X SYSTEMS LTD
SOUTHPORT U.K.
LONDON OFFICE

APPLICATION NO:
CON/2000/3034

LOCATION:
Readin Business Park Adjoining A33, Near Junction 11 Of M4 Reading.

APPLICANT:
Akeler Development Ltd C/O Aukett Europe

PROPOSAL:
Consultation from Reading Borough Council on application for offices (B1) with associated leisure facilities, landscaping, service & estate roads plus 969 car spaces for office development and retention of 457 car spaces for brewery use.

EARLIEST DATE FOR DECISION: **11/01/2001**

APPLICATION WILL HAVE EXPIRED ON:
18/01/2001

CASE OFFICER: **Emy Circuit**

Tel. No. 0118 974 6323 (Direct Line) Fax. 0118 974 6313

Date: 7th February 2001

Your ref.

My ref. TC/P9

Mr K Rogers
Transport Planning
Reading Borough Council
Civic Centre
Reading
RG1 7TD

Environmental Services Department
Engineering Services
P.O. Box 153
Shute End, Wokingham
Berkshire RG40 1WL
Main Switchboard (0118) 974 6000
Minicom No: (0118) 974 6991
DX: 33506 – Wokingham

Dear Keith,

PHASE 3 READING INTERNATIONAL BUSINESS PARK.

Thank you for providing the opportunity for me to comment on the above proposal. As you know, I forwarded a copy of the Transport Assessment (TA) to our term consultant Parkman for comments, which I have now received. There are a number of queries that have been raised regarding the methodology applied within the TA, assumptions made (particularly modal split), and anomalies with the SRTM. Although these issues will need to be addressed prior to the development commencing, I do not consider them sufficient to delay the application being determined by your Planning Committee this evening.

The queries are as follows:-

1. The area of interest considered within the TA excludes any junctions within Wokingham District's administrative boundary. Whilst it is acknowledged that the majority of the impact will be within RBC's boundary, there will clearly be impacts (possibly material) elsewhere on the network within Wokingham. These have not been identified within the TA.

2. The TA considers 2006 as the base year (end of plan period) having regard to existing and future planned improvements to non car modes. However the development is programmed to be fully occupied in 2002, when a number of these improvements will not yet be in place. Therefore, in order for the assessment to be robust, it should consider the traffic impact in 2002 without future planned improvements to non car modes, together with more realistic modal splits.

3. If the assumed modal split is to be believed, then this should be reflected within the overall car parking provision on the site. The applicant proposes 969 spaces based on the draft PPG13 standards of 1 space per 35 sq. metres (maximum). However, if only 44.1% of staff arrive by car, there will only be a requirement for a total of 750 spaces which equates to 1 space per 45 sq. metres. As the standards recommended within the draft PPG13 are considered as maximum, then any reduction would further support the aims and objectives of PPG 13. It is recommended that provision be made within the GTP for a staged reduction in car parking, in line with the aims and targets set therein. This approach has recently been endorsed by an Inspector at appeal when considering office development at Church farm/Cattle Breeding Centre in Shinfield.

4. The TA acknowledges the limitations of the SRTM and how it cannot accurately reflect conditions such as peak spreading. As the area of interest is limited to those junctions in the immediate vicinity of the site, the TA does not identify where the existing traffic forced out by the development traffic will be redirected. This could place further pressure on the B3349 Basingstoke Road/Hyde End Road/A327 Hollow Lane and the B3270 Whitley Wood Lane. This needs to be demonstrated within the TA.

I understand from our recent telephone conversations that the applicant is willing to contribute £2.75 million towards highway and transport related improvements of which £1 million will be allocated towards the Mereoak Park and Ride. The TA acknowledges the importance of this facility is bringing about the assumed modal splits and GTP objectives. Therefore, as this forms an integral part of the development, any subsequent legal agreement should allocate this amount specifically to the proposed Mereoak P&R.

If you require any further information please contact me direct on 0118 9746323. I have enclosed a copy of Parkman's comments for information.

Yours sincerely,

T. Callaghan
Team Leader Highways Development Control.

cc: Emy Circuit - WDC Planning
Bob Coe - Transport Planning

Tel: (0118) 974 6479 (Direct Line)
Fax: (0118) 974 6484
Email: Emy.Circuit@wokingham.gov.uk
Date: 24 January 2001
My ref: EXC/CON/2000/3034
Your ref: 00/01477/FUL/AD

Andrew Dawe
Planning
Reading Borough Council
Civic Centre
READING
RG1 7TD

DX 10124 Reading (Castle Street)

Environmental Services Department
Planning Services
P.O. Box 157
Shute End, Wokingham
Berkshire RG40 1WR
Tel: (0118) 974 6000
Fax: (0118) 974 6484
Minicom No: (0118) 974 6991
DX: 33506 – Wokingham

Dear Mr Dawe

CONSULTATION ON PROPOSED DEVELOPMENT AT READING BUSINESS PARK – 00801447/FUL/AD

Thank you for your consultation on the above proposal. I apologise for the delay in responding to it.

Wokingham District Council is aware of the planning brief for south west Reading. While there is no objection to the proposals, it would be considered preferable for the land to be used for industrial or storage uses, for which there is a reducing supply of land. This would be in accordance with Berkshire Structure plan policy BU2 and policy RE10 of the draft Regional Planning Guidance For The South East. In view of the prominent location of the site the Council would support Reading Borough Council in seeking a high standard of design.

The information regarding the traffic impact of the proposal was received on 22 January and this has been passed to the Highway Section, who will endeavour to respond during the next week.

Yours sincerely

John Mitchell,
Development Control Manager

File: con_2000-3034
Reading Business
Park.doc

WOKINGHAM D.C. DEVELOPMENT CONTROL

Start date: 21|12|00	
Officer: EXC	Application No. CON|2000|3034

Map No. ..... Site .....
Easting: ..... Flood Pln .....
Northing: ..... Mineral .....

Level: ☐ **Sub Committee** ☑ **Delegated** ☐ **Sec. State**
☐ **Incorrect Fee** ☐ **Invalid** ☐ **PD**

Description:
(CON) Consultation from Reading BC on application for offices (B1) with associated leisure facilities, landscaping, service & estate roads. Plus 969 car spaces for office development & retention of 457 car spaces for brewery use

Location: Reading Business Park adj A33 by M4 Junction 11.

Parish: STANFIELD Ward: Patman, Bryant, Pollock

Applicant: AIKELER DEVELOPMENTS LTD

Fee Received... ✓ ..... Required ..... Additional ..... Refund .....

Enforcement Section to be notified ☐ tick if required

Additional information required for validation

		Reason	Requested	Received
1	1:2500 OS location plan showing property edged in blue/red			
2	1:500 block plan showing existing & proposed dev. + adj. Properties			
3	Forms unsigned			
4	Correct S 66 certificate			
5	Elevation plans			
6	Floor plans			
7	Metric scale disclaimer			
8	Encroachment letter			
9	Miscellaneous			

APPLN NO. _____

ACTION REQUIRED BY DEVELOPMENT CONTROL

Conservation Area .....

Listed Building 1 2 2*

Advertisement Required .....

Date Site Notice Sent : ..... Parish Council Informed - YES / NO

INTERNAL CONSULTATIONS

Building Control .....
Landscape .....
Trees .....
Conservation Officer .....
Environmental Health .....
Housing .....
Leisure & Cultural services .....
Public Rights of Way .....
Property .....
District Secretary (only if called in by SOS) .....
Policy & Plans .....
Strategic Planning (JSPU) .....
Minerals (INTERNAL) .....
Archaeological Site (BABTIE) : .....
Education .....
Social Services .....
Highways .....

EXTERNAL CONSULTATIONS

Adjacent D P A ~~Shaw~~ Shurfield : .....
Adjacent Parish : .....
Southern Electricity Board : .....
British Gas .....
PSA Oil Pipeline .....
Transco : .....
Environment Agency : .....

Rail Track .....
Police Arch. Liaison Officer .....

HERITAGE BODIES

The Georgian Group .....
Ancient Monuments Society .....
Council for British Arch. .....
RCHME .....
Telecommunications (NRPB) : .....
Sport England : .....

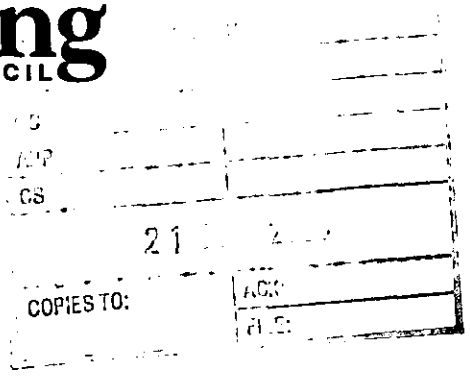
OTHERS:

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NEIGHBOURS:

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Reading
BOROUGH COUNCIL



Tony Lear
Director of Environment

Civic Centre, Reading, RG1 7TD
☎ 0118 939 0900
DX 40124 Reading (Castle Street)
Fax: 0118 958 9770
Minicom 0118 939 0700

Wokingham District Council
Council Offices
Shute End
Wokingham
RG11 1WR

Our Ref: 00/01447/FUL/AD
Your Ref:

Direct: ☎ 0118 939 0023

19th December 2000

Your contact is: Andrew Dawe, Planning

Dear Sir/Madam,

CONSULTATION ON A PLANNING APPLICATION REF: 00/01447/FUL/AD

The Council has received an application for Full Planning Approval on property at: Reading International Business Park A33 Relief Road Reading

O.S Grid Ref: Easting: Northing:

Applicant: Akeler Developments Ltd

Proposal: Development of offices with associated leisure facilities, landscaping, services roads and 969 carparking spaces for office development, together with retention of 457 existing carparking spaces for brewery use.

Application Number: 00/01447/FUL/AD

I enclose a copy of the application form and a site plan. Further details can be viewed at the Information Centre on level 4 of the Civic Offices between 9.00am and 5.00pm, Monday to Friday. If this is not convenient, or you need to discuss this in more detail please contact me on the above number as soon as possible.

Any comments should be in writing and reach me by 10th January 2000. If I have not heard from you by this date, I will assume that you have no objections or comments to make and I will determine the application accordingly, If you think you will be unable to respond fully by this date, please let me know as soon as possible.

All comments received will be taken into consideration when a decision is made, and will be available for public inspection.

Yours faithfully

Andrew Dawe
for Planning Manager

Reading BOROUGH COUNCIL

Planning Section
PO Box 17, Civic Centre, Reading RG1 7TD
Telephone 0118 939 0450 Fax 0118 958 9770
between 9am and 5pm Monday to Friday

FOR OFFICE USE ONLY
Application No. 00 1447 FUL/AD
Date received
Date acknowledged:
Copy No. 1/2/3/4/5

APPLICATION FOR PLANNING PERMISSION

PART 1

Please read the accompanying **NOTES.** Answer all questions in **BLACK INK AND BLOCK LETTERS** and send **FIVE** copies of the application to the above address.

1. APPLICANT

Name AKELER DEVELOPMENTS LTD.
Address 20. BERKELEY SQUARE. LONDON
Postcode W1J 6EQ Tel. No. 0207·864·1800

2. AGENT (if form is completed by agent)

Name AUKETT EUROPE
Address 2. GREAT EASTERN WHARF PARKGATE ROAD. LONDON
Postcode SW11 4TT Tel. No. 0207·924·8701

3. ADDRESS OR LOCATION OF APPLICATION SITE

READING INTERNATIONAL BUSINESS PARK, ADJACENT TO A33 BASINGSTOKE ROAD BY THE M4 JUNCTION 11.

