James F Kenny
4 Temple Road
Dublin 6

An Bord Pleanála
64 Marlborough Street
Dublin 1 D01 V902

20 July 2020

Re: Referral of Section 5 Declaration under Decision Order P3332 for Review by An Bord Pleanála

Dear Sir/Madam,

1. I applied to Dublin City Council for a Section 5 declaration in respect of increases (the "Changes") that have been made to the floor area of Building 2 and Building 3 at Trinity Hall, Dublin 6 beyond what was permitted by the planning permission that had been granted in respect of those buildings.

2. I received notification of a declaration by Dublin City Council dated 23 June 2020 under Decision Order P3332. I wish to refer this declaration for review by An Bord Pleanála under the provisions of Section 5 of the Planning and Development Act on the following grounds:

Ground 1	That the declaration is contradictory;
Ground 2	That the declaration is illogical and irrational;
Ground 3	That the declaration is contrary to Irish law on the basis that the Changes were material and were therefore development;
Ground 4	That the declaration is contrary to Irish law on the basis that the express agreement of the Council was not sought for the Changes and were therefore not agreed by the Council;
Ground 5	That the declaration is contrary to Irish law on the basis that there is no provision in planning law or regulations under which the Changes could be exempted development;
Ground 6	That the declaration is contrary to Irish law on the basis that any purported approval and/or agreement of the Council in respect of the Changes would have been ultra vires;
Ground 7	That the declaration is contrary to Irish law on the basis that revised environmental impact assessment is required in respect of the visual impact of the Changes and as this has not been done, they could not be exempted development; and
Ground 8	That the declaration is contrary to EU law on the basis that by making the declaration the Council failed to comply with its obligation to give effect to Council Directive 85/337/EEC, as amended, and deprived me and the public of our rights under that Directive.

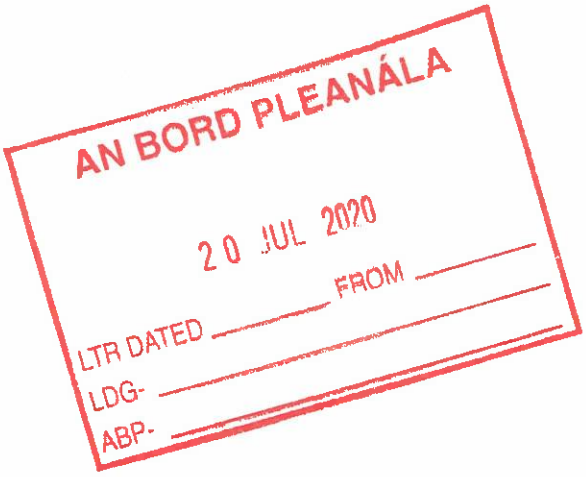
3. Due to the fact that the history of the development at Trinity Hall is long and complex I wish to request an oral hearing of this referral.

4. This referral is comprised of the following:
    - This referral letter;
    - An Addendum to this referral letter providing details on the Development and the legal and factual information supporting the above-mentioned grounds for the referral;
    - Appendices to the Addendum;
    - A copy of all documents and plans submitted in support of the application to the Council for a Section 5 declaration; and
    - A cheque for €270, being the prescribed fees of €220 for the referral and €50 for the request for an oral hearing.

5. If there is any further information you require to assist in the assessment of this submission, my preferred means of contact is by email to jfkenny.ie@gmail.com. Otherwise I can be contacted at the above address, by phone at 4971599 or 086 866 2269.

Yours faithfully,

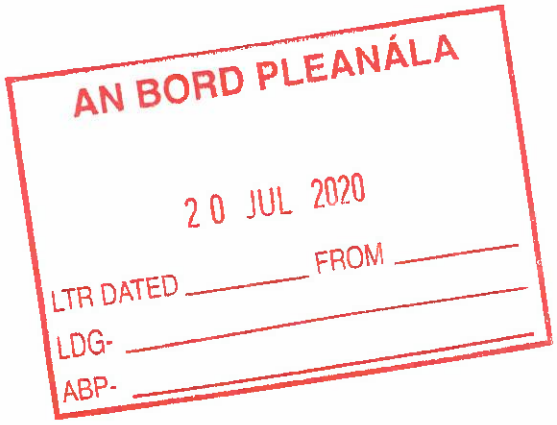
James F Kenny



ADDENDUM TO THE REFERRAL TO AN BORD PLEANÁLA OF THE SECTION 5 DECLARATION MADE BY DUBLIN CITY COUNCIL IN RESPECT OF TRINITY HALL, DARTRY, DUBLIN 6

SUBMITTED BY JAMES F KENNY

20 JULY 2020



1 INTRODUCTION

1.1 Purpose of this addendum

I have prepared this addendum (the "Referral Addendum") to accompany the letter dated 20 July 2020 in which I referred the Section 5 declaration made by Dublin City Council ("the Council") in respect of Trinity Hall, Dartry, Dublin 6, to An Bord Pleanála (the "Board").

1.2 Section 5 application to the Council

I submitted an application (the "Section 5 Application") dated 5 May 2020 to the Council for a declaration under Section 5 of the Planning and Development Act in respect of Trinity Hall. The Section 5 Application was comprised of a cover letter, an application form, an addendum (the "Application Addendum") to the Section 5 application form and annexures to the Section 5 Addendum.

Copies of the first page of the cover letter, first page of the application and cheque stamped by the Council in respect of the Section 5 Application are provided in Annexure 1 to this Referral Addendum.

All of the documents and plans comprising the Section 5 Application are incorporated by reference in this referral (the "Section 5 Referral") to the Board and should be read before reading this Referral Addendum. Section 1.3 below is comprised of verbatim extracts from the Application Addendum that have been provided in order to allow the Referral Addendum to be read without needing to refer continuously to the Section 5 Application for background details and definitions of terms.

Copies of all of the documents and plans comprising the Section 5 Application are being submitted to the Board along with the Section 5 Referral.

1.3 Background to the Development

1.3.1 The April 1999 Submission

On 12th April 1999 Murray O'Laoire, architects for Trinity College Dublin ("Trinity"), submitted a planning application (the "April 1999 Submission") to the Council for a development (the "Development") at Trinity Hall, Dublin 6. The initial proposed development was for nine new student halls of residence and included the refurbishment and renovation of a tenth building, Trinity Hall, which is a listed building.

The April 1999 Submission included, inter alia, drawings and plans (the "April 1999 Plans"), an architect's report (the "April 1999 Architect's Report") outlining the key elements of the proposed development and various other documents, a copy of which is provided in Annexure 1 to the Application Addendum, and an EIS (the "April 1999 EIS").

On 14th September 1999 the Council sent a letter to Trinity in accordance with Article 35 of the Local Government (Planning & Development) Regulations 1994 requesting revised plans to be submitted taking into account various matters that were noted in the letter.

1.3.2 The October 1999 Submission

On 7th October 1999 Trinity made a submission (the "October 1999 Submission") in response to the Article 35 Request comprising a revised set of drawings and plans for the Development (the "October 1999 Plans") an architect's report dated 4 October 1999 (the "October 1999 Architect's Report") outlining the key elements of the revised proposed development, a revised EIS (the "October 1999 EIS") and various other documents. A copy of the October 1999 Architect's Report is provided in Annexure 2 to the Application Addendum. Copies of selected drawings from the October 1999 Plans that are considered to be relevant to the Section 5 Application are listed in section of 11.1 of the Application Addendum and provided in Annexure 3 of the Application Addendum.

Significant changes were made in the October 1999 Plans, with the nine buildings that had originally been proposed in the April 1999 Submission being replaced with three buildings that provided similar overall floor space and bed spaces.

On 11th November 1999 the Council made an order (the "1999 Council Order") granting permission to the October 1999 Plans subject to 14 conditions.

1.3.3 The Grant of the Permission

The 1999 Council Order was appealed to the Board by the Dartry and District Preservation Association, and various residents living close to Trinity Hall, including me. A Board Inspector held an oral hearing from 24th-26th May 2000 and on 4th August 2000 the Board granted planning permission (the "Permission") for the October 1999 Plans, subject to 19 conditions (the "Board Conditions"). A copy of the Permission is provided in Annexure 4 to the Application Addendum.

Board Condition 1 stated:

> *The proposed development shall be carried out in accordance with the revised plans submitted to the planning authority and received on the 7th day of October, 1999, in response to a request for revised plans under Article 35 of the Local Government (Planning and Development) Regulations, 1994, except as may otherwise be required in order to comply with the [other Board Conditions].*

In order to be allowed to commence development, Trinity was required to prepare a revised submission incorporating such changes to the October 1999 Plans as were necessary to comply with the Board Conditions and to seek the Council's agreement in respect of those changes.

1.3.4 Legal proceedings relating to the grant of the Permission

On 3rd October 2000 I sought leave in the High Court (High Court Reference 2000 532 JR) to apply for a judicial review of the Permission and to declare the Permission invalid and ultra vires. Mr Justice McKechnie gave judgment on 15th December 2000 refusing leave to apply for judicial review. I sought leave to appeal but this application was refused by Mr Justice McKechnie on 2nd March 2001.

I subsequently instituted three further sets of proceedings (High Court References 2002 14269P, 2003 7926P and 2005 3320P) in which I sought to have the decision of Mr Justice McKechnie set aside, but was unsuccessful in each of these proceedings.

None of the above proceedings (collectively the "Permission Proceedings") are relevant to the subject matter of this Section 5 application as the judgements in the Permission Proceedings only dealt with challenges to the validity of the Permission and did not deal with or make any determination in relation to the question of whether the Development as constructed complies with the Permission.

The Permission Proceedings are referred to in this addendum solely for the purposes of providing a full summary of the history of the Development.

1.3.5 The Compliance Submissions

In August 2001 Murray O'Laoire made a submission (the "August 2001 Compliance Submission") which included a revised set of plans for the Development accompanied by an architect's report dated 22 August 2001 (the "August 2001 Architect's Report") which identified and explained certain changes that had been made in the revised plans compared to the October 1999 Plans.

In November 2001 Murray O'Laoire made a second submission (the "November 2001 Compliance Submission") which included a full revised set of plans for the Development (the "Compliance Plans") accompanied by an architect's report dated 22 November 2001 (the "November 2001 Architect's Report") which identified and explained certain further changes that had been made in the Compliance Plans.

Trinity's compliance submissions (the "Compliance Submissions") were effectively the Compliance Plans read with the November 2001 Compliance Architect's Report and, where appropriate, the August 2001 Compliance Architect's Report.

The agreement of the Council was sought for various changes that were identified and explained in the August 2001 Compliance Architect's Report and November 2001 Compliance Architect's Report (together the "Compliance Architect's Reports"). No information in respect of the Changes was disclosed in the Compliance Architect's Reports.

Copies of the August 2001 Compliance Architect's Report and November 2001 Compliance Architect's Report are provided in Annexure 5 and Annexure 6, respectively, to the Application Addendum. Copies

of selected drawings from the Compliance Plans that are relevant to this Application are listed in Section 11.2 of the Application Addendum and are provided in Annexure 7 to the Application Addendum.

1.3.6 The Council Order

The City Planning Officer for the Council at that time, Mr Pat McDonnell, prepared a report (the "McDonnell Report") dated 24 December 2001 in which he stated that the Compliance Submissions were *"satisfactory"*. On the basis of the McDonnell Report the Council, by an order of 4 January 2002 (the "Council Order"), determined that the submissions were *"satisfactory"* and *"acceptable to the planning authority"*, and construction was then allowed to commence on the following day, 5 January 2002. A copy of the Council Order is provided in Annexure 8 to the Application Addendum. The Development was completed on 5th September 2003.

1.4 The questions put to the Council

The floor area approved by the Board for Building 2 was, as stated in section 8.2 of the Application Addendum, 7,145 m^2. The floor area of Building 2 as built is, as stated in section 8.4 of the Application Addendum, is 8,174 m^2, which represents an increase of 1,029 m^2, or 14.4%, compared to what was approved by the Permission.

The floor area approved by the Board for Building 3 was, as stated in in section 9.3 of the Application Addendum, 7,878m^2. The floor area of Building 3 as built is, as stated in section 9.5 of the Application Addendum, is 9,217 m^2, which represents an increase of 1,342 m^2, or 17%, compared to what was approved by the Permission.

The Section 5 Application sought a declaration in respect of two questions, as follows:

> *Question 1*
> *Is the increase in floor area of Building 2 of 1,029 m^2 compared to what was approved by the Board development or not development and, if it is development, is it exempted development or not exempted development for the purposes of the Planning and Development Acts 2000-2019?*
>
> *Question 2*
> *Is the increase in floor area of Building 3 of 1,342 m^2 compared to what was approved by the Board development or not development and, if it is development, is it exempted development or not exempted development for the purposes of the Planning and Development Acts 2000-2019?*

Board Condition 1 required the Development to be carried out in accordance with the October 1999 Plans except as was otherwise required in order to comply with the other Board Conditions. As none of the other Board Conditions required changes that would or could have resulted in an increase in the floor area of Building 2 or Building 3, these changes (the "Changes") represent material differences between the permitted development and the as constructed development and are a breach of Board Condition 1.

1.5 Referral of the Section 5 Declaration by the Council

I received letter a letter dated 23 June 2020 containing the decision of the Council. A copy of this letter (the "Section 5 Letter") is provided in Annexure 4 to this Referral Addendum, and an extract from the letter is provided below:

> *Proposal EXPP: PROTECTED STRUCTURE: The application relates to the question as to whether various works that have been carried out at Trinity Hall, Dartry, Dublin 6, namely:- (a) An increase in the floor area of Building 2 of 1,029m2 compared to what was approved; and (b) An increase in the floor area of Building 3 of 1,342m2 compared to what was approved are or are not development and, if they are development, whether they are or are not exempted development for the purposes of the Planning and Development Acts.*

NOTIFICATION OF DECLARATION ON DEVELOPMENT AND EXEMPTED DEVELOPMENT

In pursuance of its functions under the Planning & Development Acts 2000 (as amended), Dublin City Council has by order dated 19-Jun-2020 decided to issue a Declaration that the above proposed development is EXEMPTED from the requirement to obtain planning permission under Section 32 of the Planning & Development Acts 2000 (as amended).

Reasons & Considerations:

I am satisfied, having examined the proposal that the following conclusions apply;

The floor areas of Building 2 and Building 3 were deemed to be in compliance with the conditions imposed as part of the planning permission granted under Reg. Ref. 1101 /99 (ABP Ref. 29S.117164). The 'increase in floor areas' referred to were approved and constructed and therefore are not development.

I consider that this declaration (the "Declaration") is contradictory, illogical, irrational, contrary to Irish law and contrary to EU law and am therefore referring the Declaration to the Board for review for the reasons set out later in this document.

1.6 When the changes to Building 2 and Building 3 were made

It should be noted that Sections 8 and 9 of the Application Addendum, which outlined the basis on which the two questions were being asked of the Council, did not make any statements or assertions as to when the changes to the floor area of Building 2 and Building 3 were made.

The possible explanations as to how and when these changes were made was considered in Section 10 of the Application Addendum as follows:

- Section 10.3 of the Application Addendum outlined the possibility that the changes were made in the Compliance Plans and that the absence of information relating to those changes and of information on the floor area of the buildings in the Compliance Architect's Reports was either an oversight (which I considered to be implausible given the detailed disclosure of many other minor changes in the Compliance Architect's Reports) or deliberately done with the objective of concealing the changes from the Council (which I consider to be the more likely explanation).
- Section 10.4 of the Application Addendum outlined the possibility that the changes were made after the Compliance Submissions had been submitted to and approved by the Council and were never disclosed to the Council or the public.

In making the Declaration it is clear that the Council assumed that the changes were made in the Compliance Plans. The analysis in Sections 3 and 4 below has been undertaken on the basis that this assumption is correct. Further analysis is provided in Section 0 in respect of the alternative scenario where the changes were made after the Compliance Plans were submitted and agreed by the Council.

2 GROUNDS 1 & 2 – THE DECLARATION IS CONTRADICTORY, IRRATIONAL, AND ILLOGICAL

2.1 Ground 1 – the Declaration is contradictory

There are only 3 possible outcomes to a Section 5 application in respect of a structure that has already been constructed, namely that the changes in respect of which the declaration is being sought are either:

i. Not development, which is appropriate in cases where the changes represent immaterial deviations from the permission granted for that structure; or
ii. Development, which is appropriate in cases where the changes represent material deviations from the permission granted; or
iii. Exempted development, which is appropriate in cases where the changes represent material deviations from the permission granted but are exempted from the requirement to apply for planning permission under a specific provision of the Planning and Development Act and Planning regulations.

I contend that the Declaration is contradictory as it indicates that the Council determined that the Changes were both *"EXEMPTED from the requirement to obtain planning permission"* and also that they were *"not development"*. These are contradictory determinations and it is not possible for the Changes to be both of these.

2.2 Ground 2 – the Declaration is irrational and illogical

The Declaration states that the Council *"[deemed] the floor areas of Building 2 and Building 3 ... to be in compliance with [the Permission]"* and that *"the [Changes] were approved [by the Council]"*.

Leaving aside the fact that, as outlined in 3 and 4 below, any such deemed *"approval"* would have been unlawful under national and EU law, it is illogical and irrational for the Council to claim that the Changes were approved by the making of the Compliance Order when the Council does not know, as noted in 1.6 above, whether the Changes had been made in the Compliance Plans submitted to the Council Order or at a later date after the Council's review of the Compliance Submissions had been completed.

3 GROUNDS 3 TO 7 - THE DECLARATION IS CONTRARY TO IRISH LAW

3.1 Ground 3 - The Changes were material and were therefore development

The Council's determination that the Changes were not development could only be lawful if the Changes were immaterial deviations from the Permission.

As explained in detail in Sections 8.5.2 and 9.6.2 of the Application Addendum the Changes represent material deviations between the building as constructed and what was approved by the Permission and accordingly the statement in the Declaration that the changes were *"not development"* is contrary to Irish law.

Furthermore, it is not possible to make an argument that the Changes could be considered to be immaterial deviations from the Permission on the basis of the principles as outlined in the Krikke judgment[1]:

> *122. There is a further reason that the Developer cannot rely on the concept of "immaterial deviations". **The case law indicates that the rationale for allowing some flexibility in planning permissions is to address unexpected contingencies during the course of the carrying out of the development.** On the facts of the present case, the decision to change turbine types was a deliberate decision made in advance of the carrying out of the works. **This was not an unexpected event such as might benefit from the concept of "immaterial deviations".** [Emphasis supplied]*

As was the case in the development that was the subject of the Krikke judgement, the Changes were a deliberate decision made by Trinity in advance of carrying out of the works on the Development and were not an unexpected event such as might benefit from the concept of "immaterial deviations".

3.2 Ground 4 - Express agreement of the Council was not sought for the Changes

In making the statement in the Declaration that *"[the Changes] were deemed to be in compliance with the [Board Conditions]"* the Council completely ignored the detailed analysis and clear and explicit case law provided in Section 6.3 of the Application Addendum. In particular, the Council ignored the extracts provided in Section 6.3 from the Krikke judgement[2], which dealt explicitly with what changes can be deemed to have been accepted by a planning authority when it accepts a compliance submission. This principle is outlined clearly in the additional extract from the Krikke judgment below:

> *128. First, as a matter of interpretation, **the decision-letter cannot be read as "agreeing" to an increase in rotor diameter in circumstances where the Developer did not expressly request agreement to this increase.** Planning documents are to be interpreted in their ordinary meaning as they would be understood by members of the public, without legal training, as well as by developers and their agents, unless such documents, read as a whole, necessarily indicate some other meaning. (See In re XJS Investments Ltd. [1986] IR 750). [Emphasis supplied]*

The Krikke judgment makes it clear that where changes are made in plans submitted for compliance review and those changes are not expressly identified and the agreement of the planning authority is not expressly sought in the documents accompanying those plans, then, notwithstanding the acceptance of the plans by the planning authority, those changes cannot be deemed to have received the agreement of the planning authority.

Section 6.3 of the Application Addendum concluded by stating:

> *Applying this principle to Trinity Hall, it is clear that any changes that were made in the Compliance Plans that were not disclosed in the Compliance Architect's Reports and for which the express agreement of the Council was not sought in the Compliance*

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[1] *Krikke and others v. Barranafaddock Sustainability Electricity Limited,* Simons G., 6 December 2019 [2019] IEHC 825
[2] Ibid.

Architect's Reports could not[3] *have received and therefore did not receive the agreement of the Council by the making of the Council Order.*

On the basis of the above and Section 6.3 of the Application Addendum the Declaration is accordingly contrary to Irish law.

3.3 Ground 5 - No provision under which the Changes could be considered exempted development

A development which would otherwise require planning permission will not require such permission where it falls within a category of exempted development as specified in the Planning and Development Act and/or the Planning and Development Regulations.

As (i) neither the Planning and Development Act nor the Planning and Development Regulations contain any provisions under which the Changes would qualify as exempted development, and (ii) the Declaration does not refer to the provision of the Planning and Development Act or the Planning and Development Regulations under which the Changes would qualify as exempted development, the Declaration contrary to Irish law.

3.4 Ground 6 - Purported approval by the Council of the Changes would in any case have been ultra vires

Even if the express approval of the Council had been sought at the compliance stage for the proposed increase in size of Building 2 and Building 3, any material increase in size of Building 2 and Building 3 would have represented a breach of Board Condition 1 and any purported approval, agreement or acceptance by the Council of such increases at the compliance stage by the making of the Compliance Order would have been ultra vires.

The legal analysis supporting this position is outlined in Section 6.1 of the Application Addendum, an extract from which is reproduced below for convenience[4].

The only power exercisable by the Council [during the compliance process] was to agree details in relation to the revision of plans on the basis of the implementation of the condition imposed by the Board. ***Any agreement reached without that condition having been fulfilled was necessarily ultra vires the Council.*** *[Emphasis supplied]*

Furthermore, there is a distinction between conditions in a planning permission which, for their implementation require the *"approval"* of the planning authority and conditions which require the *"agreement"* of the planning authority. This point was made by McKechnie J in the Permission Proceedings[5] when he stated

b) Secondly, there is a clear distinction between conditions in a planning permission which, for their implementation require the "approval" of the planning authority and conditions which require the "agreement" of the planning authority

None of the Board Conditions contained provisions that required the Council to approve any changes to the October 1999 Plans. Board Conditions 2, 7, 10(4), 18 and 19 contained provisions that required the Council to agree certain matters, but none of these matters would have required or allowed the floor areas of Building 2 and Building 3 to increase in size. In fact, the implementation of Board Condition 2 would have required the size of Building 3 to be reduced rather than increased.

Furthermore, any agreement reached in respect of any Board Condition was limited by law to what was necessary to give effect to that condition and no more. This principle was outlined by Dodd[6] as follows:

In entering into such agreement the planning authority and person carrying out the£ development, must ensure that the agreement is within the scope of the true or correct meaning of the condition. See O'Connor v Dublin Corporation, unreported,

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[3] Erratum: the word "not" was omitted from the text in the Application Addendum at the time of submission to the Council, but has been corrected for the purpose of this referral to An Bord Pleanála.

[4] Gregory v Dun Laoghaire Rathdown County Council (Supreme Court, unreported 28th July 1977)

[5] Kenny v An Bord Pleanála (No. 1) [2001] 11.R. 565

[6] *Planning and Development Acts 2000-2007 Annotated and Consolidated,* Stephen Dodd (Round Hall, Ltd November 30, 2008), p132

High Court. O'Neill J., October 3, 2002. Where the agreement goes beyond the scope of such condition, the agreement will be ultra vires.

It follows from the above that in relation to the statement in the Declaration that *"The 'increase in floor areas' referred to were approved [by the Council]"*, any such purported approval would have been ultra vires and unlawful and the Declaration is therefore contrary to Irish law.

3.5 Ground 7 – The Changes could not be exempted development as a revised EIA is required in respect thereof

3.5.1 The relevant legislation

Section 4 (4) of the Planning and Development Act 2000, as amended, states:

"(4) Notwithstanding paragraphs (a), (i), (iA) and (l) of subsection (1) and any regulations under subsection (2), development shall not be exempted development if an environmental impact assessment or an appropriate assessment of the development is required.

3.5.2 The Development had required an environmental impact assessment

The April 1999 Architect's Report, the October 1999 Architect's Report, the August 2001 Compliance Architect's Report and the November 2001 Compliance Architect's Report, copies of which were provided in Annexures 1, 2, 5 and 6, respectively, to the Application Addendum, all make reference to an EIS, so it is clear that an environmental impact assessment had been required in relation to the Development.

3.5.3 The environmental impact assessment included an assessment of the visual impact of the Development

The April 1999 Architect's Report noted[7] that an EIS had been prepared in respect of the Development. The October 1999 Architect's Report stated[8] that a revised EIS had been prepared in respect of the Development and indicated that seven views of the Development that had previously been supplied in the April 1999 EIS had been required to be regenerated as a result of the redesign of the Development and that comment on those revised views were included in the revised EIS. The relevant text was as follows[9]:

Critical viewpoints from outside the proposal have been [required] to be regenerated and submitted as part of the revised documents, and a comparative commentary should be included in the EIS appendix. These are to be as previously, namely:

- ***Viewpoint 1***

View from Temple Road (opposite the Embassy) looking into the Southeast corner of the development.

