

GOVERNMENT OF WESTERN AUSTRALIA

MINISTER FOR THE ENVIRONMENT; SCIENCE

Statement No.

000692

**STATEMENT THAT A PROPOSAL MAY BE IMPLEMENTED
(PURSUANT TO THE PROVISIONS OF THE
ENVIRONMENTAL PROTECTION ACT 1986)**

**EAST CLONTARF RESIDENTIAL DEVELOPMENT
WATERFORD, CITY OF SOUTH PERTH**

Proposal: The residential development of the East Clontarf site, Waterford, as documented in schedule 1 of this statement.

Proponent: Trustees for The Christian Brothers in Western Australia Inc

Proponent Address: c/- Richard Noble and Associates, PO Box 7071 Cloisters' Square, PERTH WA 6850.

Assessment Number: 1467

Report of the Environmental Protection Authority: Bulletin 1156

The proposal referred to above may be implemented by the proponent subject to the following conditions and procedures:

1 Implementation

- 1-1 The proponent shall implement the proposal as documented in schedule 1 of this statement subject to the conditions and procedures of this statement.

2 Proponent Commitments

- 2-1 The proponent shall implement the environmental management commitments documented in schedule 2 of this statement.

Published on

11 OCT 2005

3 Proponent Nomination and Contact Details

- 3-1 The proponent for the time being nominated by the Minister for the Environment under section 38(6) or (7) of the *Environmental Protection Act 1986* is responsible for the implementation of the proposal until such time as the Minister for the Environment has exercised the Minister's power under section 38(7) of the Act to revoke the nomination of that proponent and nominate another person as the proponent for the proposal.
- 3-2 If the proponent wishes to relinquish the nomination, the proponent shall apply for the transfer of proponent and provide a letter with a copy of this statement endorsed by the proposed replacement proponent that the proposal will be carried out in accordance with this statement. Contact details and appropriate documentation on the capability of the proposed replacement proponent to carry out the proposal shall also be provided.
- 3-3 The nominated proponent shall notify the Department of Environment of any change of contact name and address within 60 days of such change.

4 Commencement and Time Limit of Approval

- 4-1 The proponent shall substantially commence the proposal within five years of the date of this statement or the approval granted in this statement shall lapse and be void.

Note: The Minister for the Environment will determine any dispute as to whether the proposal has been substantially commenced.

- 4-2 The proponent shall make application for any extension of approval for the substantial commencement of the proposal beyond five years from the date of this statement to the Minister for the Environment, prior to the expiration of the five-year period referred to in condition 4-1.

The application shall demonstrate that:

- 1. the environmental factors of the proposal have not changed significantly;
- 2. new, significant, environmental issues have not arisen; and
- 3. all relevant government authorities have been consulted.

Note: The Minister for the Environment may consider the grant of an extension of the time limit of approval not exceeding five years for the substantial commencement of the proposal.

5 Compliance Audit and Performance Review

- 5-1 The proponent shall prepare an audit program and submit compliance reports to the Department of Environment which address:

1. the status of implementation of the proposal as defined in schedule 1 of this statement;
2. evidence of compliance with the conditions and commitments; and
3. the performance of the environmental management plans and programs.

Note: Under sections 48(1) and 47(2) of the *Environmental Protection Act 1986*, the Chief Executive Officer of the Department of Environment is empowered to monitor the compliance of the proponent with the statement and should directly receive the compliance documentation, including environmental management plans, related to the conditions, procedures and commitments contained in this statement.

