



000537

MINISTER FOR THE ENVIRONMENT;
LABOUR RELATIONS

STATEMENT THAT A SCHEME MAY BE IMPLEMENTED
(PURSUANT TO THE PROVISIONS OF DIVISION 3 OF PART IV OF THE
ENVIRONMENTAL PROTECTION ACT 1986)

CITY OF WANNEROO TOWN PLANNING SCHEME NO. 1
AMENDMENT NO. 837

- Scheme Purpose:**
- (a) to introduce a "Rural Community" zone and associated new provisions into Town Planning Scheme No. 1;
 - (b) to rezone Lots 201 and 202 Breakwater Drive, Two Rocks from "Rural" zone to "Rural Community" zone;
 - (c) to introduce a new Schedule, Schedule 12 - Rural Community Zones and associated special provisions;
 - (d) to introduce a new Schedule, Schedule 13 - Environmental Conditions and associated text; and
 - (e) to modify relevant clauses in Town Planning Scheme No. 1 so that no development, or subdivision, occurs on land in "Centre" zone, "Urban Development" zone, "Industrial Development" zone and the "Rural Community" zone until a Structure Plan has been prepared.

Responsible Authority: City of Wanneroo

Responsible Authority Address: 11 Moolanda Boulevard,
KINGSLEY WA 6026

Assessment Number: 1254

Report of the Environmental Protection Authority: Bulletin 956

Subject to the following conditions, there is no known environmental reason why the town planning scheme amendment to which the above report of the Environmental Protection Authority relates should not be implemented:

1 Environmental Conditions

- 1-1 In accordance with Section 7A4 of the Town Planning and Development Act, the environmental conditions imposed by the Minister for the Environment on the Scheme or amendments to the Scheme and contained in Statements published under Section 48F of the Environmental Protection Act, are to be incorporated into the Scheme by appropriate changes to relevant provisions and appropriate modifications to the Scheme Maps as required.

Published on

15 FEB 2000

- 1-2 Where appropriate, the environmental conditions are to be indicated on the Scheme Map by the symbol EC to indicate that environmental conditions apply to the land.
- 1-3 The Responsible Authority shall maintain a register of all the Statements published under Section 48F referred to in sub-clause X.X.1 which shall be made available for public inspection at the offices of the Responsible Authority.

2. ENVIRONMENTAL CONDITIONS TO BE INCORPORATED INTO THE SCHEME BY INSERTION OF PROVISIONS IN SCHEME TEXT

2.1 Responsible Authority scheme provisions

- 2.1-1 The Responsible Authority shall incorporate the following environmental conditions documented in this statement into the scheme, the subject of this statement.

2.2 Environmental Management Plans

- 2.2-1 The following Environmental Management Plans shall be prepared in accordance with the specifications set out in Attachment 1 of the Minister for the Environment's "Statement that a Scheme may be implemented" No.XXX (insert relevant statement number) published on (insert date):

- Drainage, Nutrient and Water Management Plan
- Karst Landform Management Plan

- 2.2-2 The Environmental Management Plans referred to in Condition 2.2-1 shall be prepared and implemented in accordance with the provisions of the Plans, to the requirements of the Responsible Authority.

2.3 Vegetation and Fauna Management

- 2.3-1 Regionally significant vegetation (draft *Perth's Bushplan* sites) which surrounds the amendment area (as shown on Figure 1) shall be protected from indirect and direct impacts associated with the development of the amendment area by the following:

- Clear delineation of regionally significant areas of vegetation from the amendment area through the use of dual use paths, roads, public open space areas and the like.
- Control of off-road vehicle use and dumping of rubbish.
- Fire Management.
- Promotion of community awareness of bushland protection.

2.4 Aboriginal Heritage Management

- 2.4-1 The subdivider shall protect on a lot or public open space area not less than 3 hectares, the identified heritage site and the area immediately surrounding the site shall be fenced and sign posted, as appropriate. The entrance to the cave (which is part of the Aboriginal site) shall be gated in as sensitive a manner as possible. The Responsible Authority shall also ensure that management of the cave is undertaken to ensure public safety and to protect the biodiversity and cultural values of the cave and surrounding 3 hectares.
- 2.4-2 Prior to the commencement of site works, contractors shall undergo a briefing on Aboriginal Heritage issues to enable them to recognise materials that may constitute an Aboriginal Site. During earthworks, all contractors shall be supervised by a Site Manager, who shall seek advice from the Aboriginal Affairs Department to confirm the identification of any suspected site.

