

**Brick and Tile Works, Malaga — Change of
Ministerial Conditions due to proposed subdivision
of Lot 121 Illawarra Crescent, Malaga**

International Brick and Tile Pty Ltd (Futuris Corporation Ltd)

Proposed change to Environmental Conditions

**Report and recommendations of the
Environmental Protection Authority**

Environmental Protection Authority
Perth, Western Australia
Bulletin 731
February 1994

THE PURPOSE OF THIS REPORT

This report contains the Environmental Protection Authority's environmental assessment and recommendations to the Minister for the Environment on the environmental acceptability of the proposed amendment to the original proposal.

Immediately following the release of the report there is a 14-day period when anyone may appeal to the Minister against the Environmental Protection Authority's report.

After the appeal period, and determination of any appeals, the Minister consults with the other relevant ministers and agencies and then issues his decision about whether the amended proposal may or may not proceed. The Minister also announces the legally binding environmental conditions which might apply to any approval.

APPEALS

If you disagree with any of the contents of the assessment report or recommendations you may appeal in writing to the Minister for the Environment outlining the environmental reasons for your concern and enclosing the appeal fee of \$10.

It is important that you clearly indicate the part of the report you disagree with and the reasons for your concern so that the grounds of your appeal can be properly considered by the Minister for the Environment.

ADDRESS

Hon Minister for the Environment
12th Floor, Dumas House
2 Havelock Street
WEST PERTH WA 6005

CLOSING DATE

Your appeal (with the \$10 fee) must reach the Minister's office no later than 5.00 pm on 3 March, 1994.

Environmental Impact Assessment (EIA) Process Timelines in weeks

Date	Timeline commences after receipt of full details of proposal from the proponent	Time (weeks)
2/11/93	Proponent Document distributed by EPA for comment (distribution targeted to relevant Government agencies)	3
	Comment Period Closed	
	Issues Raised During Public Comment Period Summarised by EPA and Forwarded to the Proponent	not required
	Proponent response to the issues raised received	not required
	EPA Section 46 report to the Minister for the Environment released	2

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Contents

	Page
1. Background	1
2. The proposal	1
3. Advice of the Environmental Protection Authority	1
3.1 Environmental performance	1
3.2 Use of buffer zone	5
3.3 Additional standard conditions	6
4. Conclusion	7
5. Recommended environmental conditions	7

Figure

1. Location plan of IBT Brick and Tile Works and proposed subdivision at Malaga	2
2.(a) Outline Development Plan for proposed subdivision at Malaga	3
2.(b) Outline Development Plan for proposed subdivision at Malaga	4

Appendices

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1. Environmental Conditions set on the Malaga Brick and Tile Works — 1 September 1987
 2. Current Licence Conditions on the Malaga Brick and Tile Works
 3. Submission on proposal by the Department of Planning and Urban Development
 4. Submission on proposal by the Shire of Swan

1. Background

International Brick and Tile Pty Ltd (the proponent) received approval from the Minister for the Environment to develop the Malaga Brick and Tile Works (Figure 1) on 1 September 1987, subject to a number of legally binding Environmental Conditions and Commitments (Appendix 1). That approval was given after an assessment by the Environmental Protection Authority (EPA) and release of its Report and Recommendations on the proposal (EPA Bulletin 292). A Works Approval and subsequently, a Licence (Appendix 2) were granted to the proponent to construct and operate the works. Operations commenced in 1988.

2. The proposal

International Brick and Tile Pty Ltd (IBT) proposes to subdivide the northern portion of Lot 121 Illawarra Crescent, Malaga into 45 separate industrial lots, as set out in the company's Outline Development Plan (Figure 2). Lots fronting Illawarra Crescent are proposed for showroom/semi-commercial use. IBT's brick and tile manufacturing facility is located on the south side of Lot 121. In the original proposal assessed by the EPA and approved by the Minister for the Environment in 1987, the northern portion of the lot was intended to serve as buffer to nearby residential development.

As this proposal constitutes a significant change to the original proposal, consideration of an amendment to the existing Environmental Conditions is necessary. The Minister for the Environment, under the provisions of Section 46 of the Environmental Protection Act, has requested that the EPA inquire into the proposal and report to him. This report fulfils that request.

In May 1993, IBT provided a report on the relevant literature associated with the brickworks, including a review of the original documentation for the project and the Pollution Control Licence Conditions. In June and August 1993, the Department of Planning and Urban Development and the Shire of Swan respectively referred IBT's Outline Development Plan for the Northern portion of Lot 121 to the EPA for assessment. Futuris Corporation Ltd, of which IBT is a fully owned subsidiary, referred this proposal to the Environmental Protection Authority in June 1993.

The Department of Environmental Protection (DEP) distributed the proponent's information, together with current Environmental Conditions applying to the project, to the Department of Planning and Urban Development and the Shire of Swan on the 2 November 1993 and asked for comment by 23 November 1993. The Department of Planning and Urban Development has given conditional support to the IBT proposal (Appendix 3). The Shire of Swan provided comments to the proponent's documentation in January 1994, indicating it had given conditional approval to the proposal in November 1993 (Appendix 4).

3. Advice of the Environmental Protection Authority

3.1 Environmental performance

In assessing the original proposal for the Brick and Tile Works in 1987, the EPA gave particular consideration to the following potential environmental effects:

- air emission of fluoride on the surrounding areas;
- the effect of noise emissions from the plant on surrounding residential areas; and
- the impact of the transport of raw materials and product to and from the site.

