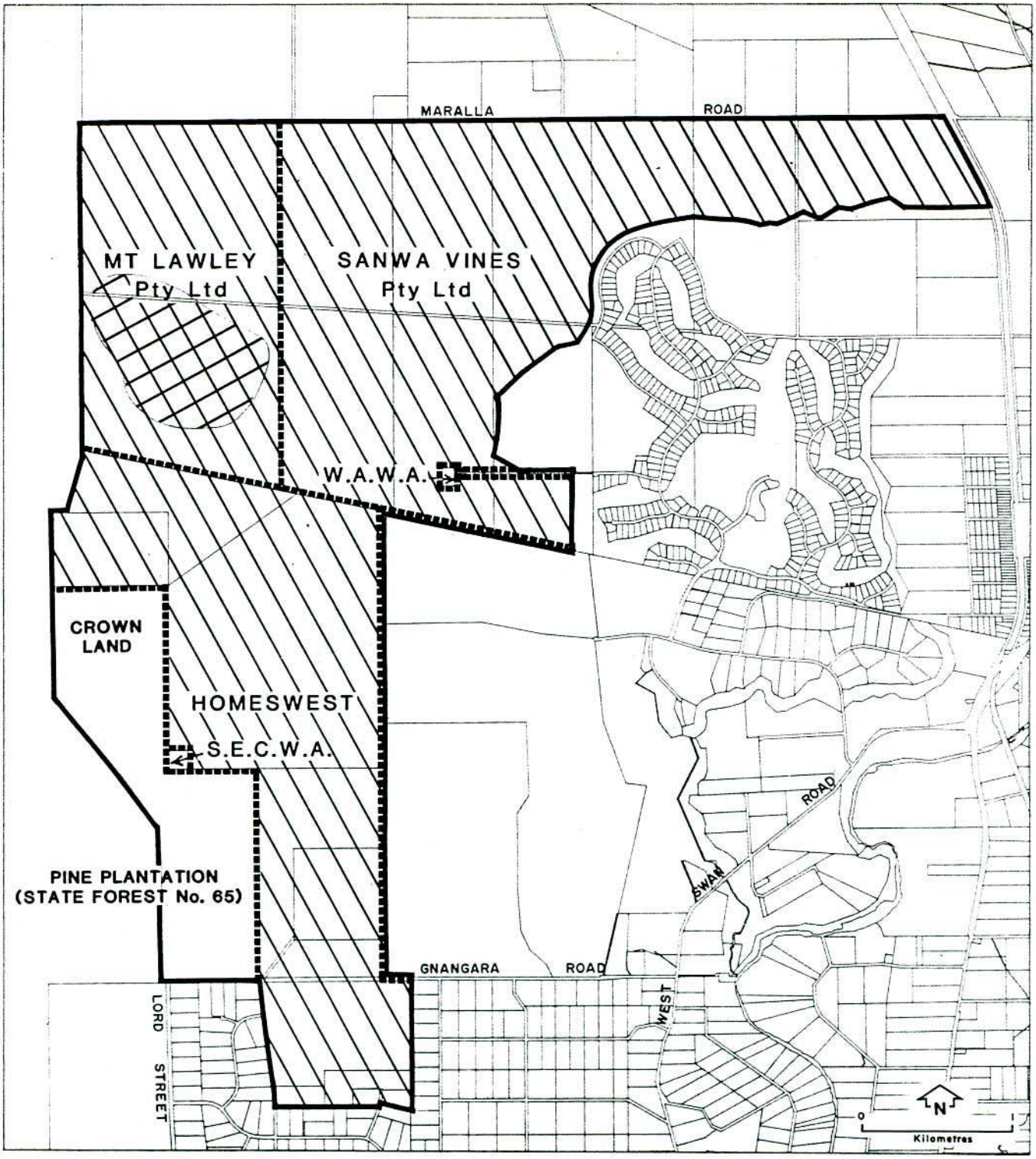

ELLENBROOK DEVELOPMENT BOUNDARY

OWNERSHIP BOUNDARY

PROPOSED URBAN ZONING

PROPOSED REGIONAL OPEN SPACE ZONING (Conservation Area)

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AREA PROPOSED FOR DEVELOPMENT & LAND OWNERSHIP

Figure 1

SOURCE: METROPLAN REPORT
PRODUCED BY D.P.U.D.

METROPLAN
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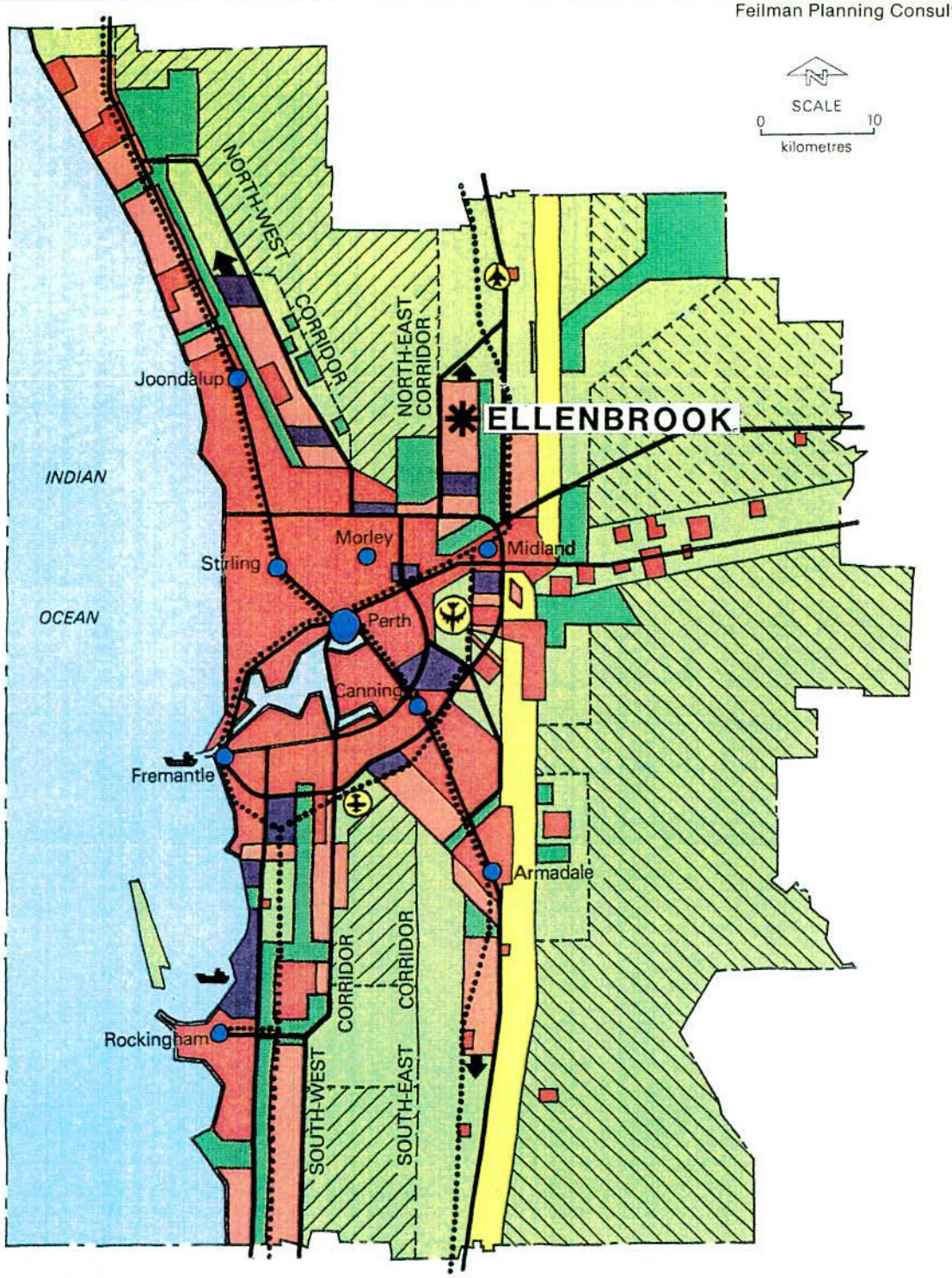

LEGEND

- Urban
- Future Urban
- Region Open Space System
- Major Industry
- Escarpment Protection
- Rural/Non-Urban
- Groundwater Catchment
- Surface Water Catchment
- Proposed Surface Water Catchment
- Strategic Regional Centre
- Airports
- Harbours
- Major Road
- Railway
- Future Urban Growth Option