- ***Viewpoint 2***

View from junction of Dartry Road and Temple Road

- ***Viewpoint 3***

Panoramic View from Sunbury Gardens

- ***Viewpoint 4***

View from junction of Dartry Road and Palmerston Park

- ***Viewpoint 5***

View from Palmerston Park

- ***Viewpoint 6***

Internal view of West edge of central space

[7] April 1999 Architect's Report pp 8, 19, 20, 21, 32, 38 & 43
[8] October 1999 Architect's Report, p3 of cover letter
[9] Ibid. p16

• ***Viewpoint 7***
Internal view of East edge of Central Space showing the central facilities building in context with the existing listed pavilion buildings.

The August 2001 Architect's Report included[10] an extract from the October 1999 EIS which indicated that the visual impact of the Development would result in a *"readily apparent change of character"*, that the appearance would *"change significantly from most points to the immediate north west and south of the site"*, and that *"The ... scale will contrast with the established 19th century dwellings which surround the site.* The full extract is provided below:

> ***11.4 Impacts of the Proposed Development***
> ***11.4.1 General***
> ***Impact***
> *There will be a readily apparent change of character from open, undeveloped, amenity and leisure uses to comprehensive and uniform residential landuse.*
>
> *The development will represent an intensification which will contrast with the established low levels of use.*
>
> *The appearance will also change significantly so that there will be a much greater variety of materials, forms, scales and uses visible from most points to the immediate north, west and south of the site.*
>
> *The contemporary materials, forms, colours, finishes and scale will all contrast with the established 19" century dwellings which surround the site.*

3.5.4 *A revised EIA should have been undertaken in respect of the visual impact of the Changes and a revised EIS prepared*

As (i) the October 1999 EIS stated that the visual impact of the Development was significant, and (ii) the Changes represented material changes to Building 2 and Building 3, the Development should have been subjected to an updated visual impact assessment by means of undertaking another regeneration of the seven views that had been provided in both the April 1999 EIS and October 1999 EIS to reflect those changes and providing those regenerated views in a revised EIS for review and comment by the Council and the public. As noted in 4.2.2 below, six of the above-mentioned visualisations (being Views 1, 2, 3, 4, 5 and 7) showed Building 2 and/or Building 3 and these should have been revised to assess the visual impact of the Changes.

As this was not done the Changes cannot be exempted development due to the provisions of Section 4 (4) of the Planning and Development Act 2000, as amended, and the Declaration is therefore contrary to Irish law.

[10] August 2001 Architect's Report, hand marked p19

4 GROUND 8 - THE DECLARATION IS CONTRARY TO EU LAW AS THE COUNCIL FAILED TO COMPLY WITH ITS OBLIGATIONS UNDER THE DIRECTIVE

4.1 The relevant EU law requirements

4.1.1 The Development was subject to Directive 85/337

The size and type of the Development were such at that an EIS was required to be prepared in respect of the project, as noted in the April 1999 EIS, which stated[11]:

> *By law, the type and size of the project means that an environmental impact statement (EIS) must be carried out.*

The EIS requirements at the time that the April 1999 Submission and October 1999 Submission were submitted to the Council were contained in Council Directive 85/337/EEC, as amended by Council Directive 97/11/EEC, (together the "Directive").

The Directive required that public and private projects likely to have a significant impact on the environment undergo an assessment of their effects on the environment and also set out requirements for public participation and consultation in the decision-making process for authorisation of such projects.

One of the matters to be assessed in an EIS is impact on visual amenity, as noted in item 3 of Annex IV of the Directive which requires *"a description of the aspects of the environment likely to be significantly affected by the proposed project, including, in particular... landscape..."*

4.1.2 The Directive had come into direct effect in Ireland

The deadline for transposing the provisions of Directive 85/337, as amended by Directive 97/11, into Irish Law was 14 March 1999, and as the Irish Government did not meet that deadline, Directive 85/337, as amended by Directive 97/11 had come into direct effect in Ireland prior to the date on which the April 1999 Submission was submitted to the Council.

Where the provisions of an EU Directive are directly applicable, all organs of State must protect the rights conferred on individuals by the Directive. The Council and the Board are organs of the state and thus bound by this obligation. This position was outlined by John Gore-Grimes as follows[12]:

> *The ECJ has held, on a mainly consistent basis, that Directive 85/337/EEC, as amended, has 'direct effect', that is to say that it can be relied on directly in proceedings before the courts dealing with the planning authorities and with appeals before An Bord Pleanála.*

4.1.3 National laws contrary to the Directive must be set aside

If an organ of State is unable to fulfil its obligation to protect the rights conferred on individuals by the Directive as a result of a provision of national law, it has the right and obligation to disapply such provision if its application would, in the circumstances of the case, lead to a result contrary to European law.

This principle was outlined by the Court of Justice of the European Union in C-378/17[13] when it held that the obligation to apply EU law in preference to national law was owed by all organs of State.

> *38 As the Court has repeatedly held, that duty to disapply national legislation that is contrary to EU law is owed not only by national courts, but also by all organs of the State — including administrative authorities — called upon, within the exercise of their respective powers, to apply EU law (see, to that effect, judgments of 22 June 1989, Costanzo, 103/88, EU:C:1989:256, paragraph 31; of 9 September 2003, CIF, C-198/01, EU:C:2003:430, paragraph 49; of 12 January 2010, Petersen, C-341/08, EU:C:2010:4, paragraph 80; and of 14 September 2017, The Trustees of the BT Pension Scheme, C-628/15, EU:C:2017:687, paragraph 54).*

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[11] Technical summary, April 1999 EIS, p2

[12] *Planning and Environmental Law in Ireland*, John Gore-Grimes (Bloomsbury Publishing PLC, 2011)

[13] Minister for Justice and Equality v. Workplace Relations Commission, CJEU, 4th December, 2018, ECLI:EU:C:2018:979

39 It follows that the principle of primacy of EU law requires not only the courts but all the bodies of the Member States to give full effect to EU rules.

...

50 It follows from the principle of primacy of EU law, as interpreted by the Court in the case-law referred to in paragraphs 35 to 38 of the present judgment, that bodies called upon, within the exercise of their respective powers, to apply EU law are obliged to adopt all the measures necessary to ensure that EU law is fully effective, disapplying if need be any national provisions or national case-law that are contrary to EU law. This means that those bodies, in order to ensure that EU law is fully effective, must neither request nor await the prior setting aside of such a provision or such case-law by legislative or other constitutional means.

This principle was also referred to by Garret Simons as follows[14]:

13-286 In conclusion, therefore, it seems that the better view is that where planning permission has been granted in breach of the requirements of the Directive, the courts have a jurisdiction to set aside the grant. This should be so irrespective of whether the decision-making procedure may have been fully in accordance with the requirements of national law. An Bord Pleanála and the planning authorities are, as emanations of the State, obliged to give effect to the Directive, if necessary by disapplying provisions of national law.

13-290 It should be emphasised that planning authorities and An Bord Pleanála are obliged to take all the general or particular measures necessary to ensure that projects are examined in order to determine whether they are likely to have significant effects on the environment and, if so, to ensure that they are subject to an impact assessment. Thus, it may be necessary on occasion for a planning authority or An Bord Pleanála either to supplement or disapply national law, so as to ensure compliance with the requirements of the Directive. For example, if it is some rule of national law which is preventing a particular project being subjected to an environmental impact assessment, this rule may have to be disregarded by An Bord Pleanála or the relevant planning authority.

4.1.4 The obligation to give effect to the Directive applies even if the time limits for bringing proceedings in relation to the matter has expired.

The obligation to give effect to the Directive applies even if the time limits for bringing proceedings in relation to the matter has expired. In the case of the Development, even though the time limit for the Council to take enforcement action in relation to the Development has expired the Council does not have the right to consider the development authorised in respect of breaches of the Directive. This principle was referred to by Simons as follows[15]:

143. The very recent judgment of the CJEU in Case C-261/18, Commission v. Ireland (Derrybrien) has emphasised that a Member State cannot deem a development project, which has been carried out in breach of the requirements of the EIA Directives, to be authorised simply because the domestic time-limits for legal challenges to the relevant development consent have expired.

4.2 Visual impact was one of the matters assessed in the EIS

4.2.1 The April 1999 EIS

The April 1999 Submission contained an EIS for the Development (the "April 1999 EIS"). Section 11 of the April 1999 EIS, a copy of which is provided in Annexure 2 to this Referral Addendum, dealt with the visual impact of the Development, as noted in the extract below:

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[14] *Planning and development law*, Garrett Simons (Thompson Round Hall, 2nd Ed. 2007)

[15] *Krikke and others v. Barranafaddock Sustainability Electricity Limited*, Simons G., 6 December 2019 [2019] IEHC 825

11.1 Introduction
This section examines the effects upon the appearance and character of the site and its immediate environs. The objectives of the analysis are twofold:-
1. to determine the extent of the visibility of the new development
2. to determine whether and how the visibility will affect viewers.

Section 11.3 provided photographs of the site from 7 viewing positions at various locations on the roads surrounding the site. The location of the viewing positions is shown on the View Location Map in Section 11.6 of the April 1999 EIS. Section 11.4 provided visualisations of the impact of the proposed development on the views from those viewing positions and an analysis of the impact.

The visual impact of the Development was considered to be significant, as noted in the extract below:

11.4 Impacts of the Proposed Development
11.4.1 General
There will be a readily apparent change of character from open, undeveloped, amenity and leisure uses to comprehensive and uniform residential landuse.
The development will represent an intensification which will contrast with the established low levels of use.
The appearance will also change significantly so that there will be a much greater variety of materials, forms, scales and uses visible from most points to the immediate north, west and south of the site.

4.2.2 The October 1999 EIS

Due to the significant changes made to the overall design of the Development in the October 1999 Plans, the October 1999 Submission was accompanied by a revised EIS (the October 1999 EIS). Section 11 of the October 1999 EIS, a copy of which is provided in Annexure 3 to this Referral Addendum, dealt with the visual impact of the Development, as noted in the extract below:

11.1 Introduction
This section examines the effects upon the appearance and character of the site and its immediate environs. The objectives of the analysis are twofold:-
1. to determine the extent of the visibility of the new development
2. to determine whether and how the visibility will affect viewers.

Section 11.3 provided the same photographs of the site from the same 7 viewing positions as shown in the April 1999 EIS, as can be seen from the View Location Map in Section 11.7 of the October 1999 EIS. Section 11.4 provided revised computer-generated simulated visualisations of the impact of the development as shown on the October 1999 Plans on the views from those viewing positions.

The visual impact of the Development was again considered to be significant, as noted in the extract below:

11.4 Impacts of the Proposed Development
11.4.1 General
There will be a readily apparent change of character from open, undeveloped, amenity and leisure uses to comprehensive and uniform residential landuse.
The development will represent an intensification which will contrast with the established low levels of use.
The appearance will also change significantly so that there will be a much greater variety of materials, forms, scales and uses visible from most points to the immediate north, west and south of the site.

Based on the View Location Map, it can be the seen that the buildings shown in the 7 computer-generated simulated visualisations in the October 1999 EIS were as follows:

View number	Buildings shown
View 1	Building 3
View 2	Building 3
View 3	Buildings 1, 2 & 3
View 4	Building 2
View 5	Building 1 & 2
View 6	Building 1
View 7	Building 2

4.3 Building 2 and Building 3 should have been subjected to an updated visual impact assessment

The material changes made to the size of Building 2 and Building 3 are likely to have altered the visual impact of the development.

In those circumstances the October 1999 EIS should have been further revised to show the extent of the changes on the visual impact of the development in order to provide the Council and the public with an opportunity to assess whether the changes were material or not.

In particular, under the requirements of the Directive the six visualisations in the October 1999 EIS which showed Building 2 and/or Building 3 (being Views 1, 2, 3, 4, 5 and 7) should have been revised to reflect the increased size of those buildings and those revised visualisations should have been submitted to the Council in a further revised EIS for review and comment by the Council and the public.

4.4 By making the Declaration the Council failed to comply with its obligation to give effect to the Directive and deprived me and the public of our rights under the Directive

It is not possible to determine whether the increase in size of Building 2 and Building 3 would have made a significant change to the visual impact of the Development by comparison to that shown in the October 1999 EIS for the simple reason that neither the Council nor any member of the public knows what changes were made to the length and/or width and/or height of those buildings in order to result in the significant increase in floor area of the buildings.

Notwithstanding whether the changes to the visual impact would have been considered to be material or not, by making the Declaration the Council failed to comply with its obligation to give effect to the Directive by depriving me and the public in general of our rights under the Directive to be consulted in relation to the Changes.

The key point here is not whether an assessment of the visual impact of the Changes would have resulted in them being approved by the planning authority or not had a revised planning application and revised EIS been submitted in respect thereof, but the fact that I and the public in general were deprived of our rights under the Directive to express our opinions and to participate in the decision-making process regarding the matter.

This right was described by Garret Simons as follows[16]

> *13-06 A similar point came before the House of Lords in Berkeley v Secretary of State for the Environment. In the leading speech, Lord Hoffmann identified the directly enforceable right under the Directive as not merely a right to a fully informed decision on the substantive planning issues, but as requiring the inclusive and democratic procedure prescribed by the Directive in* ***which the public, however misguided or wrongheaded its views may be, is given an opportunity to express its opinion on the environmental issues*** *[Emphasis supplied]*

[16] *Planning and development law*, Garrett Simons (Thompson Round Hall, 2nd Ed. 2007)

The Krikke judgment is also relevant to the above points:

> *134. Had the Developer wished to obtain the planning authority's agreement to an increase in rotor diameter, then this should have been stated in express terms in the body of the compliance submission. Neither a planning authority nor a member of the public should be expected to wade through extensive documentation in order to attempt to ascertain what precisely it is that a developer is seeking agreement to.* ***Public participation lies at the heart of the planning process. This is especially so in the context of development, such as the present case, which consists of a project subject to the public participation requirements of the EIA directive.***
>
> *135. The second reason for saying that the decision-letter cannot be relied upon as authorising the increase in rotor diameter is, perhaps, more fundamental.* ***It is a requirement of the EIA Directive that any "change" or "extension" of projects already authorised, executed or in the process of being executed, which may have significant adverse effects on the environment, must itself be subject to assessment. It is necessary, therefore, that a form of screening exercise be carried out before a decision to authorise a change or extension can lawfully be made.*** *[Emphasis supplied].*

The requirement of the Council to ensure that a screening exercise is undertaken in respect of the Changes is supported in the statement by Advocate General Pizzarella in his opinion in the Derrybrien case[17] that:

> *[it is] incumbent on Member States, in accordance with the principle of sincere co-operation enshrined in Article 4 TEU, to nullify the unlawful consequences of the infringement (of the obligation to carry out a prior assessment of the effects of the project on the environment)* ***and it is therefore for the competent authorities of each Member State, to take, within the sphere of their competence, all the general and particular measures necessary to ensure that they are subject to an assessment.*** *[Emphasis supplied]*

It is clear from the above extract that as no screening exercise has ever been carried out in respect of the Changes (i) no decision to authorise, approve or accept the Changes can have been lawfully made, (ii) in making the Declaration the Council failed to comply with its obligation to give effect to the Directive, and (iii) in making the Declaration the Council deprived me and the public of our rights under the Directive, as a result of which the Declaration is contrary to EU law.

[17] Case C-261/18 (Commission v Ireland)

5 IMPACT OF TIMING OF CHANGES ON LAWFULNESS OF THE DECLARATION

The analysis in Sections 3 and 4 of this Referral Addendum has been carried out on the basis that the assumption made by the Council that the Changes were made in the Compliance Plans is correct.

In the event that it were to be determined that the Changes were made after the Compliance Submissions were accepted by the Council, the proposition that the Declaration is contrary to both national and EU law, as outlined in Sections 3 and 4 above, would still stand.

6 FURTHER OBSERVATIONS

6.1 Not a challenge to the Compliance Order

It is possible that in responding to the Section 5 Referral Trinity will seek to characterise the referral as an attempt to challenge the Compliance Order. This is not the case. The Compliance Order has already been, as noted in Section 5.2 of the Application Addendum, the subject of legal challenge and the matters raised therein and the judgement of the courts in respect thereof are res judicata and are not being raised in this referral.

I am simply stating that the only changes that can be considered to have been approved and/or agreed by the Council in making the Compliance Order were changes (i) within the scope of what was required to comply with the Board Conditions, and (ii) for which the express agreement of the Council was requested in the Compliance Architect's Reports.

6.2 Not a challenge to the October 1999 EIS

It is also possible that in responding to the Section 5 Referral Trinity will seek to characterise the referral as an attempt to challenge the validity of the October 1999 EIS. This is not the case. The October 1999 EIS was, as noted in in Section 1.3 of the Application Addendum, one of the matters dealt with in the Permission Proceedings and the matters raised therein in respect of the October 1999 EIS and the judgement of the courts in relation thereto are res judicata and are not being raised in this referral.

I am simply stating that as the Changes were not part of the October 1999 Plans the visual impact of the Changes could not have been and were not assessed by the October 1999 EIS and should have therefore been the subject of an updated visual impact assessment which should have been provided in an further revised EIS.

James F Kenny

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James F Kenny

ANNEXURES TO THE ADDENDUM

James F Kenny
4 Temple Road
Dublin 6

Dublin City Council
Planning Registry Section
Block 4, Floor 0
Civic Offices
Wood Quay
Dublin 8

3 April 2020

Re: Application for a Declaration under Section 5 of the Planning and Development Acts 2000-2019 in respect of Trinity Hall, Dartry, Dublin 6

Dear Sir/Madam,

1. I reside at the above address, which is directly opposite the southern boundary of the Trinity Hall site on Temple Road.

2. I have recently completed a review of documents relating to the student halls of residence at Trinity Hall, Dartry, Dublin 6. This review has identified a number of matters in respect of which I am now submitting an application (the "Application") for a Declaration under Section 5 of the Planning and Development Acts 2000-2019. The Application relates to the question as to whether various works that have been carried out at Trinity Hall, Dartry, Dublin 6, namely:-

(a) An increase in the floor area of Building 2 of 1,029 m^2 compared to what was approved; and

(b) An increase in the floor area of Building 3 of 1,342 m^2 compared to what was approved

are or are not development and, if they are development, whether they are or are not exempted development for the purposes of the Planning and Development Acts 2000-2019.

3. The Application comprises the following:

- The Application form.
- This explanatory letter (2 copies).
- An Addendum and Annexures to the Addendum (2 copies).
- A site location map with the perimeter of the site clearly marked in red (2 copies). The source of this map is explained in Section 3 of the Addendum.

4. It is my submission, having regard to the reasons and considerations set out in the Addendum, that (i) all of the above-mentioned works are material deviations from the permission that was granted for Trinity Hall and are therefore development, and (ii) that the above-mentioned works are not exempted development, and I request that Dublin City Council issue a declaration to that effect under Section 5 of the Planning and Development Acts 2000-2019.

5. The requisite number of copies of documents and plans are provided with this submission. However, in order to assist with the assessment of the application, this letter, the application form and all supporting documents and plans are available in electronic form at https://bit.ly/trinityhall5. The password required to access these documents is TrinityHallS5.

DECLARATION ON DEVELOPMENT & EXEMPTED DEVELOPMENT

SECTION 5 APPLICATION FORM

NAME OF APPLICANT: James F Kenny

ADDRESS OF APPLICANT: 4 Temple Road, Dartry, Dublin 6

EMAIL ADDRESS: jfkenny.ie@gmail.com

TELEPHONE NO. Day: 01 4971599 Mobile: 086 866 2269

NAME OF AGENT AND AGENT'S ADDRESS:

TELEPHONE NO. Day: Mobile:

ADDRESS FOR CORRESPONDENCE (if different from above)

LOCATION OF SUBJECT SITE: Trinity Hall, Dartry, Dublin 6

Is this a Protected Structure or within the curtilage of a Protected Structure? ☑

If yes, has a Declaration under Section 57 of the Planning & Development Act 2000 been requested or issued for the property by the Planning Authority? ☑

Please provide details of works (where applicable) or proposed development. (Note: only works listed and described under this section will be assessed under this section 5 application. Use additional sheets if required.)

See Sections 8 & 9 of the Addendum to this application for details

Ulster Bank

College Green
PO Box 145 33 College Green Dublin 2

#7MKXWH6M

98-50-10 €

Date 6/4/2020

Pay Dublin City Council or order

Eighty Euro

euro euro euro

€ 80-00

JAMES F KENNY

J Kenny

IRELAND 121119 Cheque No. #7MKXWH6M Branch Sort Code Account No.

Ulster Bank Ireland DAC www.communials.com 8508 02/16

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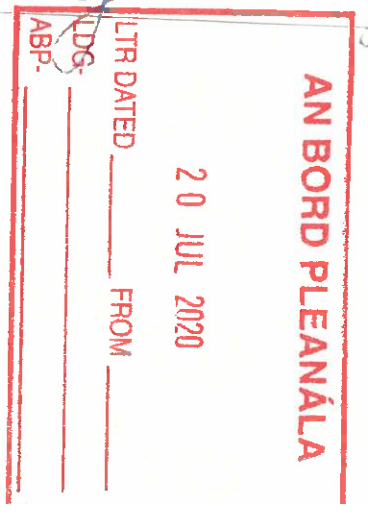


04

FOR
STUDENT RESIDENCES
AT
TRINITY HALL, DARTRY

University of Dublin
Trinity College Dublin

By:-

Environmental Impact Services Limited
6 Merrion Square
Dublin 2

April 1999

Non Technical Summary

Preamble

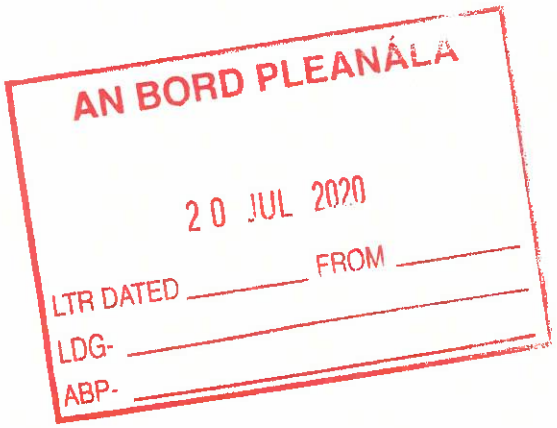
Planning Law requires a summary, written in simple, clear, non technical language to be included with every Environmental Impact Statement (E.I.S). This is a summary of the much larger and more detailed report that follows, so if you still have concerns about any issues when you've finished reading this summary, look up the topic in the main E I.S and you should find your question addressed there.

If you still have questions, comments or complaints then put them in writing and send them to:-

The Planning Officer
Dublin Corporation
Civic Offices
Fishamble Street
Dublin 8

Be sure to send your comments in as early as possible, if you want to influence the planning decision they *must* be received by the Planning Officer within 8 weeks of the date on which the application was lodged,.

This summary follows the same headings and numbering as the main E.I.S



1 Introduction, Background and Scoping

This project is being carried out by the University of Dublin, Trinity College Dublin. By law, the type and size of the project means that an environmental impact statement (EIS) must be carried out, which means that a specific range of topics (see headings 5 to 15 below) must be covered. These are general topics so before the study began the major issues and concerns were identified, as set out below.

2 Scoping

Scoping is the process of identifying the significant issues which should be addressed by a particular EIS. In this case the key issues were identified as follows:

- effects on the landscape;
- effects on traffic;
- effects on archaeology;
- effects on architectural heritage;
- socio-economic effects due to increased site population; and
- construction effects on noise, air quality, traffic, flora and archaeology.

3 Alternatives Considered

A range of alternative proposals were developed during the design evolution process. A representative sample of these is presented in the EIS with discussion of each, explaining key reasons for the selection of the preferred option.

4 Project Description

The development involves the construction of 10 new buildings with a total floor space of approximately 25,100 m² on a site of 4.27 hectares. It will also entail the refurbishment and renovation of the main existing building, Trinity Hall, and the removal of a gate lodge and a modern link building. The existing site population of 180 will be increased to 1085.

Support facilities such as laundry, security, refuse collection and administration will be provided. Works to Trinity Hall will mainly involve the provision of dining facilities.

Substantial landscaping will also be undertaken, including the removal of existing trees, planting of new trees and creation of new landscaped open spaces within the development.

5 Human Beings

The effect of the project on the socio-economic environment has been examined. The main effect of the development will be a term time population increase of approximately 900 people. Up to approximately 300 jobs will be created during construction, falling to 14 when the development becomes operational.

Local facilities including shops and pubs are likely to benefit from the increased population.

6 Flora and Fauna

The site has generous mature planting including a botanic garden with an associated collection of non-native trees. These trees have a significant teaching role for Trinity College, which will be largely lost as a result of the development.

The chief ecological value of the site is its attraction for birdlife and the impact on the local bird population is likely to be locally significant.

The aesthetic value of the site's trees is discussed under the heading of *Landscape*.