6 Wetland

- 6-1 Within 12 months following subdivision/development approval, the proponent shall substantially commence construction of an approximately 1.9-hectare wetland shown in Figure 1 of schedule 1 as Public Open Space, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

This wetland shall include the following:

1. Black Swan breeding habitat;
 2. revegetation with local indigenous species;
 3. landform recontouring;
 4. establishment and maintenance of wetland connection to Clontarf Bay and the Canning River;
 5. weed control measures;
 6. water quality and quantity monitoring; and
 7. contingency measures to maintain or improve water quality of water flowing into Clontarf Bay and the Canning River.
- 6-2 Prior to commencement of construction of the wetland required by condition 6-1, the proponent shall prepare a Wetland Management Plan which includes identification of species to be used in revegetation works on site, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.
- 6-3 The proponent shall implement the Wetland Management Plan required by condition 6-2.
- 6-4 The proponent shall make the Wetland Management Plan required by condition 6-2 publicly available.

7 Water Quality

- 7-1 Prior to ground-disturbing activity, the proponent shall prepare a Drainage, Nutrient, Irrigation and Water Quality Management Plan to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

This Plan shall address the following environmental quality objectives as described in *Riverplan – An Environmental Management Framework for the Swan and Canning Rivers (August 2004)* to protect, restore and maintain:

1. ecosystem health;
 2. biological diversity;
 3. natural landscape;
 4. recreation; and
 5. water supply.
- 7-2 The proponent shall implement the Drainage, Nutrient, Irrigation and Water Quality Management Plan required by condition 7-1.
- 7-3 The proponent shall make the Drainage, Nutrient, Irrigation and Water Quality Management Plan required by condition 7-1 publicly available.
- 7-4 Prior to ground-disturbing activity, the proponent shall prepare an Ecotoxological Testing Plan to monitor the benthic habitat at the wetland discharge point into Clontarf Bay, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.
- 7-5 The proponent shall implement the Ecotoxological Testing Plan required by condition 7-4.
- 7-6 The proponent shall make the Ecotoxological Testing Plan required by condition 7-4 publicly available.

8 Site Contamination

- 8-1 Prior to ground-disturbing activity, the proponent shall prepare a Site (Soil and Groundwater) Contamination Investigation, Remediation and Validation Plan to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority with the concurrence of the Department of Health.

This Plan shall be prepared in general accordance with the Department of Environment *Contaminated Sites Management Series of Guidelines*, and shall include:

1. an Acid Sulfate Soil Management Plan; and
 2. an Asbestos Management Plan.
- 8-2 The proponent shall implement the Site (Soil and Groundwater) Contamination Investigation, Remediation and Validation Plan required by condition 8-1.
- 8-3 The proponent shall make the Site (Soil and Groundwater) Contamination Investigation, Remediation and Validation Plan required by condition 8-1 publicly available.

Procedures

- 1 Where a condition states “to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority”, the Environmental Protection Authority will provide that advice to the Department of Environment for the preparation of written notice to the proponent.
- 2 The Environmental Protection Authority may seek advice from other agencies or organisations, as required, in order to provide its advice to the Department of Environment.
- 3 Where a condition lists advisory bodies, it is expected that the proponent will obtain the advice of those listed as part of its compliance reporting to the Department of Environment.

Notes

- 1 The Minister for the Environment will determine any dispute between the proponent and the Environmental Protection Authority or the Department of Environment over the fulfilment of the requirements of the conditions.

Dr Judy Edwards MLA
MINISTER FOR THE ENVIRONMENT; SCIENCE

11 OCT 2005

The Proposal (Assessment No. 1467)

The proposal is for:

- the residential development of the 18-hectare East Clontarf site bounded by Manning Road, Centenary Avenue, the Clontarf Aboriginal Campus and the Canning River, creating up to 200 lots, as shown in Figure 1;
- the filling and draining of approximately 2.1 hectares of Resource Enhancement wetland identified in the *Environmental Protection (Swan Coastal Plain Lakes) Policy 1992* and the *Draft Environmental Protection (Swan Coastal Plain Wetlands) Policy 2004*;
- the creation of an approximately 1.9-hectare wetland and associated upland vegetation adjacent to the existing wetland and Canning River;
- increasing the river foreshore area by approximately 8350 square metres;
- investigation into soil and groundwater contamination, and remediation as required;
- installation of two additional monitoring bores to perform additional ground and surface water monitoring; and
- provision of road frontage along both the wetland and the river foreshore, but not including the western section of Public Open Space which is to be a revegetated dryland buffer.