METROPLAN 1990: METROPOLITAN STRATEGY

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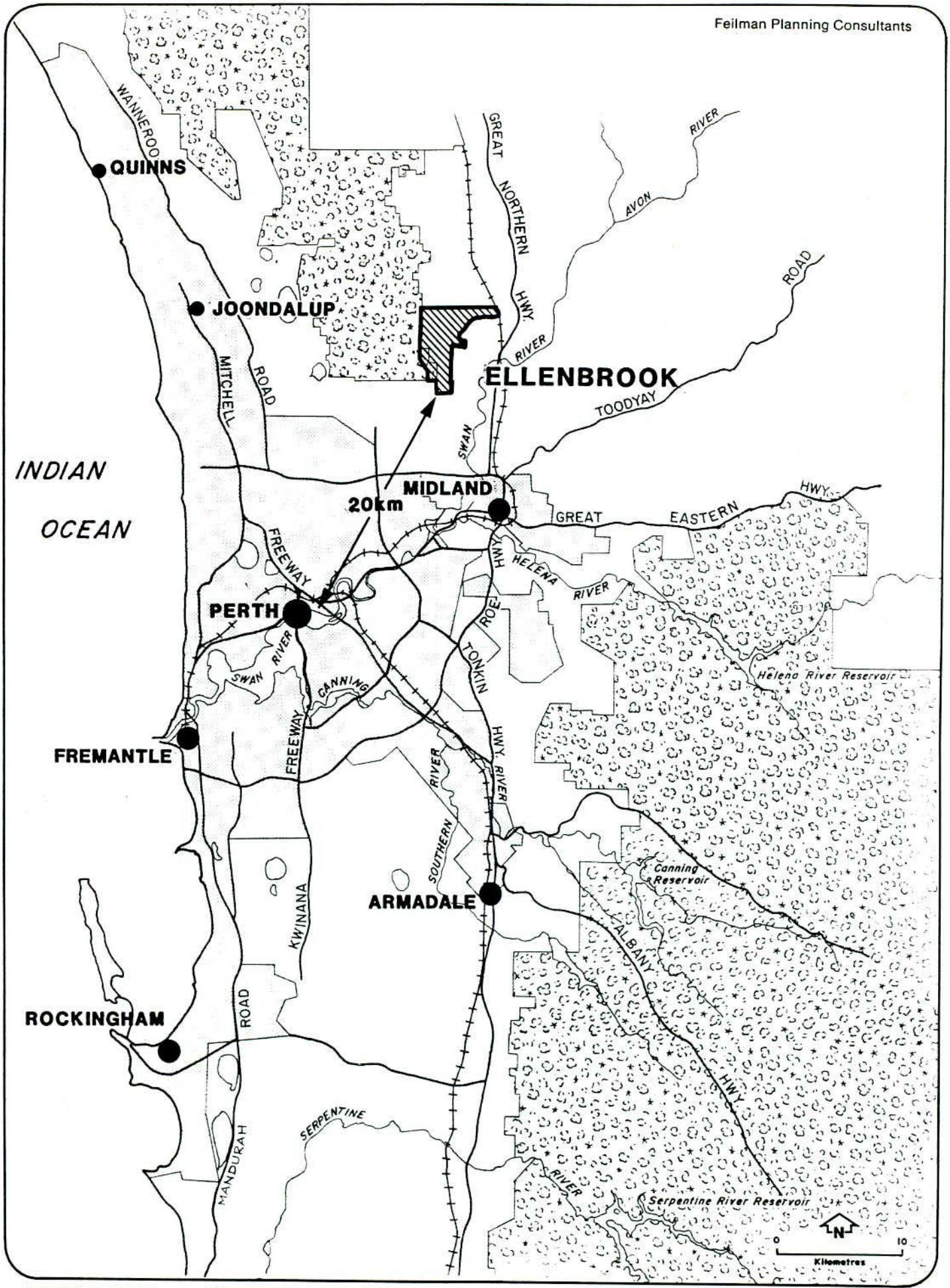
METROPLAN

Figure 2



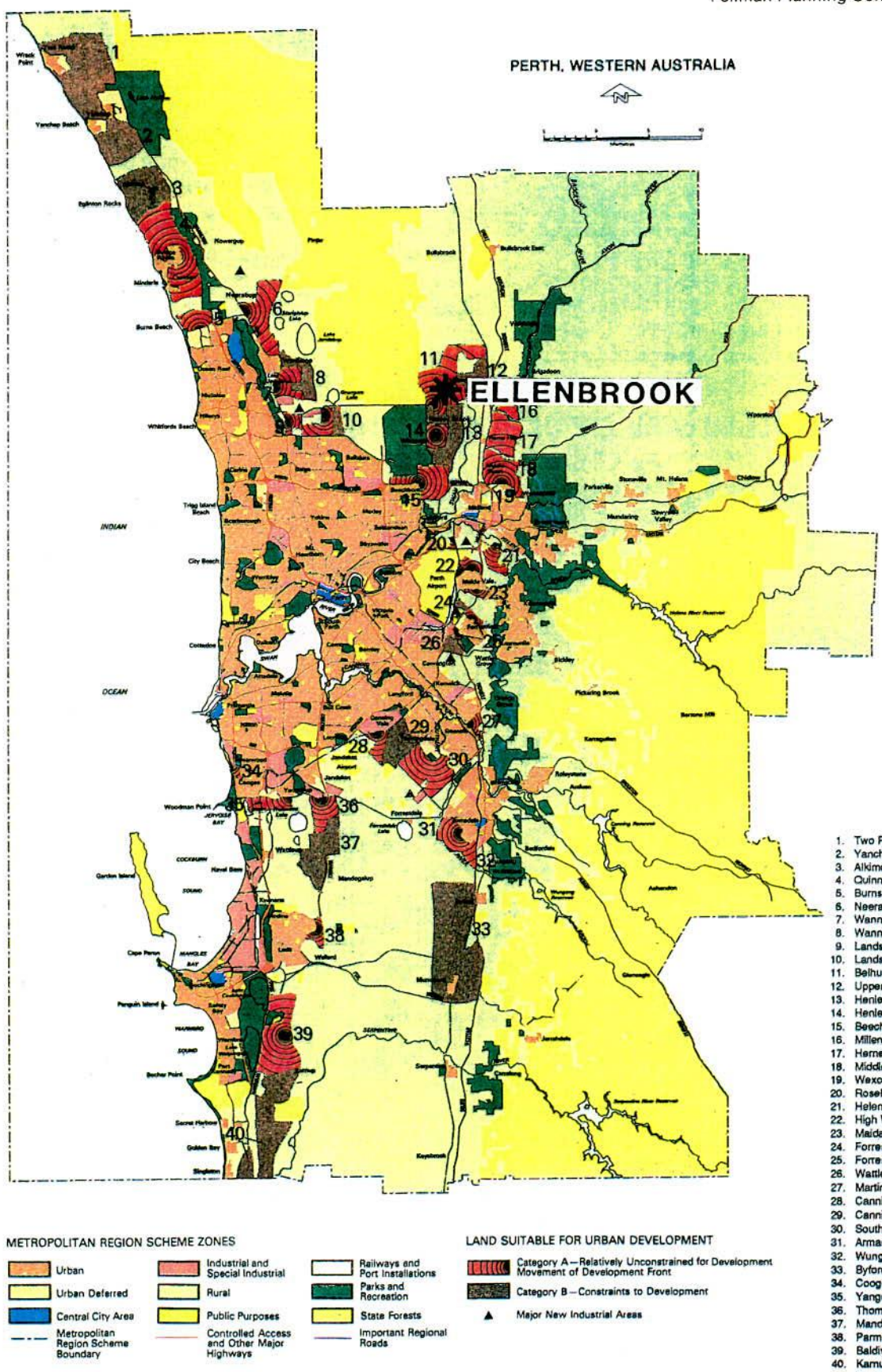
ELLENBROOK

LOCATION PLAN

Figure 3

SOURCE: URBAN EXPANSION REPORT
PRODUCED BY D.P.U.D.