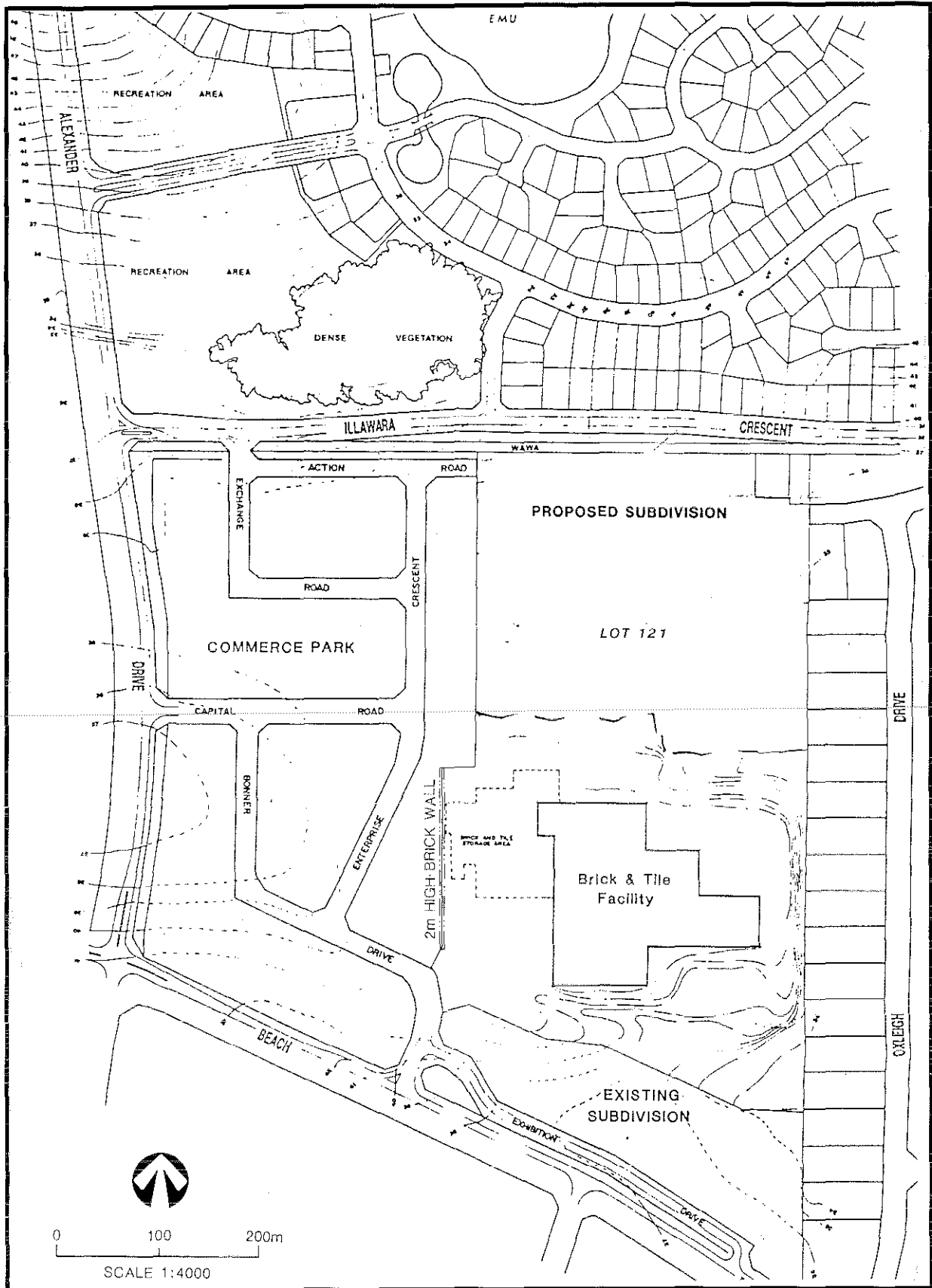


Figure 1. Location plan of IBT Brick and Tile Works and proposed subdivision at Malaga