Table 1 – Key Proposal Characteristics

Element	Description
Proposal	Creation of up to 200 residential allotments
Area of disturbance	Approximately 16 hectares
Major components – • Wetland modification • Dewatering • Disturbance to site hydrology • Remediation of site contamination • Additional foreshore reserve • Potential acid sulfate disturbance • Created wetland • Noise and dust creation	Draining and filling of approximately 2.1 hectares of Resource Enhancement wetland as depicted on schedule 1. Creation of not less than 1.9 hectares (approximately) of wetland. Provision of 8350 square metres of additional foreshore reserve. Hydrological maintenance – water quality and quantity. Remediation of on-site contamination.

Figure (attached).

Figure 1 - Residential Development Plan

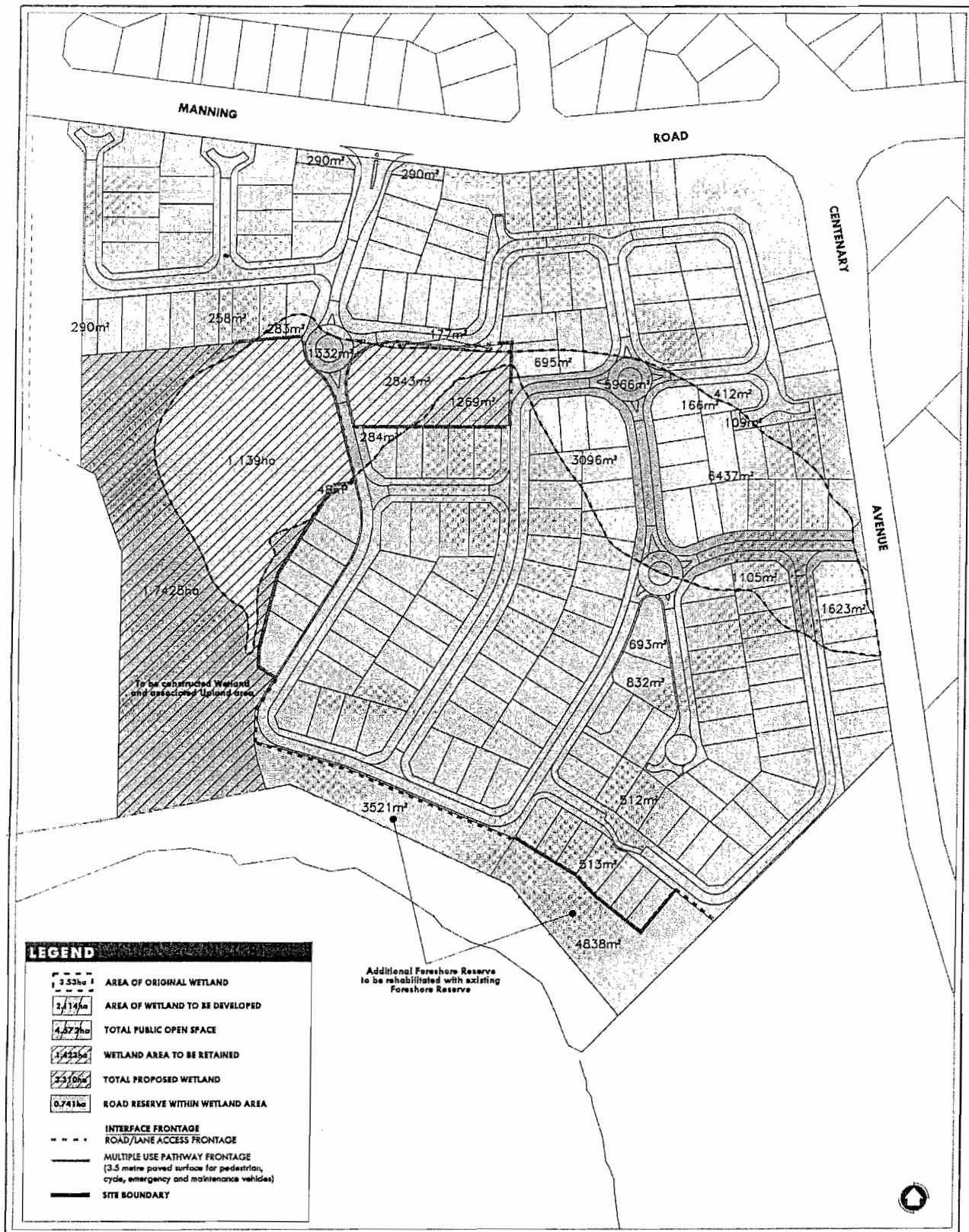


Figure 1 - Residential Development Plan

Note: The area for residential development is within the "site boundary", but excludes "Public Open Space", the "Wetland Area", and the "Area of Proposed Rehabilitated Wetland" indicated above.

Schedule 2

Proponent's Environmental Management Commitments

(September 2005)

**East Clontarf Residential Development
Waterford, City of South Perth**

(Assessment No. 1467)

**Trustees for
The Christian Brothers in Western Australia Inc**

Proponent's Environmental Management Commitments – September 2005

EAST CLONTARF RESIDENTIAL DEVELOPMENT, WATERFORD (Assessment No. 1467)

Note: The term “commitment” as used in this schedule includes the entire row of the table and its six separate parts as follows:

- a commitment number;
- a commitment topic;
- the objective of the commitment;
- the ‘action’ to be undertaken by the proponent;
- the timing requirements of the commitment; and
- the body/agency to provide technical advice to the Department of Environment.

No.	Topic	Objective	Action	Timing	Advice
1.	Construction Management	To protect the remnant wetland vegetation identified for protection within <i>Bush Forever</i> adjoining the development from potential impacts associated with construction. To minimise (direct and indirect) impacts associated with the construction of the residential development and surrounds on fauna, surface and groundwater quality and quantity and local residents.	Prepare and implement a Construction Environmental Management Plan (CEMP) to the satisfaction of the DoE and the Cities of South Perth and Canning, which addresses: 1. Dewatering Program; 2. Detailed Remediation Assessment of Contaminated Soils; 3. Acid Sulfate Soils Management Plan; 4. Construction Noise Management Procedures; and 5. Construction Dust Management Procedures.	Prepared and approved prior to construction. Implemented during construction. Audits to be completed during construction works and post-construction.	City of South Perth City of Canning