Feilman Planning Consultants



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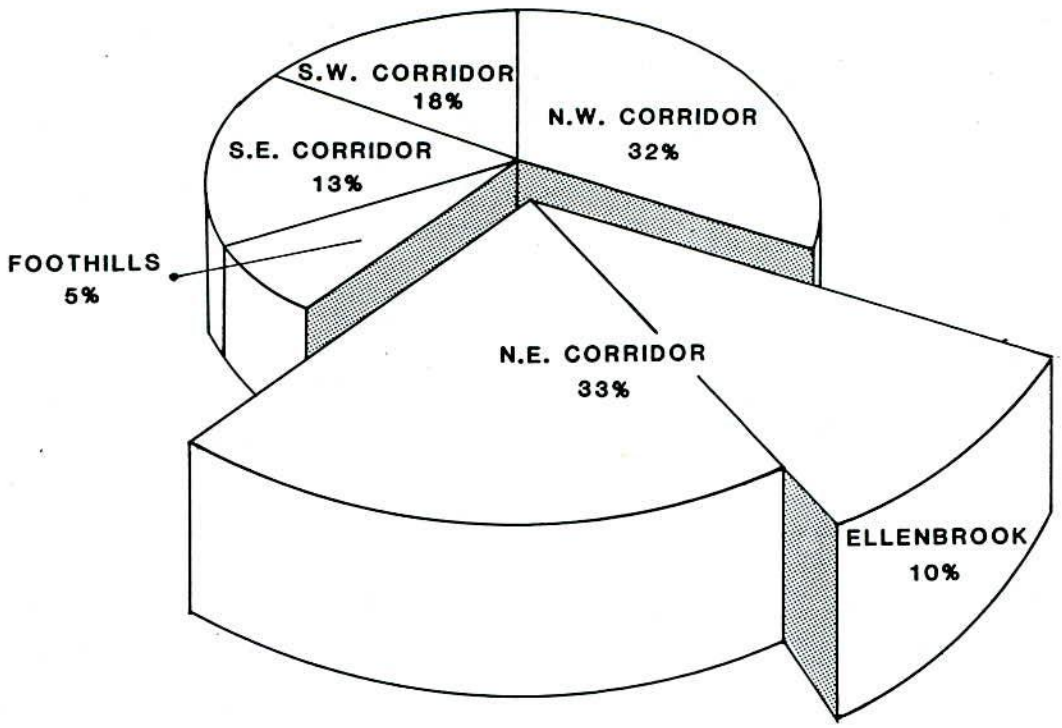
URBAN EXPANSION POLICY

Figure 4



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URBAN EXPANSION POLICY
CATEGORY A. LAND

Figure 5

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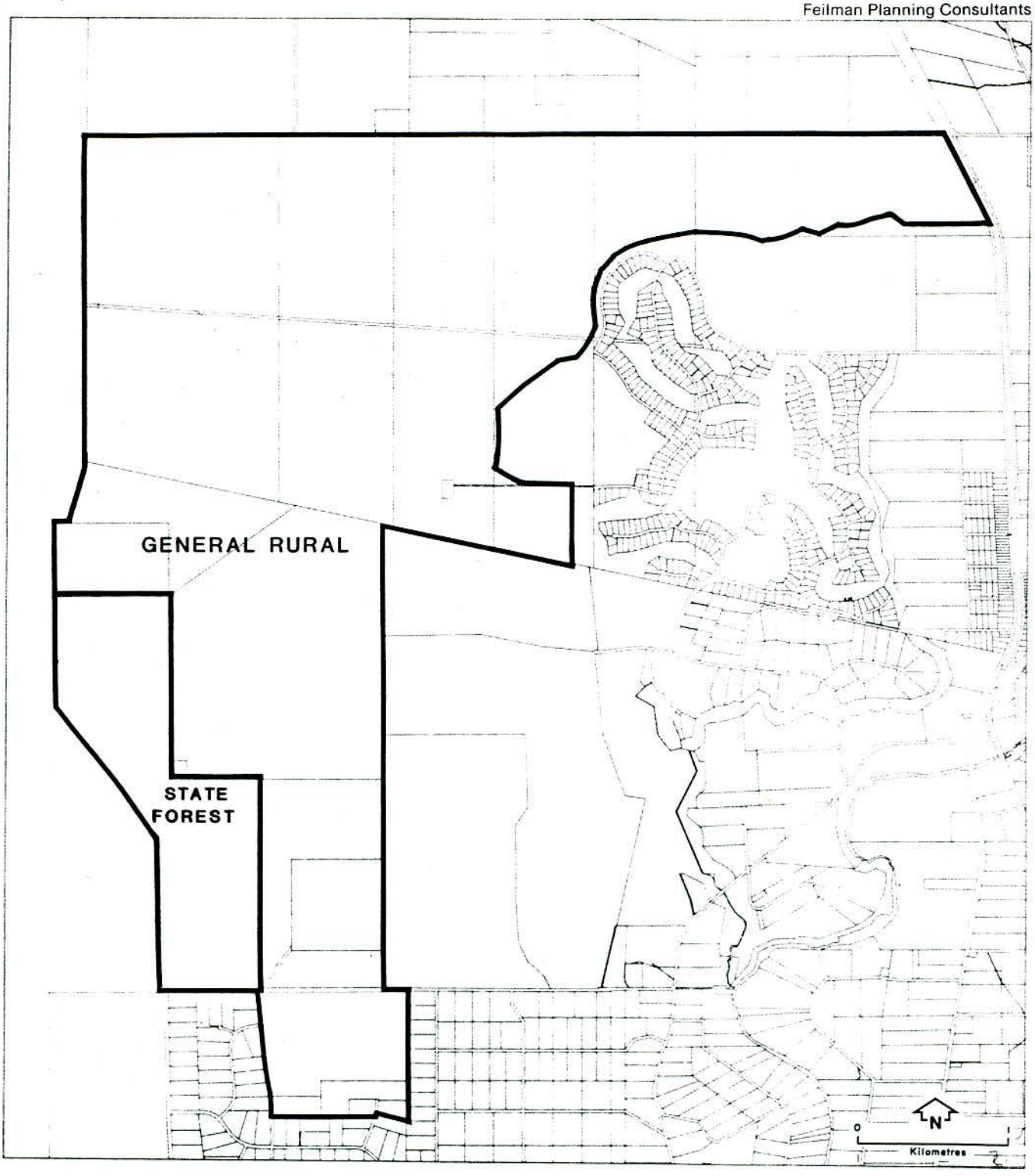

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CURRENT SHIRE OF SWAN ZONING

Figure 6A

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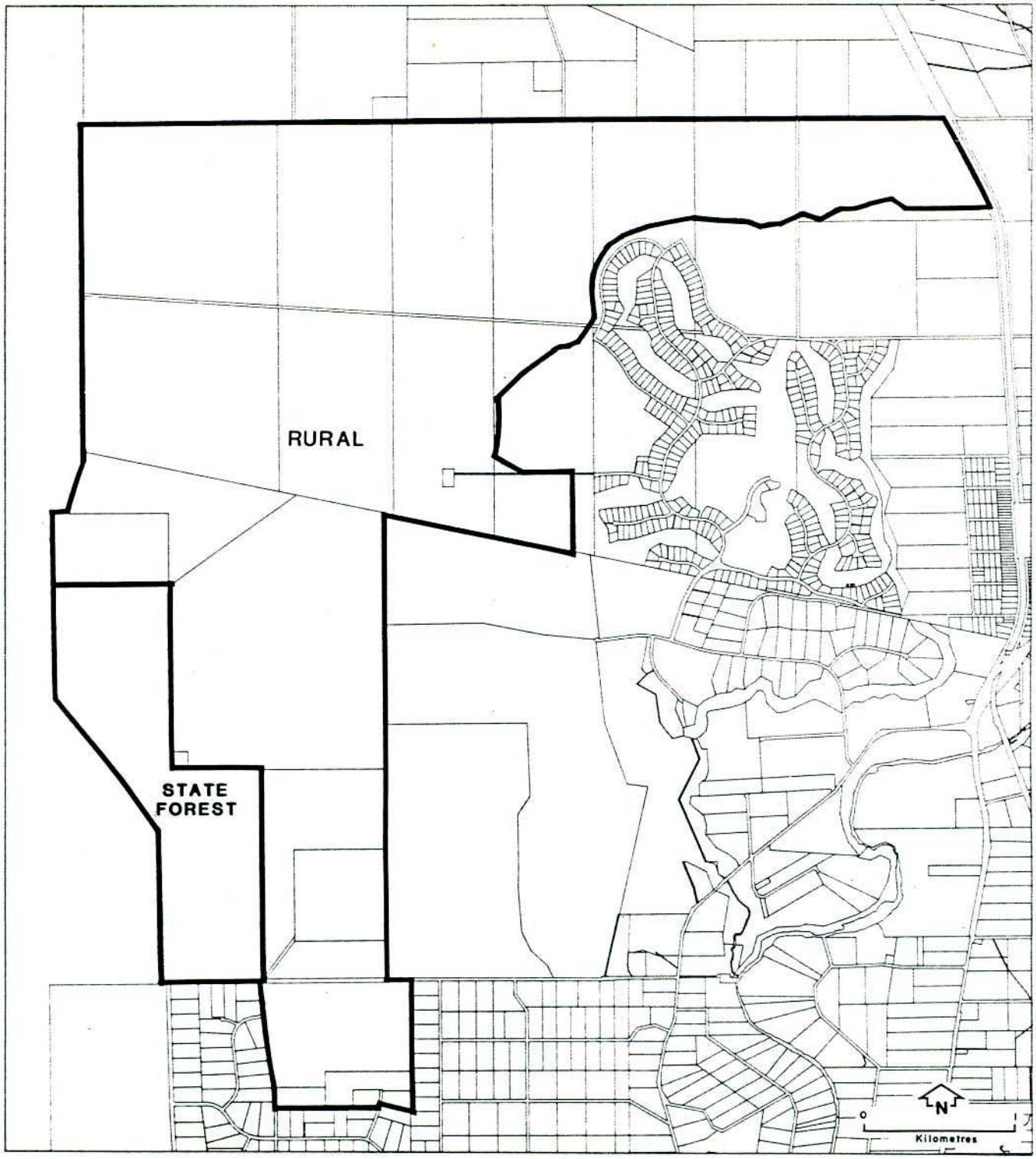