7 Soils

The development will entail the loss of a large area of relatively undisturbed soil in an urban context. This is a minor adverse impact with little significance outside the site.

8 Water

The on-site water drainage regime will be altered by the construction of new buildings and hard paved areas, thus increasing surface runoff generation. All runoff will be passed through oil and grit traps and retained in a new pond feature for discharge at a controlled rate to an existing Corporation drain adjacent to the site.

9 Air Quality

There will be no significant impacts on air quality during the operation of the new accommodation.

During construction there is potential to generate some nuisance, principally because of dust. The mitigation measures contained in the EIS will ensure that such nuisance is minimised. These measures include water spraying of some on-site areas to suppress dust and general adoption of best practices in construction site management to avoid dust generation.

10 Noise

The potential noise impact of the proposed residential development at Trinity Hall has been assessed as follows.

Existing background noise levels at night time are 41 dB(A). Night-time noise emissions from building services could potentially have a noise impact. By limiting external noise sources to a sound power of 78 dB(A) L_{WA} per building, there will be no noticeable increase in night-time background noise levels.

The operational development will have no traffic noise impact on nearby residents.

During the construction phase, noise levels of 60 to 65 dB(A) may be experienced at nearby houses. This would be a tolerable noise level for the limited duration of the construction phase. Construction traffic will increase noise levels at houses on routes to the site by 1 dB, which is not significant.

11 Landscape

Following the full establishment of the site planting (say after 8 – 10 years) it can be assumed that the perimeter screen planting will be 6 – 8 m tall. In this context there will be significant visual contrasts between the appearance of the site now and as it will look following development.

The contrast will be between the scale, height, materials and designs of the contemporary new structures and those of the established buildings – predominately redbrick – late 19th Century and early 20th Century dwellings.

The changes will be most evident on Dartry Road – opposite Sunbury Drive, and on Palmerston Park Road.

12 Traffic and Transportation

Due to the low rate of car usage by students and the adjacent Dartry Road, a primary north-south radial, vehicular traffic due to the completed development will be insignificant

The main potential traffic impact is due to road dirtying and spillages during construction. Mitigation measures that will minimise such impacts are proposed.

There will be significant additional demand for seats on adjacent bus routes during the a.m. peak which it is envisaged can be met through arrangement with Dublin Bus. In the medium/longer term it is anticipated that the proposed LUAS system will accommodate much of the demand for public transport.

350 Bicycle parking spaces will be provided and cyclists will have direct access onto Palmerston Park.

13 Material Assets

There is existing infrastructure for all services in the site vicinity. All service providers have indicated that they can accommodate the demand from the proposed development.

Cooking and heating throughout the development will be gas fuelled.

14 Architectural Heritage

There are three mid-Victorian houses on the site, namely Trinity Hall, Purser House and Grenane House. The first two of these are listed by Dublin Corporation. There are two (non-listed) gate lodges.

A c.1920s annexe to Trinity Hall will be refurbished and converted to a restaurant area. and one of the gate lodges will be removed to allow for the re-aligned main entrance and avenue. A c. 1920s building of no architectural importance, connecting Purser Hose and Trinity Hall, will be demolished.

There will not be any significant impacts on the architectural integrity of any of the listed buildings.

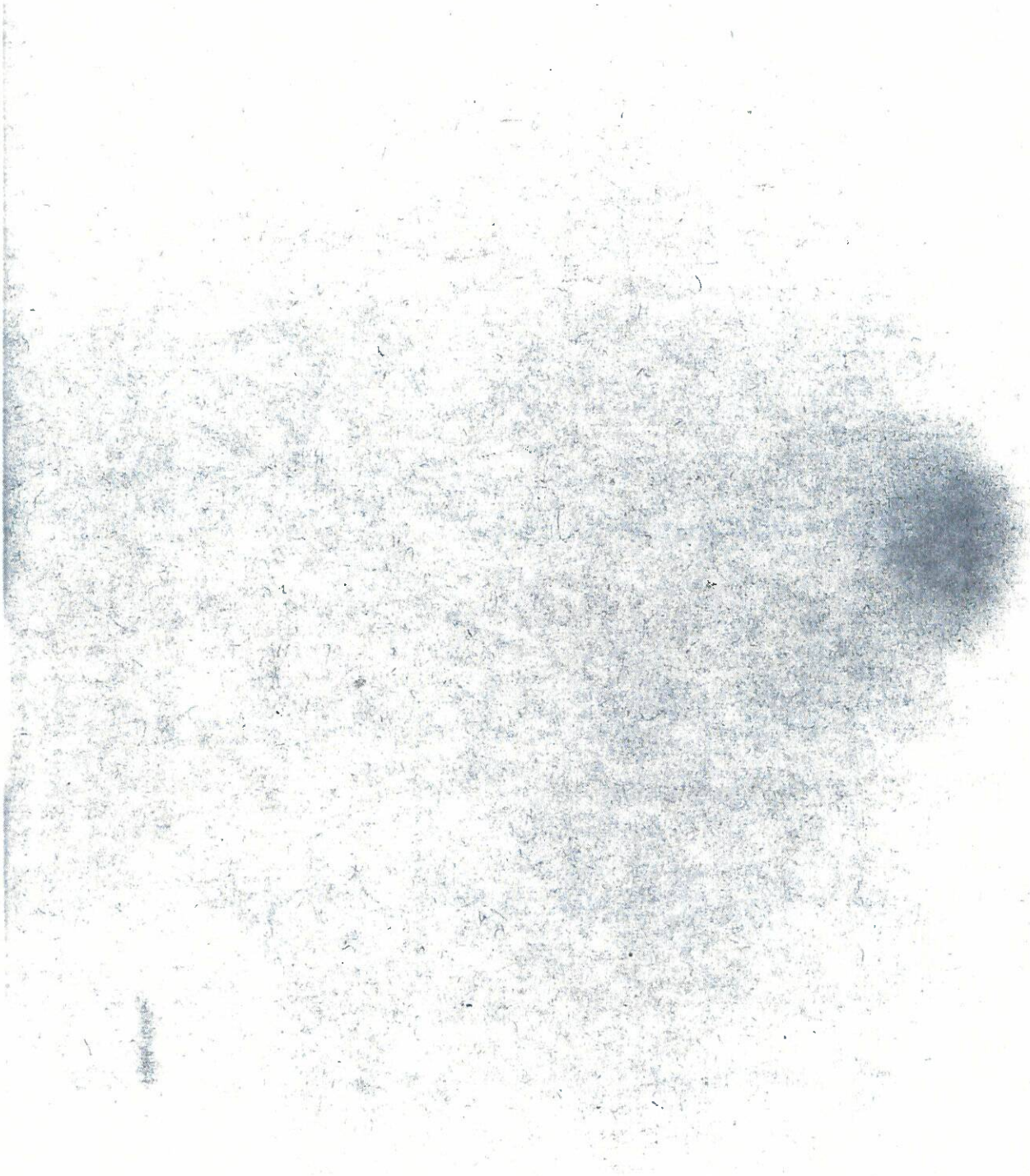
15 Cultural Heritage

The site of Rathmines Castle (a C17th mansion) is thought to be at the north eastern corner of the site. This site is recorded in the National Sites and Monuments Record and in the current Draft Dublin City Development Plan.

The Battle of Rathmines (1649) took place in the area.

Field inspections during the preparation of this EIS revealed no obvious archaeological features.

The proposed development does not include any building in the area of the recorded site of Rathmines Castle. The EIS proposes a number of measures to monitor the construction stage in order that any unknown features be checked for and should anything be noted, commitment is given to the adoption of appropriate procedures.



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CHAPTER 14 - ARCHITECTURAL HERITAGE

CHAPTER 15 - CULTURAL HERITAGE

TABLE OF FIGURES

* All the above visualisations have been included at the end of Chapter 11

Chapter 1 – Introduction

1.1 Introduction and Terms of Reference

Murray O Laoire Architects (MOLA) have been commissioned by Trinity College Dublin (TCD) to design a scheme for the redevelopment of their student residences at Trinity Hall in Dartry. MOLA have employed specialist sub-consultants Environmental Impact Services Limited (EIS Ltd.) to prepare the Environmental Impact Statement (EIS) required for this scheme.

The EIS will be submitted to the Planning Authority as part of the planning application documentation. The objective of the EIS is to determine the impacts of the proposed development on the environment and where adverse impacts are identified - to propose measures to avoid, reduce or remedy them.

1.2 Legislation

Environmental Impact Statements (EIS's) are carried out in response to the requirements of the European Community Council Directives of 27th June 1985 and 3rd March 1997, on the assessment of the effects of certain public and private projects on the environment (85/337/EC and 97/11/EC). The enabling Statutory Instruments which transpose 85/337/EC into law in Ireland are European Communities (Environmental Impact Assessment) Regulations 1989 to 1998, with the main legislation being Statutory Instrument 349/89. These regulations generally set out the types of projects which must be subject to EIA and the format and contents of EIS's. The second directive 97/11/EC has not yet been transposed into law in Ireland and is not applicable to this project, but it is likely that it will come into force in mid April 1999.

Part IX of the Local Government (Planning and Development) Regulations 1994 at Article 116 provides for the prior carrying out of an EIA for any development of a class specified under Article 24 of S.I. 349/89, as amended. The proposed development falls within the listing of development types under *Article 24, First Schedule, Part II, Section 10 (Infrastructure Projects) (b) – urban development projects which would involve an area greater than....2 hectares within existing urban areas.* While the total site area of Trinity Hall is 4.27 hectares, the proposed development covers an area of approximately 2.67 hectares of this site. The content of this Environmental Impact Statement is based on the relevant requirements as specified in Article 25 of the EIA Regulations S.I. 349/89.

The information to be contained in an EIS is set out in the second schedule of Article 25 of S.I. 349/89. This EIS has furthermore been undertaken in accordance with the Environmental Protection Agency's *Draft Guidelines on the information to be contained in Environmental Impact Statements* (EPA 1995) and *Advice notes on Current practice in the preparation of Environmental Impact Statements* (EPA 1995).

1.3 Consultation

The following bodies were consulted in the preparation of this report :

- Dublin Corporation
  - Planning, Parks, Roads and Traffic and Environment Departments

- Dúchas The Heritage Service – Sites and Monuments Records
- Trinity College Dublin
- An examination of previous planning files for the area was undertaken to determine sensitivities of local residents towards development proposals in the Dartry area.

1.4 EIS Format

This EIS follows a grouped format structure. Using this structure the EIS is prepared in a format which examines each environmental topic (as prescribed by the regulations) as a separate chapter. Each of these separate chapters refers to -

- The proposed development
- The receiving environment
- Likely significant impacts
- Mitigation measures
- Residual impacts (where applicable)

The EIS addresses each of the topics specified by the EIA Regulations as follows:-

EIA REGULATION TOPICS	EIS CHAPTER TOPICS
Human Beings	Human Beings
Flora	Flora and Fauna
Fauna	Flora and Fauna
Soils	Soils
Water	Water
Air	Air Quality Noise
Climate	Air Quality
Landscape	Landscape
Interaction of the foregoing	Within each topic as appropriate
Material Assets	Traffic and Transport Material Assets
Cultural Heritage	Architectural Heritage Cultural Heritage

1.5 Study Team

The study team used for this EIS was as follows:-

Role	Personnel
Study Director	D Conor Skehan
Study Manager	Paul Fingleton
Specialist Topics	
Human Beings	Brendan Allen
Flora and Fauna	Roger Goodwillie
Soils	D Conor Skehan

Water	Paul Fingleton
Air Quality	Michael Bailey
Noise	Colin Doyle
Landscape	D Conor Skehan and Pat Furey (Visualisations)
Traffic and Transport	Brian Mc Cann
Material Assets	Paul Fingleton and Brendan Allen
Architectural Heritage	William Garnermann
Cultural Heritage	Margaret Gowen and Co Limited

1.6 A Note on Quotations

Environmental Impact Statements by their nature contain statements about the proposed development, some of which are positive, and some are negative. Selective quotation or quotations out of context can give a very misleading impression of the findings of the study. The study team urge that quotations should where reasonably possible be taken from the conclusions of specialists' sections or from the non-technical summary and not selectively.

1.7 Statement of Difficulties Encountered

It is a requirement of the EIA Regulations to include a statement of the difficulties encountered in preparing the EIS, particularly any involving data deficiency. There were no significant difficulties encountered in compiling this EIS.

Chapter 2 – Scoping

2.1 Introduction

Scoping is a process which determines the likely issues that need to be examined in an environmental impact statement. The determination of issues to be examined in this EIS arose from :-

- Site visits and local investigation
- Consultation with Dublin Corporation
- Consultation with the Sites and Monuments Records Office
- Experience with previous EIS's and the requirements of the Regulations

The preparation of this EIS also had regard to the Environmental Protection Agency's *Draft Guidelines on the Information to be contained in Environmental Impact Statements* (EPA 1995) and *Advice notes on Current Practice in the Preparation of Environmental Impact Statements* (EPA 1995)

A scoping document which was submitted to and agreed with Dublin Corporation, identified the following issues to be examined in the EIS

2.2 Scoping Document for Trinity Hall (as agreed with Dublin Corporation)

1. Introduction

- *Background and terms of reference*
- *Legislation*
- *Study team*
- *Determination of scope*
- *Consultation*
- *EIS format*
- *Difficulties encountered*
- *Handling of interactions between topics*
- *Quotation usage*
- *Acknowledgements*

2. Project Description

- *General proposed outline*
- *Demolition of buildings*
- *New buildings on site*
- *Phasing of the project*
- *Provision of services*
- *Construction plans*

3. Consideration of alternatives

- *Terms of reference*
- *Do nothing alternative*
- *Alternative locations, layouts and designs*
- *Consultation*

4. Human beings

- Demography of the area
  - The substantial increase in the 18-24 age group in the area may cause a change in the character of the local area, which is a mature residential suburb
- Impacts on the amenity of the surrounding area
  - The loss of a green wedge may result in a loss of amenity
- Employment generated by the development during construction and operation
  - The development is likely to create substantial employment of all types (construction, administration, security etc.) This is likely to be spread throughout the Dublin area.
- There also likely to be substantial extra spending in local shops the area
- Increase in traffic (vehicular, cycles and pedestrian) as a result of construction and occupancy of accommodation
- The impacts on local residents during demolition and construction
- Impacts from the large influx of "students" on the amenities of the area such as pubs, shops etc.
- Public transport
  - There may be a necessity to improve public transport to Trinity College due to a large increase in potential users

5. Flora and fauna

- Habitat evaluation
- Protected or important species
  - There are no statutory designations on this site
- Current trends on site
- Construction impacts
- Operational Impacts

6. Soils and water

- Surface and groundwater
  - There is likely to be a large requirement for water and subsequent effluent disposal due to the large site population. Due to hardsurfacing of areas which presently absorb water, there is likely to be an increased quantity of surface water to be disposed.
- There are no streams on site
- Interaction with flora and fauna
- The increase in surface water may cause significant impacts depending on the findings of the above section

7. Air Quality

- Atmospheric emissions
  - Emissions such as dust could arise at the construction phase, this could lead to adverse impacts on air quality
- Odours
  - As a result of the restaurant, self catering and laundrette, there may be a significant increase in odours in the surrounding area

8. Noise

- Noise during construction
  - This may be significant due to demolition of existing buildings and construction operations such as pile driving and general construction activities.
- Noise during use
  - The tenfold increase in population is likely to give rise to increased noise on the site. This will be especially so if events (social or sporting) are taking place as large amounts of young people will congregate in one place.

9. Climate

- Microclimatic effects
  - Change in local climatic factors such as wind and temperature as a result of new buildings.

10. Landscape

- Context of the site
  - The site is set in the mature residential suburb of Dartry. Adjacent to a local park and tennis club. There are only a few buildings on the site at present so the whole block forms a large "green wedge" in a area with medium density housing.
- The appearance of the proposed development
- The proposed development will occupy an area which is currently a green space which contains playing pitches. It also contains a significant amount of mature trees.
- Relationship between the proposed development and the existing landscape

11. Cultural heritage

- Archaeological heritage
  - Trinity Hall was once the site of Rathmines Castle therefore it has important historic associations
- Archaeological potential
  - There may be high potential for discoveries during excavations as the Rathmines / Rathfarnham area is rich in archaeology
- Architectural heritage of the buildings and gardens
  - Pursar House and Trinity Hall are List 2 buildings in the 1998 Draft City Development Plan. Any direct or indirect impact on these will need to be examined.
  - Impact on the context of Grenane House and Esterel House may need to be examined
  - As some of the buildings and gardens are over 100 years old there may be some features worthy of preservation in the proposed development

12. Material assets

- Traffic volumes
  - Construction traffic is likely to be quite significant. This is likely to create impacts on local roads especially if development takes place in one phase.
  - Extra traffic will be generated as a result of the proposal. Currently there are only 170 students on site so the proposal to increase this to

- *approximately 1100 will create significantly more traffic movements. It is likely that a large proportion of "students" will cycle and use public transport but there will still be a large number of cars accessing the site.*

- *There will be a large number of service vehicles making deliveries to shop, restaurant, laundrette etc.*
- *Parking of cars, bicycles and construction vehicles*
- *Impacts on services such as water supply, power, waste disposal and telecommunications.*
- *Volumes of waste to be disposed are likely to be significant as a result of the large population to be accommodated in the development.*

It should be noted that the scoping document is not prescriptive because issues may arise during the Environmental Impact Assessment process which are not considered to be of any significance and are therefore omitted, or new issues not identified in the scoping phase may emerge.

Chapter 3 – Alternatives Considered

3.1 Introduction

It is a requirement of the EIA Regulations that before looking at the impacts of any development on the environment an evaluation (in outline) of the main alternatives (if any) must take place, examining how various criteria including environmental considerations were taken into account in arriving at the selected proposal. This section describes the process in the case of this project. Each of principal options is described in terms of the main elements and the opportunities and constraints posed by each option. Figures 3.1 to 3.6 show the principal elements of each option in sketch format for illustrative purposes.

3.2 Demand for additional accommodation

Trinity College Dublin (TCD) currently caters for a population of approximately 12,000 students. 50 – 55% of this student population is from outside the Dublin area and therefore requires rented accommodation in the Dublin area. TCD currently provides a maximum of 1,000 student accommodation rooms (in TCD and Dartry) which shows that there is an obvious shortage of student accommodation. Present estimates for first year students alone indicate a demand in excess of supply by a factor of 3 for rented accommodation.

Recent market trends in the property market which have contributed to the shortage of student accommodation include the following :

- reduced availability of accommodation which is compliant with the regulations for private rented accommodation
- increase in property prices and rents
- TCD policy of encouraging student applications from rural areas, overseas and Northern Ireland
- Difficulties for students in obtaining 9 month leases for private accommodation in current market conditions

TCD envisages that the new development at Trinity Hall will assist in relieving the pressure of current and forecast demand for student residences. The development is in line with Higher Educational Authority policy which promotes such ventures by actively encouraging the funding of such through a series of initiatives within the Government Finance Bill 1999.

3.3 Options available to TCD

3.3.1 Do Nothing Scenario

This option involves no new developments on the site. It is likely that the site would continue to be used for student accommodation with the number of students accommodated on site remaining at approximately 180. The open space on site would continue to be used by residents of Trinity Hall for recreational activities. TCD would be unable to provide additional accommodation for students who would have to continue to seek private rented accommodation.

3.3.2 Alternative Locations

TCD owns a number of properties within its property portfolio, which were all examined in choosing Trinity Hall for the development. Suitable capacity does not exist on any site other than Trinity Hall for a development of this nature. The advantages of choosing Trinity Hall for this development include :

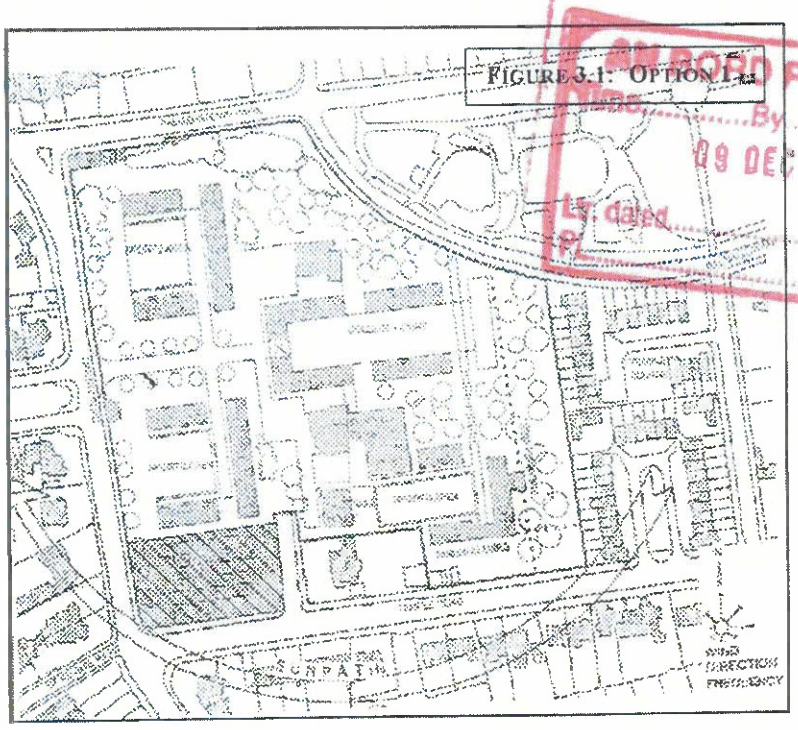
- it already houses significant student accommodation and has successfully operated in this manner for many years
- it provides students with accommodation within a reasonable walking and cycling of both the city centre and suburbs
- it is in close proximity to the proposed LUAS line which will provide frequent services to the city centre

3.4 Alternative Layouts

This section gives an outline of the main options considered for Trinity Hall redevelopment and the architects reasons why one option was deemed to be more advantageous over another. This section is not an exhaustive examination of all options, but presents a representative sample of the main options.