No.	Topic	Objective	Action	Timing	Advice
2.	Foreshore Management	To protect the conservation values identified for protection within the development adjacent to the Canning River foreshore. To mitigate proposed clearing within the development and enhance linkages and habitat value.	Prepare and implement a detailed Foreshore Management Plan to the satisfaction of the DPI, the SRT and the City of South Perth, which will include: 1. Comprehensive weed eradication program; 2. Revegetating and restoring foreshore POS adjoining conservation areas with appropriate indigenous flora of the Canning River; 3. Increase the area contained within POS adjoining Bush Forever Site No. 333; 4. Creation of habitat and wildlife corridors; 5. Controlling vehicle and pedestrian access; 6. Construction of a dog-proof fence along the existing Foreshore Reserve, if considered appropriate; 7. Provision of public facilities; 8. Soil and plant source material hygiene; 9. Fire management including provision of fire hydrants; 10. Provision of educational and interpretative materials within the area to raise awareness of JAMBA/CAMBA species which frequent the area; 11. Encouraging community involvement and awareness by promoting control of pets (eg cats and dogs); 12. Water conservation principles; 13. Monitoring re-establishment of native and exotic plant species for a period of not less than 2 years followed by review; 14. Monitoring criteria to determine the success of the revegetation and weed eradication program; 15. Progress and compliance reporting; and 16. Timing and implementation schedule.	Preparation prior to construction. Implementation to be as determined in schedule within the Foreshore Management Plan.	CALM SRT City of South Perth
3.	Wetland Management	To minimise impacts on wetlands and to offset any wetland impacts to ensure no net loss of function or value.	Prepare and implement a Wetland Management Plan to the satisfaction of the DoE and the City of South Perth which will include: 1. Identification of existing wetland area to be retained; 2. Avoiding direct and minimising indirect impacts on the wetland; 3. Ensuring no net loss of wetland values and functions; 4. Rehabilitation techniques to be employed;	Preparation prior to construction. Implementation to be as determined in schedule within the Wetland Management Plan.	City of South Perth