4. AREA OF APPLICATION SITE

Hectares 3·36 OR Acres: 8·3

5. PLANS AND DRAWINGS ACCOMPANYING APPLICATION

(Please tick)

Location plan (1:1250 scale — edged red) ☑
Site plan (1:500 scale) ☑
Detailed plans (floor plans, sections, elevations, please supply illustrative material) ☑

6. BRIEF DESCRIPTION OF PROPOSED DEVELOPMENT

OFFICES (USE CLASS B1) WITH ASSOCIATED LEISURE FACILITIES, LANDSCAPING, SERVICING AND ESTATE ROADS. ALSO TO INCLUDE 969 CAR SPACES FOR THE OFFICE DEVELOPMENT AND RETENTION OF EXISTING 457 CAR SPACES FOR BREWERY USE.

7. TYPE OF PERMISSION REQUIRED

(Please tick ONE box only)

A Outline (building works only)
B Change of use only
C Change of use with building or other work
D Building, engineering or other operations
E Reserved matters
F Temporary (specify condition if for a 'renewal')
G Non-compliance with a condition (specify reference no.)

A	
B	
C	
D	✓
E	
F	
G	

(Answer Question 8)

(Answer Question 9)

8. OUTLINE APPLICATIONS N/A.

The following matters are reserved for future consideration (please tick).

Siting ☐ Design ☐ External appearance ☐ Access ☐ Landscaping ☐

9. RESERVED MATTERS APPLICATIONS Please state N/A.

A Reference no. and date of outline permission
B Which reserved matters are applied for

10. PRESENT OR LAST USE OF ALL LAND/BUILDINGS

BREWERY BOTTLING PLANT WITH OFFICE AND CAR-PARK PLUS AGRICULTURAL

11. TREES

A Are there any existing trees on site? (YES)/~~NO~~

B Are any trees affected by the proposals? If YES, please indicate on plans. (YES)/~~NO~~

12. BUILDING MATERIALS ETC.

Please state type and colour of materials for:

A External walls GLASS AND METAL CURTAIN WALLING FACADE.

B Roofs GLASS AND METAL ATRIUM ROOF, GRAVEL TOPPED FLAT ROOF ELSEWHERE.

C Walls, fences etc. —

13. DRAINAGE

Please state the method of disposal for:

A Surface/storm water TO EXISTING STORM WATER/SURFACE WATER DRAINAGE SYSTEM.

B Foul sewage TO EXISTING FOUL SEWAGE DRAINAGE SYSTEM.

14. ACCESS TO ROADS (VEHICULAR AND PEDESTRIAN)

(Please tick **ONE** box)

A There will be **NO** new access to a public road and **NO** alteration to any existing access to a public road. ☐

B There will be a new or altered access to a public road (specify) MINOR ALTERATIONS TO KERBLINES AT ROUNDABOUT AT INTERSECTION OF A33 AND BREWERY ACCESS ROAD. ☑

15. ACCESS FOR THE DISABLED

Will the proposed development be fully accessible to disabled persons including wheelchair access? (YES)/~~NO~~

If NO, where is access provision deficient? N/A.

16. PROPOSED DEVELOPMENT — RESIDENTIAL

The development involves (specify)

Dwelling Type	No. of New Units	No. of Bed Spaces	No. of Habitable Rooms	No. of Units Lost
Houses				
Bungalows				
Flats/Maisonettes				
Bedsits				
Other				

Please complete PART 2 of this form if the proposed development is non-residential.

17. MINERALS

Is the proposal for the extraction of minerals? ~~*YES~~/(NO)

If YES, please complete PART 3 of the application form.

18. DECLARATION — ACCOMPANYING DOCUMENTS ETC.

(Tick **ALL** boxes)

I attach the plans specified in question 5 above ☑

AND I attach a completed Ownership Certificate (Article 7) ☑

AND I enclose a fee of £9,500.00 ~~by cash~~/cheque~~/P.O. No.~~ ☑

Signed (AUKETT EUROPE) ~~(Applicant~~/Agent) Date 20 NOVEMBER 2000

*Please delete as applicable

APPLICATION FOR PLANNING PERMISSION

NON-RESIDENTIAL DEVELOPMENT: ADDITIONAL INFORMATION

PART 2

PLEASE READ THE NOTES ON THE REVERSE SIDE OF THIS FORM

1. GROSS FLOORSPACE

State the **GROSS** floorspace (by external measurement) in sq. m. and sq. ft. of **ALL** buildings to which this application refers.

	Existing floorspace retained in existing use.	Proposed additional or new floorspace created by		Existing floorspace to be lost by change of use or demolition.
		New building	Change of use	
Office		33,910 m² 365,000 sq.ft.		93 m². 1000 sq ft.
Industrial				4,755 m² 51,000 sq ft.
Retail				
Storage				1,020 m². 10,980 sq ft.
Residential				
Other - give use				
Total		33,910m². 365,000 sq ft.		5,868 m². 62,980 sq ft.

2. ACTIVITIES EXISTING & PROPOSED

Describe the activities or processes as existing and as proposed and describe any plant or machinery to be installed.

PART OF THE SITE FORMS A BOTTLING PLANT WITH OFFICE ACCOMODATION FOR THE BREWERY, WHICH IS TO BE DEMOLISHED. ALL NEW PLANT FOR THE PROPOSED OFFICE BUILDING TO BE LOCATED ON THE ROOF, IN PART-BASEMENT OR UNDER DECK OF CAR-PARK AT GROUND FLOOR.

3. ACCESS FOR THE DISABLED

Does the development you propose include a building or premises to which the public are to be admitted on payment or otherwise? NO.

If YES, ensure you have complied with Note 15 on the guide notes. N/A.

4. PROSPECTIVE OCCUPIER AND EXISTING PREMISES

A. State the name of the prospective occupier and the address of their current premises.

MCI WORLD COM. PHASE 1/2, READING INTERNATIONAL BUSINESS PARK & 14. GRAY'S INN ROAD, LONDON, WC1X 8HN.

B. What is to happen to their current premises?

EXTENSION TO PHASE 1/2 AND PARTIAL TRANSFER OF STAFF FROM LONDON OFFICES. POSSIBLE RE-LEASING OF LONDON OFFICES.

5. EMPLOYEES The development involves *(please specify)*

	Office Staff	Industrial Staff	Retail Staff	Other Staff
New	1500			
Transferred	500			
Existing	—			

6. VEHICULAR TRAFFIC

A. What is the estimated number of vehicles (excluding staff journeys to work), visiting the site during a normal working day?

250 TO 350 APPROX.

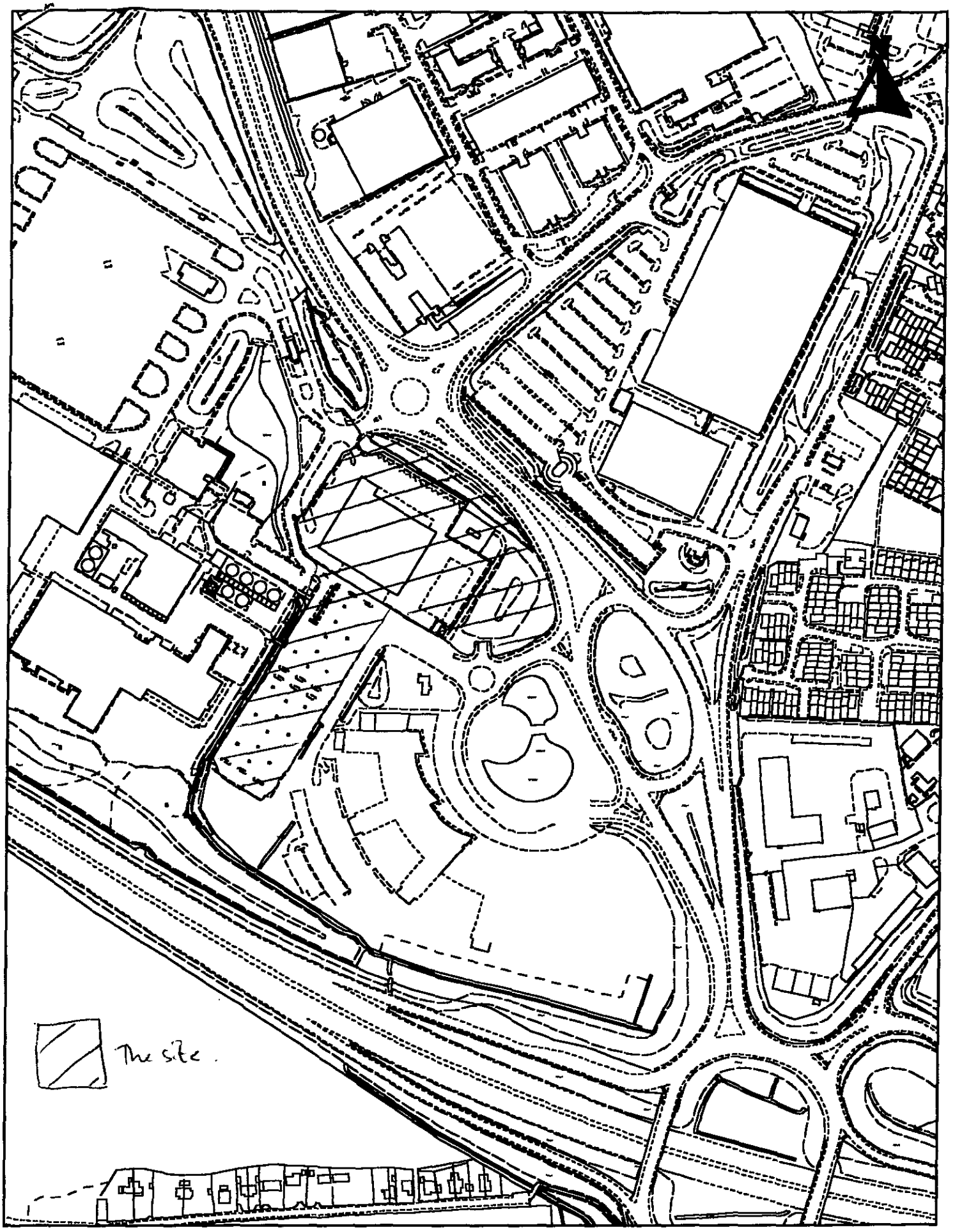
B. Summarise the provisions made for parking, manoeuvring, loading and unloading of vehicles on the site.

LOADING BAY AND TURNING PROVISIONS LOCATED TO REAR OF NEW OFFICE BUILDING, ACCESSED FROM PH1/2 ACCESS ROAD FROM A33.

7. HAZARDOUS SUBSTANCES

Does the proposal involve the use or storage of any materials listed in the notes? NO If YES specify quantities and method of storage

N/A.



Title: Location Plan
Reading International Phase 3
Date: 12/12/2000
Drg.No.:
Scale: 1:4000

Based upon the Ordnance Survey 1:1250 mapping with the permission of Her Majesty's Stationary Office © Crown Copyright. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. Licence number LA 079049.

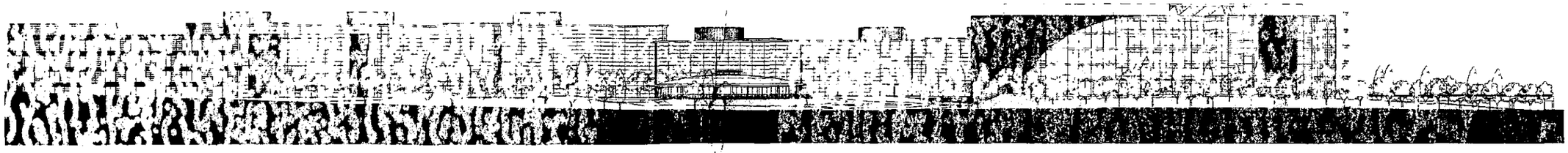
Reading BOROUGH COUNCIL

File:

READING INTERNATIONAL BUSINESS PARK

PHASE 3

20 NOVEMBER 2000



PLANNING SUPPORT DOCUMENT

20 November 2000

Aukett Europe
2 Great Eastern Wharf
Parkgate Road
London SW11 4TT

Compiled: _____

Checked: _____

Authorised: _____

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1.05 Infrastructure Constraints.
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2.02 Main Entrance.
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Section 3.00

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3.02 Environmental Study – Wind.
3.03 Environmental Study – Electromagnetic Reception.
3.04 Environmental Study – Solar Reflection.
3.05 Environmental Study – Day Lighting.