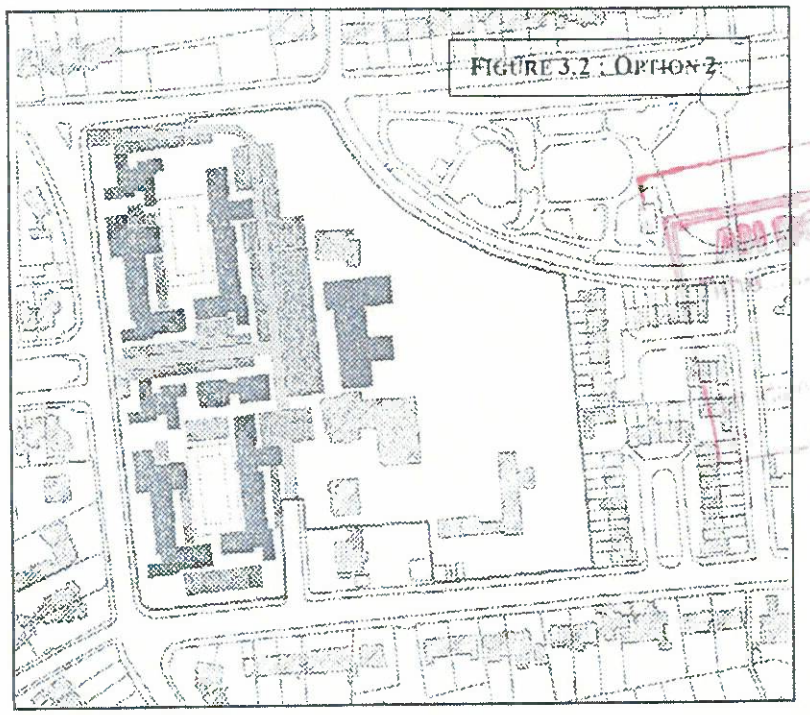
3.4.1 Option 1

Option 1 represents the scheme at the beginning of the project when the project brief to develop the site was circulated at the interview stage. At this point it was envisaged that Botany would be relocated to the south-west corner of the site thereby creating two open courts to the front of each main block, each of which could contain a tennis court. A new college court was to be created where Botany had previously been and the completion of a fourth courtyard at the corner of the student residential block at Cunningham House was also proposed. Environmental information such as information on mature trees, archaeology, topography and landscaping was limited at this stage and Option 1 only took cognisance of known site characteristics. (See figure 3.1)



3.4.2 Option 2

Option 2 followed from on from the evaluation of Option 1. In this scheme, the residential courtyards to the front were developed so as to enable three or more apartments to be serviced from a single core. This is a more economic and viable option with regard to the development potential and economics of the site. At this stage the suggestion of a main college plaza to the front of the existing listed buildings was looked at for the first time. In common with Option 1 the organisational accesses remained in place, with the new avenue picking up the accesses of Sunbury Gardens (opposite the proposed entrance) being retained as the key element of the development. Once again environmental information was limited at this stage of development. Option 2 was mainly concerned with achieving economies on the site and took little account of environmental considerations. (See figure 3.2)



3.4.3 Option 3

This option looked at the overall site as more environmental information became available. It retained Botany in its current location but looked at possibly redeveloping it along with the overall redevelopment of Cunningham House. At this stage adequate tree survey information had been obtained and the location of mature trees impacted on design of the scheme. The scheme developed into four courtyards of smaller scales to the front of the site which were generated by a more accurate building footprint in keeping with the scale of apartments required by TCD. Once again the former college court to the front of the listed buildings had been retained, along with the access of Sunbury Gardens. At this point a number of trees were shown to be removed and the main gatelodge was to be located to the south of the avenue. (See figure 3.3)

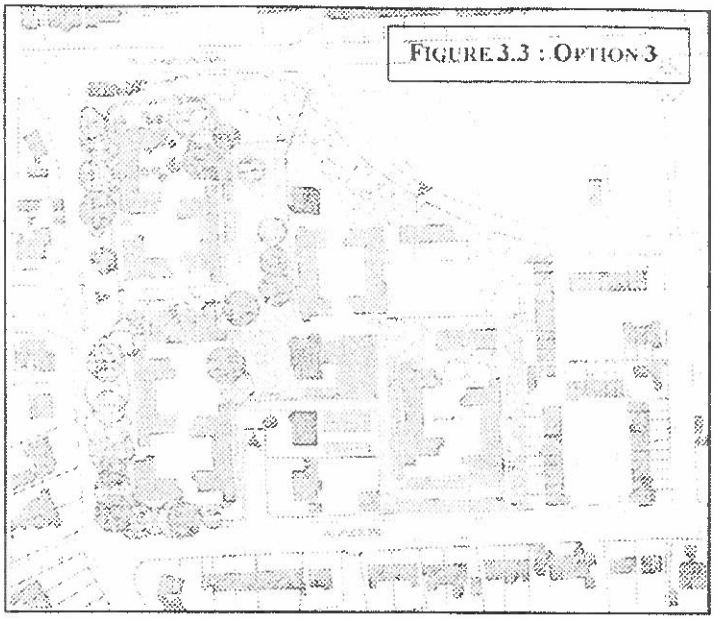


FIGURE 3.3 : OPTION 3

3.4.4 Option 4

This was a further development of Option 3 where a cruicaform block was used as an entrance. The avenue of trees along the main entrance which was considered for removal as part of Option 3 were now retained. However, the nature of the courtyard spaces in this scheme was deemed to be less than successful and the context of the listed buildings was poorly addressed by this option. At this stage, the approximate location of the site of Rathmines Castle was known to be in the north-west corner of the site and the modified design ensured that this area would not be developed for buildings. (See figure 3.4)

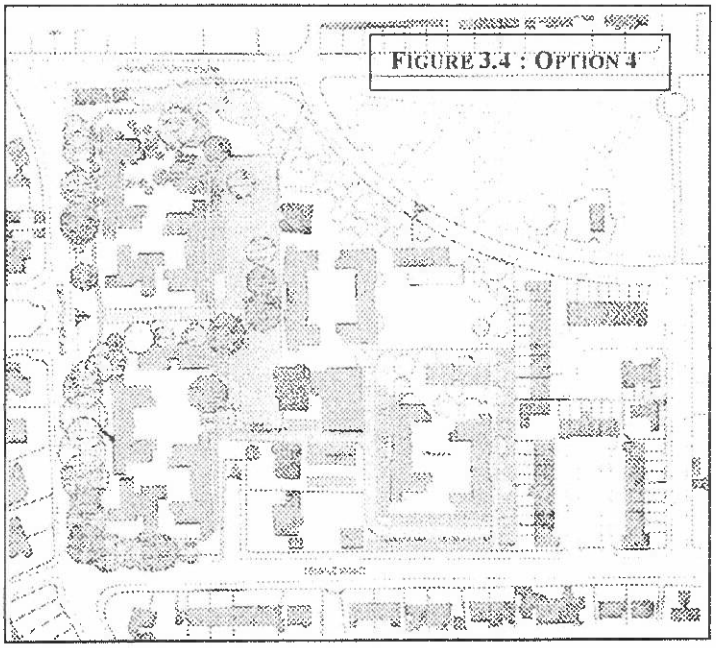


FIGURE 3.4 : OPTION 4

3.4.5 Option 5

In Option 5 the disposition of the buildings was reviewed. The entrance building located behind the main avenue of trees was removed in this option. At this point the

issue of surface water retention on the site was addressed and a water feature along the avenue was introduced. The main avenue building was examined in more detail with a view to creating a central pavilion flanked by the two listed buildings and using this pavilion as a central reception / facilities area on the ground floor with large twin rooms and mixed apartments above. Two further pavilions (buildings 9 and 10) were introduced along the side of Palmerston Park. The scheme was organised along the main entrance avenue which arrives into a civic / front square space. Four courtyards were created to the front of the scheme, two of which are enclosed by buildings and two of which are edged between landscaping and buildings. This option took account of environmental sensitivities, as detailed information on most environmental topics was available to the designers at this stage. (See figure 3.5)

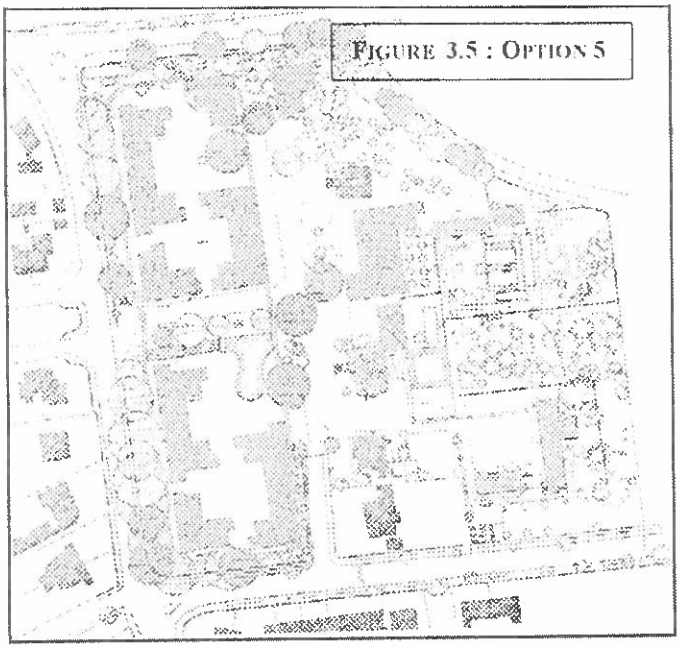


FIGURE 3.5 : OPTION 5

3.4.6 Option 6

This option is a further development on Option 5. This option is the preferred option and is the one being proposed by the designers. It is the option which best addresses environmental sensitivities as full account has been taken of the detailed environmental information which was available especially in relation to the mature trees. This option pulls the buildings back from the mature trees on Dartry Road and also gives greater space to the main civic space, it provides a better environmental and architectural context for the listed buildings. Building nine has been amalgamated with what was formerly Building two in previous options. Building ten has been slightly rotated to give a better architectural context to Grenane House. Three trees adjacent to building nine which are deemed to be in poor condition will be removed by this option, which allows the building to rotate therefore creating a better courtyard. This option allows for a crescent shaped access from Dartry Road opposite the junction with Sunbury Gardens. The avenue of trees in Sunbury Gardens is continued along the Trinity Hall entrance avenue and is seen as creating a strong urban space leading through into the main complex. (See figure 3.6)

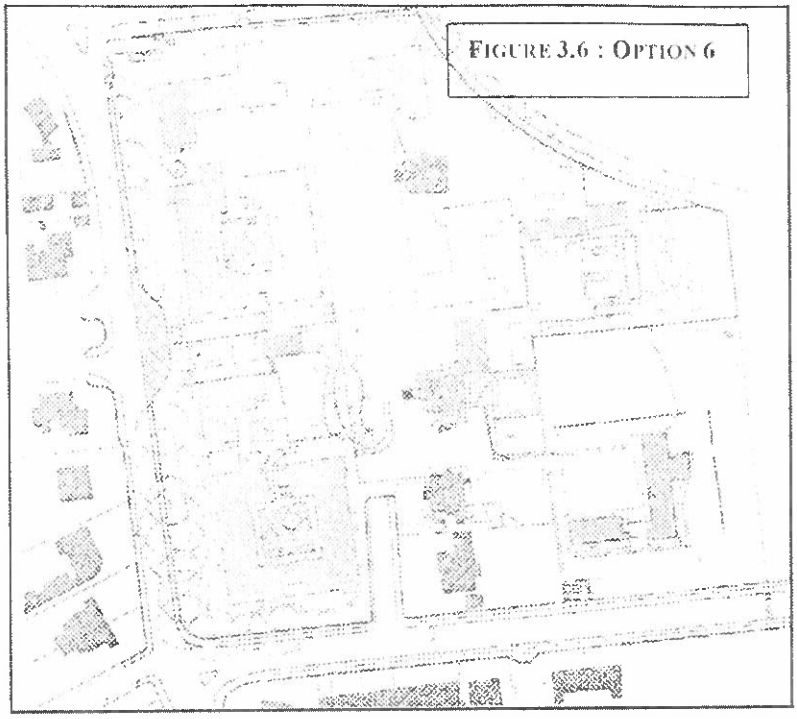


FIGURE 3.6 : OPTION 6

3.5 Conclusion

Option 6, which is the option selected, has been chosen as the option which provides the required number of accommodation units within the project budget. Modifications have been made to Option 6 as the design developed but the basic layout is as shown in the indicative drawing. The design takes full account of environmental sensitivities. While significant environmental impacts do occur with this option, the mitigation measures proposed ensure that the impacts are minimised.

Chapter 4 – Project Description

4.1 Introduction

This chapter provides a comprehensive description of the existing site layout, the proposed site layout (in terms of demolition of buildings, refurbishment and renovation of existing buildings and construction of new buildings). It also describes the approximate quantities of materials and natural resources which will be used during construction and the quantities of waste materials, which will require disposal. Finally, an indication of the likely duration of construction activities is provided. In addition to this general project description, each chapter provides a project description based on the environmental topic considered in that particular chapter.

4.2 Existing Site Layout

Trinity Hall is a 4.27 hectare site in the predominately residential suburb of Dartry, Rathgar. Temple Road, Dartry Road and Palmerstown Park bound the site on three sides and Rathgar and Rathmines Village Centres are less than 1 km away. (See figure 4.1). The area is generally zoned residential in the Dublin City Draft Development Plan 1998 while the site itself is zoned institutional.

The lands have been in the ownership of Trinity College Dublin since 1896 and were opened as Halls of Residence in 1908, they are currently still in use for this purpose.

Trinity Hall currently caters for a population of approximately 180 students with rooms distributed through Cunningham House, Trinity Hall, Purser House, Greenane House and the link block between Trinity Hall and Purser House. There are dining facilities provided in a glass extension to the sports hall with servery and kitchens at the lower ground level of Trinity Hall.

There are ten distinct buildings which occupy the Trinity Hall site, which comprise:-

- two single storey gate lodges, laid out as private residences
- Purser House - a 3 storey late 19th Century house used as student residences and listed in List 2 of the Draft Development Plan 1998
- Trinity Hall - a three storey late 19th century house used as kitchens, offices and student residences, also listed in List 2 of the Draft Development Plan 1998
- Trinity Hall extension - a 3 storey turn of the century annexe, used as student residences
- Greenane House- a three storey late 19th century house used as student residences
- an early 20th century link building between Purser House and Trinity Hall, used as student residences
- An early 20th century 3 storey link building between Purser House and Trinity Hall, used as student residences
- a modern 2 storey sports hall, used as a recreational facility
- Cunningham House, a modern 3 storey L shaped building, used for student residences
- A single storey building to the north-east, currently housing the Botanics Department

SCALE 1:50,000

FIGURE 4.1:
SITE LOCATION MAP

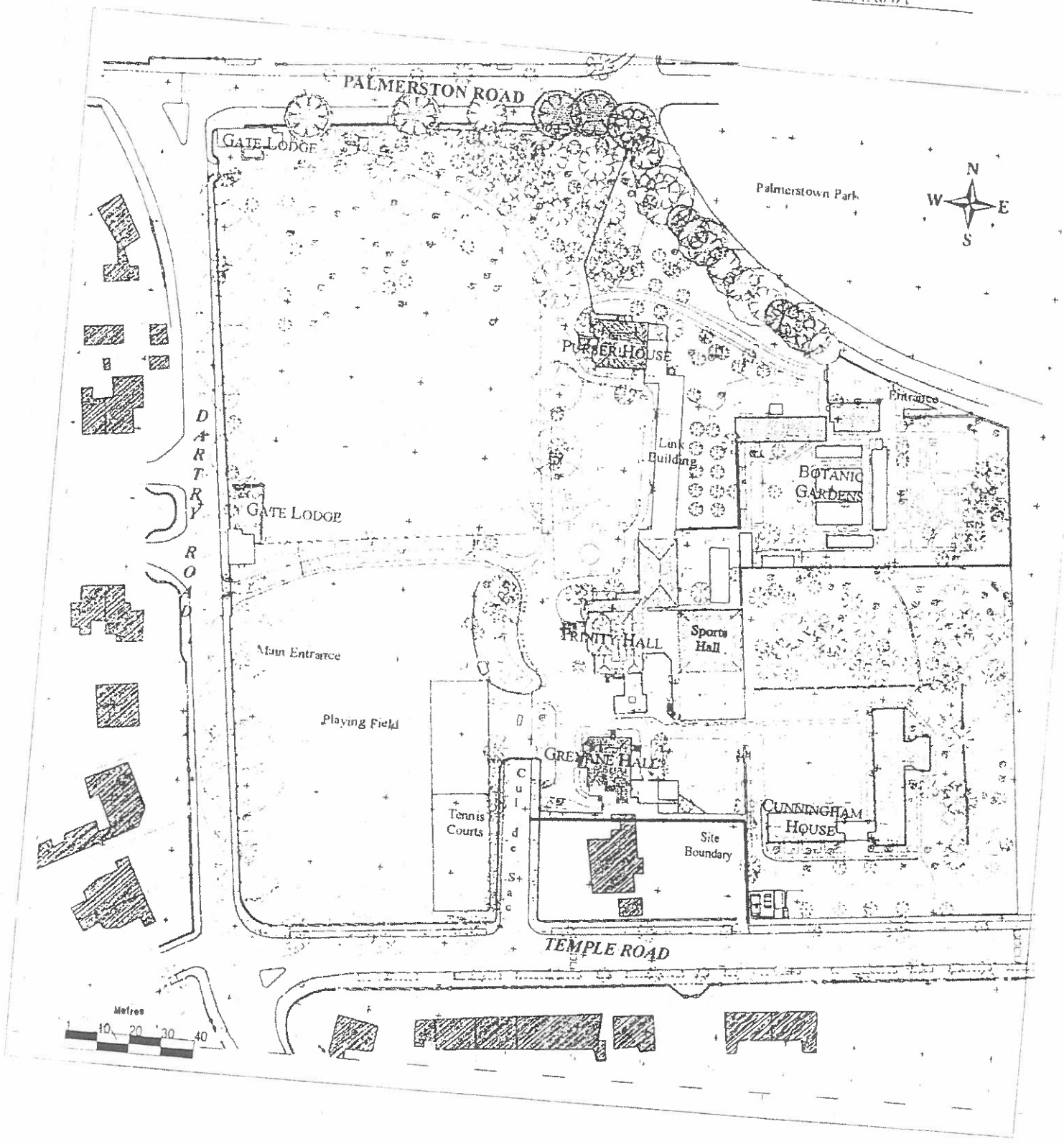


FIGURE 4.2 :
SITE LAYOUT - EXISTING

In addition to the buildings in Trinity Hall, there is a large amount of open space throughout the site. This open space is used for active recreational purposes such as tennis and football, however, it is also used for passive recreational activities. The existing site coverage of buildings is 9% over the total site, with a plot ratio of 0.184 As can be seen by the above figures the current density of development is very low on this site (See figure 4.2)

4.3 Proposed Site Layout.

It is proposed to redevelop 2.67 hectares of the 4.27 hectare site in order to provide new student residences. The redevelopment comprises approximately 25,100 square metres distributed over 10 buildings and it includes the refurbishment of Trinity Hall which is a listed building. In addition, it involves the removal of two existing buildings; a small gate lodge and a 3 storey 20th Century link building between Purser House and Trinity Hall.

The new complex of buildings will provide accommodation for 1085 people, an increase of 905 people. The new accommodation will be provided by demolition of the link building and constructing 1003 new bedspaces in 905 bedrooms. The bedrooms will be arranged in a combination of twin, single, disabled and staffrooms distributed over 180 apartments with each room sharing common living, dining, and kitchen areas within apartments.

Support facilities will also be provided as part of the redevelopment plan. These facilities include a laundrette, linen stores, workshops, reception areas and a student shop.

These facilities are located in a central block and will operate specifically to serve the on-site community. The refurbishment of Trinity Hall will provide new dining facilities and common areas capable of accommodating up to 400 diners.

The proposed site layout (See figure 4.3) shows all new developments on the site. Details of the proposed demolition, refurbishment of existing buildings and new buildings on the redeveloped site are as follows:

Buildings to be demolished:-

- *Link Block* (between Trinity Hall and Purser House)

This is an early 20th Century building of little architectural merit which is currently used for student rooms

- *West Lodge*

This is a single storey gate lodge which will be demolished to facilitate an upgraded road entrance and avenue

- *Lobby of Sports Hall*

This is currently used as makeshift dining facilities. New dining facilities will be provided in the refurbished Trinity Hall.

Buildings to be refurbished:-

- *Trinity Hall* (Listed Building)

This is shown as Building 8 in figure 4.3. The annexe to the main building will be completely refurbished internally to provide dining facilities for up to 400 diners and associated kitchen facilities. A new atrium will be constructed to the rear of this building.

New Buildings:-

- *Building 1*

Located in the centre of the site, this building will be 4 storeys over ground level. It will contain 102 bedspaces covering an area of approximately 2,350 sq. m. Central facilities serving the development including a laundry, linen store, mini-market, reception and housekeeping areas will be provided at ground floor level, these will cover an area of approximately 628 sq. m.

- *Building 2*

Located in the north-west corner of the site this 4 storey building covers an area of approximately 1,518 sq. m. and will provide 66 bedspaces.

- *Building 3*

Located in the west of the site. This will be a 4 and 5 storey building covering an area of approximately 3,497 sq. m. and will provide 158 bedspaces.

- *Building 4*

Located in the west of the site, this will be a 5 storey building covering an area of approximately 3,551 sq. m. and will provide 166 bedspaces.

- *Building 5*

Located in the west of the site, this will be a 5 storey building covering an area of approximately 1,868 sq. m. and will provide 83 bedspaces.

- *Building 6*

Located in the south-west corner of the site, this will be a 4 and 5 storey building covering an area of approximately 3,132 sq. m. and will provide 147 bedspaces.

- *Building 7*

Located in the south-west corner of the site, this will be a 3, 4 and 5 storey building covering an area of approximately 3,304 sq. m. and will provide 150 bedspaces.

- *Building 8*

Located in the centre of the site, this is the refurbished Trinity Hall providing dining facilities for up to 400 diners and other facilities.

- *Building 9*

Located in the north-west corner of the site this will be a split level 4 storey building covering an area of approximately 1,476 sq. m. and will provide 66 bedspaces.

- *Building 10*

Located in the north of the site, this will be a split level 4 storey building covering an area of approximately 1,477 sq m and will provide 66 bedspaces

The total number of new bedspaces to be provided is 1003 covering a total area of approximately 21,182 sq m, including ancillary areas such as kitchens and circulation spaces

Associated new ancillary works necessary to facilitate the development include a new square designed for vehicular and pedestrian use, hard and soft landscaped courtyards, new water features; 150 car parking spaces and other landscaping and installations intrinsic to the development A high level of open space will remain in the redeveloped Trinity Hall. The proposed site coverage of buildings will be 23% over the total site with a plot ratio of 0.742. The site coverage and plot ratios are well within the limits recommended for the area in the Dublin City Draft Development Plan 1998.

4.4 Construction and Waste Materials

The development at Trinity will require, inter alia, the construction of a series of nine buildings.

To reach the operational stage of the development, the following works will be carried out:

- Site clearance including excavation of subsoil to required levels
- Demolition of existing link building, gatelodge and entrance
- Trenching for underground services including foul sewer, surface water drains, watermains, gas, telecommunications, electricity and lighting.
- Connection of proposed underground services to existing underground services.
- Construction of buildings
- Construction of roads, footpaths and paved areas.
- Erection of boundary fencing, signage and lighting.

The principal material quantities associated with the construction period will be :

MATERIAL	QUANTITY
Demolition Rubble	1,200 cu m
Excavation - spoil	20,000 cu m
Concrete	9,000 cu m
Structural Steel	1,250 tonnes
Blocks and Bricks	5,000 cu m

Other materials will include windows, doors, lifts, sanitary fittings and services.

4.5 Construction Period

The overall construction period projected for the project is 20 - 30 months, from site clearance to final fitting out of buildings. It is estimated that site clearance will take about 10 weeks to complete with other activities taking up to 17 / 18 months.

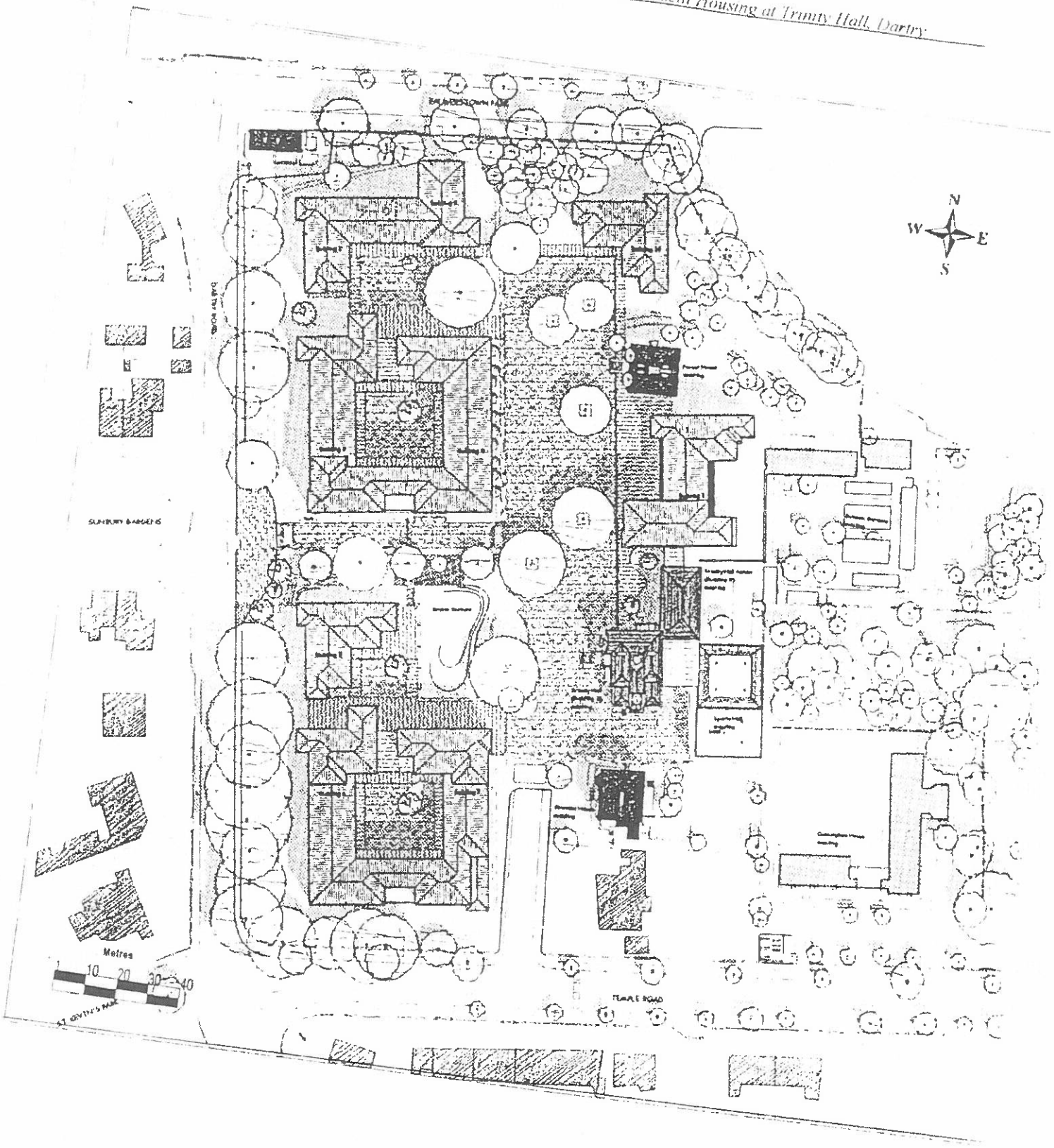


Figure 4.3 :
Site Layout - Proposed

Chapter 5 – Human Beings

5.1 Introduction

This section considers the significant effects of the proposed development, both during construction and operation, on human beings in terms of socio-economic aspects which include; population change and economic activity, employment generated by the development and the impacts on services and amenities in the area

The impact on human beings arising from the construction and occupation of accommodation, associated traffic and pedestrian movement in terms of noise, air quality and visual impact is dealt with in other sections of the EIS. The impacts on human beings considered here relate to socio-economic impacts due to construction work and the continuing existence of the development.