No.	Topic	Objective	Action	Timing	Advice
			5. Selection of appropriate local wetland and dryland species to maintain and enhance existing habitats; 6. Mitigation strategies for loss of any vegetation will be investigated, including both on-site and off-site options; 7. Creation of a new wetland area to be located adjacent to the existing wetland and the river foreshore suitable for Black Swan breeding habitat; 8. adopt existing mosquito and midge management protocols currently utilised by the City of South Perth; 9. Monitoring criteria to determine the success of the plan; 10. Progress and compliance reporting; and 11. Timing and implementation schedule.		
4.	Groundwater Management	To ensure that emissions do not adversely affect environmental values or the health, welfare and amenity of people and land uses by meeting statutory requirements and acceptable standards. To determine the potential impacts of dewatering during the construction phase on the vegetation within the wetland areas, Canning River and groundwater quality.	(1) Prepare and implement a Groundwater Management Plan as a component of the CEMP to the satisfaction of the DoE, SRT and Water Corporation which will include: 1. Determining the nature and extent of groundwater contamination; 2. Installation of 2 additional monitoring bores; 3. Quarterly sampling of both additional and existing monitoring bores for a 12-month period; 4. Groundwater flow characteristics; and 5. Groundwater contamination plume management. (2) Develop a Dewatering Program as a component of the CEMP to the satisfaction of the DoE.	Preparation of Groundwater Management Plan and Dewatering Program prior to construction. Implementation as per Plan/Program. Construction works to be timed and staged to minimise the volume of dewatering required.	SRT Water Corporation

No.	Topic	Objective	Action	Timing	Advice
5.	Drainage, Nutrient, Irrigation and Water Quality Management	To maintain acceptable water quality within the wetland and the Canning River in keeping with the Riverplan framework of management and best practice in urban stormwater management. To ensure that no road surface run-off directly enters the wetland. To ensure that there is provision for contaminant spillage entrapment.	Prepare and implement a Drainage, Nutrient, Irrigation and Water Quality Management Plan (DNIWQMP) to the satisfaction of the DoE, the SRT and the City of South Perth, which will include: 1. Design and construction of the detention/infiltration basin; 2. Periodic monitoring of the infiltration basin (post-construction) to ensure continued function and maintenance as required; 3. Quarterly sampling of surface water body for a 12-month period; 4. Maximising infiltration of uncontaminated stormwater at sources to recharge the groundwater system; 5. Water conservation principles; 6. Nutrient control; 7. Prescribed fertilizer applications for areas of POS; 8. Determination of flushing requirements, associated impacts and management options; 9. Treating contaminated stormwater via gross pollutant and sediment traps; 10. Directing treated stormwater into the Canning River along the south-eastern corner boundary of the site (as per DoE advice); 11. Monitoring criteria to determine the success of the plan; 12. Develop and implement contingency measures to be implemented in the event that monitoring criteria are exceeded; 13. Progress and compliance reporting; and 14. Timing and implementation schedule.	Preparation prior to construction. Implementation to be as determined within the DNIWQM Plan.	SRT City of South Perth
6.	Site Contamination Assessments	To determine nature and extent of any soil or groundwater contamination present within the site which may pose a risk to human health or the environment.	(1) Prepare and implement a Site Remediation (Contaminated Soils) Management Plan as a component of the CEMP to the satisfaction of the DoE. (2) Areas of soil identified as contaminated in excess of EIL or HIL criteria will be excavated (if directed by DoE) and the base and walls of the excavations validated in accordance with relevant DoE Guidelines for the Remediation of Contaminated Land.	Preparation and implementation prior to site works in areas identified in the DSL as potentially contaminated.	DoH Worksafe City of South Perth City of Canning