Appendix

Project Team.

AKELER DEVELOPMENTS

READING INTERNATIONAL – PHASE 3

Section 1.00

1.01 Planning Background / History.

1.02 Aerial Photograph.

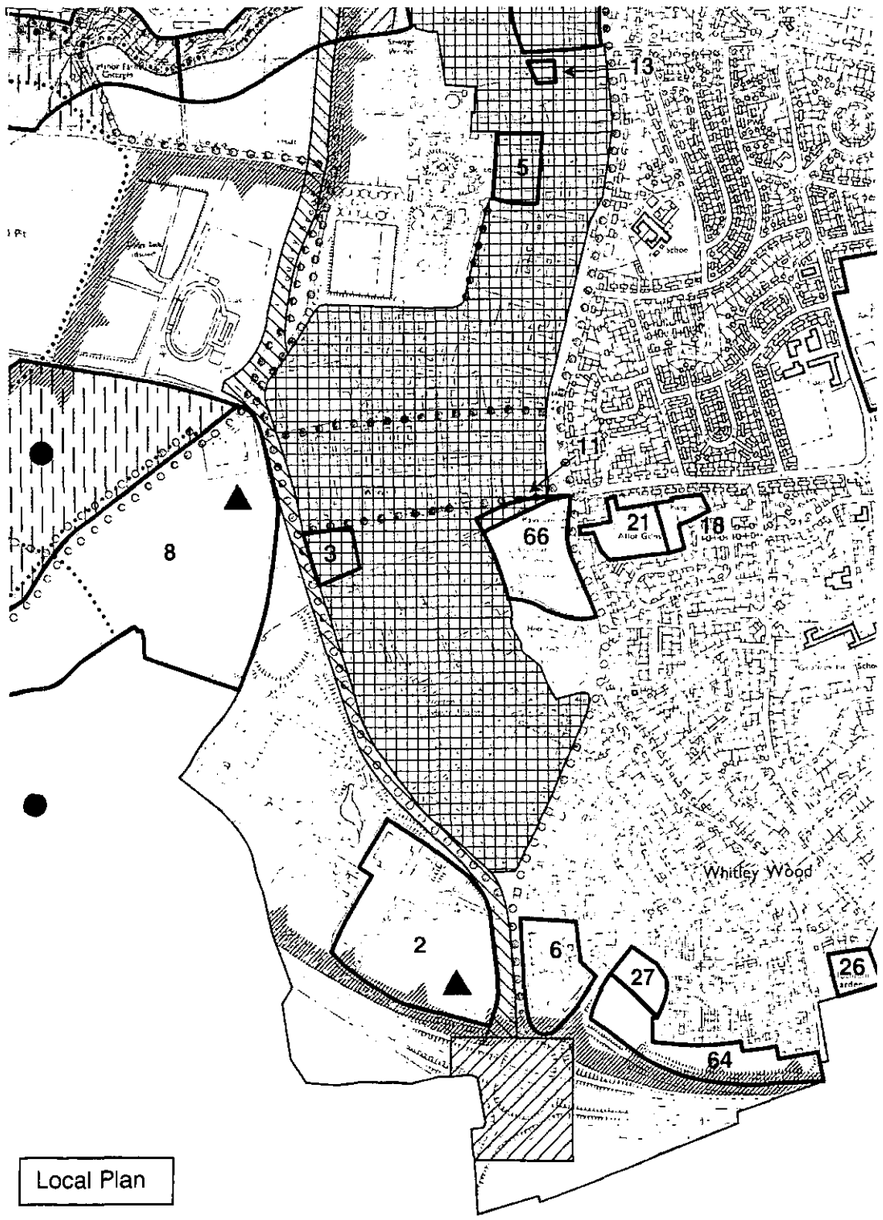
1.03 Masterplan.

1.04 Site Constraints Plan.

1.05 Infrastructure Constraints.

1.06 Environmental Statement.

1.07 Transport Assessment Summary.



1.01 Planning Background / History

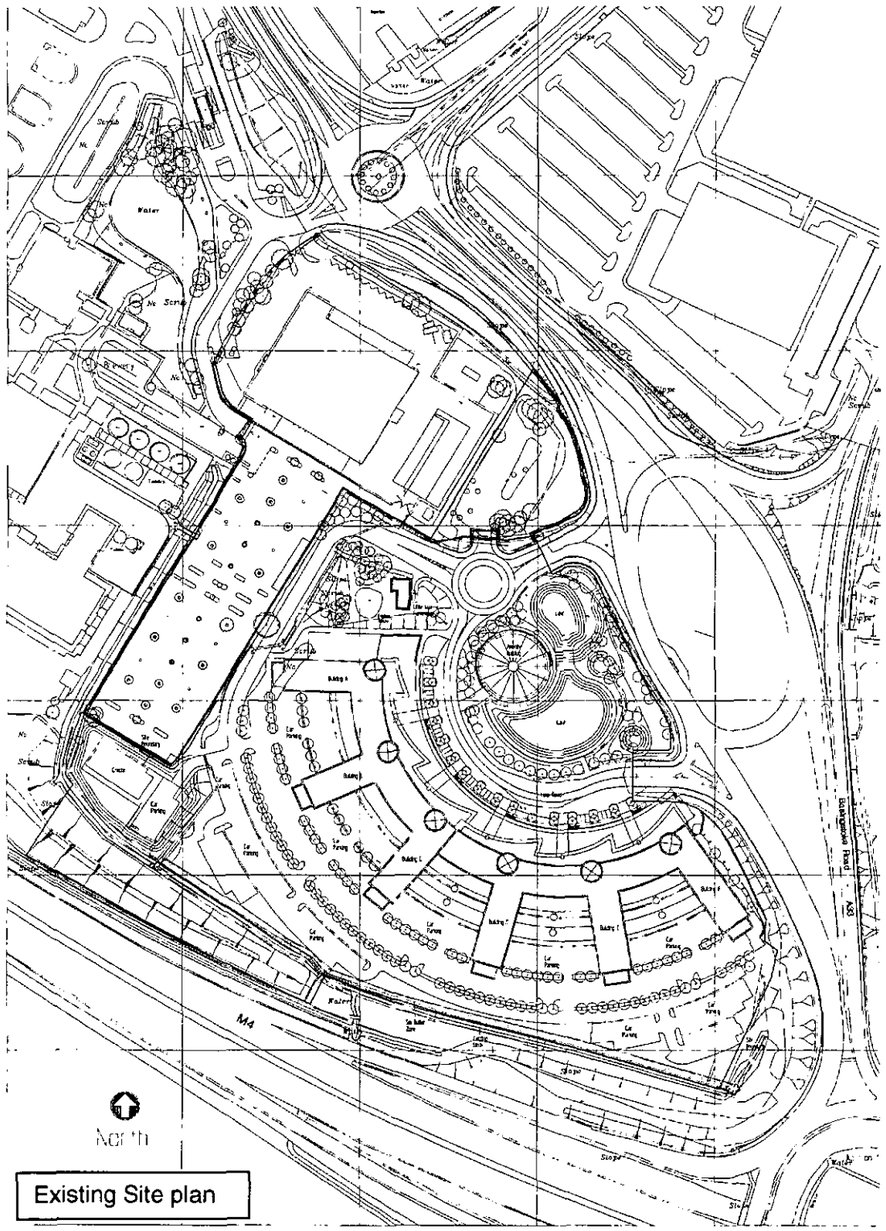
The site is identified in the relevant Local Plan for employment development. The Reading Borough Local Plan was adopted in October 1998 and identifies two main areas as appropriate locations for employment growth. These are Reading town centre, and the A33 relief road corridor.

The land pertaining to the application forms part of Site No 2 referred to in the Local Plan as "land adjacent to Courage's brewery". Policy EMP1 of the Plan confirms that the site is appropriate for major employment generating development. Indeed the allocation of this site pre-dates the Local Plan which notes that the site has been allocated for employment development since at least 1991 and was identified for development in the Berkshire Structure Plan over the period 1991 to 2006.

At the time that the Local Plan was drafted, it was suggested that site No 2 should provide "development comprising business, industrial, storage and distribution uses to include a proportion of small managed industrial units.

Since adoption of the Plan, Reading Borough Council has granted planning permission for development of the major part of Site No 2 as a business park. Outline planning permission was granted for Phase 1 of the Reading International Business Park in 1998 and a further permission for Phase 2 was granted earlier this year. These new proposals for Phase 3 will provide a natural extension of the business park meeting the pressing requirements of the occupier MCI WorldCom.

Notwithstanding the above, it is understood that Local plan is being reviewed next year within the context of a new Structure Plan that is out to consultation in the forthcoming year.



Existing Site plan

In addition to the site's designation under policy EMP1, it is notable that the application site also meets the criteria for employment development set out in Policy EMP3 of the Local Plan.

In particular: -

- The scheme involves no loss of residential land or accommodation.
- The scheme is environmentally acceptable in terms of the character and amenity of the local area.
- There is no loss of A1 (retail) or A3 (catering) uses.
- The proposal complies with the Council's access and parking standards.
- The scheme will provide environmental benefits, reinforcing the high quality development established in earlier phases of the business park.

In addition to meeting local planning policies, the proposals also comply with national and regional planning objectives. Selection of previously developed brownfield sites has strong policy backing at all levels. There is similar emphasis on the need to sustain economic growth and provide up to date buildings and facilities necessary to attract inward investment to the UK. Regional planning guidance confirms the vital role that such sites can play in contributing to the development of the national economy.