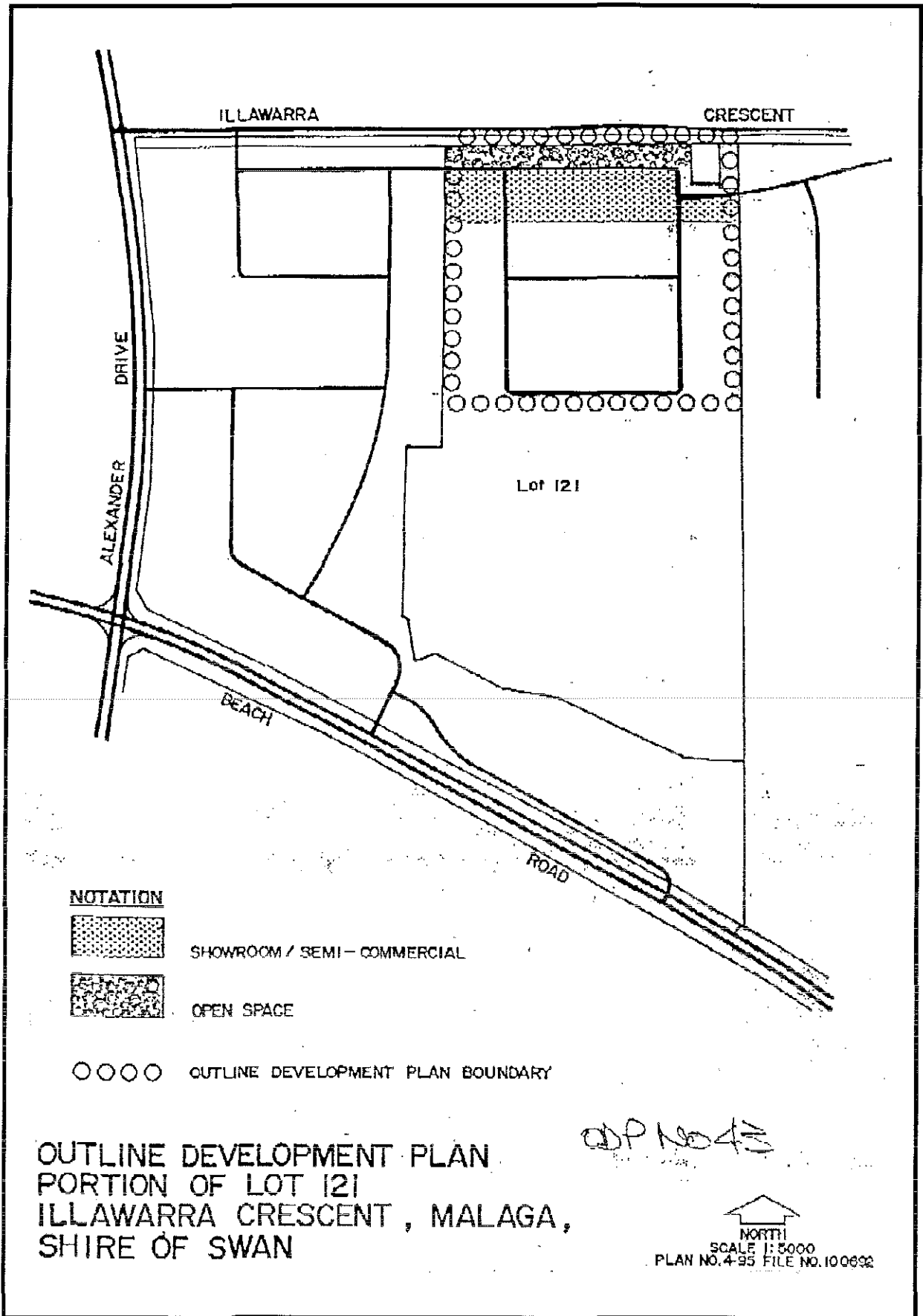


Figure 2.(a) Outline Development Plan for proposed subdivision at Malaga

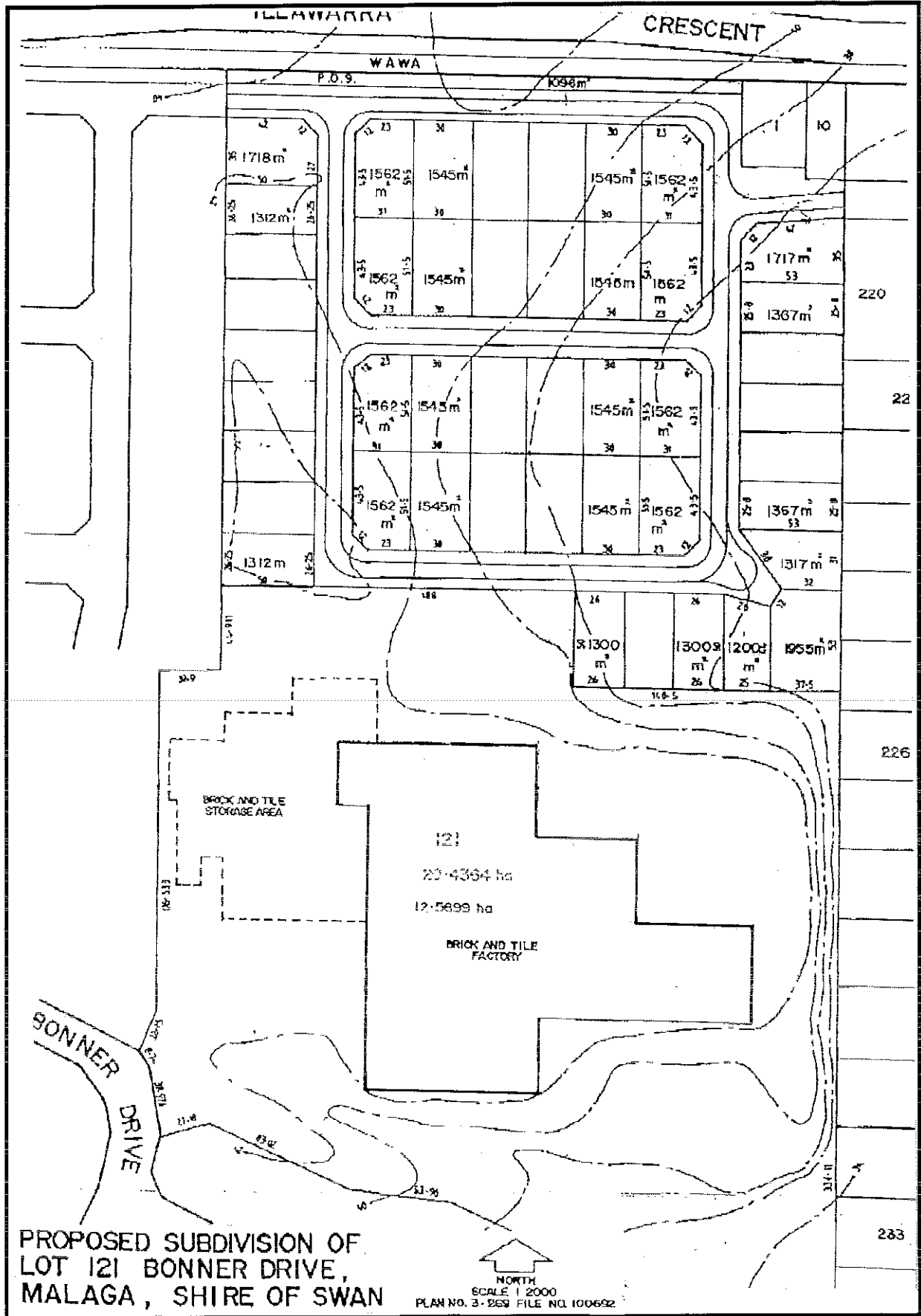


Figure 2.(b) Outline Development Plan for proposed subdivision at Malaga

Fluoride emissions were considered the most important potential impact. The chosen technology, specific Environmental Conditions, Commitments by the proponent and Licence Conditions by the DEP have been directed towards ensuring that the Brick and Tile Works operates with fluoride emission levels such that the environmental impact is negligible. Licence Condition A1 (e) requires that the fluoride mass emission rate in the exit gases from the chimney stack do not exceed 1.0 g/second of fluoride as hydrogen fluoride. Monitoring data on the fluoride levels, reported to the DEP on a three-monthly basis, show that fluorine levels emitted from the Malaga works are an order of magnitude less than the Licence limit.