No.	Topic	Objective	Action	Timing	Advice
			(3) The excavated soil will then be assessed to determine the appropriate management option. A final decision on the management of excavated contaminated soils will be made once analytical results are available for excavated soil. (4) An alternative that may be considered is to screen the material to remove geotechnically unsuitable materials and then re-use the material as fill in appropriate areas on the site, such as POS. (5) A remediation assessment report will be submitted to DoE on conclusion of remediation works which provides detailed information on: 1. The remediation strategy implemented; 2. The results of validation and stockpile sampling; and 3. Details of the management of all contaminated material. (6) Where areas have been identified as potentially affected by asbestos cement sheeting, prepare a specific Health and Safety Plan. This plan will be prepared as an appendix to the overall Site Remediation Management Plan.	Before works commence	
7.	Water Conservation Principles	To conserve water.	Water conservation measures will be applied within the development. These include: 1. Promoting the use of plant species which have low water and fertiliser requirements; 2. Utilising local native plant varieties in landscaping; 3. Promoting landscape treatments sympathetic to climatic conditions and prevailing site conditions – soil types, topography, environment, wetlands etc.; 4. Utilising "cluster or clump" plantings to provide useable shade areas and better use of reticulated water in preference to single item or symmetrical planting regimes; 5. Irrigating POS areas at appropriate times so as to reduce evaporative loss and minimise transpiration losses; and 6. Ensuring that the irrigation regime applied to areas of POS is responsive to prevailing weather conditions.	To be considered within preparation of the Foreshore Management Plan, Groundwater Management Plan and the DNIWQMP (Commitments 3 and 9).	SRT City of South Perth

No.	Topic	Objective	Action	Timing	Advice
8.	Noise	To protect the amenity of nearby residents from noise impacts resulting from activities associated with the proposal by ensuring that the noise levels meet statutory requirements and acceptable standards.	Noise Management Procedures will be prepared for the site as part of the overall CEMP (see commitment 1). Measures to minimise noise levels received by proposed residences within the development from existing roadways will include: 1. Construction of noise barriers between the roadway and residential lots; 2. Specifying appropriate setbacks of proposed residences from existing roadways; and 3. Specification of construction methods and materials (in keeping with "quiet house design" principles).	Prepared and approved prior to construction. Implemented during construction. Audits completed during construction works and post-construction.	City of South Perth City of Canning
9.	Dust	To protect the surrounding land users such that dust and particulate emissions will not adversely impact on their welfare and amenity or cause health problems in accordance with the EPA's Guidance Statement No. 18: Prevention of Air Quality Impacts from Land Development Sites.	(1) Dust generated during construction will be minimised by the application of EPA guidelines and best practice in dust suppression. (2) Dust Management Procedures will be prepared for the site as part of the overall CEMP (see commitment 1). Measures to minimise dust levels will include: 1. Watering of exposed surfaces; 2. Minimising working surfaces at any one time; and 3. Progressive rehabilitation of disturbed areas.	Prepared and approved prior to construction. Implemented during construction. Audits to be completed during construction works and post-construction.	City of South Perth City of Canning
10.	Acid Sulfate Soil (ASS)	To plan and manage development that may potentially impact on ASS to avoid adverse effects on the natural and built environment and human activities and health.	Prepare and implement an Acid Sulfate Soil Management Plan as a component of the CEMP (see commitment 1) to the satisfaction of the DoE, which will include: 1. The area of PASS soils to be disturbed by excavation or dewatering will be minimised as far as possible; 2. Where ASS must be disturbed: • Earthworks will be completed as quickly as possible to minimise the time that the walls and base of excavations are exposed to the atmosphere;	Prepared prior to commencement of any earthworks or dewatering in areas identified as having potential for Acid Sulfate Soils. To be implemented during construction.	SRT