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CURRENT METROPOLITAN REGION SCHEME ZONING

Figure 6B

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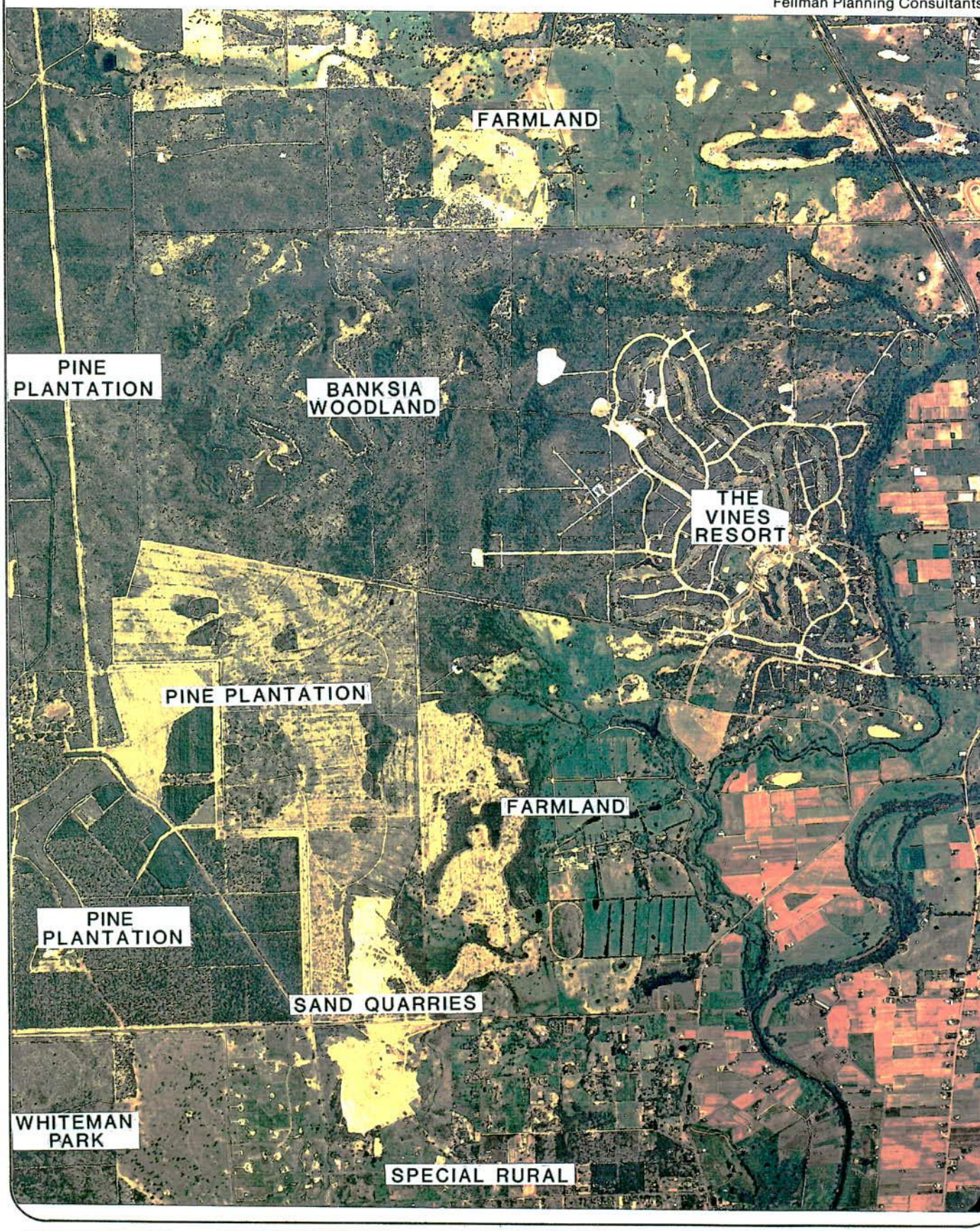

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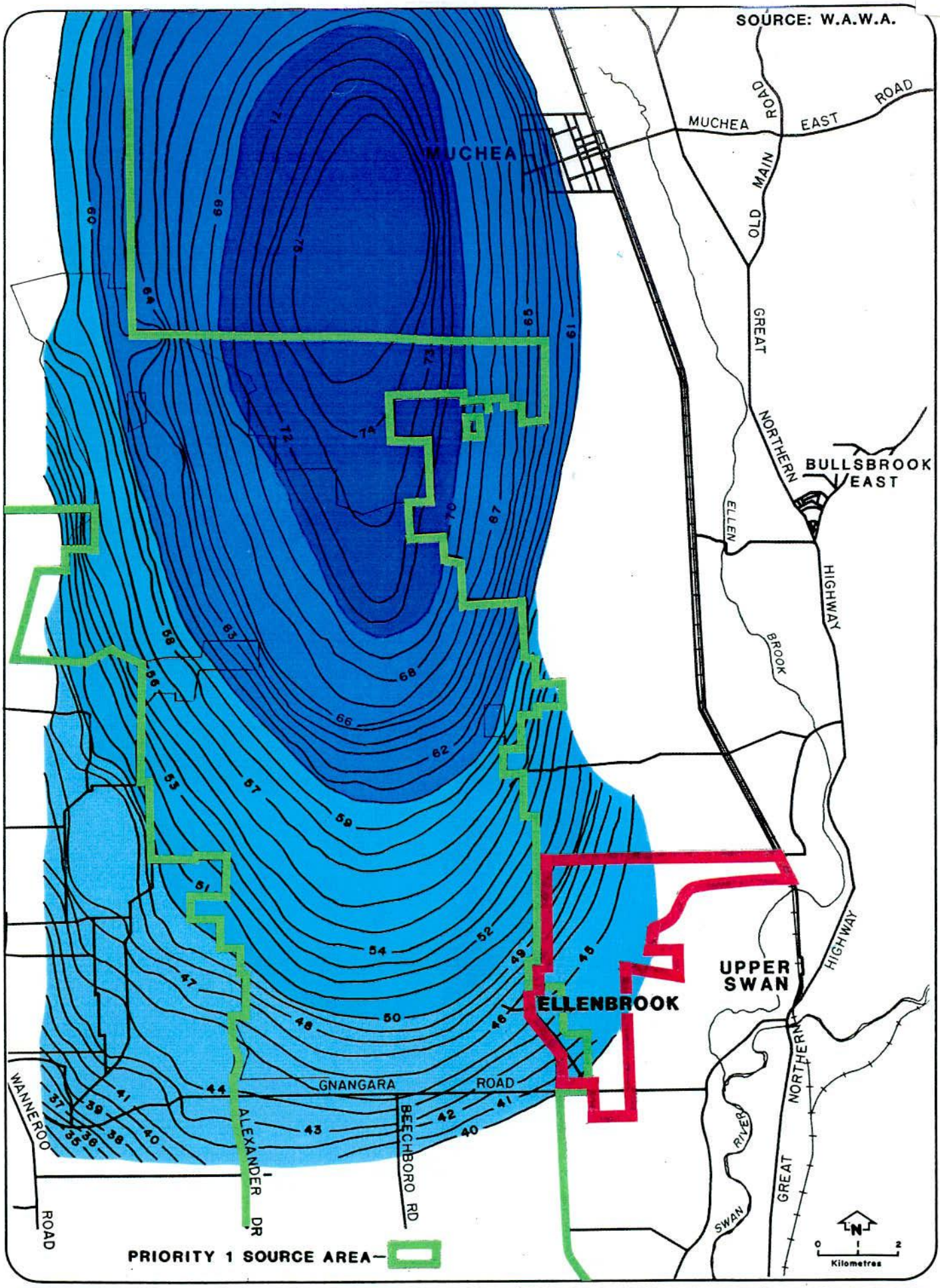
EXISTING LAND USES