CHERYL EDWARDES (Mrs) MLA
MINISTER FOR THE ENVIRONMENT

15 FEB 2000

1. Drainage, Nutrient and Water Management Plan

1-1 The subdivider shall prepare a Drainage, Nutrient and Water Management Plan for the whole of the amendment area, at the Local Structure Planning stage, to the requirements of the Responsible Authority on advice of the Water and Rivers Commission, the Water Corporation and the Department of Conservation and Land Management to ensure that:

- Groundwater extraction bores are located in areas where drawdowns will not impact on areas of karst or potentially significant stygofauna habitats. In all cases, however, the borefield shall be located at least 200 metres from high risk karst areas to avoid any potential impacts on stygofauna.
- The rate, quantity and quality of wastewater infiltrating the Amendment area is maintained at levels compliant with the minimum requirements for the protection of a Priority 3 Groundwater Source Protection Area.
- If more than 100 hectares of agriculture is to be developed within the Amendment area, more detailed modelling is carried out to determine suitable locations for the bores. This modelling shall be based on variable and site-specific data for aquifer parameters and calibrated against longer term modelling records, given that the potential drawdown of the water table could go beyond seasonal fluctuations.
- Groundwater extraction does not impact adversely upon vegetation through contributing to tree mortality.
- Agricultural activities do not adversely impact on karstic zones in terms of water quality and quantity.
- Best practice Water Sensitive Urban Design principles are incorporated to maximise on-site water infiltration generally.
- Measures to facilitate the removal of pollutants and nutrients are provided.
- Nutrient attenuating sewage disposal mechanisms are provided to service the development.
- Effluent disposal areas are not sited over areas rated as high risk for karst features.
- A monitoring and reporting program is included which measures and reports on the performance of the implemented Plan against performance criteria.
- Contingency plans are included in the event that the criteria are temporarily not achieved.
- If cluster development is proposed for the amendment area then nutrient modelling should be undertaken to estimate the level of contaminants which could infiltrate the groundwater following cluster development. Management measures should be proposed based on the results of the nutrient modelling exercise.

- If more than 100 hectares of agriculture is to be developed within the Amendment area, additional management measures to limit either the quantity of nitrogen applied to the soil or the quantity of nitrogen that leaches through the soil profile into the groundwater system are required.
- The layout of cluster subdivision is suitably located downstream of any proposed production bores for drinking water supply.

2 Karst Landform Management Plan

- 2-1 The subdivider shall prepare a Karst Landform Management Plan, at the Local Structure Planning stage, to the requirements of the Responsible Authority on advice of the Water and Rivers Commission, a geotechnical consultant and an environmental scientist to avoid development over high risk karst areas. The definition of high risk areas is subject to further assessment by a geotechnical engineer and environmental scientist. Areas of outcrop shall also be further investigated.

The subdivider shall undertake detailed investigations in accordance with Table 1 (attached) to determine the presence of large karst structures within the building envelopes on the property. Development shall not be approved in areas or close to any location where large karstic structures are known or suspected to be present unless deemed acceptable by a qualified geotechnical engineer and environmental scientist. Development shall also only be permitted where investigations indicate that structures can be safely erected.

The subdivider shall undertake appropriate geotechnical investigations in the areas which have been identified as within the zone where karstic features may potentially occur. It is recognised that the completion of the geotechnical investigations, staged as necessary, will be required prior to subdivision approval being granted. Preliminary Ground Penetrating Radar Work shall be undertaken at the Local Structure Plan stage. Detailed investigations, including drilling, shall take place where necessary prior to subdivision.