No.	Topic	Objective	Action	Timing	Advice
			• Un-neutralised ASS/PASS will be stored for only limited periods on on-site bunded hardstand areas constructed from alkaline materials; • The quality of groundwater and dewatering effluents will be monitored regularly to ensure early detection of any alteration in water chemistry; and • if necessary, dewatering effluent will be treated to ensure that appropriate water quality is maintained; and 3. Where excavated soils must be directed for off-site disposal, they will be directed to a site approved for acceptance and/or treatment of ASS by the DoE.		
11.	Archaeological Investigations	To fulfil the requirements stipulated on the Section 18 clearance of the <i>Aboriginal Heritage Act 1972</i> .	(1) Apply for clearance under Section 18 of the <i>Aboriginal Heritage Act 1972</i> to remove both previously recorded sites and any new sites that emerge as a result of earthmoving procedures located within the site which will be impacted by the development. (2) Also undertake further archaeological investigations if required as part of the Section 18 clearance. Such investigations may include: 1. Surface recording, mapping and collection of archaeological material; 2. Archaeological excavation and/or sub-surface evaluation; 3. Recovery of samples for radiometric dating; and 4. Analysis of recovered material.	Site Heritage Protocol will be prepared prior to commencement of construction and implemented during construction, with any statutory processes followed as per the requirements of the <i>Aboriginal Heritage Act 1972</i> .	DIA

Abbreviations:

ASS - Acid sulfate soils
CAMBA – China-Australia Migratory Birds Agreement
CALM - Department of Conservation and Land Management
DIA - Department of Indigenous Affairs
DoE - Department of Environment
DoH - Department of Health

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Abbreviations continued:

DPI – Department for Planning & Infrastructure
DSI – Detailed site investigation
EIL – Ecological Investigation Levels
HIL – Health Investigation Levels
JAMBA - Japan-Australia Migratory Birds Agreement
PASS – Potential acid sulfate soils
POS – Public Open Space
SRT - Swan River Trust

Attachment to Statement 692

Change to Description of Proposal

Proposal: East Clontarf Residential Development Waterford, City of South Perth

Proponent: Trustees for the development of the Christian Brothers in Western Australia Inc.

Change: to Schedule 1.

From:

Element	Quantities/Description
Major components – - Wetland modification - Dewatering - Disturbance to site hydrology - Remediation of site contamination - Additional foreshore reserve - Potential acid sulfate disturbance - Created wetland - Noise and dust creation	Draining and filling of approximately 2.1 hectares of Resource Enhancement wetland as depicted on schedule 1. Creation of not less than 1.9 hectares (approximately) of wetland. Provision of 8350 square metres of additional foreshore reserve. Hydrological maintenance – water quality and quantity. Remediation of on-site contamination.

To:

Element	Quantities/Description
Major components – - Wetland modification - Dewatering - Disturbance to site hydrology - Remediation of site contamination - Additional foreshore reserve - Potential acid sulfate disturbance - Created wetland - Noise and dust creation	Draining and filling of approximately 2 hectares of Resource Enhancement wetland as depicted on schedule 1 Creation of not less than 1.8 hectares (approximately) of wetland. Provision of 8350 square metres of additional foreshore reserve. Hydrological maintenance – water quality and quantity. Remediation of on-site contamination.