5.2 Proposed Development

While the total site of Trinity Hall is 4.27 hectares, the proposed development will cover an area of approximately 2.67 hectares and it comprises of the provision of residential student accommodation totalling 1085 bedspaces. There is currently a site population of 180. Approximately 98 of these will be removed when demolition of existing buildings takes place and 1003 new bedspaces will be provided in the redevelopment.

5.3 The Existing Environment

5.3.1 Planning and Development Context

The site is situated off Dartry Road in the south suburbs of Dublin City, it is in the administrative area of Dublin Corporation but is adjacent to the administrative boundary with Dun Laoghaire/ Rathdown County Council.

Trinity Hall is a 4.27 hectare site in the well established residential suburb of Dartry in a block surrounded by Dartry Road, Temple Road and Palmerstown Park. Rathgar Village is located 800 metres from the site while Rathmines Village, which is the district centre for the area, is located 1 km to the north of Trinity Hall. Trinity College Dublin, where students living in the student apartments will be attending college, is located in the city centre which is 3.5 km from the site.

The Rathgar / Dartry area is generally zoned residential in both the Dublin City Development Plan 1991 (The Current Development Plan) and the Dublin City Draft Development Plan 1998, the Draft Development Plan is expected to be adopted in 1999. The subject site is generally zoned A3 – *To ensure that existing environmental amenities are protected in redevelopment for residential areas* – in the 1991 Development Plan.

5.3.2 Population

Receiving Environment

In terms of County, Region and State, population is strongly influenced by migration and emigration rates rather that birth and death rates. The mid to late 1980's was a period of heavy population outflow, mainly due to the poor economic and employment situation in Ireland. Population statistics indicate that there has been a

large movement of people into the country due to the current economic boom in Ireland.

Like the state as a whole, Dublin City and County have both experienced considerable population growth, especially in the 1960's and 70's. This growth gave rise to considerable pressure for residential development in both City and County suburbs. From 1961 to 1981, population growth in the City and County was over 39%. This growth declined substantially, mainly as a result of immigration and declining birth rates, to 1.8% between 1981 and 1986. This growth again declined between 1986 and 1991 to 0.4%. The 1996 census shows that population growth in the City and County has increased to 3.1% between 1991 and 1996. It is likely that population growth in Dublin City and County has increased substantially since the 1996 Census was published.

Dublin County Borough South, the area within which the site is located, experienced a significant decline in the period 1981 to 1986, falling by 9.5%. The population continued to decline, by 2.8% between 1986 to 1991, while it increased by 2.7% between 1991 to 1996. These population changes should be seen in the context of substantial increases in the populations of Dun Laoghaire – Rathdown, South Dublin and Fingal during each census period 1981 to 1996.

Population - Wards / DEDs

Population data for the Census Wards / DEDs close to the subject site has been analysed to give an indication of the demographic profile of the area from 1991 to 1996. (See Table 5.1) The site of the proposed development is in the Census Ward of Rathfarnham.

Ward / DED	1991 Census	1996 Census	% Change
Rathfarnham	**4,291**	**4,520**	**5.3**
Rathmines East B	4,273	4,510	5.5
Rathmines East C	3,605	3,571	-1.0
Rathmines West C	2,719	2,686	-1.1
Clonskeagh / Milltown	1,158	1,808	56.1
Clonskeagh / Farranboley	1,750	1,638	-6.3
TOTAL	**17,796**	**18,773**	**5.3**

Table 5.1 Population Change in Wards / DEDs in the vicinity of the site

The overall population of the Wards / DEDs in the vicinity of the site has increased from 17,796 persons in 1991 to 18,773 in 1996, which is an increase of 5.3% over the five year period. Analysis of the total of these areas over the period shows that the trends in population changes between 1991 and 1996 are similar but slightly higher than those in the State, City and County during that period. The individual Wards and DEDs have experienced considerable variation, ranging from an increase of 56% in Clonskeagh / Milltown to a decrease of 6.3% in Clonskeagh / Farranboley. Rathfarnham DED, where the subject site is located has experienced steady but unspectacular population growth in the period 1991 to 1996. It is likely that moderate population growth in the DED has taken place since 1996 due to development of new infill schemes in the area.

The level of population growth in the area can be attributed to the popularity of the area as a residential location, which has been the case for many years. The proposed LUAS line, which will serve the area, and strategies for sustainable development of the city are likely to further increase the popularity of the area for residential development.

Age Profile

Table 5.2 below shows the existing age profile for the State, Dublin City, Dublin City and County, Rathfarnham DED and the wards in the vicinity of the site mentioned in Table 5.1.

Area	Age Groups as a % of the Overall Population 1996				
	0 – 14	15 – 24	25 – 44	45 – 64	65 +
State	23.7	17.5	27.7	19.4	11.4
Dublin City	18.3	19.1	30.3	19.2	13.1
Dublin City & Co	22.0	18.6	30.3	19.1	9.9
Rathfarnham DED	**15.5**	**19.3**	**32.3**	**19.0**	**13.9**
Other Wards (Average)	11.4	19.5	26.3	14.1	9.1

Table 5.2 Age Profile of Popualtion

In 1996 the age profile in Rathfarnham DED differed only slightly from the State and Dublin City and County trends as can be seen in Table 5.2 above.

- The percentage of under 15's in the DED is below that of the City and County while it is slightly above the figure for other Wards in the vicinity of the site.

- The percentage of 15 – 24 year olds in the DED is similar to national and City and County figures while for 25 – 44 year olds the percentages are slightly above other figures. This is probably indicative of the area containing a substantial number of new apartments and flats which are occupied by that age group.

- The percentage of 45 – 64 year olds is similar to that of the State and the City and County while it is slightly above that of the wards in the vicinity. The percentage of 65 + year olds in the DED is higher than other areas, this is indicative of Rathfarnham being a mature Dublin suburb where many families having grown up and only the parents remaining in the family home.

- The present on-site population is approximately 180 people during term time and 70 during the summer. Six staff are currently employed in Trinity Hall.

5.3.3 Services and other facilities

The types of services available in the immediate area are typical of those available in most city suburbs. There are a small number of local shops and other facilities serving the local area close to the site. Any other facilities and services can be found in Rathmines Village or Dublin City.

Rathgar Village is located 800 metres from Trinity Hall. The village while small has most facilities which would be expected including shops, banks, pubs, restaurants,

churches and schools. It is easily accessible to Trinity hall, being within a ten minute walk or a five minute cycle.

Rathmines Town Centre is located within 1 km of Trinity Hall, the town centre is substantially bigger than Rathgar. It contains a shopping centre with a number of supermarkets and other shops. Other facilities including a cinema, banks, restaurants, schools, churches, pubs, doctors etc. are all located in Rathmines. For many years Rathmines has been an area with a large student population and it is likely that this will continue to be the case in future years.

Dublin City is located approximately 3.5 km from Trinity Hall. All students living in Trinity Hall will be attending Trinity College Dublin in the city centre and as a result are likely to spend most of their day in the city centre. Any facilities and services not available locally are available in Dublin City.

5.3.4 Amenities in the Area

There are a wide variety of amenities and social facilities in the Rathgar / Rathmines area. These include two tennis clubs in Dartry and Rathgar, a squash and fitness centre on Orwell Road, a local river walk beside the River Dodder, Bushy Park in Terenure and Palmerstown Park to the rear of the site. Other sporting and social facilities are available and easily accessible in Dublin City and County.

Trinity Hall is presently used for some sporting activities, there is a sports hall and football pitch on the site. Generally only students resident in Trinity Hall use these facilities as the main sports grounds for Trinity College are located in the college itself and in Santry, 7 km north of Dublin City, they are not open for use by the general public.

5.3.5 Transport

Chapter 12 – Traffic and Transportation, provides a comprehensive analysis of traffic and transport patterns resulting from the proposed scheme. The proposed development has good access to public transport into the city centre with a number of bus routes passing close to the site and the proposed LUAS located within 300 metres of the site. It is also quite feasible to cycle and walk to Trinity College from Trinity Hall.

5.4 Impacts from the Proposed Development

5.4.1 Population

As a result of the proposed development there is likely to be a large increase in population of Rathfarnham DED (approximately 900 people) with the majority of the increase occurring in the 15 – 24 year old age group. This increase is unlikely to create any major changes in the demographic structure of the area, after the initial population increase. Continued population increase will not occur in the area as residents of Trinity Hall will not be starting families. The population of the site will fall substantially in summer to approximately 380 as the college academic year runs from October to June.

The proposed development is compatible with the residential policies and objectives of Dublin Corporation outlined in the Development Plan 1991 and the Draft

Development Plan 1998 and the current Central Government strategy for achieving sustainable development by encouraging intensive use of residential lands in the vicinity of public transport corridors. The proximity of the development to the proposed LUAS line, which will provide easy access to the city centre and beyond, will help to consolidate the use of this important transport corridor and is a good example of sustainable urban development.

5.4.2 Employment

Construction Employment

While under construction the development is likely to give rise to approximately 300 direct jobs at peak times, it is likely that this figure will fluctuate from time to time when different aspects of the development are being constructed Due to a multiplier effect, additional jobs will be created during construction, it is not possible at this stage to estimate how many jobs will be created as a result of the multiplier effect but it is likely to be substantial. Construction workers are likely to spend money in local shops which will provide an economic injection to the local economy. Construction of the development will be put out for tender so it is not possible to identify at this stage where the main economic impacts will occur. It is likely however that construction workers will be recruited from throughout the Dublin Area and beyond

Operational Employment

When the proposed development is fully operational and occupied to capacity it is likely to provide up to 14 full time equivalent jobs ranging including cleaning, security, maintenance and management staff. Some of these jobs may be seasonal, depending on occupancy rates at particular times.

5.4.3 Services and other facilities

The general area is well served with served with shopping and other services. The close proximity to Rathmines, Rathgar and Dublin City will ensure that the impacts on shopping and other services are spread widely throughout the area.

There will be an injection of extra income into the local area when the development is fully operational. The economic impact on local shops and other services from the population increase is likely be considerable with local convenience shops and pubs likely to benefit most. A mini-supermarket, laundrette and other common facilities are being provided in a central services block. A canteen is also being provided as part of the scheme while cooking and eating facilities are also being provided for each apartment.

There will be no impacts on local schools as the students living in Trinity Hall will generally not have children. Nearly all students living in Trinity Hall will be attending Trinity College Dublin, in the city centre.

5.4.4 Amenities

The impact on local amenities and sporting facilities is likely to be limited as many of the students who will be accommodated in Trinity Hall are likely to be involved with sports clubs based in the college and are not therefore likely to be using sports and amenity facilities in the Dartry Area. The football pitch and open space to the front of Trinity Hall will be lost when the development is constructed, but a high ratio of open space will be maintained within the completed development, high quality landscaping

will also be incorporated into the development. Limited sports facilities will remain in Trinity Hall, including the existing sports hall and squash courts which will be available for use by residents of the complex

5.4.5 Transport

There is likely to be a moderate impact on transport patterns in the area, this is examined in detail in Chapter 12 – Traffic and Transportation. It is likely that the majority of students will either walk, cycle or use public transport to get to Trinity College. Buses serving the area are likely to become more crowded at peak times as a result of the increase in numbers using them however, student travel departure and arrival times during term are varied depending on lecture times and evening college activity. Generally the flow of student traffic will be spread over several hours in both the morning and evening and should not generate significant peak flows. The proposed LUAS line is projected to be operational by the year 2001 but for the purpose of this EIS, it has been assumed that LUAS will not become operational until a later date, as it is currently running behind schedule. When open it is likely to be used by students travelling to the city centre and should ensure that local bus services do not become too crowded at peak times as a result of the proposed development.

5.4.6 Health and Safety

During construction there may be concerns in relation to health and safety of local residents due to movements of construction traffic to and from the site. It is not possible to state exactly what the site arrangements will be until the contractor is appointed following the tender process however, site operations will comply with all national health and safety standards for construction sites. It is however anticipated that a new site access will be constructed off Dartry Road adjacent to the existing site entrance which will be used by all construction traffic. A temporary access road for non-construction traffic will be provided from a short spur off the existing gateway on Temple Road. Separating construction from other traffic ensures greater traffic safety in the vicinity of the site. Parking for construction staff will be provided on site so there will be no disruption to local residents as a result. A mechanical road sweeper, a wheel wash facility and watering down during dry periods will help ensure that dust and other materials from the site does not cause a nuisance to local residents. Section 12 Traffic and Transport, examines construction traffic in detail.

5.5 Mitigation Measures

No significant adverse environmental impacts have been identified which will impact upon human beings, therefore no specific mitigation measures are required in this section.

Chapter 6 – Flora and Fauna

6.1 Introduction

Trinity Hall is an urban parkland site with large buildings set amongst open lawns and trees which were partly planted as an Arboretum for the adjacent University Botanic Gardens. There are therefore, no wild habitats and the flora and fauna which are present consist of species which were planted or those which can invade by themselves and co-exist with people.

The site was visited in February 1999 while some older information has been included from previous years' knowledge of it. Dr. Steve Waldren (Head of Trinity Hall Botanic Gardens) was consulted for some of the faunal details about areas of the Trinity Hall site. A comprehensive inventory of the trees in the north west corner of the site is available in Appendix 6.

6.2 The Proposed Development

The development includes the construction of a number of accommodation blocks on the site with appropriate paving and landscape treatment. A pond will also be constructed. It is intended to transplant some of the trees within the grounds and to move others to the Trinity College Dublin property at Santry.

6.3 The Existing Environment

6.3.1 Designations

There are no special ecological designations applying to land or species on the site although the adjacent Botanic Garden has a number of plants protected by national legislation and international treaties.

6.3.2 Habitats and Vegetation

Two main habitats occur, the open lawns, formerly used as games pitches and the tree belts and parkland which surround them.

6.3.2.1 Grassland

The lawns are typically of bent grass *Agrostis* species, crested dogstail *Cynosurus cristatus* and ryegrass *Lolium perenne* with some patches of red fescue *Festuca rubra*. Broad-leaved plants are infrequent though the typical lawn species of white clover *Trifolium repens*, catsear *Hypochaeris radicata*, daisy *Bellis perennis* and dandelion *Taraxacum officinale* do occur. The community is not species-rich as it has been managed to maintain an intact and vigorous turf, first for sporting use and latterly for general amenity. Beside the tennis courts there is a little rougher grassland in which cocksfoot *Dactylis glomerata*, false oat *Arrhenatherum elatius* and scutch *Elymus repens* play a part.

6.3.2.2 Woodland belts

Well grown trees surround most of the periphery of the site, extending up the avenue from Dartry Road and in front of the existing main block. In addition there is a varied parkland of trees at the northern end along Palmerstown Park and this links into a shrub and tree border along the crescent of the Park itself towards the Botanic Garden buildings

Tree health is generally good and there are large individual tree stands of beech, horse chestnut, sycamore, lime and oak as well as a few pines and other conifers. The parkland at the northern end is much more varied with young trees from many parts of the world, for example Eucalyptus and Metasequoia, growing together with shrubs - Corylus, Crataegus and Cornus. They are mostly spaced out though the canopies although some are now beginning to touch.

Beneath the trees there are a few garden and hedgerow species such as celandine *Ranunculus ficaria*, wood avens *Geum urbanum*, speedwell *Veronica hederifolia*, chickweed *Stellaria media* and goosegrass *Galium aparine*. There are also some naturalised bluebells, crocuses and snowdrops. However there is also much bare or almost bare ground created by the shade, dead leaves and the general regime of tidiness and mowing

6.3.2.3 Adjacent habitats

The eastern part of the site consists of the flower beds, planted borders and tree groups behind and partly enclosed by the existing buildings. The herbaceous flora is more varied here involving native and non-native plants and there are garden collections of certain families. There is also a group of greenhouses, most of which are heated.

Palmerstown Park is unusual for a city park in having groups of fully grown pine and other trees with some undergrowth, it has however been established for a long time.

6.3.3 Fauna

The vertebrate fauna which occurs on this site is shared by Trinity Hall and Palmerstown Park and is clearly richer than it would be in each site if isolated. Thus the fox probably uses both these habitats as well as the local housing estates for feeding, it has a secure breeding place in the Botanic Gardens. Other mammal species include hedgehog, brown rat, house mouse and there could be a few pygmy shrew and bats although they are not regularly seen.

The bird fauna is richer than expected with many if not most of the garden species occurring. The population of tits was especially notable on both visits with a large flock of long-tailed tit associated with the younger, parkland trees at the northern end. All other species of tit occur, along with all thrushes (including fieldfare and redwing), robin, dunnock, wren, goldcrest, chaffinch and bullfinch. Treecreepers were not seen but are likely to occur, as are redpolls and siskin, outside the breeding season. The blackcap occurs in winter with chiffchaff and willow warbler at times in the spring and autumn. Of the larger species hooded crow, jackdaw, magpie, woodpigeon and sparrowhawk are regular visitors and all except the first nest on site. Black-headed gulls are sometimes seen on the grassland areas.

6.3.4 Evaluation

There are few native species in the flora apart from those planted to form the overall structure of the gardens.

The chief values of the site are its collection of non-native trees and the birdlife that this planting supports. Both are unusually rich and many of the tree species are not widely grown. There is a bias toward 'teaching' trees, species that provide examples

for practical teaching work and the current size of the trees make them particularly useful for collecting class material. Several are only now reaching reproductive age and beginning to flower.

The vertebrate fauna is primarily of large-garden species that occur in most of the older suburbs but the variety and numbers are augmented by the area of habitat on this site and in the adjacent Palmerstown Park. The presence of sparrowhawk is ascribed to this

6.4 Impact of the Development

Development proposals will cause changes in the ecology of the site with the replacement of garden areas by buildings and paving. The mass of young trees at the northern edge will be broken up and this will lead to a decline in their importance for passerine birds. The lawns also will be divided by buildings so that other birds requiring a certain area of open space will be discouraged. Such impacts will be locally significant but are unlikely to lead to the disappearance of species from the Palmerstown Park area.

The loss of some specimen trees will devalue the collection on site and reduce its usefulness for teaching. Many trees and shrubs grow best in a woodland setting and suffer from wind and temperature effects beside buildings. Moving half-grown trees to another site is also of dubious value as their survival and future growth is often compromised. The scale of this impact may appear small in local terms but is likely to be more significant to research and teaching work.

6.5 Mitigation Measures

Provision will be made to transplant as many individual trees as possible to suitable new positions within the development area and to replace those that cannot be moved on another site.

Landscaping will be designed so as to maximise its usefulness to birdlife for food and nesting cover. The pond will be given a natural treatment at the edges which will attract some invertebrates at present absent for the site. This will have the added benefit of concealing its fluctuating nature.

Chapter 7 – Soils

7.1 Introduction

This section considers the impacts on soils resulting from the proposed development Substantial areas which were previously open space will be paved and covered with buildings with resultant impacts

7.2 Proposed Development

The buildings and the proposed pavings will obliterate the existing soil profile over the majority of the western portion of the site – except where provision has been made to retain existing trees.

7.3 Existing Environment

The existing soils have been examined by site inspection, trial trenching and boreholes[1].

The soils are typical of the general region being derived from a glacial parent material which comprises boulder clay with drifts of sandy gravel material at varies depths.

A number of the borehole logs in the development site (boreholes 2, 4, 5, 9 and 17) exhibit some evidence of previous disturbance ('fill' being recorded in depths of between 0.3m & 0.7m).

Weathered rock was reported from a number of boreholes at relatively consistent depths of between 5.5m and 7.5m. below the surface.

Groundwater levels varied across the site though it should be noted that both borehole 7 and borehole 8 on the southern boundary of the site encountered water strikes between 1 and 2 metres below the surface.

7.4 Impacts on Soils

The loss of a large area of relatively undisturbed soil is an adverse localised impact in the relatively urbanised context. The only consequences of the loss are the depletion of the non renewable soil resource (which is very minor) and the loss of localised soil assimilative capacity for both hydraulic infiltration and the nitrogen cycle.

7.5 Mitigation Measures

The soil under and immediately adjacent to the canopy spread of mature trees will be preserved and protected from compaction and adverse disturbance during and after the construction period.

Surface water from the proposed development shall be intercepted and retained on site for controlled release to the adjacent surface water disposal network.

[1] A detailed site investigation report – for site engineering purposes has been prepared by Site Investigations Limited.

Chapter 8 – Water

8.1 Introduction

This section assesses the likely significant impacts of the proposed development on hydrology

8.2 The Proposed Development

Of a total Trinity Hall site area of 4.27 hectares, approximately 0.34 hectares are occupied by existing buildings and paved areas giving a site coverage of 8%, with a plot ratio of 0.184. It is now proposed to build on / pave a further 0.6 hectares giving a site coverage of approximately 23%, with a plot ratio of approximately 0.742.

Water falling on the impermeable areas will be stored primarily in a new pond feature with some additional retention capacity in the drainage pipework. There will be a controlled discharge to the Corporation's existing 750mm water drain underneath Dartry Road, the connection running via the main gate. The rate of discharge will not exceed 10 l/s, as specified by the Corporation's Main Drainage Division Stormwater Management Policy Guidelines.

A grit and oil trap will intercept surface drainage from all car parking areas.

8.3 The Existing Environment

The average annual rainfall in the area is approximately 800mm. Potential evapotranspiration is about 500mm. Potential recharge is therefore about 300mm per annum.

There are no surface water features on or in the immediate vicinity of the site. The site lies in the catchment of the River Dodder which flows within 400m to the south. There are no known wells in the local area, water being provided by Corporation mains.

Extreme rainfall amounts for a return period of 5 years are 16mm for 1 hour and 60mm for 2 days.

8.4 Predicted Impacts

There will be no significant impacts on water drainage.

8.5 Mitigation Measures

Potential water drainage impacts have been mitigated by the design measures described at section 8.2 above, principally the on-site retention system and the oil & grit traps.

8.6 Residual Impacts

There will be no significant residual impacts on water drainage.

Chapter 9 – Air Quality

9.1 Introduction

This section examines the impact of the proposed redevelopment programme on the local air quality during the construction and also the 'operational' phase. The site for the new student residential buildings is within the Trinity Hall grounds on Dartry Road and will require substantial earth removal as part of the construction phase There is medium density housing surrounding the site along Dartry road, Palmerston Park and Temple Road and so the impact in terms of dust emissions during the construction phase needs to be addressed. In addition, once the new premises are in operation there will be an increase in vehicle movements within the area and there will be miscellaneous emissions from heating and cooking requirements within the new buildings.

9.2 The Proposed Development

9.2.1 Construction Phase

This phase of the development may have a short-term impact on air quality in the immediate locality of the site boundary from site preparation activities involving the removal of topsoil/ overburden and operation of construction machinery and equipment.

There is a potential for dust emissions to be generated during the preparation of the site. Most of the material removed will be taken off-site in trucks and such vehicle movements can generate significant dust emissions unless adequate control measures are implemented. In addition, air emissions from the exhausts of plant construction machinery and haul trucks may also impact on the local air quality

9.2.2 Operational Phase

The air quality impact resulting from the normal activities within the new student residence buildings will result from air emissions from vehicles entering, parking or departing from the car park, service vehicle movements and from space/water heating from the boiler. The rate of emissions of pollutants within the car park will depend on the number of spaces and the rate of activity within the car park. This movement of vehicles will contribute to total vehicle emissions in the area especially as maximum emissions tend to occur when cars depart from parking spaces due to the 'cold' state of the engine compared to lower emissions when the engine is 'hot'.

9.3 The Existing Environment

9.3.1 General air quality

Trinity Hall is situated in an area of medium density housing. Properties in the area are either large detached or semi-detached dwellings, some of which having been converted into flats or to provide office accommodation. The site is about 800 metres east of Rathgar village and one of the major arterial roads into the inner city from south-west Dublin, which passes through Terenure, Rathgar and into Rathmines. The volume of traffic travelling along Dartry Road is substantially lower with relatively low traffic movements, from an emissions point of view, along Palmerston Park and Temple Road. The concentration of air pollutants associated with emissions from

motor vehicles in the immediate vicinity will therefore be significantly lower than adjacent to the main roads passing through Rathgar.

The air quality is considered to be satisfactory in the area. With the success of the ban on the sale of bituminous coal throughout the Dublin urban area since 1990, (Marketing, Sale and Distribution Regulations 1990-1993), air pollution levels have since fallen dramatically. Current levels of smoke and sulphur dioxide in this part of the conurbation are nowadays well below the National Air Quality Standards (NAQS) (S.I. No. 288 of 1987). These air quality standards specify a daily limit value of 250 $\mu g/m^3$ for smoke and sulphur dioxide (expressed as a 98 percentile of daily mean concentrations). Results from the monitoring site at Rathmines (approximately 2 km to the north), which is operated by Dublin Corporation[1], indicate that the 98 percentile levels for smoke and sulphur dioxide were 44 and 64 $\mu g/m^3$ respectively in 1997/98. These levels are less than 30% of the National Air Quality Standard. Corresponding maximum daily levels of smoke and sulphur dioxide during the 1997/98 annual period were also below the more stringent E.U. Air Quality Directive Guide value of 125 $\mu g/m^3$. The average annual smoke and sulphur dioxide levels at the Rathmines site were 14 and 29 $\mu g/m^3$ respectively and similar average levels could be expected in the Dartry Road area.