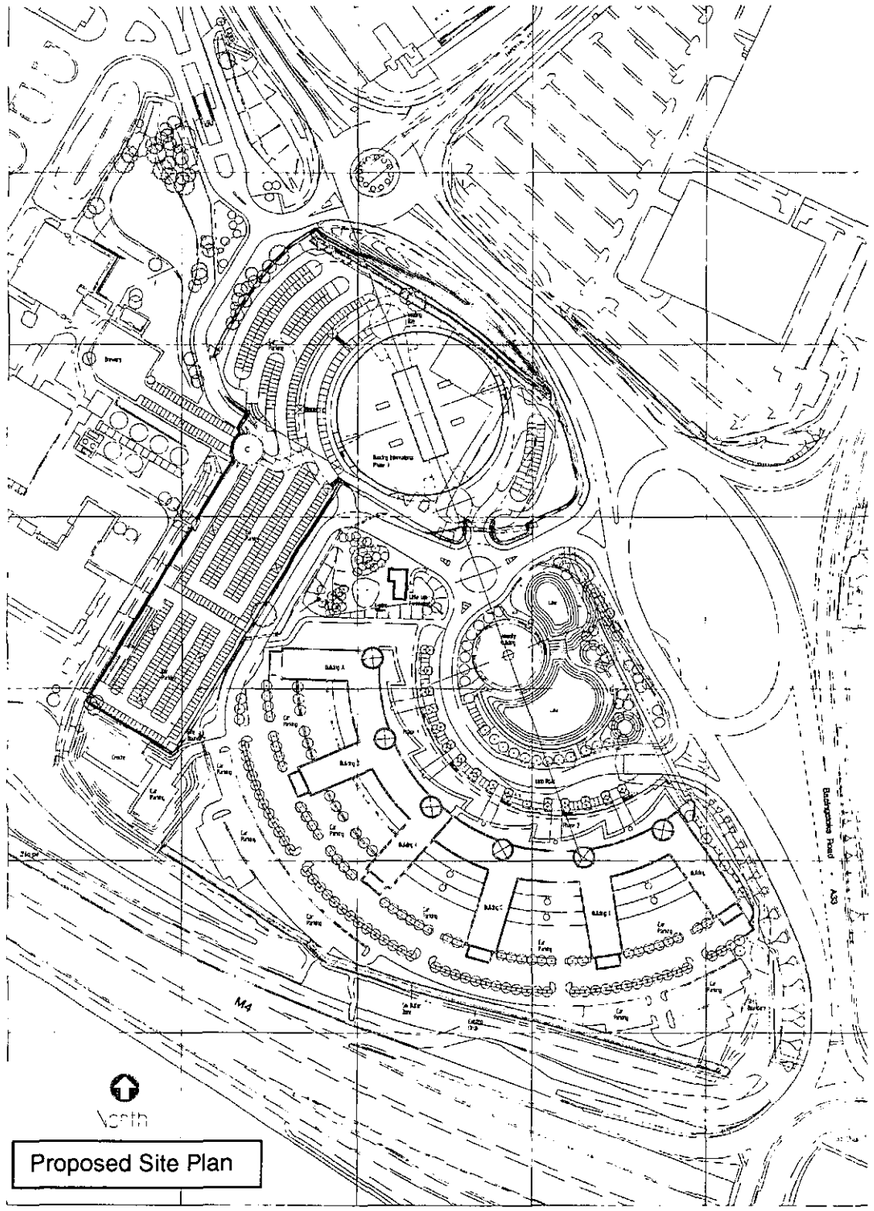
It is also worth noting that Scottish & Newcastle are cogniscent of the proposals to develop over their existing bottling plant and have no objections to them.

Finally, whilst Phases 1 & 2 were to suit the transfer of WorldCom's employees to the Reading Site, Phase 3 employees are likely to be drawn from the Reading community, in particular graduates from the neighbouring colleges and other education establishments.

In summary, the proposed development is consistent with established planning policies. It will build upon the success of the earlier phases of the business park and will play an important role in accommodating the requirements of a growing sector of the national economy as well as providing major environmental benefits at this southern gateway to Reading.

1.02 Aerial Photograph





Proposed Site Plan

1.03 Masterplan

DESIGN STATEMENTS

Architecture

The site is located adjacent to the M4 motorway junction 11 with two points of access from the A33.

This prime location is fully exploited to accommodate one of the premier business parks in the Thames Valley.

Phase 3 comprises 300,000 net sq. ft of B1 offices provided in a single circular building on six floors divided by a central atrium street or atrium to allow each half to be let individually.

The building is located to the north east of Phase 1 & 2 with its central axis aligning with the amenity building at the centre of the park.

The circular building form has floor to ceiling glazing allowing maximum daylight penetration within the building and there are four areas of triple height space around the perimeter which promote a feeling of lightness when viewed from inside and out.

There are areas of solid external cladding relating to five stairs and lifts and frame the glazed areas which are linked with a slim spandrel panel.

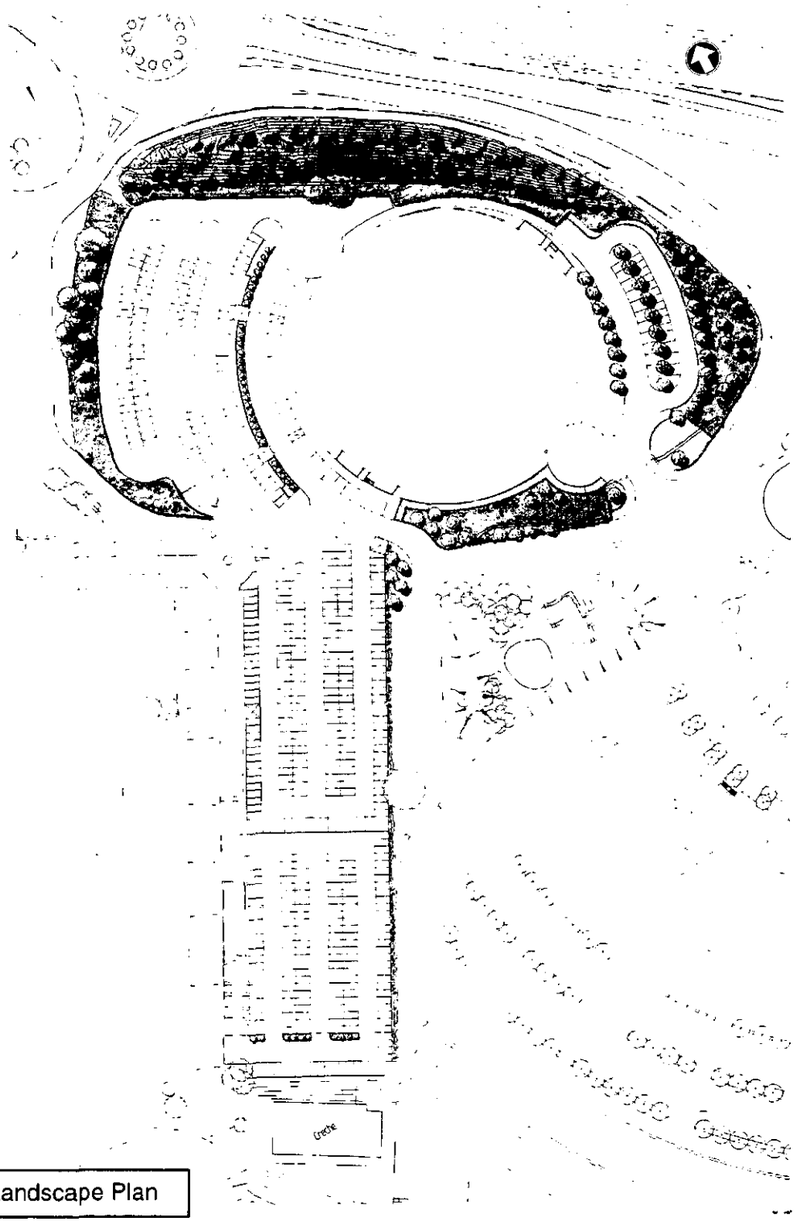
There are two main entrances to the building at either end of the atrium and these are fully glazed with glass canopies above. The south entrance is protected from solar gain by external metal louvres horizontally at roof level and vertically following the curve of the building providing a dynamic entrance to the building.

The atrium has a sawtooth glazed roof and contains two banks of vertical circulation of four lifts and a staircase connecting each building segment via link bridges. At third floor level there is a large 'breakout area' providing dramatic views of the internal space and out through the entrance glazing towards the centre of the park.

There is an area of visitor parking to the north-east with the main parking located on two or three levels to the north and west of the site.

The building is designed on a structural grid of 9m x 15m and 9m x 13.5m and a floor to floor height of 4.075m with a clear internal height of 3m.

The circular building form compliments the curves established in Phase 1 & 2 and due to its ground floor level being a full storey below the previous phases the building's height relates well to the existing buildings.



Landscape Plan

Landscape

The landscape planting scheme for Reading International Phase 3 comprises both existing and new planting.

EXISTING PLANTING

The existing planting which is being retained consists of two main areas; the largest, on the north eastern side, is a 'screening belt' on a bund 4m high, the second a mixed informal group of mature and semi-mature trees on the northern side of the site. To the north and north east edges of the site are the two areas of existing planting, which both comprise semi-mature and mature trees. The larger of the two areas, the 'screen belt', is approximately 10-15 years old and predominantly Poplars within a grid of other native tree species. This area is now well established and provides an effective dense screen between the existing bottling plant and the A33 relief road.

NEW PLANTING

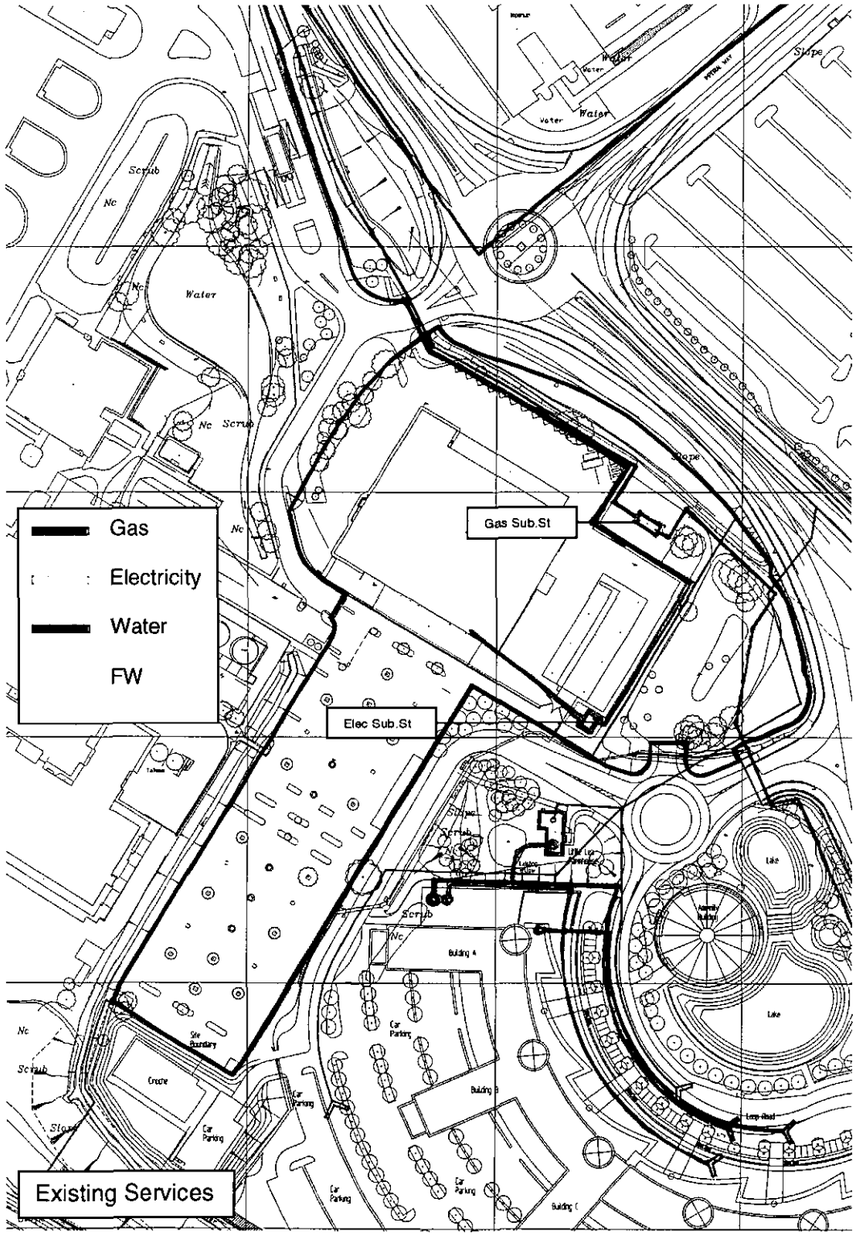
The new planting consists of four main areas within the site. These areas include a formal tree planted 'Plaza' at the building entrance, two 'Green Wall' screen planting areas in the car parks and informal groupings of native plants associated with part of the existing watercourse on the site.

The Plaza at the building entrance will incorporate semi-mature trees within the pedestrian paving and the visitor parking beyond, providing a strong structural and enriched setting to the building while maintaining a sense of openness at ground level. The furthest row from the building of these structural trees are in a soft area and combine with underplanting, which extends to the site boundary providing and reinforcing a green screening from the A33 relief road. This area will blend in with the existing maturing screened belt on the existing bank.