Noise emissions have been minimised by locating the clay storage buildings between the process sections of the plant and the nearest residential areas. No noise complaints have been received by the DEP since operations commenced in 1988.

The management of dust due to activities on the northern and eastern boundaries of the IBT premises has been of recent concern, and has led to a complaint about dust arising from the IBT operation. Dust was produced from both vehicle movements on unsealed surfaces, and strong winds picking up fine, dry clay material present around the waste stockpile areas; sealed areas also produced some dust movement. Licence Conditions A4 (a) to (f) require IBT to carry out certain measures to prevent or minimise the generation of dust on the premises. The proponent has been requested by the DEP to outline what action it intends to take to rectify the dust problem.

3.2 Use of buffer zone

In the initial proposal assessed by the EPA in 1987, the land to the north of the proposed brickworks was designated to be retained as existing bush cover. As such the land provides a natural visual screen to the brickworks from the residential development to the north of Illawarra Crescent. Furthermore, the distance from the residences would serve to minimise the effects of any emissions of noise, dust and gaseous emissions from the plant.

This proposal by IBT retains the buffer zone to residential uses, but changes its use and hence environmental amenity. In assessing the change of land use of the buffer zone, the EPA considers that the establishment of light industry in this area, together with showroom/semi-commercial along the northern extremity, is unlikely to create a significant environmental impact on the residential area to the north of Illawarra Crescent.

The development of light industrial and commercial land uses in the buffer zone will necessitate changed and improved management at the Malaga brickworks operations in the future.

As a result of the change in land use, the proponent will need to meet standards appropriate for the new land uses (ie light industrial/commercial emission), instead of the current industrial land use standards. These more stringent standards will demand a higher level of environmental control by the proponent. The standards will be set through modifications to the Licence Conditions.

The EPA points out that, although the buffer zone will have environmental standards appropriate for the light industry/commercial classification, there may be some uses within these classes that may be sensitive to noise and dust at these levels, and therefore are not appropriate for the area.

Recommendation 1

The Environmental Protection Authority concludes that the modifications to the Malaga Brick and Tile Works due to the subdivision of Lot 121 Illawarra Crescent, Malaga as being environmentally acceptable and recommends that Condition 1 of the Ministerial statement for the proposal of 1 September 1987 be deleted and replaced by the following condition.

- 1 In implementing the proposal, including the modification to subdivide Lot 121 Illawarra Crescent, Malaga as reported in Environmental Protection Authority Bulletin 731, the proponent shall fulfil the commitments made in the Notice of Intent and the Addendum Notice of Intent; provided that the commitments are not inconsistent with the conditions or procedures contained in this statement).

3.3 Additional standard conditions

With respect to the administration of the Environmental Conditions set by the Minister for the Environment, the EPA suggests that the Minister's Statement include a number of now standard conditions not reflected in the existing conditions on the proposal.

Recommendation 2

The Environmental Protection Authority recommends that the following standard conditions be added to the Ministerial Statement for the project to ensure conformity with recent statements.

The Authority notes that during the detailed implementation of proposals, it is often necessary or desirable to make minor and non-substantial changes to the designs and specifications which have been examined as part of the Authority's assessment. The Authority believes that subsequent statutory approvals for this proposal could make provision for such changes, where it can be shown that the changes are not likely to have a significant effect on the environment.

- **Subject to the conditions in the amended statement, the manner of detailed implementation of the proposal shall conform in substance with that set out in any designs, specifications, plans or other technical material submitted by the proponent to the Environmental Protection Authority with the proposal. Where, in the course of that detailed implementation, the proponent seeks to change those designs, specifications, plans or other technical material in any way that the Minister for the Environment determines on the advice of the Environmental Protection Authority, is not substantial, those changes may be effected.**

The statement should include a "transfer" clause which has been used in all recent statements issued by the Minister for the Environment and which allows for a continuity of environmental responsibility by any new proponent.

- **No transfer of ownership, control or management of the project which would give rise to the need for a replacement proponent shall take place until the Minister for the Environment has advised the proponent that approval has been given for the nomination of a replacement proponent. Any request for the exercise of that power of the Minister shall be accompanied by a copy of this statement endorsed with an undertaking by the proposed replacement proponent to carry out the project in accordance with the conditions and procedures set out in the statement.**

The satisfactory decommissioning and rehabilitation of the site is the responsibility of the proponent. The statement should include "decommissioning and rehabilitation" clauses which have been used in all recent statements issued by the Minister for the Environment and which ensure adequate and planned decommissioning and rehabilitation of the site by the proponent.

- **At least six months prior to any planned decommissioning of the site, the proponent shall prepare a decommissioning and final rehabilitation plan. The proponent shall implement the required plan.**

In order to ensure that environmental conditions and commitments are met, an audit system is required.

- **The proponent shall prepare periodic "Progress and Compliance Reports", to help verify the environmental performance of this project, in consultation with the Environmental Protection Authority.**

A number of procedural statements are now incorporated in the Minister's Statement to clarify the roles of the Minister, the Environmental Protection Authority and other government agencies in the verification of compliance and the determination of any disputes arising thereof.

- **The Environmental Protection Authority is responsible for verifying compliance with the conditions contained in this statement, with the exception of conditions stating that the proponent shall meet the requirements of either the Minister for the Environment or any other government agency.**
- **If the Environmental Protection Authority, other government agency or proponent is in dispute concerning compliance with the conditions contained in this statement, that dispute will be determined by the Minister for the Environment.**

4. Conclusion

The Environmental Protection Authority concludes the modifications to the Malaga Brick and Tile Works due to the subdivision of Lot 121 Illawarra Crescent, Malaga are environmentally acceptable and may proceed, subject to the recommendations in this report.