With the low level of emissions from the residential properties in the locality as a result of the dominant use of natural gas or oil the primary source of air pollutants observed in the area is from motor vehicle exhausts. At the kerbside of Dartry Road elevated concentrations of nitrogen dioxide, hydrocarbons (benzene) and also particulates may be detected. However beyond 10-20m from the roadside ambient levels of nitrogen dioxide and hydrocarbons will be typically near to background suburban levels. Nitrogen dioxide is measured continuously at Lower Rathmines Road, which has a significantly higher traffic volume than along Dartry Road. The results indicate that nitrogen dioxide concentrations (expressed as a 98 percentile of hourly mean concentrations over a year) in 1997 were less than 50 $\mu g/m^3$ with annual mean levels of less than 20 $\mu g/m^3$. This concentration of nitrogen dioxide is well below the NAQS for nitrogen dioxide of 200 $\mu g/m^3$(98 percentile) and also less than the E.U. Air Quality Directive guide value of 135 $\mu g/m^3$. It is evident that levels of nitrogen dioxide near the boundary of Trinity Hall will be less than these values due to the much lower volume of traffic. Corresponding annual average hydrocarbon concentrations, specifically benzene, will also be typically less than 5$\mu g/m^3$, at distances of more than a few metres from the roadside. There is no NAQS for benzene, although the E.U. have recently proposed an Air Quality Directive with a limit value of 5 $\mu g/m^3$, expressed as an annual average, to come into force by 2010.

There are no NAQS for Carbon Monoxide although the E.U. have recently adopted a proposal for an Air Quality Directive which sets a limit value for 8 hour exposure of 10 mg/m^3 based on World Health Organisation exposure criteria. This limit value is to be met by 2005. With traffic exhausts being the primary source of this pollutant the highest levels are normally experienced in slow-moving congested areas with poor air movement such as inner city streets. At higher vehicle speeds the emission rate

[1] Atmospheric Pollution and Noise Control Unit Environmental Health Section. Annual Report 1997/98. Dublin Corporation, Dublin 8.

decreases significantly. The results obtained from the Dublin Corporation monitoring site at College Green in the city centre indicate that the 8 hour average in 1997 was 2.7 mg/m^3, which is well below the proposed E.U limit value. Given the much lower volume of traffic and higher vehicle speed in the area compared to conditions in the inner city, ambient carbon monoxide levels will also be well below the criteria of 10 mg/m^3.

With regard to particulates, referred to as PM_{10} (particulate material with a mean aerodynamic diameter of less than 10 μm) ambient levels in the area will be less than the proposed E.U. 1997 Draft Directive daily limit value of 50 μg/m^3 (no more than 25 exceedances per year by 2005). The primary source of particulates is from diesel-engine vehicles. Compared to the main arterial routes from the south of the city into the city centre there is a low volume of commercial vehicles travelling along Dartry Road and so roadside levels will be comparable to background suburban concentrations in the locality of Trinity Hall

9.3.2 Dust deposition

Dust deposition rates in the locality are typical of those found in residential areas with levels generally less than 100 mg/m^2 per day, expressed as a monthly average. Within urban areas, levels of dust of this order of magnitude are unlikely to create a community nuisance. Even significantly higher short-term rates, which last only a couple of days, such as those that may occur during road-works, will normally be tolerated by residents living nearby without causing a reported nuisance. An average monthly dust deposition rate of 100-130 mg/m^2 per day is widely used as a boundary line limit value by Local Authorities in Ireland in relation to Planning or Air Pollution Licence conditions for quarrying and related activities to prevent a community nuisance.

9.4 Predicted Impacts

9.4.1 Construction Phase

The potential for dust emissions during the construction phase will, to a large extent, be related to local wind conditions, coupled with frequency and duration of rainfall. During dry weather conditions the wind may cause re-suspension of dust from areas of activity, such as trucks entering/departing the construction area, transfer of aggregates to/from stockpiles etc. The wind speed will also affect the dilution rate of exhaust emissions from construction machinery/trucks during this phase.

The proposed redevelopment of Trinity Hall involves the demolition of the link building situated near the centre of the existing grounds and the small gate lodge. The site for redevelopment will be levelled and overburden removed to provide a suitable base for the foundations of the new buildings. It is estimated that this phase of construction will take about 10 weeks to complete and involve removal of demolition material and overburden by truck off-site. The excavator will load the overburden material from the site into 20 tonne trucks. The construction phase is expected to last from 20 to 30 months and will involve substantial vehicle movements into and out of the new temporary entrance on Dartry Road. It is estimated that there will be a total of about 1,059 truck journeys (2,118 vehicle movements) over a 10 week period needed for preparing the site. This volume of vehicle loads is equivalent to about 4-5 truck journeys (8-10 vehicle movements) per hour during the normal working day.

There will be some additional 1,720 trucks (3,440 movements) during the building phase. Of these vehicles delivering building materials, blocks, pre-cast concrete sections as well as internal fittings, glass etc only a small number will transport aggregates or ready-mix concrete onto the site and so dust emissions will be relatively low. It is proposed that ready-mix concrete used in the building of the residential units will be supplied by truck thereby eliminating the need for an on-site cement storage silo, with associated dust emissions. Asphalt for the new internal road surface and car-parking areas will be delivered as hot-mix in covered trucks

Air emissions from the exhausts of the vehicles and miscellaneous construction machinery will comprise mainly of nitrogen oxides and particulate emissions from the diesel engine exhausts. The scale and duration of the phase when heavy construction equipment may be needed to clear overburden material and demolition of two small existing dwellings is limited to the first 3-4 months as the bulk of the construction will involve the construction of the various building units.

9.4.2 Operational Phase

9.4.2.1 Traffic along Dartry Road

There will be approximately 150 car parking spaces provided for the student residential buildings. The projected travel mode split is likely to be similar to the present situation with about 5% of students using private cars and the vast majority travelling into the city by bicycle, on foot or by public transport, see Chapter 12 – Traffic and Transport. There will also be only infrequent arrivals and departures of service vehicles associated with the proposed development.

Compared to the present volume of traffic along Dartry Road and adjoining roads the additional emissions originating from this relatively small increase in vehicular traffic will be very small and difficult to detect beyond the immediate parking area within Trinity Hall grounds. The additional impact on nitrogen dioxide concentration due to emissions from vehicles using student residential complex during the morning and evening peak evening commuter period is predicted to be minor compared to current levels of nitrogen dioxide, hydrocarbons and other pollutants originating from vehicle emissions.

9.4.2.2 Car-park vehicle movements

The movement of cars within a car-park can generate additional exhaust emissions due to the relatively slow speed and typical stop-start driving conditions. 150 parking spaces are to be provided to cater for vehicles within the development. Although this will add to current vehicle emissions within the grounds of Trinity Hall they will not have a significant impact on air quality in the surrounding area due to the scale of the proposed development and the location of the car-parking area within the grounds.

9.4.3 Miscellaneous Air Emissions

It is proposed that a centralised boiler plant, which will operate on natural gas, will supply space and water heating for the development. Natural gas is the preferred fuel for use in urban developments as it has a lower mass emission rate of air pollutants compared to other fossil fuels and a high energy efficiency, thereby reducing emissions per unit of energy generated. The location of the centralised boiler plant and the exhaust stack will be designed to ensure adequate dispersion of air emissions from this part of the development.

Atmospheric emissions from cooking food in the kitchens in the residential complex will be minor with the cooker air extraction systems ducted to external wall vents These will not generate an odour beyond a few metres from the ventilation exhausts within the buildings. The new kitchen and dining facilities to be located within the main building of Trinity Hall will be about 100m from the boundary of the grounds Exhaust emissions from the main extractors in the main kitchens will be well dispersed over this distance preventing an odour nuisance occurring along the boundary

The emissions from the miscellaneous activities within the proposed student residential complex will not have a significant impact on ambient air quality in the area due to the proposed control measures and low volume of emissions from the various emission points.

9.5 Mitigation Measures

9.5.1 Construction Phase

Dust controls at construction sites, such as spraying the access road with a mobile water tanker, can reduce dust emissions by upwards of 80%. Surface wetting of the road causes fine particles to adhere to the surface with a resulting reduction in dust emissions. Even a small amount of rain during the day may provide sufficient 'natural' dust control. In the case of 'unpaved' haulage roads within the site, a small increase in the moisture content, from a dry state to a damp condition can increase the control efficiency to up to 75% The dust control efficiency only increases slowly after the moisture content is doubled from the initial dry state and so constant spraying is not normally required. Cleaning the public road with a mechanical sweeper also reduces the generation of dust by passing vehicles.

During the construction phase, measures will be taken to control dust emissions. These specific measures and any other measures necessary for controlling dust emissions which will be incorporated into construction contracts include:

- Spraying surfaces with water to control dust emissions from certain locations such as near the entrance to the construction area and locations where building aggregates may be stockpiled.
- Any spillages of material from vehicles departing the site will be removed to prevent re-suspension by passing vehicles and dispersion of silt along the street lengths.
- A mechanical road sweeper will be used to clear silt material deposited on the public road near the construction site entrance when necessary.
- Where drilling/ pavement cutting, grinding of block surfaces or similar types of stone finishing operations are taking place, which may be a significant local source of fine particulate emissions (in particular sub PM_{10} size), measures to control emissions will be used to prevent a nuisance within the locality.
- Exhaust emissions from vehicles operating within the site, including diesel generators or other plant equipment, will be controlled by proper engine maintenance to prevent excessive emissions.

9.5.2 Operational Phase

The location of the centralised boiler house within the development and construction of an adequate stack will provide effective dispersal of exhaust gases from the boiler

Air extraction systems from food preparation areas within the student residence will be designed and located so any of these activities will not result in odours at the site boundary

9.6 Residual Impacts

The potential impact of dust emissions occurring during the construction phase is the main issue to be addressed as emissions occurring during the operational phase will be minor. Emissions associated with the operational phase, such as from vehicles, and miscellaneous emissions within the development are minor and will not have a significant impact on the surrounding air quality. Dust control measures will be implemented to ensure that a dust nuisance does not arise, especially along Dartry Road near the entrance to the site. The control measures given in Section 9.5.1 are aimed at spraying the surface of the access and haul roads within the site with water from a mobile tanker during dry weather conditions and removing spillages from the road near the site entrance. Maintaining a 'clean' road surface near the site is very important as silt deposited from wheels of trucks departing the site or spillages can easily migrate along the road for a considerable distance and this would be likely to result in complaints from nearby residents. However, with the proposed control measures in place any impact will be of relatively short-duration and should not have an adverse effect on the surrounding air quality.

Chapter 10 – Noise

10.1 Introduction

The potential noise impact of the proposed student accommodation development is considered in this section. The noise impact assessment addresses the likely noise impacts during the construction, and potential impacts associated with the completed development.

Terminology used in this section is defined in Appendix 10. All noise levels referred to in this report are in terms of the one-hour average noise level (LAeq, 1hr) unless otherwise indicated. Appendix 10 provides details on the noise level calculations referred to in this section.

10.1.1 Methodology

The methodology used in compiling the noise assessment report consists of the following elements :

- A noise survey to determine existing daytime and night-time ambient noise levels
- Estimation of construction traffic noise on routes to the site based on measured truck data
- Estimation of construction work noise based on data measured at similar construction sites, and methods of British standard BS4142
- Assessment of potential impact of services noise, and calculation of appropriate noise emission limits

10.2 The Proposed Development

The greatest potential for noise generation will be during the construction phase. There will be significant movements of heavy vehicles to and from the site which will generate additional traffic noise on routes to the site. The impacts of construction traffic itself are considered in Chapter 12 – Traffic and Transportation, while the noise aspects of such are considered in this section.

During the operational phase, the noise emissions are likely to be minimal. There are no student bars or party rooms planned for the development. It is estimated that 5% of the residents may use car transport. Resident traffic is therefore not a significant consideration. Service traffic to the site will be minimal. Building services and air handling units may potentially increase the nighttime background noise levels in the area, and this aspect is considered in this section.

10.3 Existing Noise Environment

10.3.1 Noise Survey

A noise survey was carried out at the site of the proposed development on the 16th and 17th of February 1999. The objective was to determine the typical ambient noise levels at nearby residences by day and by night.

10.3.1.1 Measurement Locations

Measurements were made at three locations, A, B and C, within the grounds of Trinity Hall, as shown on the location map in Figure 10.1

Location A

At the cul-de-sac off Temple Road. The measured levels here are taken as being representative of the daytime traffic noise environments at residences in the cul-de-sac and at houses nearby on Temple Road. The nighttime measurements at A are taken as being representative of the underlying background noise levels in the locality around the proposed development.

Location B

20 metres from the main entrance. Noise levels here are likely to be representative of daytime traffic noise levels at houses on Dartry Road.

Location C

Near northern site boundary. Noise levels here are likely to be representative of traffic noise levels at houses on Highfield Road / Palmerston Park.

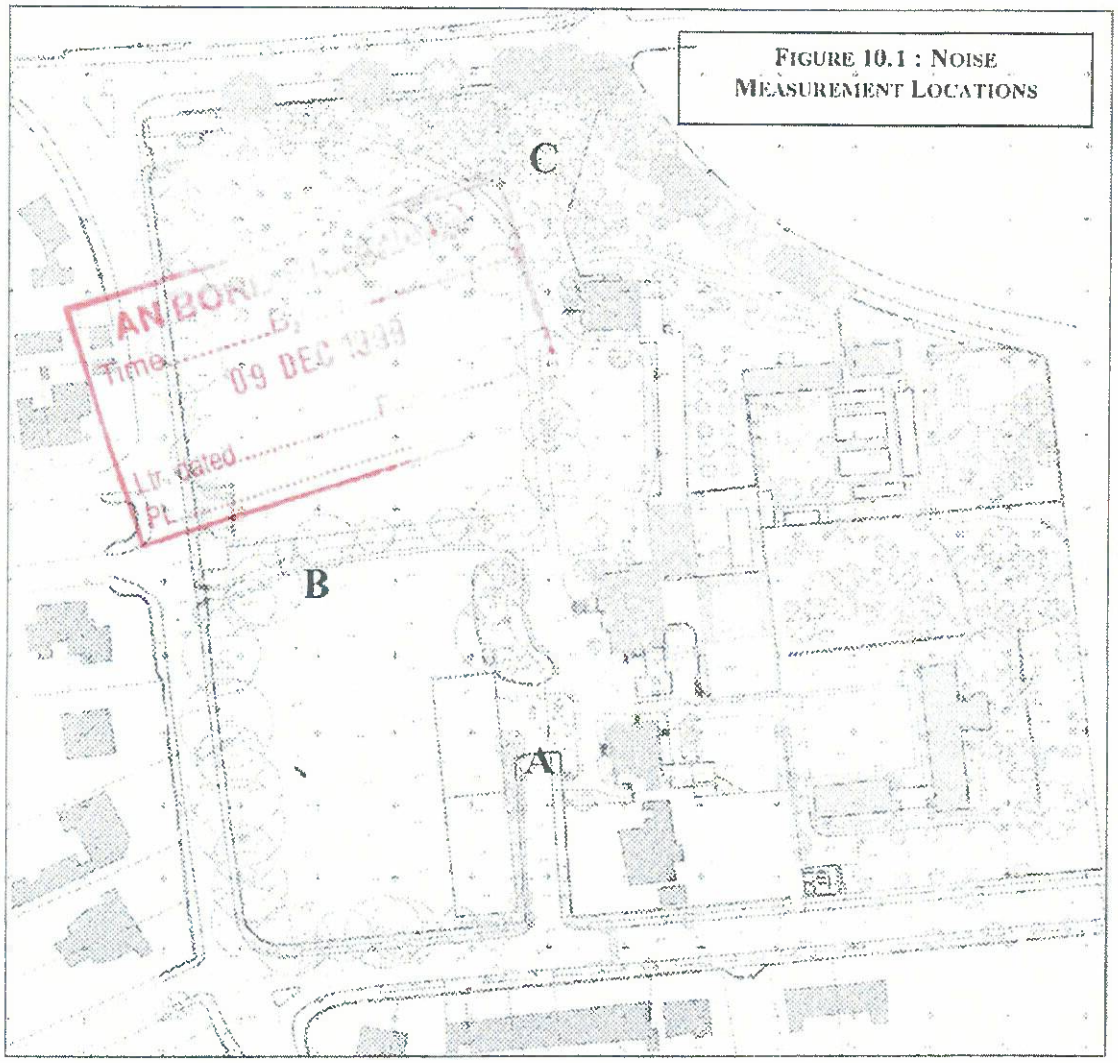


FIGURE 10.1 : NOISE MEASUREMENT LOCATIONS

10.3.1.2 Noise Survey Results

The results of the noise survey are shown in Table 10.1. At all measurement locations the noise environment was dominated by traffic. Daytime measurements were made during the evening rush-hours, and during a low-traffic period later in the evening, to obtain an estimate of noise levels averaged over different traffic conditions. Night-time measurements were made only at location A. The purpose of the night-time measurements is to determine the underlying steady background noise level in the locality at nighttime (L_{A90}).

		Noise Level dB(A)			
Location	Time (24hr)	L_{Aeq}	L_{A90}	L_{A10}	Comment
Day	A 17-18	57	53	59	Traffic
	18-19	57	53	59	
	20-21	55	49	58	
	21-22	55	49	58	
	B 17-18	65	56	67	Traffic
	18-19	63	57	66	Traffic flow (vehicles/hour)
	20-21	65	50	69	17.00-18.00 : 1450/hr
	21-22	63	50	67	20.00-21.00 : 1050/hr
	C 17-18	57	53	59	Traffic
	18-19	58	55	60	
	20-21	54	51	57	
	21-22	55	48	58	
Night	A 00-01	50	42	53	Traffic
	01-02	49	41	52	
	02-03	48	41	52	
Survey Details Instrumentation: CEL 480, B&K 2260, B&K 4231 Weather: Dry, generally calm, occasional gusts Personnel: Colin Doyle					

Table 10.1 Results of noise survey at Trinity Hall

Existing Daytime Noise Levels

Based on the noise survey data, the existing average daytime noise levels are as follows:

Location	Traffic Noise Level $L_{Aeq,1hr}$
A – Temple Road Cul-de-Sac	56 dB(A)
B – Houses on Dartry Road	64 dB(A)
C – Houses north of site	56 dB(A)

These traffic noise levels are typical of a suburban area subject to traffic noise.

Existing Night-time Noise Levels

Based on the survey data, the average underlying noise level at night-time is 41 dB(A) L_{A90}. This is the steady component of the background noise, excluding the intermittent noise from passing cars. It is due to the sum of the distant traffic noise from the surrounding urban areas. The underlying noise level is typical of a relatively quiet suburban area.

10.4 Predicted Noise Impacts

10.4.1 Construction Phase

10.4.1.1 Construction Traffic To / From Site

The greatest number of truck movements will be due to transport of spoil volumes, which are estimated to require 50 truck loads per day for a maximum of 10 weeks This would correspond to an average hourly truck rate of 4 – 5 truck journeys (8 – 10 truck movements) per hour. The initial construction phase (site clearance) which requires the largest number of truck movements, is calculated to generate an additional traffic noise level of 59 dB(A) at houses along the route to the site, and on Dartry Road. Houses on Temple Road and Palmerston park will be exposed to significantly lower noise levels from this activity.

During the general construction phase, the estimated number of truck loads of materials which will be transported to the site is approximately 1,500. Spreading this out over a nominal 20 – 30 month construction period results in an average daily rate of approximately 3 trucks per day approximately. This will give rise to maximum hourly traffic noise levels of 51 dB(A) at houses on routes to the site (based on an upper estimate of two truck movements per hour (see Appendix 10)

10.4.1.2 Construction Traffic Impact

The impact of construction traffic noise is determined by comparing the existing traffic noise levels with the levels anticipated during the construction phase, as follows :

Existing Traffic Noise Level on Dartry Road :	64 dB(A)
Additional Construction Traffic Noise :	59 dB(A) (maximum estimate)
Total Traffic Noise Level :	**65 dB(A)**

Therefore, the total traffic noise will increase by 1 dB. This is a slight increase, and will not be noticeable at any of the noise measurement locations.

10.4.1.3 Construction Noise

Noise levels on a construction site can vary substantially throughout the day and from week to week as construction progresses. Typically noise levels at 50 metres from a building site would be 60 dB(A). This includes noise from vehicles on site, construction plant and equipment and manual work.

Houses on Dartry Road may experience noise levels of around 60 dB(A), while construction is in progress at the western part of the site. The level of construction noise will be a similar order of magnitude as the existing traffic noise. It will be noticeable outdoors but not intrusive indoors. There is a slight noise impact from construction activities.

Houses near location A, in the cul-de-sac off Temple Road may experience noise levels of up to 65 dB(A) while construction is in progress at the eastern part of the site. This will significantly exceed the existing ambient noise levels of 56 dB(A). It will be noticeable outdoors, but not likely to be intrusive indoors.

Houses near Palmerston Park to the north of the development may also experience construction noise levels of up to 65 dB(A) while construction is in progress at the northern part of the site. This will significantly exceed the existing ambient noise levels of 56 dB(A). It will be noticeable outdoors, but is not likely to be intrusive indoors

No nighttime construction activities are envisaged Working hours are expected to be as 8 a m to 8 p m on weekdays, and on Saturday 10.00 to 4 00 p m

In considering the noise impact of construction activities, account has to be taken of the inherently noisy nature of much of the construction work, the limited duration of the impact, and the need to progress the construction work as quickly as possible Unreasonable construction noise restrictions could prolong the project, and actually increase the annoyance to the residents. Daytime construction noise levels of up to 65 dB(A) would be considered tolerable by most people for the limited duration of the construction phase. Construction noise levels in excess of 65 dB(A) would prove increasingly annoying, and levels in excess of 70 dB(A) may begin to prove intrusive indoors The predicted construction noise levels at houses near the proposed development are well within the range that would be considered tolerable for major construction projects.

10.4.1.4 Vibration

No activities such as blasting, which could generate ground-borne or air-borne vibrations are envisaged.

10.4.1 Noise Impact of Completed Development

10.4.2.1 Traffic Noise

There is likely to be minimal vehicular traffic to and from the student residences. It is anticipated that only 5% of the resident students will use cars. Service traffic to the residences will also be minimal. Traffic noise impact on routes to Dartry Hall will be insignificant.

10.4.2.2 Services Noise

Daytime noise levels from building services, including air handling units, laundrettes, kitchens etc., are unlikely to approach existing background noise levels in the locality No potential daytime noise impact source has been identified.

At night-time, air handling units on the roofs of apartment buildings, or facing in the direction of nearby houses could potentially generate additional noise which could be of significance. At this early stage of the project precise details on these services are not available

The existing steady background noise in the locality at nighttime is 41 dB(A) L_{A90}. If the contribution of the services noise from the new building is kept to less than 35 dB(A), there would be an increase of just 1 dB in background noise level. To ensure this, the external noise sources at each building must be limited to 78 dB(A) Sound Power (L_{WA}).

10.4.2.3 Entertainment Noise

No student bars or party rooms are planned in the development. There is therefore no potential impact as regards breakout of amplified music noise from such facilities.

For apartments located in the eastern part of the site near the cul-de-sac, there would be a potential impact due to music noise emanating from student rooms. Given the relatively low levels of background noise at nearby residences, and the close proximity to the proposed apartments, music noise from open windows could be audible and intrusive outdoors. This would not be an issue for apartments facing onto Dartry Road, where background noise levels are significantly higher.

10.5 Noise Mitigation Measures

10.5.1 Construction Phase

The calculated construction noise levels are within the range which would normally be tolerable for the limited duration of the construction phase. With construction noise levels anticipated to be less than 65 dB(A) at all residential locations, there is unlikely to be any significant noise intrusion into houses. Night-time works are not envisaged. No mitigation measures are required as no significant adverse impacts are expected to arise.

10.5.2 Completed Development

As regards possible night-time noise emissions from building services, total sound power from each building should be limited to 78 dB(A) L_{WA}. If night-time noise emissions are likely to significantly exceed this value, appropriate mitigation measures such as silencers or screening will be provided as considered appropriate.

A minor potential noise impact was identified at residences near the cul-de-sac at Temple Road due to music noise emanating from open windows in the apartments. This will be effectively controlled by appropriate apartment block management procedures, and rules for tenants, if required.

10.6 Residual Noise Impacts

During the construction phase, noise levels in the range 60 to 65 dB(A) may be experienced at nearby houses for limited durations as work is in progress in adjacent parts of the site. There is not likely to be any residual noise impact from the completed development.

With building services noise limited as described, the background noise level will rise by at most 1 dB, to 42 dB(A). This is a slight increase, and would not be noticeable.

Chapter 11 - Landscape

11.1 Introduction

This section examines the effects upon the appearance and character of the site and its immediate environs. The objectives of the analysis are twofold:-

1. to determine the extent of the visibility of the new development
2. to determine whether and how the visibility will affect viewers.