Figure 7



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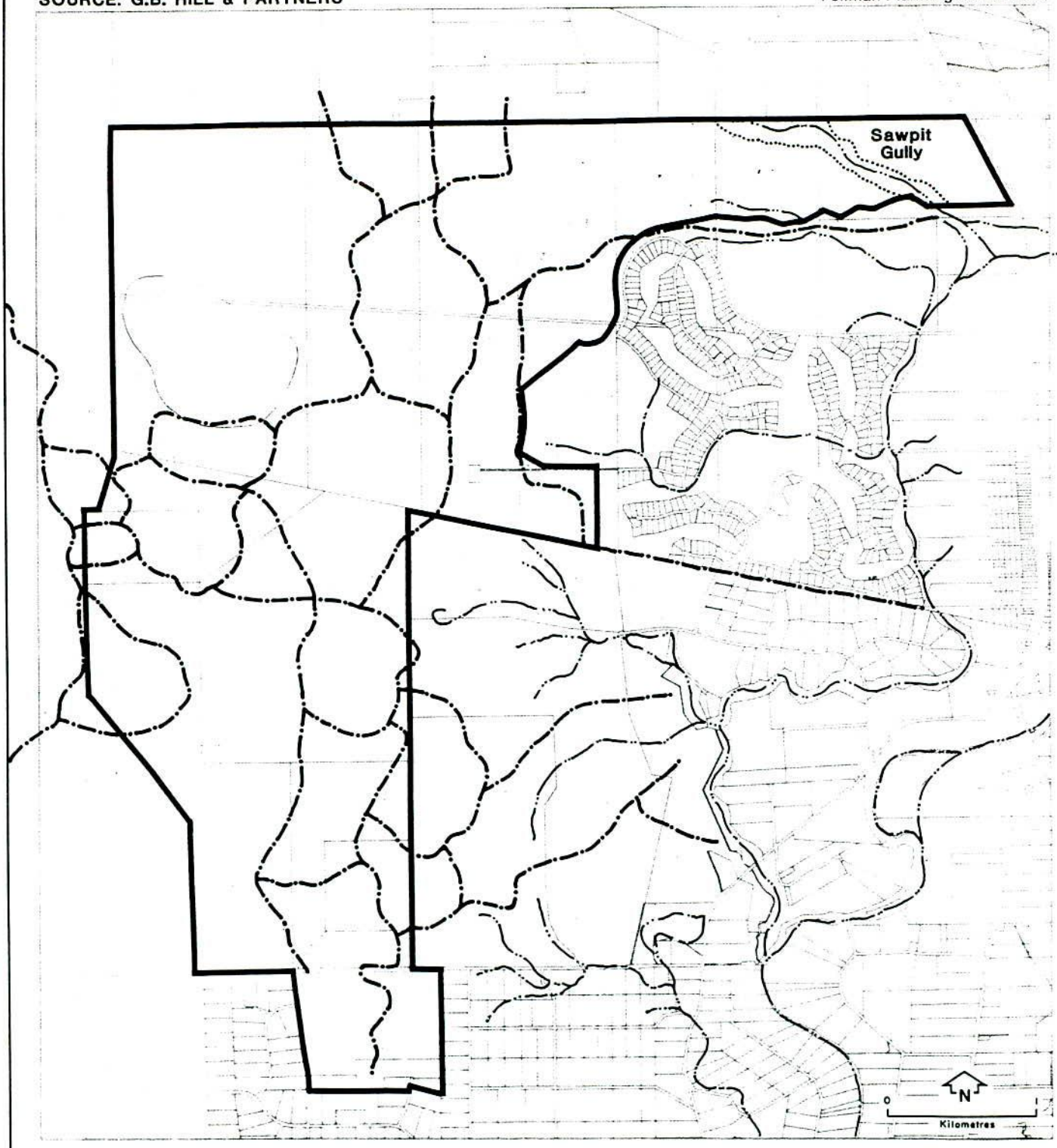
GROUNDWATER CONTOURS