Figure 1b. Wetland and Residential Areas Plan

Approval Date: 25/05/06

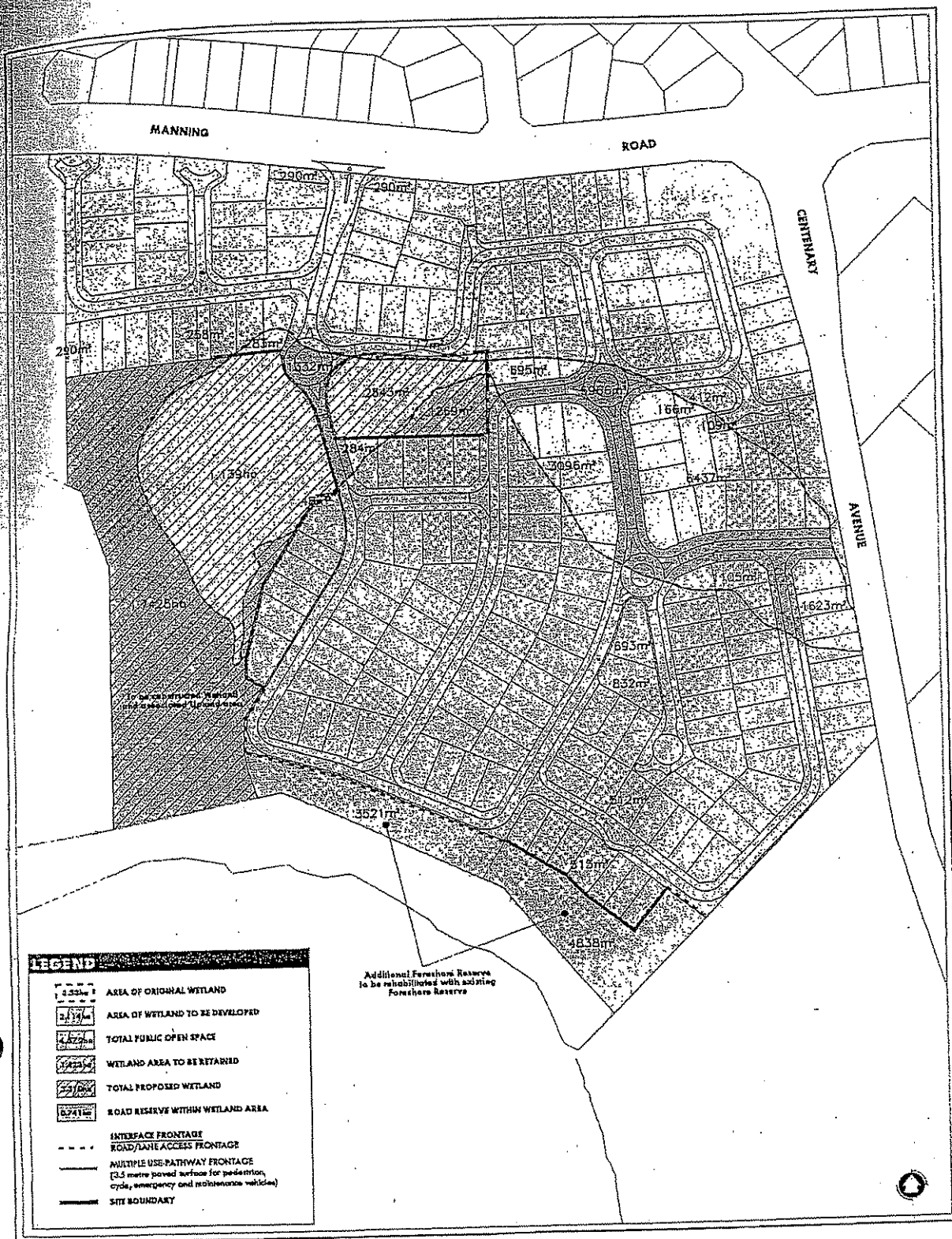


Figure 14 - Residential Development Plan

Note: The area for residential development is within the "site boundary", but excludes "Public Open Space", the "Wetland Area", and the "Area of Proposed Rehabilitated Wetland" indicated above.