5. Recommended environmental conditions

The following Recommended Environmental Conditions would amend the Minister's original Statement (Attachment 1) and apply additional conditions to ensure a continued review of the environmental performance of this site.

PROPOSAL: PROPOSED BRICK AND TILE WORKS - MALAGA (027/819)

CURRENT PROPONENT: INTERNATIONAL BRICK AND TILE PTY LTD

CONDITIONS SET ON: 1 SEPTEMBER 1987

Condition 1 is amended to read as follows:

1A Proponent Commitments

The proponent has made a number of environmental management commitments in order to protect the environment.

In implementing the proposal, including the modification to subdivide Lot 121 Illawarra Crescent, Malaga as reported on in Environmental Protection Authority Bulletin 731, the proponent shall fulfil the commitments made in the Notice of Intent and the Addendum Notice of Intent; provided that the commitments are not inconsistent with the conditions or procedures contained in this statement .

1 B Implementation

Changes to the proposal which are not substantial may be carried out with the approval of the Minister for the Environment.

Subject to the conditions in this amended statement, the manner of detailed implementation of the proposal shall conform in substance with that set out in any designs, specifications, plans or other technical material submitted by the proponent to the Environmental Protection Authority with the proposal. Where, in the course of that detailed implementation, the proponent seeks to change those designs, specifications, plans or other technical material in any way that the Minister for the Environment determines on the advice of the Environmental Protection Authority, is not substantial, those changes may be effected.

The following conditions and procedure are inserted after condition 7.

8. Proponent

These conditions legally apply to the nominated proponent.

- 8-1 No transfer of ownership, control or management of the project which would give rise to a need for the replacement of the proponent shall take place until the Minister for the Environment has advised the proponent that approval has been given for the nomination of a replacement proponent. Any request for the exercise of that power of the Minister shall be accompanied by a copy of this statement endorsed with an undertaking by the proposed replacement proponent to carry out the project in accordance with the conditions and procedures set out in the statement.

9 Decommissioning and Rehabilitation

The satisfactory decommissioning and rehabilitation of the site is the responsibility of the proponent.

- 9-1 At least six months prior to any planned decommissioning of the site, the proponent shall prepare a decommissioning and final rehabilitation programme.
- 9-2 The proponent shall implement the plan required by condition 9-1.

10 Compliance Auditing

In order to ensure that environmental conditions and commitments are met, an audit system is required.

- 10-1 The proponent shall prepare periodic "Progress and Compliance Reports", to help verify the environmental performance of this project, in consultation with the Environmental Protection Authority.

Procedure:

1. The Environmental Protection Authority is responsible for verifying compliance with the conditions contained in this statement, with the exception of conditions stating that the proponent shall meet the requirements of either the Minister for the Environment or any other government agency.
2. If the Environmental Protection Authority, other government agency or proponent is in dispute concerning compliance with the conditions contained in this statement, that dispute will be determined by the Minister for the Environment.

Appendix 1

**Environmental Conditions set on the Malaga Brick and Tile Works
— 1 September 1987**



MINISTER FOR THE ENVIRONMENT

GROUND FLOOR, 20 BARRACK STREET,
PERTH, W.A. 6000

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

PROPOSED BRICK AND TILE WORKS - MALAGA

IBT HOLDINGS LTD

This proposal may be implemented subject to the following conditions:

1. The proponent fulfilling the commitments given in the Notice of Intent and the addendum Notice of Intent for the proposal.
2. The fluoride mass emission rate shall never exceed 1 gram per second from the whole plant.
3. All gaseous process emissions shall be vented to the atmosphere through a stack with a minimum height of 35 metres.
4. The proponent shall periodically monitor the gaseous emissions from the plant and report to the Environmental Protection Authority on commencement of operations and thereafter upon the request of the Environmental Protection Authority.
5. The monitoring programme shall include details of sampling the gaseous emissions before and after scrubbing.
6. The monitoring programme shall be submitted to the Environmental Protection Authority for approval prior to commencement of operations.
7. If the proponent is unable to meet the above conditions, or the operations of the plant are having a detrimental impact on the surrounding area, the Environmental Protection Authority shall require, as a condition of licence, that the proponent modify its operation so that gaseous emissions are reduced to a level acceptable to the Environmental Protection Authority.

B. Hodge
 BARRY HODGE MLA
 MINISTER FOR ENVIRONMENT

COMMITMENTS MADE BY THE PROPONENT IN THE NOTICE OF INTENT AND
ADDENDUM NOTICE OF INTENT FOR THE PROPOSED TILE REFRACTORY
AND BRICK MANUFACTURING PLANT, MALAGA. IBT PTY LTD

- . The roads and stock yard will be sealed and will be washed and vacuumed at regular intervals. They will be washed daily.
- . Under quality or damaged products will be recycled through the project.
- . The exhaust stack will be fitted with an oxygen meter.
- . There will be a minimum 10 m buffer area adjoining major roads and land use interfaces.
- . All the industrial traffic will enter and leave the site via Beach Road.
- . Discharge from the mould washing process will be directed into a series of settlement tanks and filtered through baffles for recycling.

Management of fluoride emissions:

- . The scrubber will incorporate a LUHR filter as installed at Penta Klinker.
- . All exhausts will pass through the scrubber.
- . The kiln exhaust stack will be 35 m above ground level.
- . The average fluoride concentration at 600 m from the plant stack will be less than $0.03\mu\text{g}/\text{m}^3$.

The environmental impact of noise will be managed by the following measures:

- . An electric clay excavator will operate inside the building.
- . The unloading of raw materials will take place within a building. Entry to and exit from this building by the trucks carrying the materials will be through openings protected by permanent curtains of 150 mm wide strips of discarded conveyor belting. Each curtain will consist of a double layer of belting, to give the maximum attenuation of noise from within the building.
- . The crusher will be contained within the building in which the raw materials are off-loaded, and will, therefore, be shielded. In addition, the crusher will:
 - be set in a concrete pit, below the tipping level of the trucks;
 - operate by a slow and controlled knife action, rather than by an impact or hammer action.