On either side of the site entrance are two linked portions of the existing watercourse. Surrounding and planted into it will be semi-mature trees, echoing their surroundings, and native planting which will further enhance and encourage a more diverse wildlife habitat along the watercourse. Within these areas are two small semi-ornamental groups of plants containing feature 'accent' trees, which signal and create the gateway into the site.

The car park, constructed on two and three levels will be planted with 'Green Screens'. These screens will comprise attractive and rigorous climbing plants grown up a matrix of wires and cables enabling the plants to rapidly attain full height of the car park. Beneath the climbing plants in selected areas ornamental columnar trees and semi-ornamental shrubs will be planted, further enhancing the site and providing a lush and green environment.

At the north side of the site is an island bed opposite the bottling plants main entrance. This bed consists a grass area containing mature and semi-mature trees. These trees provide substantial screening and structure at present but also offer the opportunity for including underplanting to further enhance the scheme to create interest at a lower level below the tree canopy and to enhance wildlife habitats.

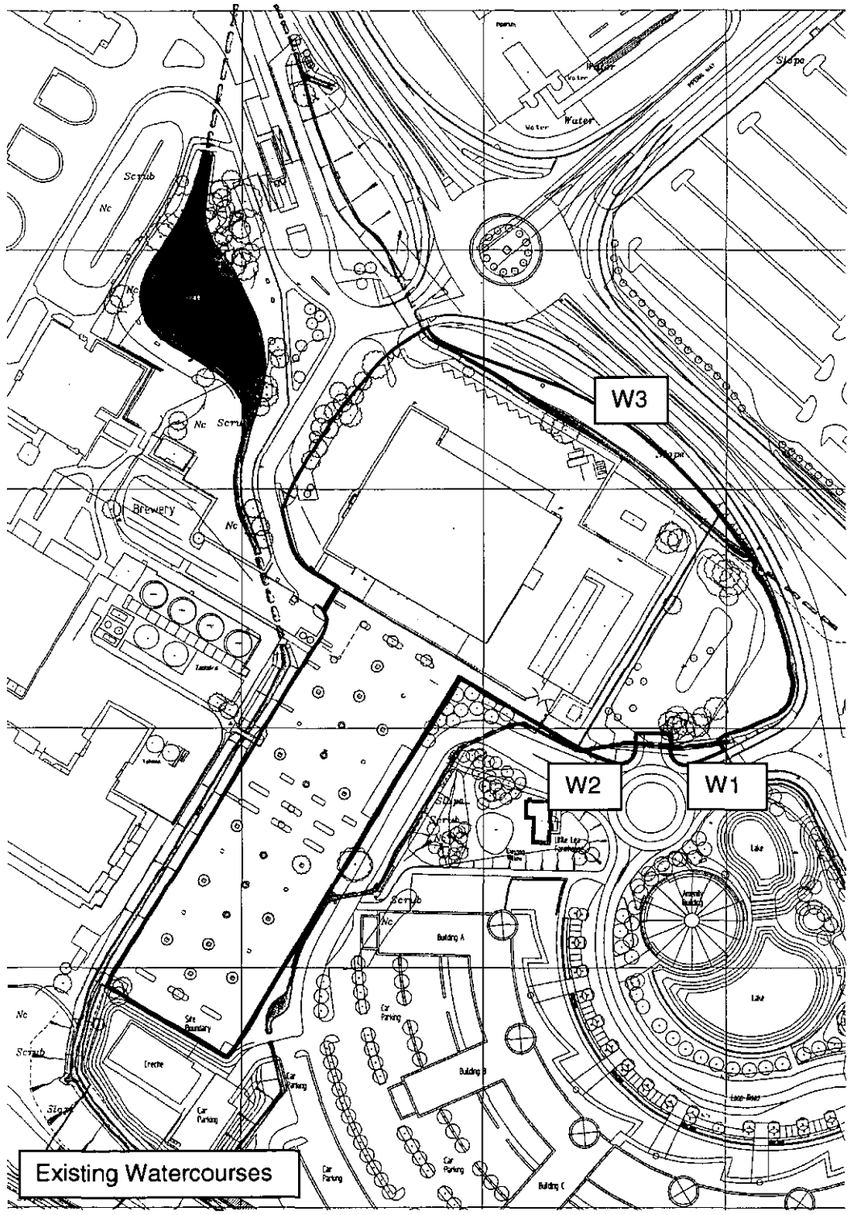


1.05 Infrastructure Constraints

The site is currently crossed by mains gas and electricity services. The electricity substation and existing mains electricity service located on the site will be abandoned. An 8" gas main will be diverted into the footpath along the A33. An existing gas governor house will be relocated to a plot of land just north of Imperial Way.

It is anticipated that surface water run-off will be discharged into the existing underground piped system. Foul sewerage from the development will discharge into an existing main sewer in the A33.

Off site reinforcement of electricity services will be required to supply the development.



1.06 Environmental Statement

WATERCOURSES

Within the Reading International Phase 3 site boundary are three sections of existing watercourse as identified on the plan opposite as W1, 2 & 3. Two are connected together and run from east to west at the site entrance and flow into Phases 1 & 2. The third enters the site from the east and flows to the west on the north side of the site.

In line with the Environment Agency's requirements a protected 5m 'Buffer Zone' has been incorporated along the watercourse. It is proposed to encourage a wildlife zone and 'Green Corridor'. It has however been necessary to make small intrusions into the zone, which have been proposed at certain crucial points.

W1 & W2 were, historically, drainage ditches that served Little Lea farm, and which occupied the area that phase 1 & 2 are now built on. Generally the original levels of the watercourse have been maintained. Undulating the bottom of the watercourse as well as the profiles of the embankments produces more varied environment, habitat and wildlife opportunities.

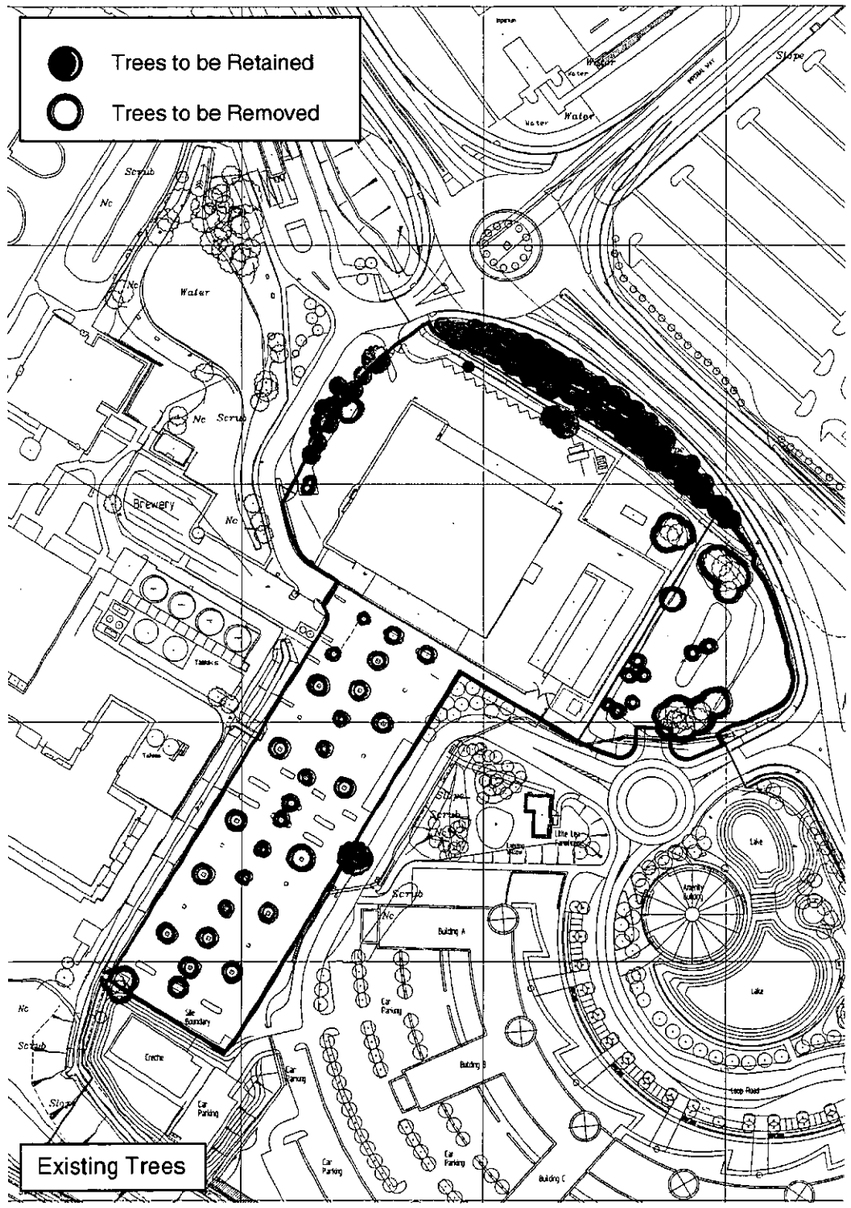
At certain points, between the water and finished ground level, gabions may be constructed to provide additional bank support as used in Phases 1 & 2. Willow cuttings will reduce their impact. Native plant species will be planted along the length of the two connected portions of watercourse. The selection of species will reflect what already exists in the near vicinity, so enhancing and reinforcing the local environment.

W3 is a constantly flowing stream, which enters the site through a culvert. The bund and planting on the northern bank appear to be in the region of 15 years old and provide effective screening of the brewery from the surrounding area. The planting consists mostly of Willows and Poplars but includes a mixture of other native species. The bottling plant currently intrudes into the 5m zone. It is proposed to enhance this area with either planting, or a sympathetic management regime for the maintenance of the grass. A long-term management strategy is proposed for the existing vegetation on site, which will ensure that the area will continue to thrive. The development will also provide for an even greater variation to the water's edge as in Phases 1 & 2 thus creating further opportunities for enhancement of wildlife habitation and diversity.

EXISTING VEGETATION

There are two main groups of trees on the Phase 3 site and a number of individual trees. The two groups are on the northern sides of the site and provide screening. Most of the individual trees are within the car park.

It is intended to retain the two groups of trees and incorporate them into the development. They already provide a fairly mature structure. The largest of the two groups are on the bund beside the northern watercourse as mentioned earlier. A management strategy will be implemented to ensure the continued health and well-being of this group. They have now reached a state of maturity where an element of thinning and coppicing would be advantageous.



The second group consists of approximately thirteen trees which include London Plane, Japanese Cherry, Ash, Oak and a Willow. It is intended that all but one will be incorporated into the development. Currently grass grows beneath the tree canopy, but it is intended to reinforce this area with some shrub planting in order to reduce its 'island appearance' and encourage it to appear as part of the bund planting wrapping around the site.

A Site Investigation will be carried out to assess residual contamination within the site boundaries.

There will be no culverting, and the existing water courses will be maintained.

1.07 Transport Assessment Summary

The transportation implications of the development proposal will be fully investigated within a Transport Assessment (TA) which is currently being prepared by Mott MacDonald, and which will be submitted under separate cover.

The TA is being prepared following the submission of a Scoping Study and ongoing discussions are taking place with Reading Borough Council's (RBC's) Highways Officer. Wokingham District Council (WDC) and the Highways Agency (HA) have also been consulted.

The TA will consider the employee trip generation of Phase 3 of the Reading International Business Park and will assess the impact of these additional trips on the highway and public transport network. An assessment will be made of a realistic modal split of employee trips given the existing and proposed levels of public transport which will serve the site. Consideration will be given to any public transport improvements which can be made to enhance accessibility to the site by non-car modes. This includes links with the proposed Mereoak Park and Ride facility to the south of the site, and also potential links to future rail facilities.