Figure 8

SOURCE: G.B. HILL & PARTNERS

Feilman Planning Consultants



LEGEND

CURRENT DRAINAGE CATCHMENT BOUNDARY

DRAINAGE LINES

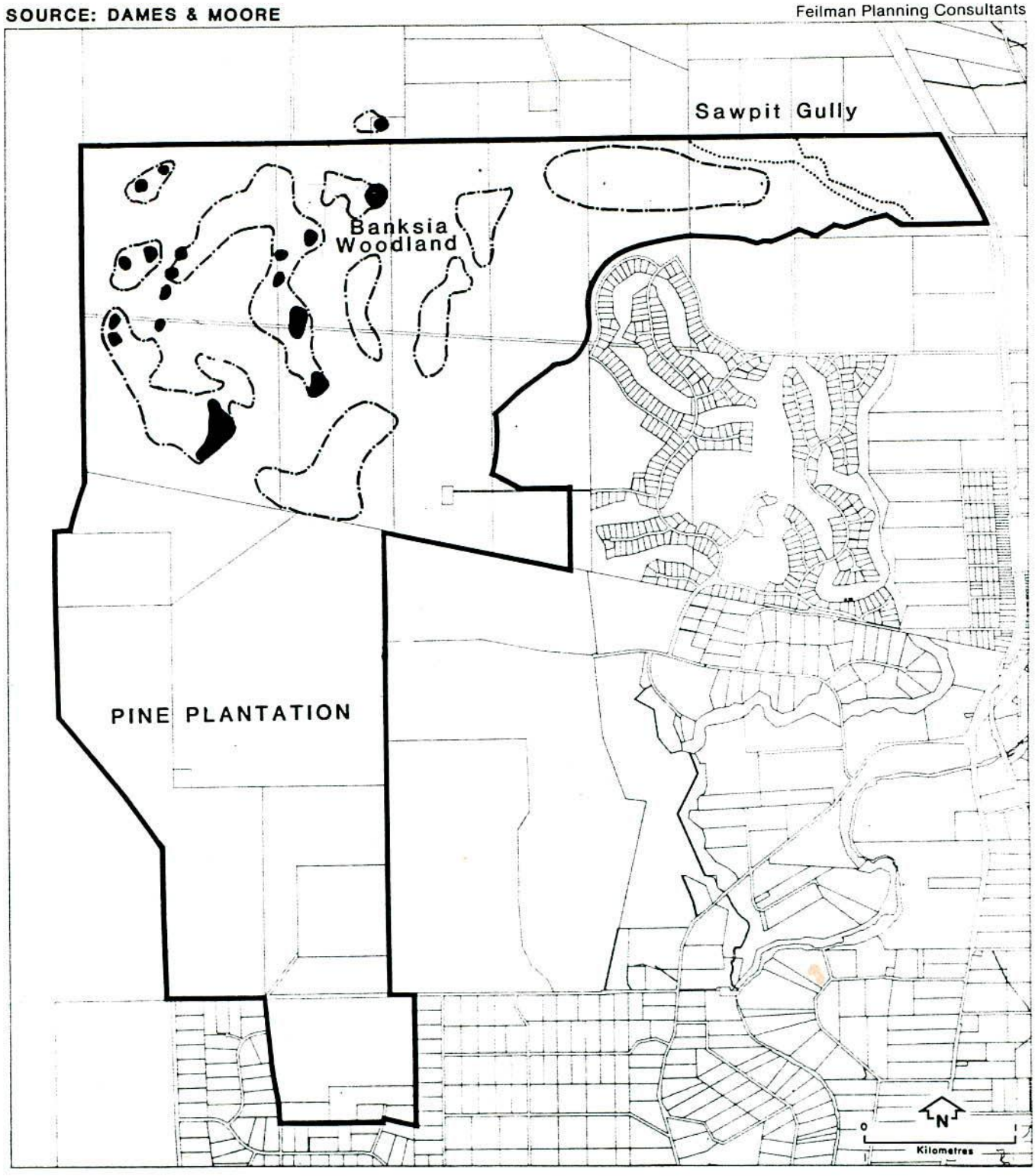
ELLENBROOK

DRAINAGE PATTERNS

Figure 9

SOURCE: DAMES & MOORE

Feilman Planning Consultants



LEGEND

WETLAND

VARIOUS TYPES OF DAMPLAND

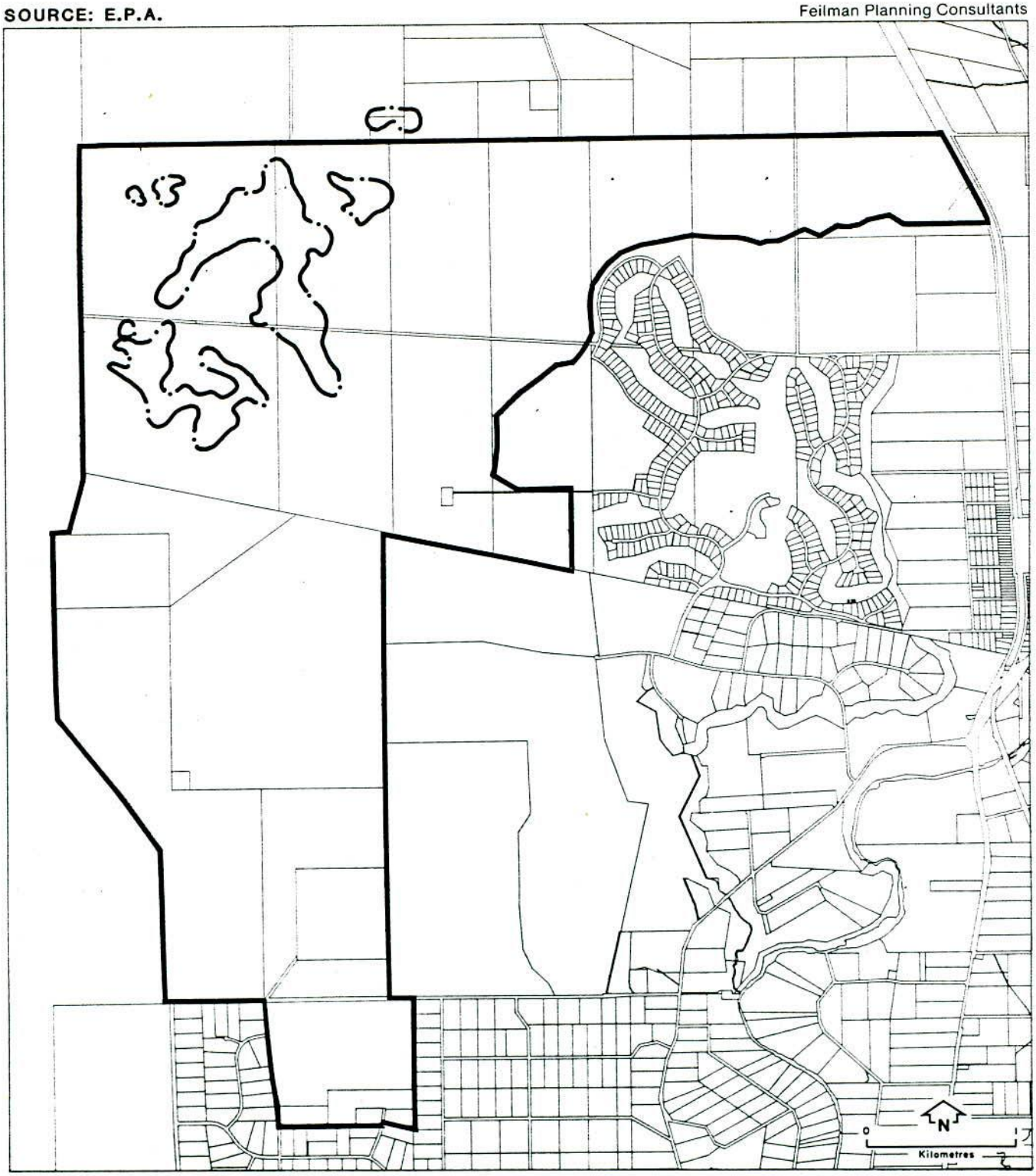
ELLENBROOK

VEGETATION MAP

Figure 10

SOURCE: E.P.A.

Feilman Planning Consultants



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LAKES AS DEFINED BY E.P.A.
DRAFT ENVIRONMENTAL PROTECTION POLICY

Figure 11

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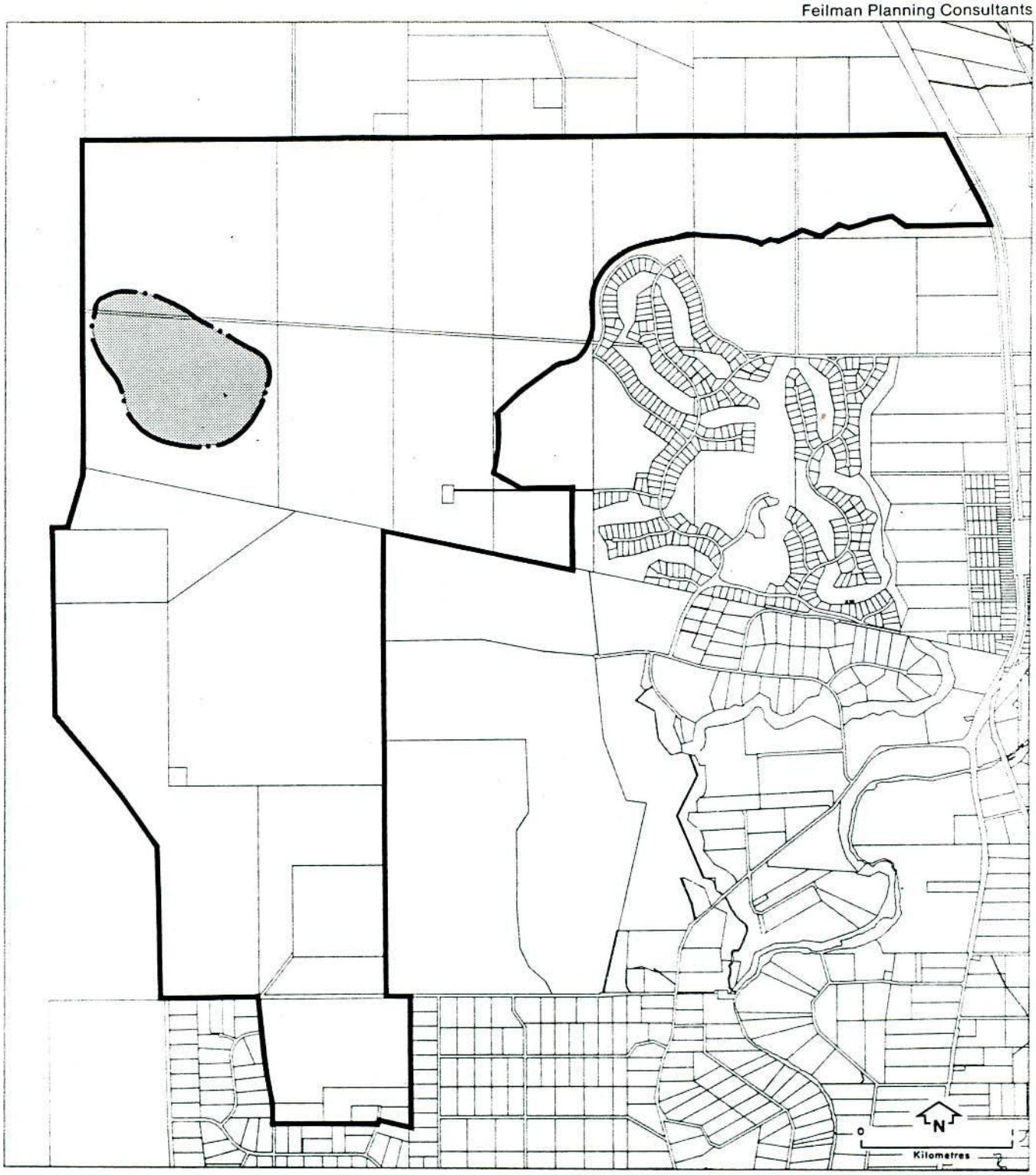