Appendix 2

Current Licence Conditions on the Malaga Brick and Tile Works

AMENDED LICENCE
WESTERN AUSTRALIA
ENVIRONMENTAL PROTECTION AUTHORITY

Environmental Protection Act 1986

LICENCE

LICENCE NUMBER: 3821

FILE NUMBER: L157/87

NAME OF LICENSEE:

INTERNATIONAL BRICK & TILE PTY LTD

ADDRESS FOR CORRESPONDENCE:

66 Kings Park Road
WEST PERTH 6005

NAME AND LOCATION OF LICENSED PREMISES:

INTERNATIONAL BRICK & TILE PTY LTD
10 Bonner Drive
MALAGA 6062

CLASSIFICATION(S) OF PRESCRIBED PREMISES:

CERAMIC WORKS [Schedule3-1(e)]

COMMENCEMENT DATE OF LICENCE: Thursday, 1 October 1992

EXPIRY DATE OF LICENCE: Saturday, 30 September 1995

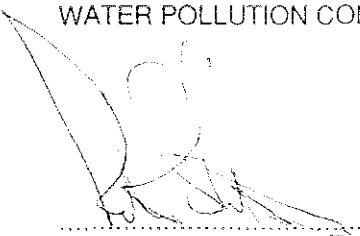
CONDITIONS OF LICENCE:

As described and attached:

GENERAL CONDITION(S) - G1 TO G3

AIR POLLUTION CONTROL CONDITION(S): A1 TO A4

WATER POLLUTION CONTROL CONDITION(S): B1 TO B3



PETER SKITMORE
Member Licencing & Control Unit
Substantive Control Division
Environmental Protection Authority

Receipt No: 303074
Receipt Date: 1/10/92
Licence Fee: \$1,500.00

Officer delegated under Section 20
of the Environmental Protection Act

Date of Amendment: Friday, 27 August 1993

Date of Issue: Monday, 12 October 1992

WESTERN AUSTRALIA
ENVIRONMENTAL PROTECTION AUTHORITY

Environmental Protection Act 1986

CONDITIONS OF LICENCE

LICENCE NUMBER: 3821

FILE NUMBER: L157/87

GENERAL CONDITIONS

PERSONS IN CHARGE TO HAVE ACCESS TO CONDITIONS

- G1 Any person in charge of the premises at any time shall be aware of these Conditions and have reasonable access at all times to these Conditions or copies thereof.

REPORTING FREQUENCY - 3 MONTHLY

- G2 The licensee shall provide to the Director, Pollution Control Division a monitoring report containing the monitoring data or other collected data required by any condition of this Licence. The report shall contain data collected over each 3-calendar month period and shall be provided no later than 21 days after the last day of the 3-month period to which the data relates or within such longer period of time as is approved by the Director, Pollution Control Division. An explanation shall be provided where any monitoring results are in excess of the limits specified in any condition of this Licence. The explanation shall contain reasons for the pollutant levels being in excess of the limits and outline, where applicable, corrective action taken by the licensee to ensure that pollutant levels are maintained below the limits. The 3-month period shall be considered to commence on 1 January, 1 April, 1 July and 1 October each year.

MAINTENANCE OF BUFFER

- G3(a) The licensee shall install and maintain a four (4) metre wide landscaped area on the Western boundary of the property as detailed in the document titled "EPA Deed".
- G3(b) The licensee shall arrange for brick packs to be stacked along the western boundary of the brick stacking area as detailed in the document titled "EPA Deed".
- G3(c) The licensee shall, upon receipt of written instruction from the Director, Pollution Control Division, install and maintain a two (2) metre high brick wall on the Western boundary of the property as detailed in the document titled "EPA Deed".

Compliance Date: Within four (4) weeks of receipt of written instruction.

AIR POLLUTION CONTROL CONDITIONS

SCRUBBER - OPERATION REQUIREMENT

- A1(a) The kiln shall be fired on gas only.

WESTERN AUSTRALIA

ENVIRONMENTAL PROTECTION AUTHORITY

Environmental Protection Act 1986

CONDITIONS OF LICENCE

LICENCE NUMBER: 3821

FILE NUMBER: L157/87

- Al(b) Exhaust gases from each kiln shall be ducted through a fluoride scrubber and released to the environment through a chimney stack with a minimum height of 35 metres above local ground level.
- Al(c) The chimney stack for each scrubber shall incorporate emissions sampling ports, platforms and access ways constructed and maintained to the requirements of the Director, Pollution Control Division.
- Al(d) The scrubber shall operate at all times the kiln is in operation except when the scrubber has been bypassed for the purpose of regular maintenance or repair. Such bypassing shall not exceed more than six hours in any 7 day period unless prior approval has been granted in writing by the Director, Pollution Control Division for a longer period of bypass time.
- Al(e) The fluoride mass emission rate in the exit gases from the chimney stack shall not exceed 1.0 grams per second of fluoride as hydrogen fluoride.
- Al(f) The licensee shall undertake source emission monitoring of fluoride in accordance with Environmental Protection Authority (Western Australia) A.Q.S.T.M. Number F.01.01 or other method as is approved in writing by the Director, Pollution Control Division. Tests shall occur at least once in every three month period and the results, submitted in accordance with condition G2 of this licence, shall contain details of the following parameters:
- (i) date and time of test;
 - (ii) chimney stack identification;
 - (iii) fluoride emission concentration expressed as grams of fluoride as hydrogen fluoride per cubic metre expressed dry at 0 degrees Celsius and 1.0 atmosphere pressure (101.325 kilopascals);
 - (iv) fluoride mass emission rate expressed as grams per second;
 - (v) chimney stack flow rate in cubic metres per hour expressed dry at 0 degrees Celsius and 1.0 atmosphere pressure (101.325 kilopascals);
 - (vi) chimney stack gas temperature; and
 - (vii) height and diameter of chimney stack at exit point.