11.2 The Proposed Development.

This section describes the physical attributes of the proposed development which are likely to affect the appearance and character of the site and its environs. The Planning Application Report provides a comprehensive description of the design materials and concepts of the project.

11.3.1.General

The site preparation and construction process will leave the appearance of much of the existing site boundary unchanged. The majority of the walls and the mature trees along Dartry Road will be unaffected with works limited to the environs of the existing entrance where the gate, gate house, part of the boundary wall and some trees will be removed to make way for the new entrance. The tree removal plan indicates that the majority of tree losses will be at, or near, corners in the north west, north east and south central parts of the site.

The buildings will be set back from site boundaries at distances similar to those of the existing dwellings in the areas.

The height, form, material and finishes of the new building are different to those of the nineteenth century buildings in the area - being dominantly horizontal, principally 4 & 5 storey in height and constructed using contemporary materials and forms.

11.3 The Existing Environment

The character of the surrounding area arises from the late nineteenth century pattern of large redbrick houses, mature gardens and streets which are rich in civic character. The latter takes the form of generous tree planting, finely detailed boundary treatments and the Palmerston Park. These factors combine to create a high quality manmade environment. This quality is reflected by the (draft) Development Plan which seeks to preserve many of the structures and features while also protecting the character and amenities of the area. The external character and appearance of the site – as viewed from the roads and residences in the vicinity - offers a contrast on account of it's low density, extensive vegetation, and distance from boundaries. There is limited visibility of the existing structures with an open institutional/amenity character predominating.

The existing appearance and character is further considered hereafter by reference to specific views from a number of diagnostic viewing positions. Note that these locations have been selected to illustrate either a *worst case* (i.e. most exposed view)

or views which are most representative of the likely effect on the appearance and character of the area.

Where relevant these viewing positions have been accompanied by photographs (viz. *Existing View 6)*.

Existing View 1 (From Temple Road)
This view has been selected to illustrate the maximum (i.e. worst case) exposure to Temple Road. It must be emphasised that this view occurs for only a short section of road and will not be substantially available from points further east – on account of the intervening Brazilian Ambassador's residence. The view illustrates how no site structures or buildings are currently visible from this location.

Existing View 2 (From Temple Road/Dartry Road)
This view has been selected to illustrate the effect on a well-trafficked route. It is representative of how the site is first encountered by observers travelling northwards on Dartry Road. There is limited visibility of existing buildings within the site.

Existing View 3 (from Sunbury Gardens/Dartry Road)
This view from one of the roads which enters Sunbury Gardens is selected on account of it's location along the focal line of an existing road as well as on account of its significance because it is almost opposite to the proposed new entrance. At present there are relatively unobstructed views into the site from this location with a number of the buildings clearly visible.

Existing View 4 (From Dartry Road/Palmerston Park Junction)
Like View 2 this view is representative of the first impression of the site which is obtained by many observers travelling southwards on the Dartry Road. The character is almost exclusively created by the existing mature trees, the gates, wall and the small gate lodge. The existing entrance gate is just visible at the extreme right of the photograph.

Existing View 5 (From Palmerston Park (Road))
This is another 'worst case' location which again is only visible for a very short stretch of Palmerston Park Road. It occurs because of the coincidence of a low section of existing wall, poorly developed woody development within the site and an absence of ivy bearing tree stems.

Existing View 6 (From Trinity Hall)
The main entrance steps to Trinity Hall and flanking evergreen decorative planting are visible on the right of this photograph while the side elevation of Purser House is also visible.

Existing View 7 (from Purser House)
This view across open grass is directed towards the entrance drive and gate lodge. The limited extent of overlooking from the surrounding dwellings is clearly illustrated in this view.

Views from Palmerston Park (Not Illustrated)
There are intermittent views from the paths inside Palmerston Park. These views are very brief and incomplete on account of the dense vegetation within both the park and the site at this point. On account of this factor it has not been possible to prepare meaningful visualisations from this location.

11.4 Impacts of the Proposed Development

11.4.1 General
There will be a readily apparent change of character from open, undeveloped, amenity and leisure uses to comprehensive and uniform residential landuse.

The development will represent an intensification which will contrast with the established low levels of use.

The appearance will also change significantly so that there will be a much greater variety of materials, forms, scales and uses visible from most points to the immediate north, west and south of the site.

The contemporary materials, forms, colours, finishes and scale will all contrast with the established 19th Century dwellings which surround the site. The following section examines the landscape and visual impacts (i.e. the effects on the appearance and character of the existing environment) by reference to the existing views which are described at Section 11.3 above:-

Proposed View 1 (from Temple Road)
The upper portions of building 6 & 7 will be visible above existing and proposed vegetation at the corner.

The appearance will contrast significantly with the existing view which is dominated by natural features within the boundary wall. It will also contrast with the existing late 19th Century and early 20th Century buildings which dominate the character of the Temple Road.

The impacts of the contrast will be limited on account of:-

- The oblique views towards the buildings when viewed travelling west on Temple Road
- The screening offered by the Brazilian Ambassador's residence.
- The (relatively) low levels of traffic on Temple Road.

Proposed View 2 (From Temple Road/Dartry Road)
The new buildings will be intermittently visible between trees and above vegetation. There will be limited contrasts with existing scales, forms and styles as seen from this location.

Proposed View 3 (From Sunbury Gardens/Dartry Road)
The proposed view will create a significant contrast with the existing view from Sunbury Gardens. The current openness and low intensity of built fabric will be

replaced by the significantly taller, denser and more intensively used structures & routes.

The height and horizontal dominance of the new structures will reduce the apparent height of the existing mature trees while the loss of the other trees, gates and the gate lodge will significantly reduce the continuity and diversity of the cultural and natural heritage.

Proposed View 4 (From Dartry Road/Palmerston Park Junction)
There will be a significant change in context and character as seen from this location. This will occur on account of the contrast with the existing open and largely undeveloped view – where there are extensive views of sky. The new structures change the context for the retained gates and gate lodge – causing it to appear smaller and less dominant on this corner.

Buildings 2,9 & 10 will enclose this part of Palmerston Road in contrast to its present undeveloped southern boundary while the cumulative impact of the full frontage to Dartry Road – intermittently visible through the depleted tree screen will increase the visual dominance of the site.

The dominantly horizontal design will cause the visual scale – currently created by tall existing trees – to appear to be reduced.

Proposed View 5 (from Palmerston Park (Road))
The close proximity to the road, the height & materials all contrast significantly with the established character and appearance of Palmerston Park (Road) – at this location. The height and proximity will also change the existing character by causing additional overshadowing of the path and road – especially outside of the summer months.

Proposed View 6 (From Trinity Hall)
The new internal space will provide a dramatic and dynamic new context for Trinity Hall and Purser House. This will positively increase the dominance and apparent size and formality of these structures.

Proposed View 7 (From Purser House)
The new internal space will also change the perception of the existing retained trees and will create an additional internal amenity for the environs.

The visibility and dominance of the buildings (2, 9 and 10) on Palmerston Park (Road) will cause further contrast because of the absence of any precedence for large buildings along the southern perimeter of this road.

Views from Palmerston Park (not illustrated)
The upper portions of buildings 1 & 10 will be intermittently visible through the trees and shrubs of the Park. Building no. 10 will be more visible on account of its proximity to the perimeter and on account of its location along the axis of two principal paths. It should be noted that such visibility will always be intermittent and partial (i,e, there will be an awareness of the presence of the building through 'glimpses'). The building will not be perceived as being visually dominant from within the Park.

11.5 Mitigation Measures

The design has incorporated a number of measures to avoid, reduce or remedy landscape and visual impacts. These include the reduction of the heights of structures at critical corner locations, the replanting of large trees at critical openings and the creation of a significant new interior courtyard – as part of a comprehensive site planning exercise which includes tree and shrub planting, as well as the creation of a hierarchy of pedestrian routes and spaces.

11.6 Residual Impacts.

Following the full establishment of the site planting (say after 8 – 10 years) it can be assumed that perimeter screen planting will be 6 – 8m tall.

The residual impact on the appearance and character of the area will be:-

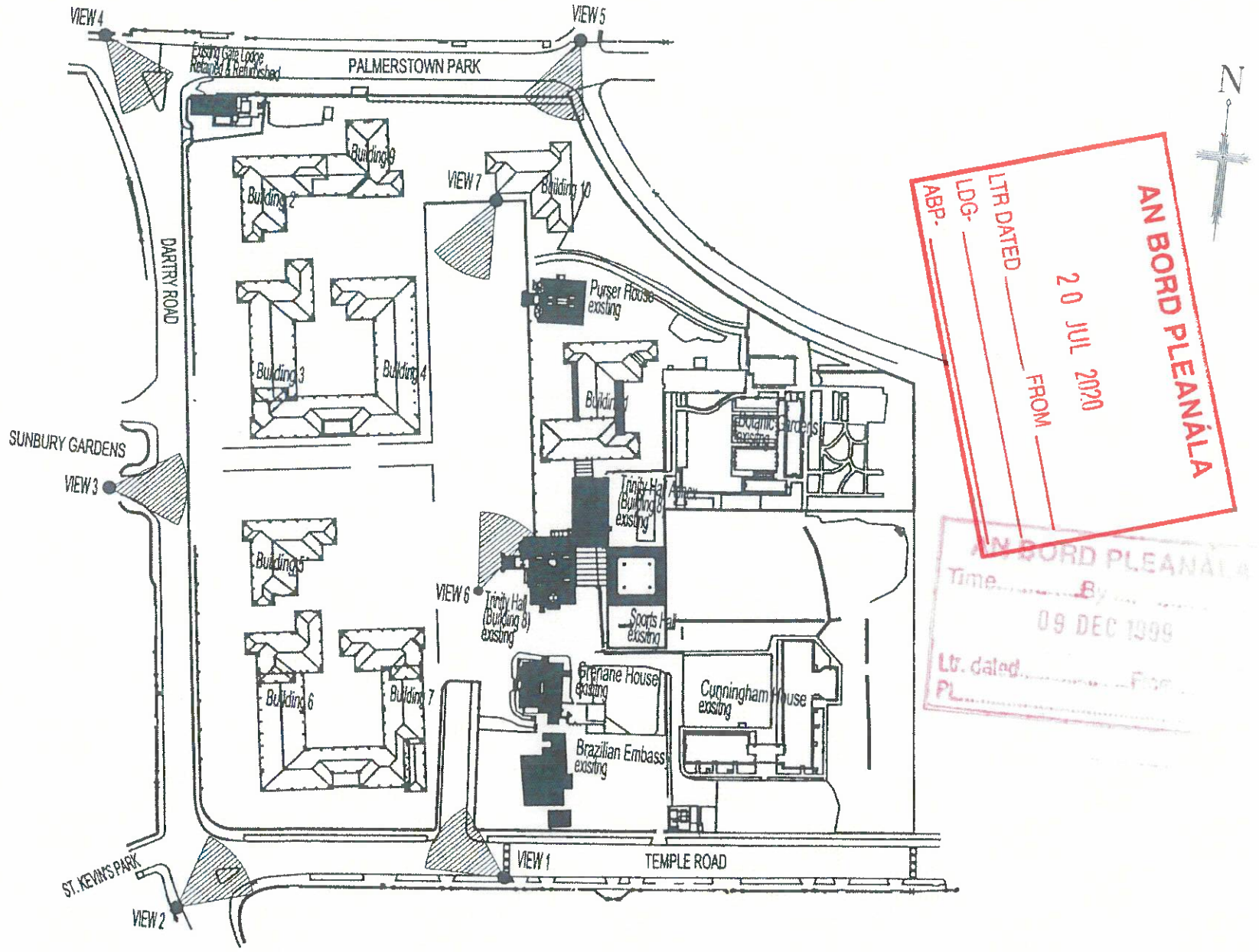
- to significantly change the appearance of this portion of Dartry Road and Palmerston Park (Road) on account of the visibility of the upper portions of relatively tall buildings at locations which are currently without visible development.

- to cause localised changes to the appearance of parts of Temple Road, Palmerston Park (Road) and Palmerston Park on account of the visibility – over short distances - of portions of new buildings close to the perimeter of the site.

- To cause the character and intensity of landuses to change from open, less used leisure and amenity to relatively intensively developed and used residential institutional uses.

- To establish a contrast between the new and established structures in terms of height, scale, form, materials, finishes and style.

For the purpose of the formal evaluation and in accordance with the 'Glossary of Impacts" *(EPA Draft Guidelines on the information to be contained in Environmental Impact Statements* section 8, p35) there will be *Significant Permanent Impacts on the Landscape*. The impacts will arise from contrasts between the existing and proposed environment. It is not possible to definitively characterise the impacts as being 'positive', 'neutral' or 'negative' on account of the subjectivity of opinions aesthetic matters.



VIEW LOCATION MAP

NOT TO SCALE

VISUAL

EXISTING VIEW 1 - FROM TEMPLE ROAD

PROPOSED VIEW 1 - FROM TEMPLE ROAD

PROPOSED VIEW 2 - FROM THE PUBLIC ROAD / PARKING AREA
AN BORD PLEANÁLA
20 JUL 2020
LDG-
ABP-
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20 JUL 2020
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FROM
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EXISTING VIEW 3 - FROM SUNBURY GARDENS / DARTREY ROAD

PROPOSED VIEW 3 - FROM SUBURBAN GARDENS / DARTRY ROAD

PROPOSED VIEW 4 - FROM DARTRY ROAD / PALMERSTOWN PARK JUNCTION

EXISTING VIEW 4 - FROM DARTRY ROAD / PALMERSTOWN PARK JUNCTION

EXISTING VIEW (2) FROM THANNY AVENUE

EXISTING VIEW 7 - FROM PUBSEY HOUSE

Chapter 12 – Traffic and Transportation

12.1 Introduction

This section of the Environmental Impact Statement addresses the existing transportation situation in the vicinity of the subject site, the travel demand that will be generated by the proposed development and the impact, if any, on the surrounding transportation network.

As part of the preparation of the Environmental Impact Statement and in order to establish the existing level of traffic in the area, a ten hour classified survey of weekday traffic during term time was undertaken on Friday 5th February 1999 at the junction of Dartry Road and Temple Road. The findings of this survey are discussed in sections 12.3 and 12.4 below.

12.2 The Proposed Development

12.2.1 Accomodation and Access

The proposed development on a site of approximately 2.67 hectares comprises the provision of residential student accommodation totalling 1085 bedspaces of which 82 bedspaces are existing and 1003 bedspaces are new.

Vehicular access to the development will be through a modified existing entrance off Dartry Road.

New pedestrian entrances are also being incorporated in the development which will facilitate access to the bus stops on Dartry Road and the bus terminus on Palmerston Park.

12.2.2 Parking

On site car parking will be provided to satisfy demand from a number of sources. These include; student car parking, staff car parking and visitor car parking. The demand from each of these sources will vary depending on the time of day and time of year. A total of 150 spaces will be provided.

A total of 5 coach parking spaces are being provided on site to cater for student movements, sports teams and special events.

To cater for the significant number of students who will travel by bicycle, a total of 350 bicycle parking spaces are being provided within the development.

12.2.3 Modal Split

The current level of car ownership amongst third level students is low compared to many other sections of the population in the Dublin area.

In the case of students at Trinity College car usage for travel to the city centre campus is also low due to the restrictions on parking both in the City Centre in general and on the TCD Campus.

The current modes of transport used by the student population are as follows

-	Car	5%
-	Bicycle	20%
-	Public Transport	65%
-	Foot	10%

By comparison with the remainder of the population, student travel by car is less by a factor of 13 and student travel by public transport greater by a factor of 2 than the average population

12.2.4 Trip Generation

For the purposes of this EIS, a trip is defined as a one way journey

The generally accepted trip rate for residential developments in the Dublin suburban area is in the range 3-7 trips per unit depending on the size and location of the apartment complex

For one bed units, a rate of 3 trips per day is appropriate with 11% or 0.33 trips per unit occurring during the AM peak between 08h00 and 09h00.

Excluding existing trips generated by the present site population of 180, the additional trips generated by this development during the AM peak have been calculated as follows

Student Cars	(1085 - 180) units x 0.33 trips x 1/13	23 trips
Public Transport	(1085 - 180) units x 0.25	226 trips
Staff Cars		10 trips

12.2.5 Trip Distribution

Trip distribution to and from the completed development is dependent not only on the existing traffic pattern but also on the purpose of the journey.

In the case of Trinity Hall it has been assumed in this EIS as a worst case scenario that during the AM peak, 100% of the car trips will be towards the City Centre with no car trips in the opposite direction.

With respect to public transport, it has been assumed also for the purpose of this EIS that 100% of the trips will be towards the City Centre.

Inward staff trips during the AM peak have been allocated in this EIS on the basis of 50% from each direction.

12.2.6 Service Traffic

Service traffic to the completed development will fulfil the following functions :

- Deliveries to small grocery / newsagent
- Supply of linen and housekeeping goods
- Maintenance vehicles providing service to heating, telecommunications etc.

- Waste removal

The number of service vehicles will be small with typical frequency as set out below

- Deliveries	-	Groceries	Daily
	-	Newsagent	Daily
	-	Linen	Twice Weekly
	-	Cleaning Supplies	Weekly
- Waste Collection	-	Private	Twice Weekly
		Public	Weekly
- Maintenance	-	Heating	Monthly
	-	Telecom etc.	Monthly
	-	Window Cleaning	Fortnightly

12.2.7 Construction

The development at Trinity will require, inter alia, the construction of a series of nine buildings

To reach the operational stage of the development, the following works will be carried out:

- Site clearance including excavation of subsoil to required levels
- Demolition of existing link building, gatelodge and entrance
- Trenching for underground services including foul sewer, surface water drains, watermains, gas, telecommunications, electricity and lighting
- Connection of proposed underground services to existing underground services.
- Construction of buildings
- Construction of roads, footpaths and paved areas.
- Erection of boundary fencing, signage and lighting.

Each of the activities described above will generate traffic movements to and from the site and within the site.

The principal material quantities associated with the construction period will be :

MATERIAL	QUANTITY	INDICATIVE TRANSPORT PERIOD
Demolition Rubble	1,200 cu m	4 weeks
Excavation - spoil	20,000 cu m	10 weeks
Concrete	9,000 cu m	30 weeks
Structural Steel	1,250 tonnes	8 weeks
Blocks and Bricks	5,000 cu m	40 weeks

Other materials will include windows, doors, lifts, sanitary fittings and services.

The overall construction period projected for the project is 20 - 30 months. During this time construction traffic access to the site will be from Dartry Road. Other traffic will access Trinity Hall via a temporary entrance at the cul-de-sac off Temple Road.

Traffic movements generated by the construction process are expected to comprise some 20 - 30 inward car / light van and 45 - 50 inward truck movements per day during the opening months together with a similar number of outward movements per day.

Construction traffic will vary as the contract progresses to some 120 - 150 inward car / light van movements per day and 18 - 20 inward truck movements per day together with a similar number of outward movements per day at the peak of construction activity between months 10 and 20.

Depending on the domiciles of the construction staff, some additional trips may be generated by lunch time traffic.

Parking demand for construction staff is expected to be 30 - 50 spaces between months 2 and 4 and 80 - 100 spaces between months 10 and 26. Parking demand for construction staff is expected to peak at 120 spaces about month 24. Parking for construction staff will be provided within the site.

12.3 The Existing Environment

12.3.1 General Description

The proposed development is located on a relatively undeveloped site in the southern suburbs of Dublin. The road network in the area is dominated by Dartry Road, a primary north-south radial linking the City Centre to Churchtown through Rathmines.

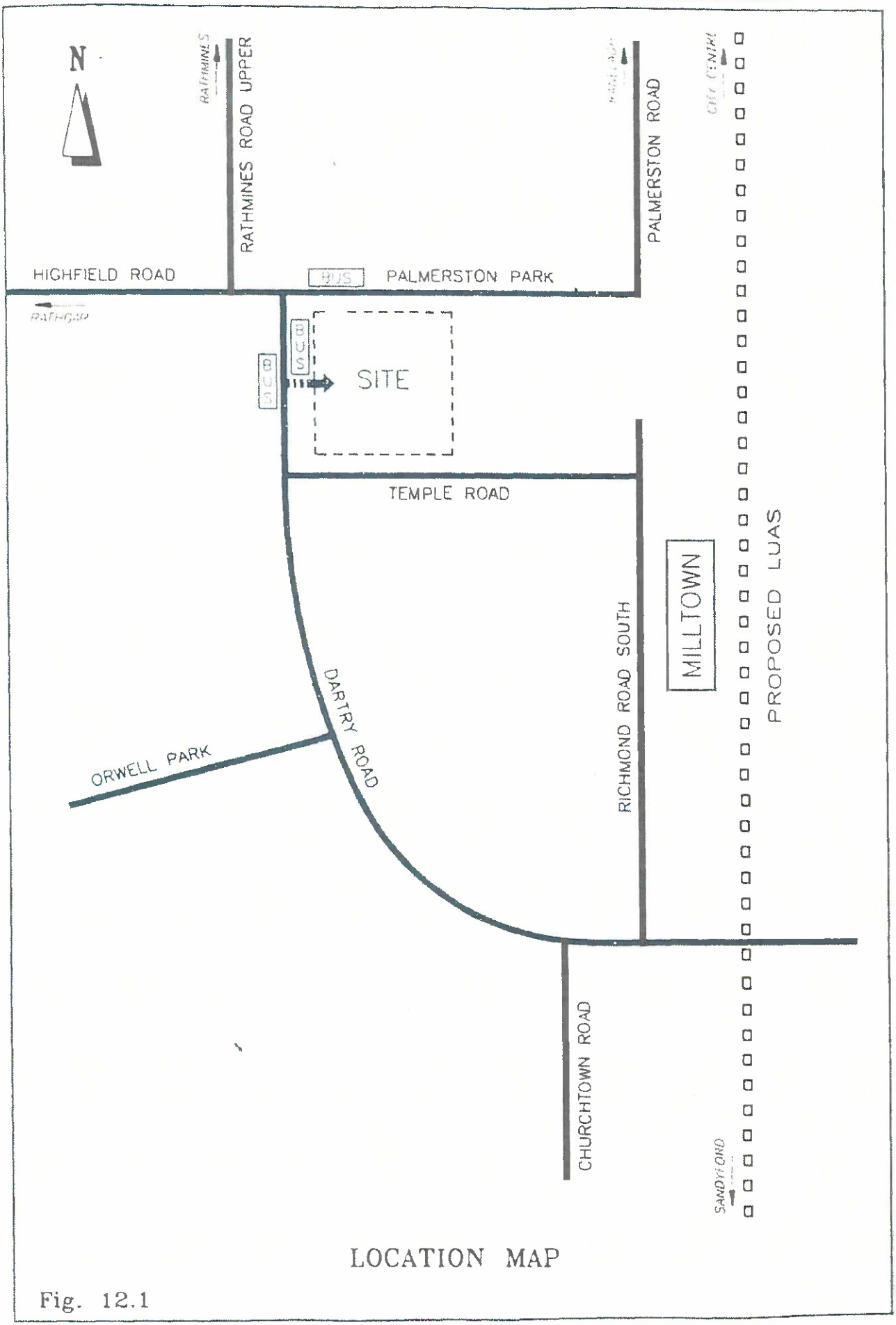
To the west, Highfield Road provides an east - west link to Rathgar, Terenure and Kimmage. To the east the abandoned Harcourt Street railway line provides a linking corridor from the City Centre and Ranelagh to Dundrum / Sandyford, Foxrock and Bray.

The site is bounded on three sides by public roads (see Figure 12.1).

The western boundary is formed by Dartry Road with signal controlled junctions at Temple Road and Palmerston Park. The carriageway on Dartry Road is 9 metres wide with 2 metre wide footpaths on both sides of the road.

The southern boundary is formed by Temple Road, a wide traffic calmed residential area where speed ramps have recently been installed. The carriageway on Temple Road is 10 metres wide with 2 metre wide footpaths and 2m wide grass verges on both sides.

The northern boundary is formed by Palmerston Park, an eastwards extension of Highfield Road. The carriageway on Palmerston Park is 9 metres wide with 4 metre wide footpath on the north side and a 5 metre wide footpath on the south side along the frontage of the subject site.



LOCATION MAP

Fig. 12.1

12.3.2 Site Access

There are presently two vehicular access points to the site The primary access is off Dartry Road through a 3 6m wide gateway and along a traditional avenue There is also a secondary service access off Palmerston Park which is mainly used for access to the botanic gardens

12.3.3 Traffic Management

Current traffic management in the vicinity of the site comprises

- 30 mph speed limit
- signal controls at junctions of Dartry Road with Temple Road and of Dartry Road with Palmerston Park
- a series of speed control ramps on Temple Road
- local 24 hour parking restrictions at junctions of Dartry Road with Temple Road and Palmerston Park
- one way clockwise traffic circulating in Sunbury Gardens opposite the main access to the subject site

12.3.4 Road Junctions

Details of the existing signalised junctions on Dartry Road at Temple Road and Palmerston Park are presented on Figures 12.3 and 12.4. Both sets of signals operate to a cycle of 97-98 seconds including a pedestrian phase at Temple Road.