While walk and cycle modal split will be small, consideration will also be given to existing facilities and any possible improvements which could increase the walk/cycle modal share.

Parking will be provided at a rate of 1 per 35 sq.m. which is consistent with the draft Planning Policy Guidance Note 13 'Transport' (PPG13). Together with good public transport provision, it is considered that this will ensure the development proposals meet the aims of Government policy.

A Green Travel Plan will also be produced as an extension of the existing Plan for Phases 1 & 2.

The layout of the site, as with Phases 1 and 2, locates the building close to the site frontage with parking located to the rear. Parking will be accessed via the brewery road from the A33/Imperial Way roundabout. Locating the building in this position minimises walking distances from the surrounding area. The new bus services associated with these earlier phases will also provide direct access to Phase 3 with minimal walking distances.

The general location is subject to significant change in terms of land use and transportation proposals and these will be taken on board through employing the RBC/WDC owned traffic assignment model. Background traffic conditions will be assessed for the year 2006, the end of the Plan period. The impact of the residual development traffic will then be assessed, and if necessary, improvements will be considered to overcome any adverse impact.

The TA will also consider the impact of the development proposals on road safety. Any significant impact will be identified and mitigating measures proposed.

Section 2.00

2.01 South East Elevation.

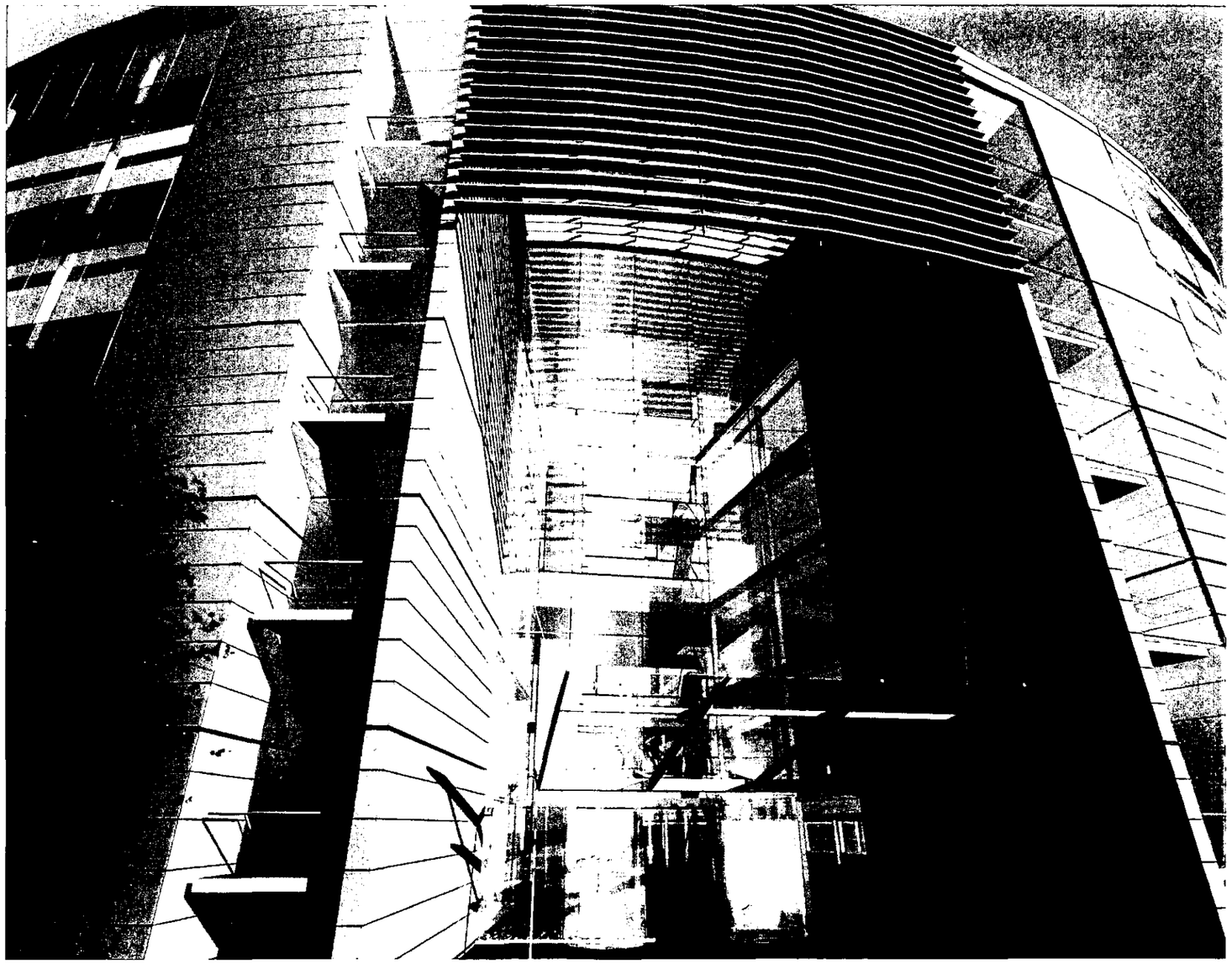
2.02 Main Entrance.

2.03 Scheme Design Drawings.

2.01 South East Elevation



2.02 Main Entrance



2.03 Scheme Design Drawings

Section 3.00

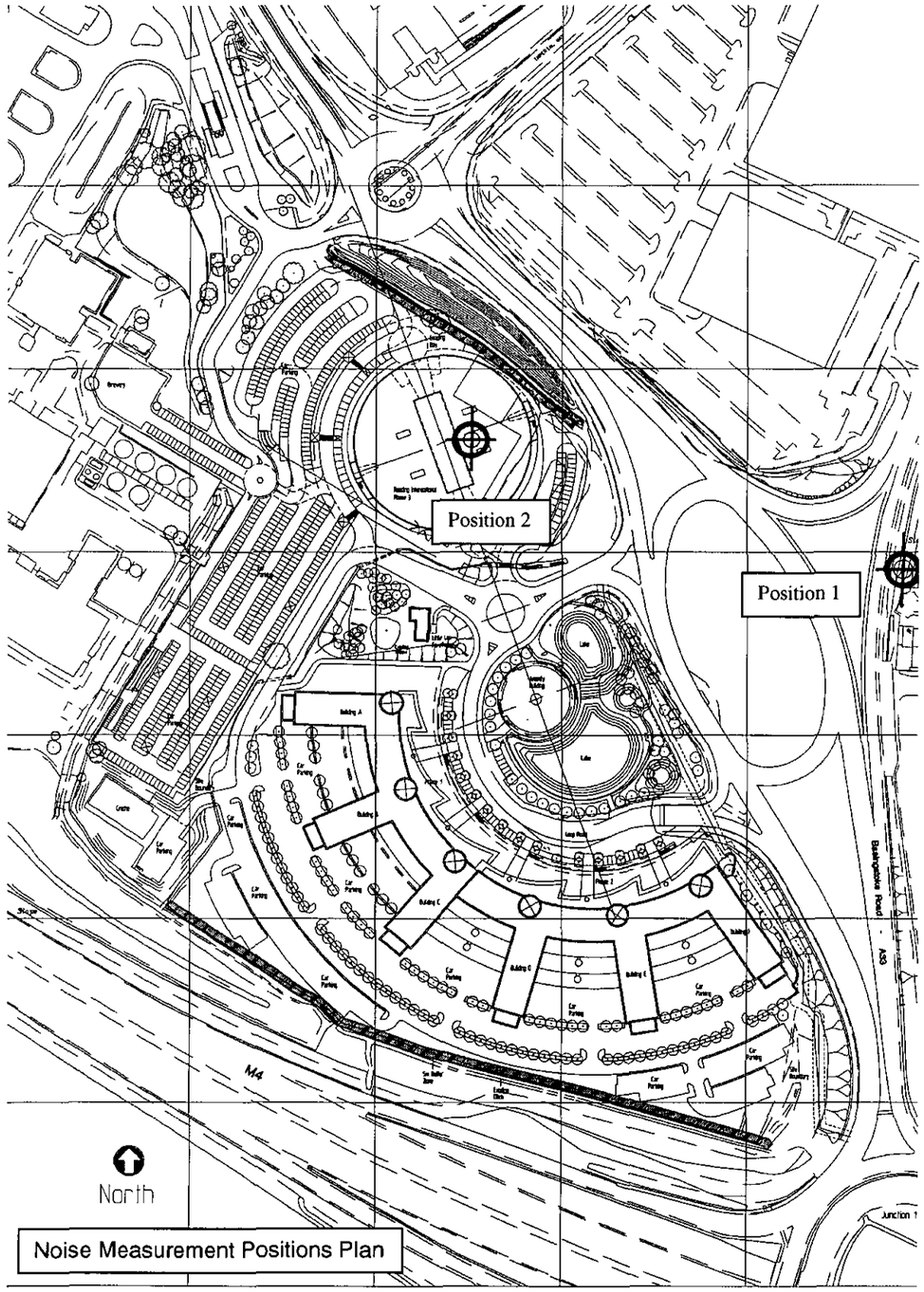
3.01 Environmental Study – Noise.

3.02 Environmental Study – Wind.

3.03 Environmental Study – Electromagnetic Reception.

3.04 Environmental Study – Solar Reflection.

3.05 Environmental Study – Day Lighting.



Noise Measurement Positions Plan

3.01 Environmental Study: Noise

INTRODUCTION

The proposed site is bounded to the North by an industrial development and to the East by the A33 Basingstoke Road, to the West by a bottling area of the Courage Brewery, and to the South by Phase 1 of the development and car parking. The M4 Motorway runs along the South of the Phase 1 development.

There are two storey residential properties to the East of the proposed site.

The assessment has assumed the site layout as shown on Aukett Europe drawing no. 4034/PL/10000.

ACOUSTIC TERMINOLOGY

The acoustic terms used in our Report are as follows:

dB : Decibel - Used as a measurement of sound pressure level. It is the logarithmic ratio of the noise being assessed to a standard reference level.

dB(A) : The human ear is more susceptible to mid-frequency noise than the high and low frequencies. To take account of this when measuring noise, the 'A' weighting scale is used so that the measured noise corresponds roughly to the overall level of noise that is discerned by the average human. It is also possible to calculate the 'A' weighted noise level by applying certain corrections to an un-weighted spectrum. The measured or calculated 'A' weighted noise level is known as the dB(A) level.

Because of being a logarithmic scale noise levels in dB(A) do not have a linear relationship to each other. For similar noises, a change in noise level of 10dB(A) represents a doubling or halving of subjective loudness. A change of 3dB(A) is just perceptible.

L_{10} & L_{90}: If a non-steady noise is to be described it is necessary to know both its level and the degree of fluctuation. The Ln indices are used for this purpose, and the term refers to the level exceeded for n% of the time, hence L_{10} is the level exceeded for 10% of the time and as such can be regarded as the 'average maximum level'. Similarly, L_{90} is the average minimum level and is often used to describe the background noise.

It is common practice to use the L_{10} index to describe traffic noise, as being a high average, it takes into account the increased annoyance that results from the non-steady nature of traffic noise.

L_{eq} : The concept of L_{eq} (equivalent continuous sound level) has up to recently been primarily used in assessing noise in industry but seems now to be finding use in defining many other types of noise, such as aircraft noise, environmental noise and construction noise.

L_{eq} is defined as a notional steady sound level which, over a stated period of time, would contain the same amount of acoustical energy as the actual, fluctuating sound measured over that period (e.g. 1 hour).

The use of digital technology in sound level meters now makes the measurement of L_{eq} very straightforward.

L_{max} : L_{max} is the maximum sound pressure level recorded over the period stated. L_{max} is sometimes used in assessing environmental noise where occasional loud noises occur, which may have little effect on the L_{eq} noise level.