WESTERN AUSTRALIA
ENVIRONMENTAL PROTECTION AUTHORITY

Environmental Protection Act 1986

CONDITIONS OF LICENCE

LICENCE NUMBER: 3821

FILE NUMBER: L157/87

STACK - PARTICULATES EMISSION LIMIT

- A2 The concentration of particulate material in the exit gases from the chimney stack shall not exceed 0.1 gram per cubic metre, expressed dry at 0 degrees Celsius and 1.0 atmosphere pressure (101.325 kilopascals), measured in accordance with USEPA Method 5 or other method as is approved in writing by the Director, Pollution Control Division for the purpose of this condition. The addition of dilutant gases shall not be used to achieve compliance with the above emissions limit.

STACK - DARK SMOKE CONTROL

- A3(a) The licensee shall ensure that the normal operations of the plant do not cause or contribute to the emission of black smoke from any part of the licensed premises.

- A3(b) If, as a result of a non-normal operation, any black smoke is emitted then:

- (i) the emission of dark smoke from any chimney stack shall not continue for greater than a period of 4 minutes in aggregate in any one hour period unless the licensee has approval from the Director, Pollution Control Division for such longer periods of time; and
- (ii) the emission of dark smoke from the entire licensed premises shall not continue for greater than a period of 20 minutes in aggregate in any 24 hour period unless the licensee has approval from the Director, Pollution Control Division for such longer periods of time.

- A3(c) For the purpose of clauses (a) and (b) of this condition:

- (i) dark smoke means that, if compared with a chart known as the Australian Miniature Smoke Chart (AS 3543 1989), the smoke would appear darker than shade 1 on that chart; and
- (ii) the process known as "flashing" is defined as a normal operation.

DUST - GENERAL REQUIREMENT

- A4(a) The licensee shall take all reasonable and practicable measures to prevent or minimise the generation of dust from all materials handling operations, stockpiles, open areas and transport activities.
- A4(b) All trafficked areas shall be paved, sealed, or otherwise treated, and be maintained in a manner which minimises airborne dust generation. In particular, spillages shall be swept or hosed clean as required to prevent the generation of airborne dust.

WESTERN AUSTRALIA

ENVIRONMENTAL PROTECTION AUTHORITY

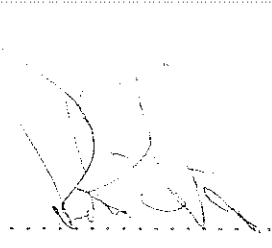
Environmental Protection Act 1986

CONDITIONS OF LICENCE

LICENCE NUMBER: 3821

FILE NUMBER: L157/87

- A4(c) Plant components likely to influence the level of dust emissions, including flexible connections, drum seals, fan casings and gas ductworks, shall be maintained in good order so as to minimise the emission of dust.
- A4(d) Routine maintenance and housekeeping practices shall be employed to ensure that there is no accumulation of waste materials in or around the premises which may lead to the generation of airborne dust.
- A4(e) The licensee shall maintain all installed dust collection and dust control systems including:
- coverings on conveyors, transfer points and discharge points;
 - skirtings; and
 - dust filters,
- so as to achieve a consistent and acceptable level of dust emissions control.
- A4(f) Appropriate measures shall be taken to suppress dust from haul roads, stockpile access roads and work areas.


PETER SIGMUND
Manager Licensing & Air Pollution
Pollution Control Dept
Environmental Protection Authority
OFFICER DELEGATED UNDER SECTION 20
OF THE ENVIRONMENTAL PROTECTION ACT

Date: Friday, 27 August 1993

PART B

WATER AUTHORITY

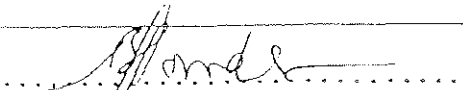
POLLUTION CONTROL LICENCE -

NO: 3321

FILE NO: E6556

WATER POLLUTION CONTROL

AUTHORISED POINT OF DISCHARGE/DISPOSAL:	NOT APPLICABLE
MAXIMUM DISCHARGE/DISPOSAL QUANTITY PERMITTED:	NOT APPLICABLE
LIMITATIONS AND CONDITIONS:	
B1 The licensee shall design, construct and manage the following facilities to the satisfaction of the Water Authority of WA. (a) Wastewater from employee amenities shall be discharged to the metropolitan sewerage scheme. (b) All liquids contaminated by process wastes shall pass through effective settlement pits, prior to disposal into any offsite stormwater system. (c) Liquid fuel storage shall comply with the attached specification and By-laws. A contingency plan to deal with any accidental spillage shall be supplied. (d) Substances subject to storm water leaching which may contaminate local groundwater, shall <u>not</u> be stored in the open, without an effective leachate recapture/containment system. Potentially polluting solid wastes shall be removed from site.	
B2 Any proposed alterations to the plant as described in the original NOI shall be returned to the Water Authority for approval prior to implementation.	
B3 An up-to-date inventory of chemicals stored on the site shall be supplied and maintained with the Water Authority.	


.....
DELEGATED OFFICER

9/11/81
.....
APPROVAL DATE

These conditions constitute the Water Pollution Control Conditions B1 to B3 attached to Licence number 3321 issued on 27 August 1993.