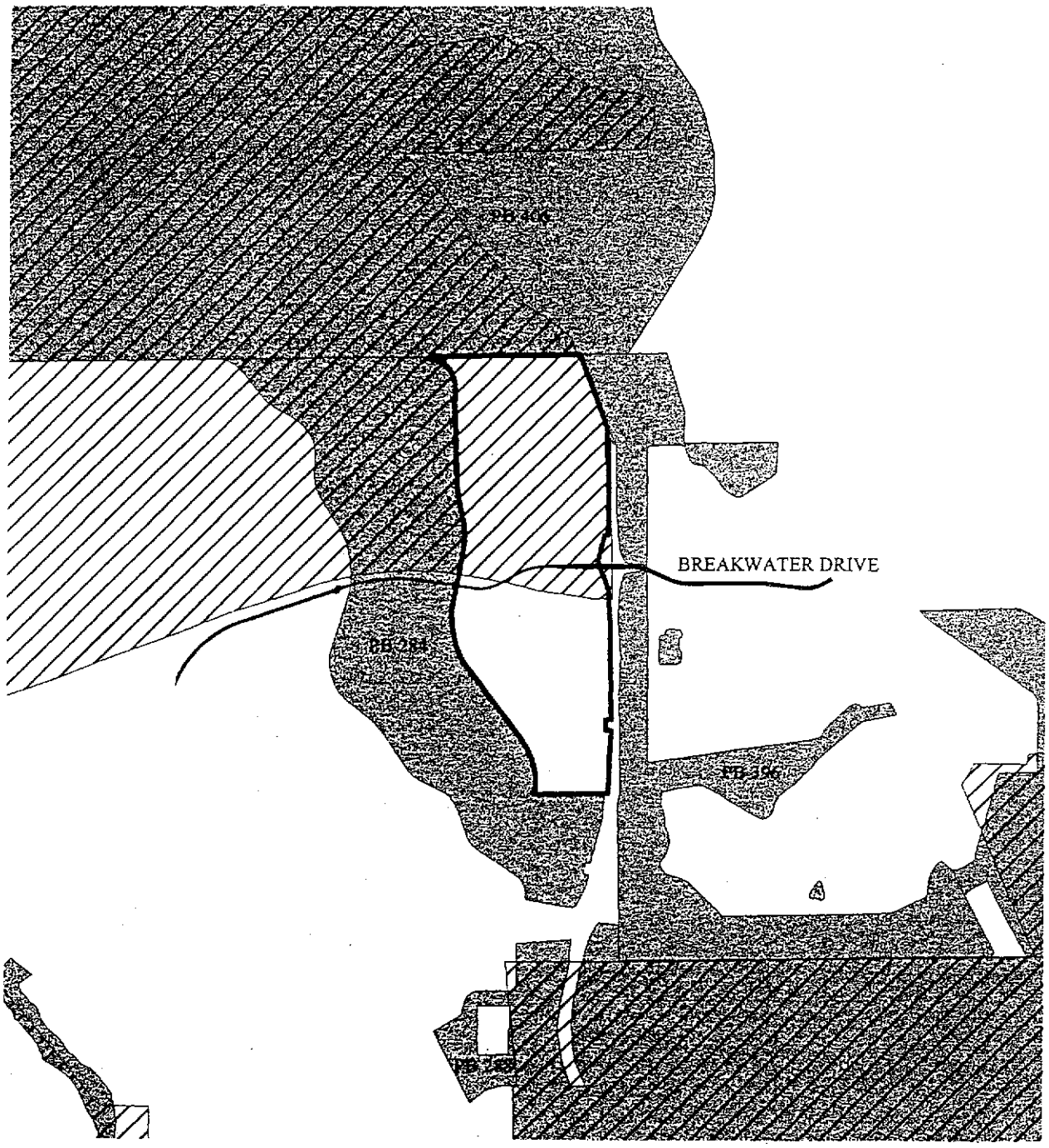
TABLE 1

WORK SCHEDULE REQUIRED WITH RESPECT TO KARST TERRAIN APPRAISAL

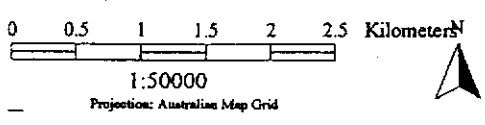
	Structure Assessment Prior to Subdivision	Placement of Building Envelopes/Drainage Design for Proposed Subdivision			Building Envelope Assessment Prior to Building			
		Detailed interpretation of existing Ground Probing Radar (GPR) data	Detailed geotechnical inspection target location, and drilling, and possible remediation	Geotechnical inspection and recommendations for additional geotechnical site assessment prior to building				
	A further geotechnical appraisal of the high and medium risk karst areas with respect to the draft Local Structure Plan design **			Geotechnical Assessment	Investigations for Foundation			
				Further GPR as recommended from the geotechnical evaluation	Drilling > 1 borehole to total depth of 15m	Drilling at least 1 borehole to a total depth of more than 15m	Testing Pitting to 3m depth ²	Perth Sand Penetro meter Testing to 750mm ³
High	✓	✓	✓					Further work on high risk only if specifically required/remediation work
Medium	✓			✓	✓		✓	✓
Low		✓		✓		✓	✓	✓
Very Low		✓		✓			✓	✓

* On the basis of advice from the geotechnical assessment.
** Geotechnical works likely to involve mapping and GPR. Program to be developed in consultation with City of Wanneroo and a geotechnical engineer.

1. Following the geotechnical assessment a reappraisal of the work program for building envelope assessment with respect to the risk rating may be required.
2. Test Pitting is generally carried out by a backhoe and refilled after logging and sampling.
3. The Perth Sand Penetrometer is a hand held portable device used for measuring the compaction of soils.



**SHIRE OF WANNEROO TOWN PLANNING SCHEME No 1
AMENDMENT 837, YANCHEP - TWO ROCKS**







-  Boundary of Study Area
-  Breakwater Drive
-  Perth's Bushplan, 29/11/98
-  System 6



Figure 1. System Six areas and draft Perth's Bushplan areas within and adjacent to the Amendment area.