METHODOLOGY

Manned Survey

Procedure

A detailed 5 hour daytime fully manned environmental noise monitoring was undertaken, to establish the existing A-weighted (dBA) L_{10}, L_{90}, L_{eq} and L_{max} environmental noise levels at selected accessible street level positions around the proposed development site closest to the nearest residential properties.

A detailed 24 hour daytime and night-time fully automated environmental noise monitoring was undertaken, to establish the existing A-weighted (dBA) L_{10}, L_{90}, L_{eq} and L_{max} environmental noise levels at one roof level position at the centre of the proposed development site.

Fully manned environmental noise monitoring was undertaken between approximately 14:00 hours and 15:00 hours on Monday 20 November 2000 and 07:30 hours and 10:30 hours on Wednesday 22 November 2000.

During the survey period the wind conditions were moderate and from approximately a Westerly direction. The sky was generally overcast. There was light rainfall between approximately 08:30 hours and 09:30 hours during the survey period. Road surfaces were, however, generally dry throughout the majority of the survey period.

Measurements were taken of the A-weighted (dBA) L_{10}, L_{90}, L_{eq} and L_{max} sound pressure levels over periods of not less than 15 minutes in each hour. Atypical noises were excluded as far as reasonably possible. The noise levels measured are therefore assumed to be representative of the noise climate during the hour in which the measurements were taken

In addition, at each position typical L_{10} and L_{90} octave band spectra (from 63Hz to 8KHz) were taken for a daytime period in order to gain a more detailed description of the prevailing noise climate.

Measurement Position

The noise level measurements were undertaken at 1 position (measurement position 1) along the A33 Basingstoke Road, at the residential properties. The measurement position is described below, and the approximate location is indicated on the enclosed 'Noise Measurement Positions Plan'.

Position No	Description
1	On the bank, at the approximate height of the second floor windows of the nearest residential property to the proposed site of Phase 3.

Instrumentation

The instrumentation used during the manned survey is presented in the Table below:

Description	Manufacturer	Type	Serial Number
Type 1 Precision Sound Level Meter	Brüel and Kjær	2231	1277087
Type 1 Octave Band Filter Set	Brüel and Kjær	1624	1333363
Type 1 ½" Condenser Microphone	Brüel and Kjær	4189	1802680
Type 1 Calibrator	Brüel and Kjær	4231	494325
Pistonphone	Brüel and Kjær	4220	1297463

The Sound Level Meter was mounted on a tripod and was fitted with a Brüel and Kjær microphone windshield.

The Sound Level Meter was calibrated prior to and on completion of the surveys. No significant change was found to have occurred.

Unmanned Survey

Procedure

Fully automated environmental noise monitoring was undertaken from approximately 14:30 hours on Monday 20 November 2000 to 11:00 hours on Wednesday 22 November 2000.

Due to the nature of the survey, i.e. unmanned, it is not possible to accurately comment on the weather conditions throughout the entire survey period. However at the beginning and end of the survey period the wind conditions were moderate from approximately a Westerly direction. The sky was generally overcast. We understand that generally throughout the survey period the weather conditions were mainly dry with some light showers.

Measurements were taken continuously of the A-weighted (dBA) L_{10}, L_{90}, L_{eq} and L_{max} sound pressure levels over 15 minute periods.

Measurement Position

The noise level measurements were undertaken at a single position (measurement position 2) on the development site. The Position was selected in order to assess typical noise levels at the development site for subsequent use in setting plant noise emission criteria. The measurement position is described below, and its approximate location is indicated on the enclosed 'Noise Measurement Positions Plan'.

Position No	Description
2	Mounted above the roof of a container within the office compound at an approximate height of 6m.

Instrumentation

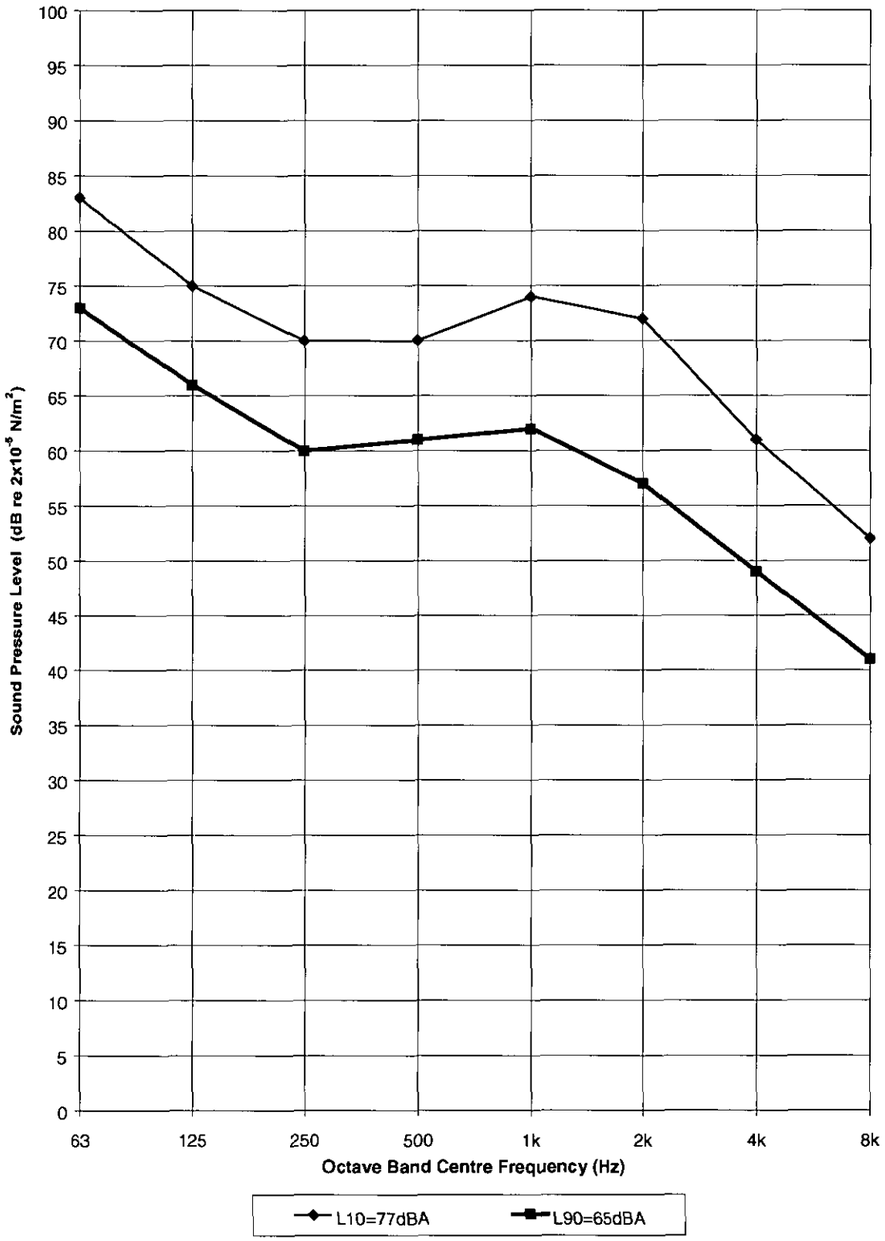
The instrumentation used during the survey is presented in the Table below:

Description	Manufacturer	Type	Serial Number
Type1 Data Logging Sound Level Meter	Larson Davis	820	0978
Type 1 ½" Condenser Microphone	Larson Davis	2541	4759
Type 1 calibrator	Larson Davis	CAL200	

The Sound Level Meter, including the extension cable, was calibrated prior to and on completion of the surveys. No significant change was found to have occurred.

The sound level meter was located in an environmental case with the microphone connected to the sound level meter via an extension cable. The microphone was fitted with a Larson Davis windshield.

Reading Phase 3
Typical Octave Band Spectra
Position 1 22/11/00 (09:00 - 10:00)



10128/G1

RESULTS

Results of Manned survey

The fully manned survey measurements have been plotted as L_{10} and L_{90} octave band sound spectra in Graphs 10128/G1. The A-weighted (dBA) L_{10}, L_{90}, L_{eq} and L_{max} sound levels are recorded below.

Position	Time	Sound Levels dB(A)			
		L_{A10}	L_{A90}	L_{Aeq}	L_{Amax}
1	07:00 – 08:00	76.8	64.3	73.2	81.9
	08:00 – 09:00	76.8	65.3	72.9	85.3
	09:00 – 10:00	77.3	65.8	73.6	85.6
	10:00 – 11:00	76.3	64.8	71.7	84.4

Results of Unmanned survey

The results have been plotted on Time History Graphs 10128/TH1 to 10128/TH2 enclosed presenting the 15 minute A-weighted (dBA) L_{10}, L_{90}, L_{eq} and L_{max} levels at each measurement position throughout the duration of the survey.

Predicted Lowest Background Noise Level At Nearest, Noise Sensitive Residency

The five hours of manned noise level measurements at the nearest noise sensitive residency have been compared to the corresponding hourly unmanned noise level measurements on site to obtain an appropriate typical hourly background noise level difference between the two positions.

Night time

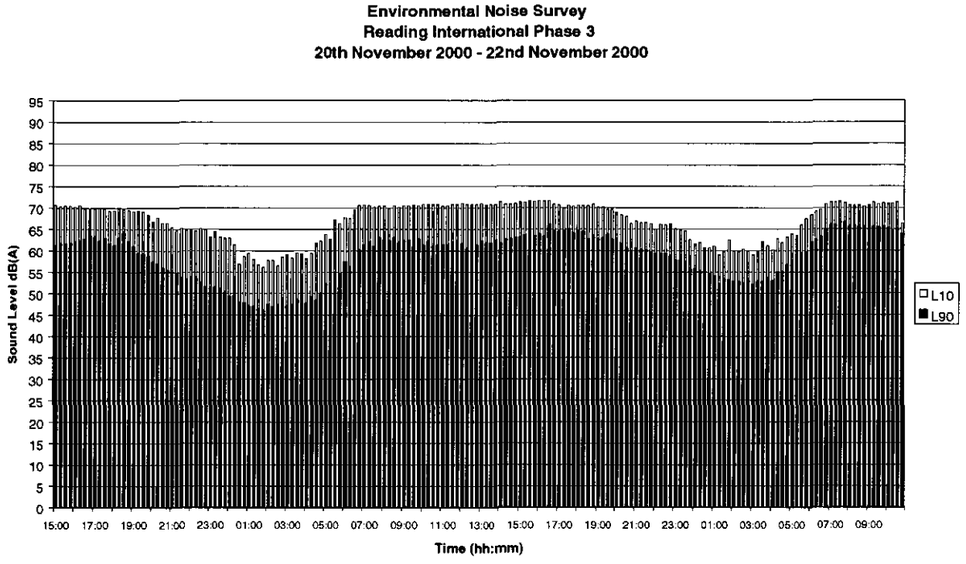
The quarter hourly noise level measurements at the unmanned measurement position exceed the quarter hourly noise level measurements at the manned position by a maximum of 0.5 dBA.

We can then predict the approximate minimum background noise level at the nearest noise sensitive residency by subtracting 0.5 dBA from the lowest measured background noise level at the unmanned measurement position on site.