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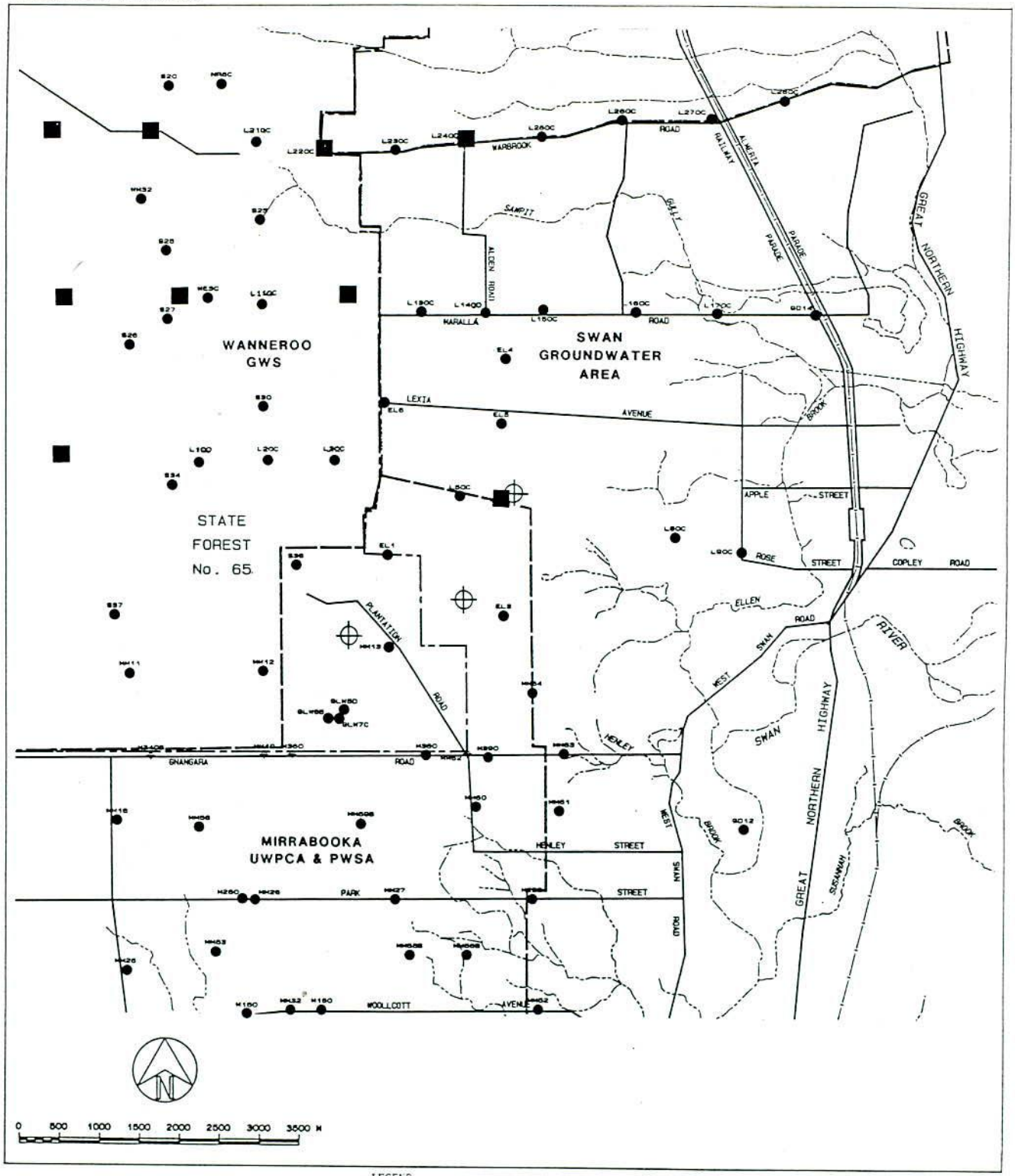
PROPOSED RESERVATION

Figure 12

SOURCE: W.A.W.A.



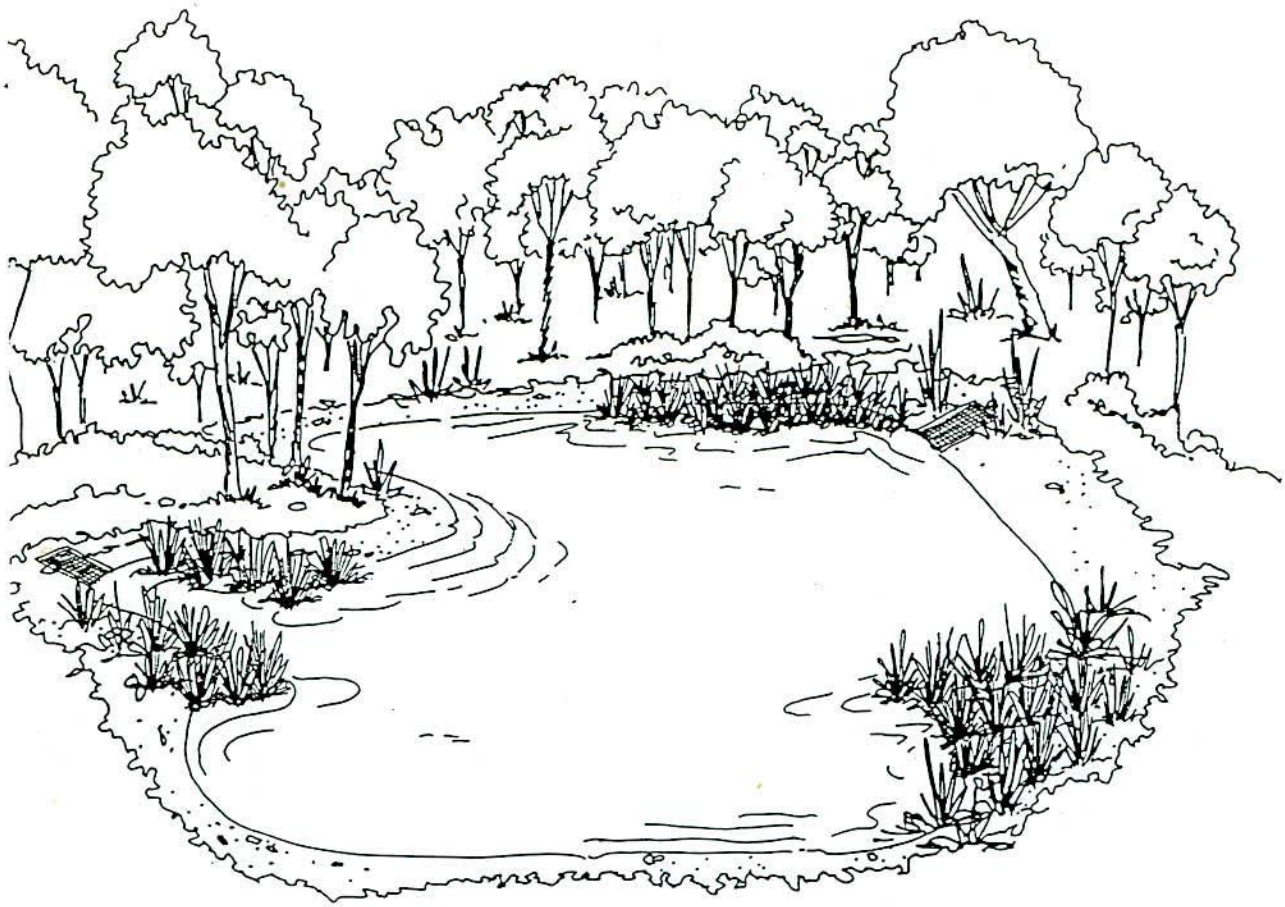
LEGEND

- Proposed Ellenbrook Supply Bore
- Road
- Railway
- State Forest Boundary
- Surface Drainage
- Monitoring Bore
- Proposed Lexia Scheme Bore