.....
PETER SKITMORE

Dated 27/8/1993

Manager Licences & Audit Branch
Pollution Control Division
Environmental Protection Authority

Officer delegated under Section 20
of the Environmental Protection Act

Appendix 3

**Submission on proposal by the Department of Planning and Urban
Development**

ALL COPIES OF THIS DOCUMENT
TO BE FORWARDED TO
CHIEF EXECUTIVE

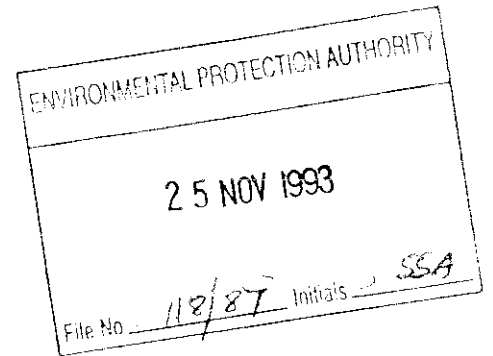
IN REPLY PLEASE QUOTE **Mr C Bulstrode**
YOUR REF **118/87 (7131)**
OUR REF **90136**

D1110
DEPARTMENT OF
PLANNING AND URBAN DEVELOPMENT



CHAIRMAN
ENVIRONMENTAL PROTECTION AUTHORITY

ATTENTION: MR S SADLEIR



**PROPOSED SUBDIVISION - LOT 121 ILLAWARRA CRESCENT, MALAGA
(FUTURIS CORPORATION) - REPORT FOR PUBLIC COMMENT**

I refer to your memorandum of November 4, 1993 seeking the Department's comments on the above.

The Department generally supports the recommendations of the proponent's environmental consultant's report, particularly, the recommendation that prospective purchasers of proposed lots be advised of the effects of possible dust and fume emissions from the brickworks.

It is considered, however, that only the prospective purchasers of the lots that will abut or face the brickworks should be required to be advised of the possibility of dust and fume emissions as this was the requirement for the lots in the subdivision to the west of the brickworks.

C. K. Bulstrode
AT ANDREW TREVOR
A/ REGIONAL MANAGER
EAST METROPOLITAN SECTION

NOVEMBER 22, 1993

*Noted SSA
26/11*
71241

Appendix 4

Submission on proposal by the Shire of Swan

OFFICE COPY

POSTED
- 5 JAN -
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SB:MA ODP43

5th January 1994

Urban Focus
PO Box 1360
WEST PERTH WA 6872

9919

Attention: Douglas Drake

Dear Sir,

RE: APPROVAL OF OUTLINE DEVELOPMENT PLAN
PT LOT 121 ILLAWARRA CRESCENT, MALAGA
INTERNATIONAL BRICK & TILE BRICKWORKS SITE

Approval was granted to an Outline Development Plan for the abovementioned land on 4th November 1993, subject to the following conditions/modifications:

1. Approval 'in principle' is granted to the submitted landscape plan dated 3 November 1993. Notwithstanding, plans detailing landscaping and reticulation specifications are to be submitted for approval prior to the commencement of works on the site.
2. All works associated with the landscaping of the site to be completed prior to this Local Authority clearing diagrams of survey for the subject lots to be created in the subdivision of the land affected by this Outline Development plan.
3. Maintenance of the landscaped works to be carried out by the subdivider of the land for a period of 2 years from the date of completion of the landscaping works, to the satisfaction of the Shire of Swan.
4. A bond to the amount of \$80,000 being submitted prior to subdivisional approval being granted to cover the cost of the landscaping and reticulation works. Such monies will be drawn upon to undertake any works not carried out in accordance with the approved plan, to the satisfaction of the Shire of Swan.
5. Undergrounding of power within the proposed subdivision to be undertaken to service the proposed industrial lots.

Page 2

6. The provision of water and sewerage services to the development. Such works will involve the extension of the reticulation mains at the expense of the subdivider. Headworks contributions are also payable for water, sewerage and drainage.
7. The proposal is situated within the Mirrabooka Public Water Supply Area and Underground Water Pollution Control Area where stringent conditions have been set for industrial development. The industrial uses described on the attached sheet will not be permitted on the land to be subdivided.
8. Road access to the east of the site being redesigned whereby a 'T' junction is created.
9. Any requirements or conditions placed on the land by the Environmental Protection Authority are to be considered as part of the approval for this Outline Development Plan.

Additional comments were also provided on the landscape plan and in regard to drainage.

Could you please advise as to when the conditions/modifications to the Outline Development Plan will be carried out, as no development will be approved on the land until such time as all the conditions of the Outline Development Plan have been fulfilled.

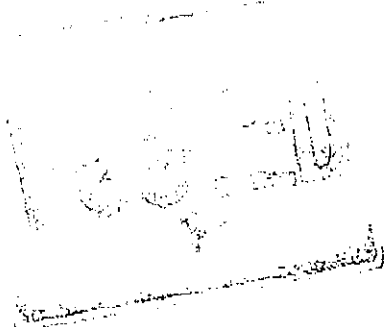
If you have any further queries in regard to this matter please contact Sue Burrows on 274 9827.

Yours faithfully



(K Weymes)
ACTING EXECUTIVE MANAGER
COMMUNITY PLANNING & DEVELOPMENT

OFFICE COPY



SB:DMC S90136

28 January 1994

Environmental Protection Authority
Westralia Square
38 Mounts Bay Road
PERTH WA 6000

ATTENTION: S Sadler

Dear Sir

PROPOSED SUBDIVISION - LOT 121 ILLAWARRA CRESCENT, MALANA (FUTURIS CORPORATION) - REPORT FOR PUBLIC COMMENT

I apologise for the delay in responding to your letter dated 2 November 1993 and provide the following comments to the proponent's documentation on the above subdivision.

Officers of the Shire of Swan have considered the two reports and the potential impacts of the development of this land for Industrial/Semi Commercial use are noise and light.

The major concern is that the buffer provided between residential development on Illawarra Crescent and the Industrial Estate is sufficient in distance and treated whereby any potential impact will be minimised. It has been proposed that this area be substantially landscaped, however, maybe a brick wall, as proposed on the western site, is also required on the northern boundary of the site.

In addition, it could be appropriate that the same controls were placed on activities re - conflicting uses, as occurred on lots on the western side of the brickworks.

Council has granted approval to the Outline Development Plan and a copy of that correspondence is attached to this letter.

If you have any further queries in regard to this matter please contact SUE BURROWS on 274 9827.

Yours faithfully

(K W Weymes)
ACTING EXECUTIVE MANAGER
COMMUNITY PLANNING & DEVELOPMENT