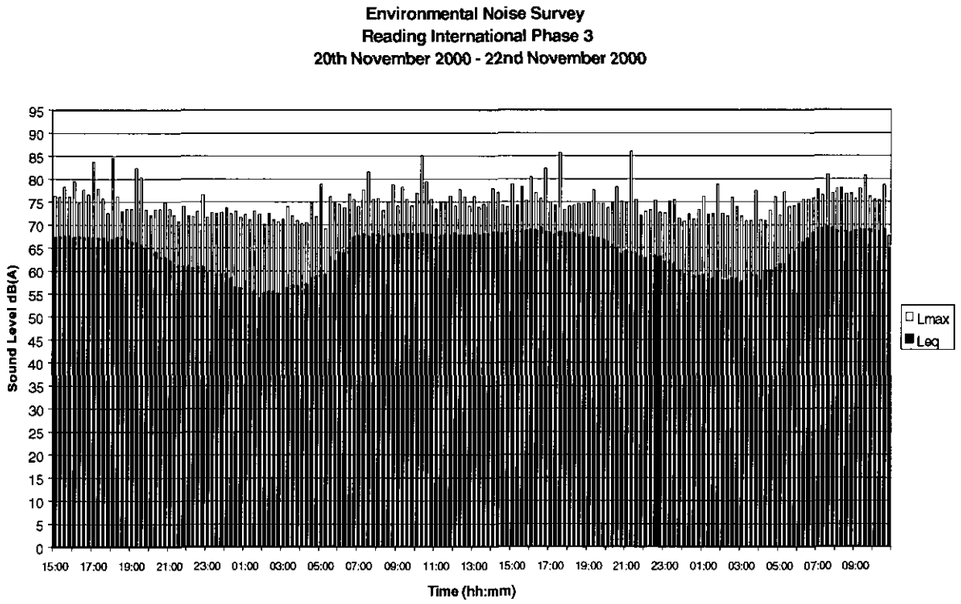
The lowest measured background noise level at the unmanned measurement position was 46 dBA. We therefore predict an approximate minimum night time background noise level of 45.5 dBA at the nearest noise sensitive residency.

Daytime

Following the same prediction method as above, we predict an approximate minimum daytime background noise level of 51 dBA at the nearest noise sensitive residency.



10128/TH1



10128/TH2

DISCUSSION OF NOISE CLIMATE

Manned Survey

The dominant noise source was noted to be the road traffic using the A33 Basingstoke Road, with lesser contributions from the M4 and surrounding roads and from the construction site.

Unmanned Survey

It is not possible to accurately describe the dominant noise sources, or specific noise events throughout the entire unmanned survey period. However at the beginning and end of the survey period the dominant noise sources were noted to be the traffic using the surrounding roads, and construction noise from Phase 1 and Phase 2 of the development.

ENVIRONMENTAL NOISE IMPACT OF PROPOSED DEVELOPMENT

Plant Noise Emission Criteria

Reading Borough Council standard condition for control of noise from plant/machinery noise states:-

"The rating level of noise from the site due to any plant or machinery shall not exceed the background noise level, or contain any tonal or impulsive characteristics that could cause annoyance to occupiers of noise-sensitive premises such as local residents or office workers. The noise levels shall be determined at the nearest noise-sensitive (i.e. residential or office accommodation) premises. The measurements and assessment shall be made according to BS 4142:1997 Method of Rating industrial noise affecting mixed residential and industrial areas".

CONCLUSION

The noise climate at the nearest noise sensitive residencies is dominated by road traffic passing along the A33 Basingstoke Road and to a lesser extent the M4 motorway and the surrounding roads. The traffic increase due to the proposed office development is therefore likely to be very small in terms of an overall percentage. For example, a 5% increase in traffic would increase the traffic noise contribution to the background noise level at the nearest noise sensitive residency by only 0.2 dB which is negligible.

In conclusion, the likely noise climate associated with the scheme is considered, on the whole, similar to that previously existing.

3.02 Environmental Study: Wind

INTRODUCTION

The building under consideration is of circular plan and is 6-storeys high. Entrances are indicated on opposite sides of a central atrium that runs along the diameter of the building. The atrium lies along a nominally north-west/south-east axis. The entrances are recessed with a canopy at first floor level that extends out to the perimeter of the building. The diameter of the building is approximately 96m, and assuming a floor height of 4m, the overall height is approximately 24m; the height-to-diameter ratio, H/D, is therefore 0.25, which is relatively low.

METEOROLOGICAL CONDITIONS

The prevailing winds for the U.K. are from the south-west (most frequent and strongest winds) and from the north-east during the late spring/early summer period (not as strong as south-westerly but as frequent during this period).

WIND ENVIRONMENT

General Flow around Surface-Mounted Cylinders

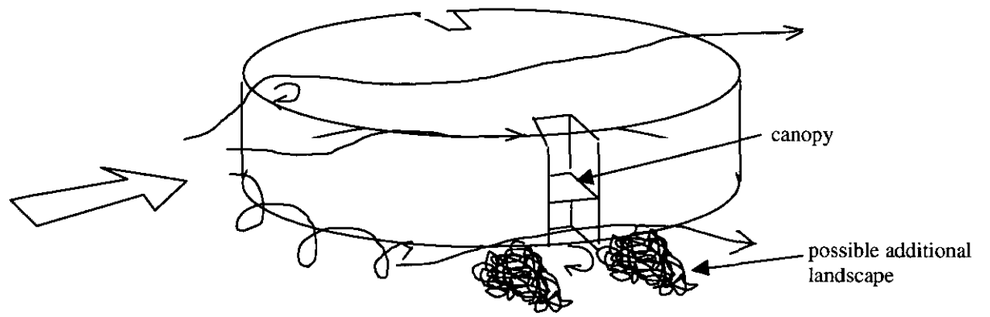
The flow around isolated and arrays of circular cylinders is probably the most researched area in fluid mechanics. It is well-known that the wind accelerates around the windward face and for the sorts of Reynolds Numbers encountered in building aerodynamics separates some 110° from the windward stagnation point. However, for cylinders that are mounted vertically on the ground there are two additional considerations due to the presence of the ground and the flow over the free-end.

For relatively tall cylinders these two regions remain localised at the extreme ends of the cylinder. Near the ground horseshoe vortices are formed on the upstream side of the cylinder which move downstream with the main air flow. At the free-end there is a tendency for more air to flow over the top of cylinder rather than around the circumference. However, as the height of the cylinder is reduced so the region influenced by the free-end becomes a more significant proportion of the total height of the cylinder and the acceleration of air around the circumference is reduced. The height-to-diameter H/D ratio is the primary factor in controlling the flow mechanism described above. The building under consideration has a low height-to-diameter ratio at 0.25 and therefore has a pronounced mitigating effect on these vortices.

Flow Around Proposed Building

It is anticipated that the maximum windspeeds at pedestrian level will occur some 90° from the windward stagnation point for south-westerly and north-easterly winds, i.e. in the regions where the entrances are located. However, as stated above, it is also apparent that this acceleration will be mitigated by the favourable H/D ratio of the building. The provision of additional shelter in the form of landscape or other screening beyond the circumference of the building on either side of the entrances would further assist in raising and diffusing the air in this region.

The canopies at 1st floor level within the recess above the doorways are a desirable feature which will also improve the wind environment immediately outside the entrances.



Sketch 1: Impact on hedges/porous screen on flow near entrances.

WIND LOADING

Maximum pressures (suctions) are likely to occur in regions around the entrances for south-westerly winds. It should be noted that the usual method of estimating loads is to assume that cylinders with H/D<0.5 are treated as if H/D=0.5. However, it is recognised that this treatment is conservative because the maximum load experienced by surface-mounted circular cylinders *continues to fall* for 0.2<H/D<0.5. The maximum mean pressure coefficient falls by around 20% in this range.

3.03 Environmental Study: Electromagnetic Reception

The nearest major TV transmitter which is probably providing service to the area is at Hannington; 15 miles away and with a capacity of 250 kW.

Some of the existing buildings of the Reading International development could be in line between the transmitter and the housing estate east of Basingstoke Road.

Potential remedy:

To compensate for possible effects, which might be experienced (in the form of reduced signal strength or ghosting) house antennae should be redirected to alternative transmitters (e.g. Crystal Palace) or consideration may be given to the mounting of a fill-in transmitter.

3.04 Environmental Study: Solar Reflection

SOLAR REFLECTION FROM THE BUILDING

Solar Dazzle is generally only a long term problem for some heavily glazed (or mirror clad) non domestic buildings (see 'Solar dazzle reflected from sloping glazed facades' BRE Information Paper IP3/87). A glazed facade also needs to face within 90° of due south for significant amounts of sunlight to be reflected.

Of the roads surrounding the site, only the northbound A33 is likely to be affected. One or two of the smaller side roads on the Reading International estate may have views of the building. Traffic on the M4 is most unlikely to be affected because of the distance of the building (over 250 metres) and the fact that it will be hidden by other buildings and trees.

A cylindrical building such as this can reflect sunlight from a range of directions to a given point, so the likelihood of some sort of reflection is possible provided the sun is low in the sky.

However the risk of dazzle is not high because:

- With a cylindrical building, the sun's reflected image tends to be smaller and less bright, because only one or two windows will be at the critical angle for reflection.
- If the building has absorbing glass only a weak reflection of the sun will occur.
- Because the building facade is vertical, the reflections will only happen when the sun is low in the sky. Drivers will therefore already be expecting solar glare.

3.05 Environmental Study: Day Lighting

POTENTIAL LOSS OF DAYLIGHT – PLANNING ASPECTS

Guidance on the loss of light to existing buildings following construction of new development nearby is given in our BRE Report 'Site layout planning for daylight and sunlight: a guide to good practice'. This report was approved by the Department of the Environment and is widely used by local authorities to help determine planning applications. To assess the impact on the amount of diffuse daylighting entering existing buildings, the Report first recommends the measurement or calculation of obstruction angle.

This is the angle to the horizontal subtended by the new development at the centre of the lowest window in each affected window wall, in a plane perpendicular to it. If this angle is less than 25° for the whole of the development then the new building is unlikely to have a substantial effect on the diffuse skylight enjoyed by the existing building.

This study is based on plans of the building by Aukett Europe, dated 17-31 October 2000 and numbered 4034/PR/10009-10, and 4034/PR/100019-100025. They were supplemented by inspection of the site and surrounding properties made during a site visit on 4 December 2000.

The nearest dwellings are situated in Kingsley Close, across the A33, over 200 metres away. Numbers 44, 51 and 52 have first floor windows facing the new development across this main road. The obstruction angles measured from the centres of these windows are just under 6 degrees, well within the BRE guideline. The nearest homes with ground floor windows facing the new building are 34-39 and 60-65 Kingsley Close. The obstruction angles measured from the centres of these windows are around 5 degrees, again well within the BRE guidelines.

The 25° guideline in the BRE Report is based on a wide obstruction, effectively extending across the field of view from the existing window. Compared to a wide obstruction with the same angle to the horizontal, additional daylight will reach the existing windows around the sides of the new building, so the daylighting impact will be substantially reduced.

Daylight distribution

The BRE report also gives guidance on the distribution of light in the existing buildings, based on the areas of the working plane which can and cannot receive direct skylight before and after. Because of the low obstruction angles it is impossible for there to be any change in these areas in any of the dwellings nearby. Indeed the BRE Report does not recommend calculating the effect on the daylight distribution in cases where the obstruction angle exceeds 25°.

SUNLIGHT

Sunlight to dwellings

The BRE Report recommends that for existing buildings sunlight should be checked for all main living rooms of dwellings, and conservatories, if they have a window facing within 90° of due south, and if any part of the new development subtends an obstruction angle of more than 25 degrees to the horizontal.

The windows to dwellings in Kingsley Close described above do not face within 90° of due south, and the obstruction angles (see above) are all less than 25 degrees, so the sunlight impact of the new building will be minimal.

CONCLUSION

Following redevelopment of the site, loss of daylight and sunlight to windows to dwellings in the area is negligible. Because of the distance of the new building from the surrounding properties, the level of obstruction is well within the guidelines in the BRE Report 'Site layout planning for daylight and sunlight: a guide to good practice', for all the windows.

Appendix

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