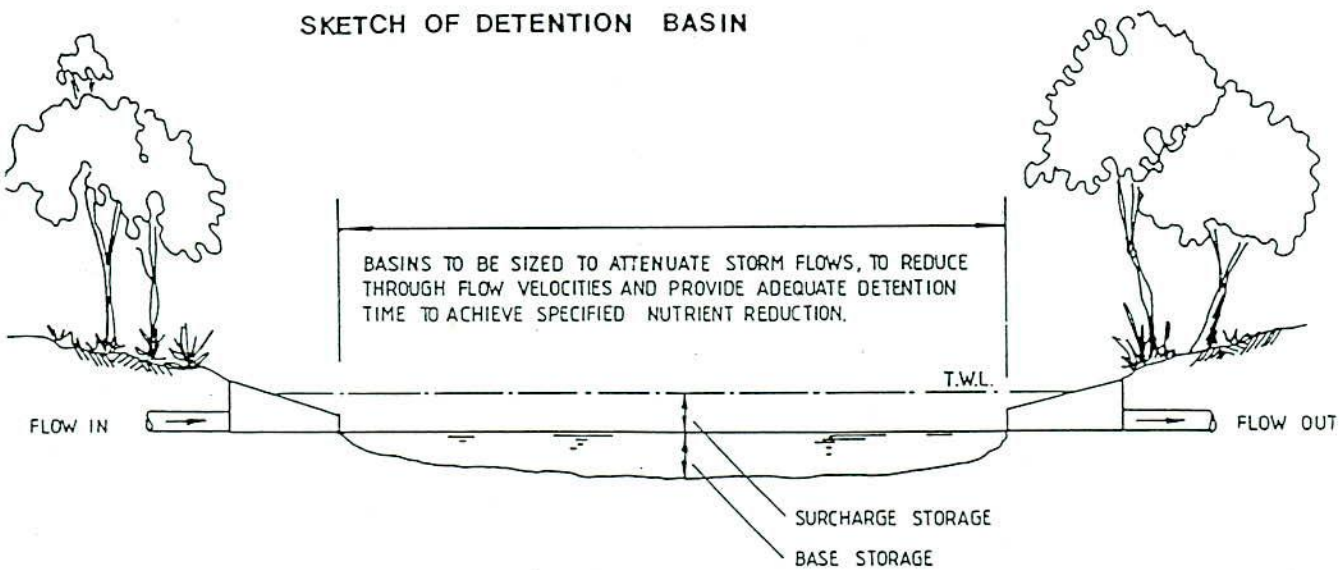
ELLENBROOK

EXISTING MONITORING BORES AND PROPOSED LEXIA BOREFIELD

Figure 13



SKETCH OF DETENTION BASIN



SECTION THROUGH DETENTION BASIN

ELLENBROOK

TYPICAL DETENTION BASIN

Figure 14

SOURCE: G.B. HILL & PARTNERS

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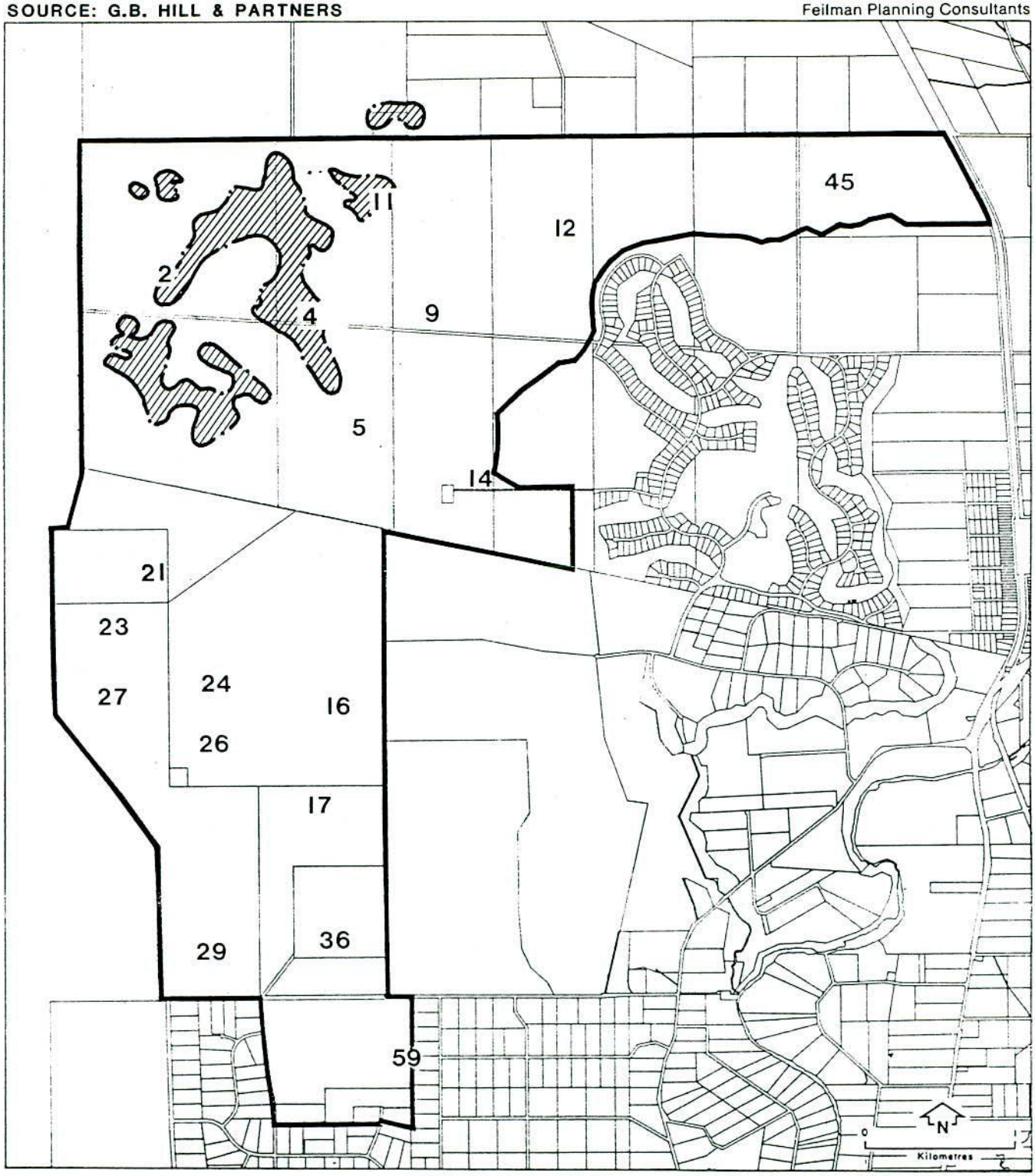

9... PROPOSED DETENTION BASIN LOCATIONS

.....DRAFT E.P.P. WETLAND AREAS

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WETLAND AREAS
PROPOSED DETENTION BASINS
(2-15 ha each)

Figure 15

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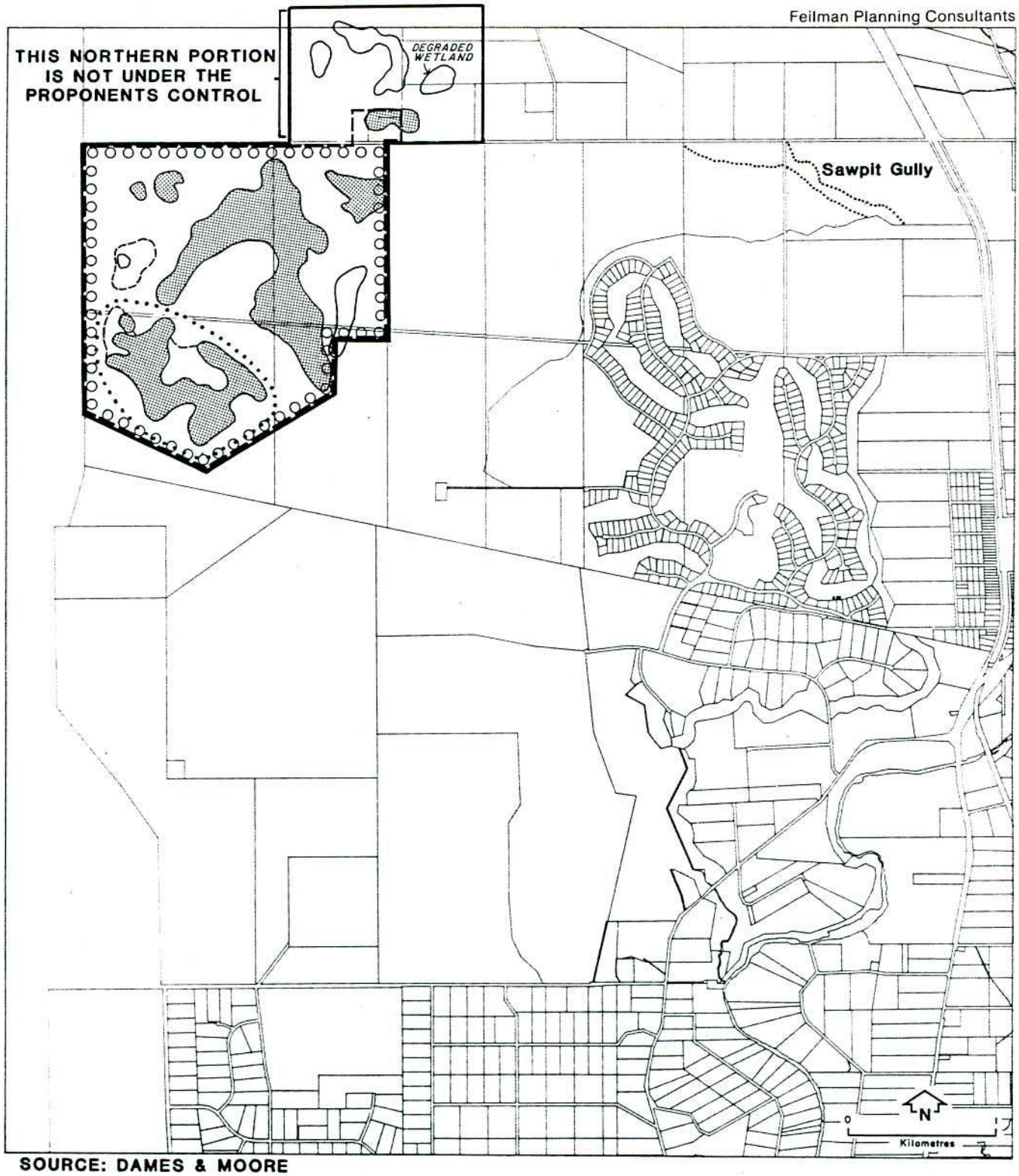

SOURCE: DAMES & MOORE

LEGEND

- E.P.P. WETLANDS
- SCENARIO 1
- SCENARIO 2
- SCENARIO 3
- SCENARIO 4

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WETLAND CONSERVATION AREAS

Figure 16