12.3.5 Public Transport

Existing public transport in the vicinity of the site comprises the following bus routes :

Route 13B	Palmerston Park - City Centre (D'●lier Street)
Route 14	Churchtown - City Centre (D'●lier Street)
Route 14A	Ballinteer - City Centre (D'●lier Street)

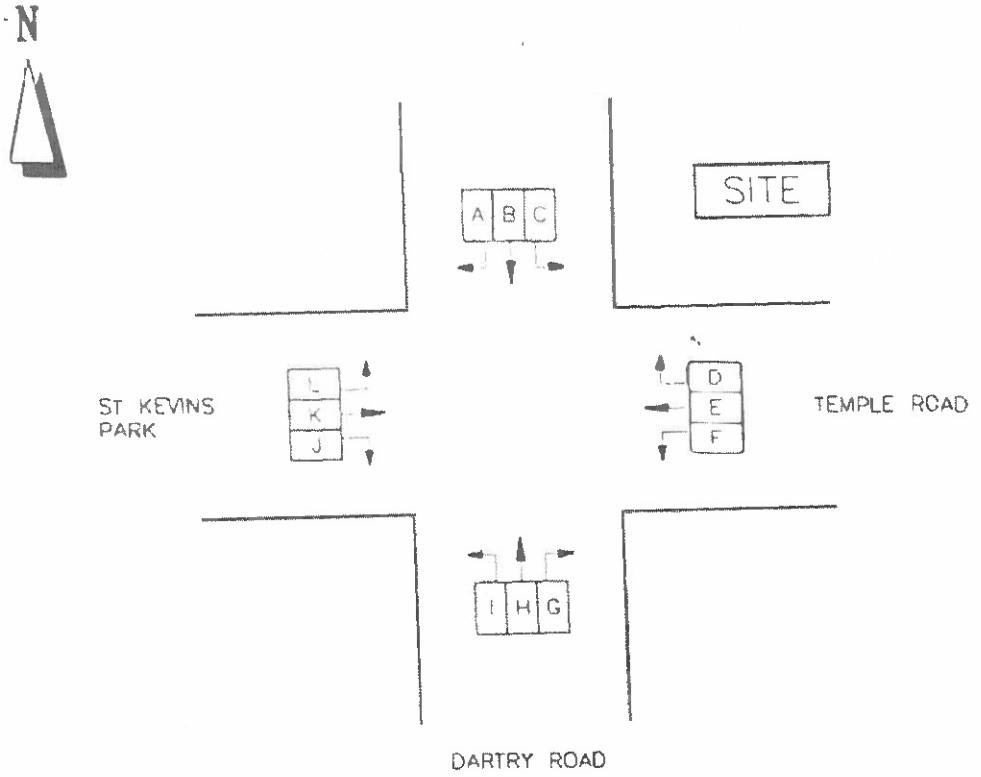
These three routes provide a total of 9 departures from Trinity Hall to the City Centre during the AM peak between ●8h●● and ●9h●● each day.

Bus stops for Routes 14/14A are located on either side of Dartry Road at the main access to the site and for Route 13B at the west end of Palmerston Park. The city terminus for both services is in D'●lier Street adjacent to the Trinity College campus.

Proposals for the improvement of public transport in the area include the provision of an improved bus service and the development of the Dublin Light Rail (LUAS) along the line of the former Harcourt Street Railway some 6●● metres east of the site.

An application to the Minister for Public Enterprise to construct the LUAS line from Sandyford Industrial Estate to St Stephen's Green was made by CIE in December 1998.

The LUAS system is proposed to operate at a peak frequency of 5 minutes and a journey time of 22 minutes from Dundrum to ●'Connell Street. Stops for LUAS will be provided at Milltown, 15● metres south of Temple Road and at Westmoreland Street adjacent to the Trinity College campus.



TIME	MOVEMENT Vehicles per hour												TOTAL
	A	B	C	D	E	F	G	H	I	J	K	L	
8–9	11	609	9	48	1	52	69	944	5	8	7	36	1799
9–10	12	434	16	27	–	29	28	765	9	7	3	25	1355
10–11	22	411	15	13	2	33	18	514	2	20	–	12	1062
11–12	19	496	18	24	–	43	26	450	10	9	–	16	1111
12–1	18	577	25	31	–	35	27	575	8	11	1	29	1337
1–2	24	652	14	27	1	49	27	509	10	14	2	15	1344
2–3	33	605	8	29	–	47	37	569	12	6	2	16	1364
3–4	18	663	27	50	2	92	47	519	24	19	1	11	1473
4–5	23	867	21	25	2	50	30	558	17	11	3	21	1628
5–6	28	1050	12	27	4	54	16	510	12	11	3	17	1744
TOTAL	210	6384	165	301	12	484	325	5913	109	116	22	198	14219
%HVC	1	3	3	2	0	1	3	3	3	1	5	2	3

Surveyed. Friday 5th February 1999.

TRAFFIC SURVEY

Fig. 12.2

12.3.6 Traffic Surveys and Volumes

A ten hour count of all traffic movements at the Dartry Road / Temple Road junction was undertaken on Friday 5th February 1999. The results of the survey are presented in Figure 12.2

As might be expected, traffic flows through the junction are dominated by the north - south movements on Dartry Road with inbound AM and outbound PM peaks of 950 - 1050 vehicles per hour equivalent to double the midday flow between peaks

12.3.7 Opening Year Flows

When considering the receiving environment for traffic impact, it is usual for the traffic volumes to have changed from that which existed at the time the EIS was prepared. In the case of this development, it is expected that the traffic volume will have increased but that this increase may be mitigated by the provision of better public transport services including the commencement of LUAS services.

For the purpose of determining the traffic impact of this proposed development, a completion date of March 2001 or 2 years hence has been assumed. LUAS is projected to be operational by the year 2001. In keeping with best practice in the preparation of EISs it has been assumed for the purpose of this EIS that LUAS will not become operational until a later date.

In order to determine the background levels of traffic that will occur at that time, the existing traffic flows have been factored by 15%. This increase is based on an annual rate of increase of 6-7% which is the current generally accepted rate of increase in the Dublin area when no reductions are included for public transport improvements.

The projected opening year traffic flows for the AM peak between 08h00 and 09h00 are presented in Figure 12.3.

12.4 Predicted Impacts

12.4.1 Introduction

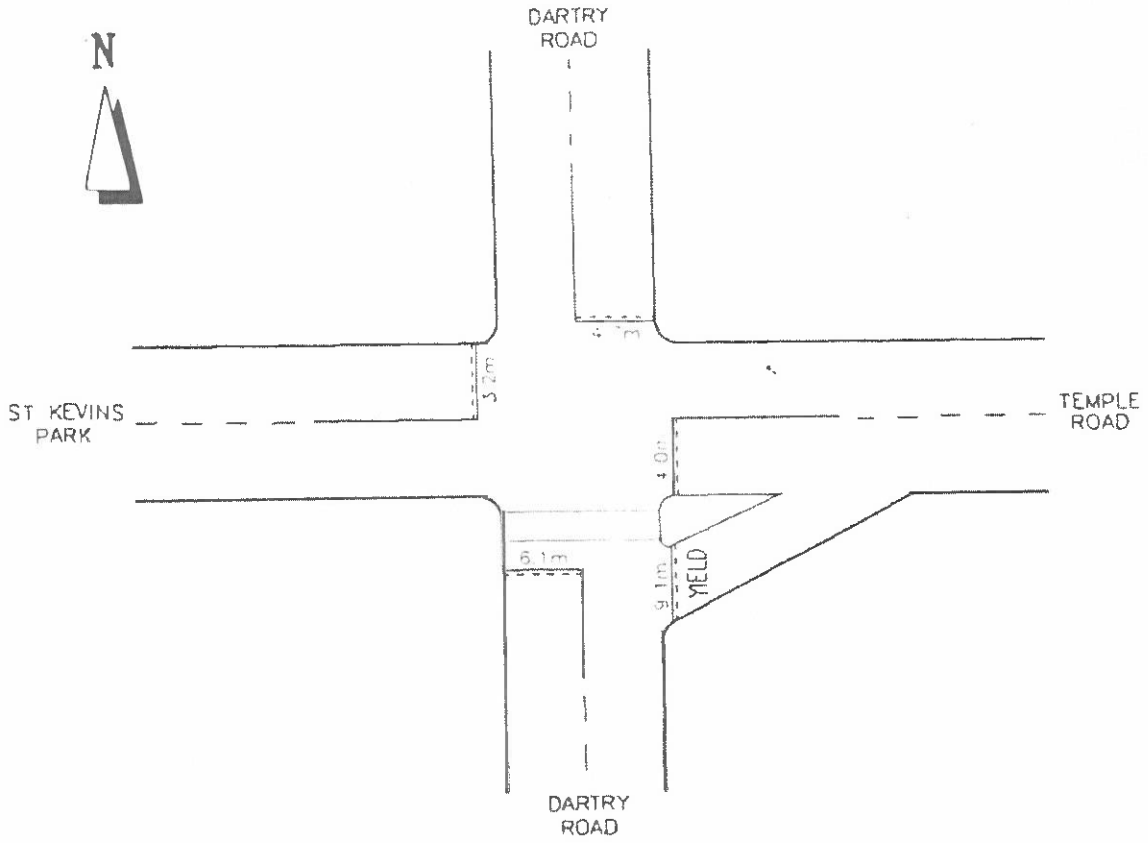
For the purpose of assessing the traffic impact of a development, it is customary to look in detail at the morning or AM peak. This approach was adopted by the Dublin Transportation Initiative and has been adopted in this EIS in order to look at the worst case scenario for the subject development.

12.4.2 Impact on Road Network

12.4.2.1 Traffic Volumes on Dartry Road

The existing two way flow on Dartry Road during the AM peak is 1,647 vehicles / hour. By the opening year of 2001 (see section 12.3.7), this volume is projected to have increased by 15% to 1,894 vehicles per hour.

Post development, the volume is projected to increase by some 33 vehicles per hour. The impact of this increase due to traffic generated by the Trinity Hall development will not be significant.



SIGNAL PHASING AND TIMING

PHASE	INTERVAL	SOUTH/NORTH	EAST/WEST	PEDESTRIAN	TIME SECONDS
A	1	GREEN	RED	RED	56
	2	AMBER			3
INTERGREEN	3	RED			2
B	4			GREEN	6
	5			AMBER	10
INTERGREEN	6			RED	2
C	7		GREEN		13
	8		AMBER		3
INTERGREEN	9		RED		2
				TOTAL	97

NOTE: WIDTH OF STOPLINE SHOWN THUS 5.2m
SURVEYED: Monday 1st March 1999

DARTRY ROAD/TEMPLE ROAD JUNCTION - EXISTING

Fig. 12.3

12.4.2.2 Traffic Volumes on Temple Road

The existing two way traffic flow on Temple Road during the AM peak is 186 vehicles per hour

There will be no change in traffic volumes on Temple Road due to the operational phase of this development During the construction phase existing site traffic will access Trinity Hall via the cul-de-sac near the western end of the Road This will not contribute significantly to traffic on Temple Road.

12.4.2.3 Road Junctions

The existing signalised junctions on Dartry Road at Temple Road and at Palmerston Park operate to a 97 - 98 second cycle (ref Fig 12.4)

Post development the total approach flow through the Dartry Road / Temple Road junction is expected to increase from 2,068 to 2,101 vehicles per hour. This increase at the junction can readily be accommodated without changing the signal cycle. As a result, there will not be a significant impact at this junction due to the Trinity Hall development.

12.4.3 Impact on Public Transport

At present, Routes 13 and 14 provide 9 No. double deck services during the AM peak between 08h00 and 09h00 each with a capacity of 79 passengers from Trinity Hall to the City Centre adjacent to the TCD Campus

Post development, the number of bus passengers from Dartry Road to the City Centre is expected to increase by up to 200 passengers per hour during the AM peak.

The impact of these additional trips assuming that the exiting provision of 711 inbound spaces between 08h00 and 09h00 is 60% full, will require an increase in service frequency from 9 buses per hour to 11 - 12 buses per hour.

It is anticipated that Dublin Bus will be in a position to meet this demand.

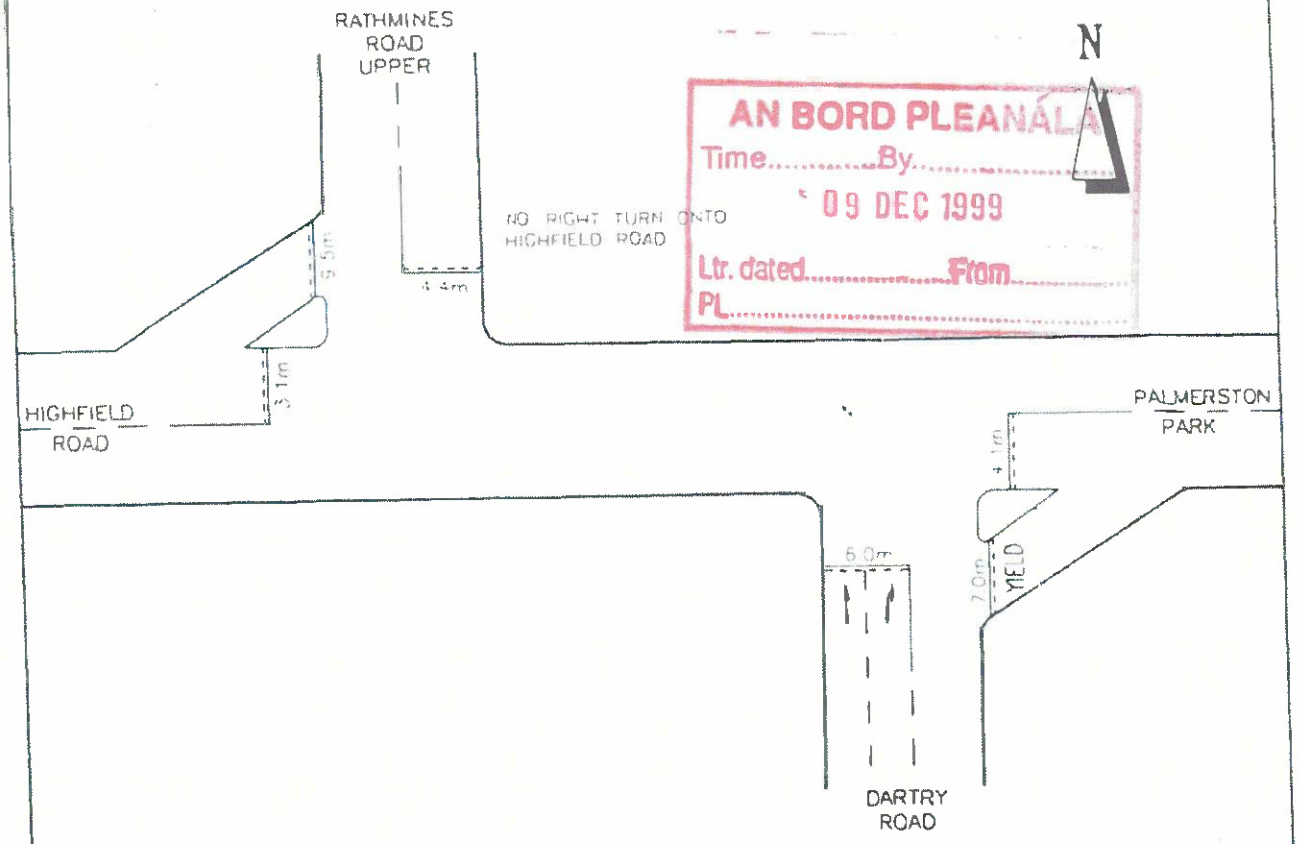
12.4.4 Impact on Parking

The on-site parking being included in this development is for 150 cars, 5 coaches and 350 cycles.

During term time, up to 50 car parking spaces will be available for student cars and 10-12 spaces will be available for staff cars. The remaining spaces will be available for visitors both regular and occasional for events such as start-of-term, Parents Day and other special occasions.

Outside term time, parking will continue to be available for staff and the remaining spaces will be available for visitors to the development.

The overall parking provision is expected to exceed demand and as a result there will be no impact on the surrounding road network due to off - site and / or illegal parking.



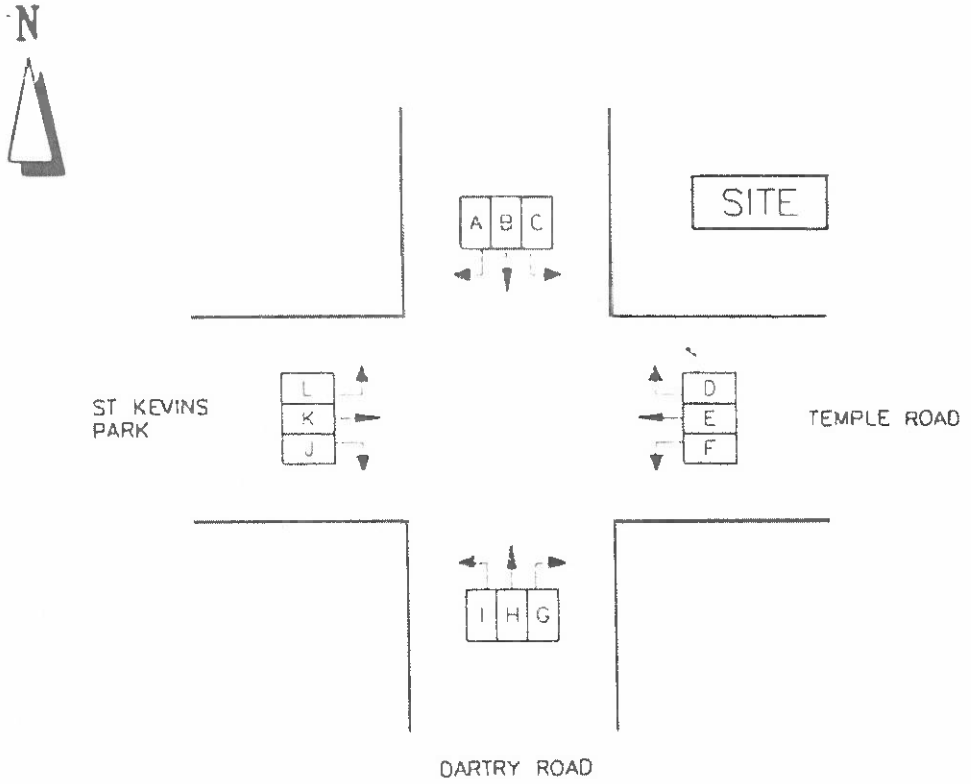
SIGNAL PHASING AND TIMING

PHASE	INTERVAL	NORTH		SOUTH		EAST	WEST	TIME SECONDS
		STRAIGHT	LEFT	STRAIGHT	RIGHT	STRAIGHT	STRAIGHT	
A	1	GREEN	GREEN	GREEN	RED	RED	RED	31
	2	AMBER	AMBER					3
	3	RED	RED					2
	4				GREEN			28
	5			AMBER	AMBER			3
INTERGREEN	6			RED	RED			2
B	7					GREEN	GREEN	15
	8						AMBER	3
	9						RED	7
	10					AMBER		3
INTERGREEN	11					RED		1
							TOTAL	98

NOTE: WIDTH OF STOPLINE SHOWN THUS 5.2m
SURVEYED: Monday 1st March 1999

DARTRY ROAD/PALMERSTON ROAD JUNCTION – EXISTING

Fig. 12.4



MOVEMENT	EXISTING (1999)	OPENING YEAR (2001)	GENERATED TRAFFIC	POST DEVELOPMENT
A	11	13	–	13
B	609	700	–	700
C	9	10	–	10
D	48	55	–	55
E	1	1	–	1
F	52	60	–	60
G	69	79	–	79
H	944	1086	5	1091
I	5	6	–	6
J	8	9	–	9
K	7	8	–	8
L	36	41	–	41
TOTAL	1799	2068	5	2073

AM PEAK 1999–2001

Fig. 12.5

12.4.5-Impact During Construction

The main impacts from the construction stage will by car trips be construction workers and truck trips from disposal of unwanted material and deliveries

During the construction phase, traffic volumes on Dartry Road are expected to be some 2,000 vehicles per hour during the AM peak compared to a construction worker arrival volume of less than 50 cars per hour and a truck volume of less than 5 vehicles per hour These trips are within the capacity of the road network and are short term in nature and extent Their impact in traffic terms will not be significant

The main impact during the construction period could be the dirtying of the road carriageway arising from spillage's and muddy tyres. The control and cleaning measures described in section 9.5.1 will minimise the impact of this activity.

12.5 Mitigation Measures

The primary mitigation measure associated with this development is its location in a developed suburb of this city at the junction of two major bus routes both of which terminate in the City Centre adjacent to the Trinity College Dublin Campus.

In addition the development is located within acceptable walking distance of the proposed Milltown Stop on the Sandyford - City Centre LUAS Line B.

A number of other mitigation measures are incorporated in the proposed development to reduce the impact of generated travel demand and provide a safe and convenient access to the development for cars, service traffic cyclists and pedestrians. These measures include :

- Redevelopment of the existing access onto Dartry Road to provide a wider and safer access for all vehicular traffic with recognised standards of geometry and visibility
- Arrangement with Dublin Bus to provide additional passenger capacity (as indicated in section 12.4.3)
- New pedestrian gateway to Dartry Road to provide access to the bus stops for Route 14
- New pedestrian gateway to Palmerston Park to provide access to the terminus of Route 13B
- Provision of adequate on-site parking for cars, coaches and cyclists.
- Provision of clear signage within the development
- Control of construction traffic
- Cleaning of roads traversed by trucks carrying excavated material or imported fill during the construction stage

12.6 Residual Impacts

There are not expected to be any significant residual impacts from the completed development other than the ongoing requirement to maintain public transport either bus or light rail from the vicinity of the development to the City Centre near the campus

Chapter 13 – Material Assets

13.1 Introduction

This section is intended to refer to infrastructure and resources For this report it is taken to include services such as water supply, sewage disposal, waste disposal, telecommunications, electricity, road and footpath networks Some of these topics are addressed in more detail in other sections of the EIS, such as Chapter 8 – Water and Chapter 12 – Traffic and Transport The format of this section examines the proposed development, the existing infrastructure and the impacts of each item under the main heading

13.2 Electricity

Electricity will be supplied to the development from existing ESB cables in the area. The ESB have advised that the likely impacts on local residents will be as follows:

- No interruption to power supplies is expected as a result of the connection of the new ESB medium voltage switchroom for Trinity Hall.
- Extensive ESB cabling operations will be necessary in the neighbourhood. The likely route will be as follows : - from Palmerstown Park / Orchard Road South Intersection to Orchard Road South to Temple Road to Dartry Road to Orwell Park to Orwell Park / Orwell Wood Intersection.

The ESB contractor, when appointed, will be responsible for all excavation and reinstatement related to the installation of ESB ducts in the path along the entire route, these operations may take up to three weeks. ESB crews will then draw cables through the new duct installation, over a period of approximately one week Cables on the site will be buried underground.

13.3 Gas

Gas will be supplied to the development from the existing gas network in the area. While detailed discussions with An Bord Gáis have not yet taken place, it has been indicated that incoming gas supplies will be taken from gas mains which pass the site along Dartry Road. Gas is likely to be used for cooking and heating throughout the development as it is the cleanest source of energy available.

13.4 Telecommunications

It has not been decided exactly what telecommunications will be installed at this stage due to the technologies for television and telecoms which are constantly changing. The provision of television services has however been referred to Cablelink for their comment. They have indicated that provision of television services to the new development will have no adverse effect on the existing supply to local residents, while down time associated with connection to the project will be negligible, a few minutes at off peak viewing at maximum, zero at minimum. Cabling is unlikely to cause disruption either on or off-site provided adequate notice of the schedule of works is given. Provision of telecom services is still under investigation as recent changes in legislation have altered the nature of service provision.

13.5 Water

13.5.1 Water Supply

The existing water supply to the site is from a Corporation watermain. Existing consumption is estimated to average approximately 14,400 litres per day (l/d). The estimated consumption following the proposed development will be 120,000 l/d which will be provided from the same mains. The Corporation has indicated that it will be able to accommodate this demand.

13.5.2 Foul Drainage

Existing foul water drainage from the site is estimated to have a peak flow of 11 litres per second (l/s). The equivalent figure for the proposed development is 46 l/s. This will discharge to a 750x540mm sewer line under Dartry Road, with the connection running under the main site entrance. Accommodation of the additional loading will be facilitated by the improvement of the existing main sewer line. This upgrading work will be undertaken by the Corporation's Main Drainage Division.

13.6 Domestic and other waste disposal

Trinity College Dublin promotes a policy of waste recycling. This policy will be encouraged and facilitated by the provision of can and bottle banks on the site. Disposal of domestic refuse from the site will be contracted to a licensed and approved waste collection firm. All waste disposal facilities will be located in a central area with suitable landscaping provided to screen the facilities from public view.

Chapter 14 – Architectural Heritage

14.1 Introduction

This section examines the architectural merit of existing buildings on the site. Each structure has been examined and is described in terms of its features and the architectural importance attached to such features. The predicted impact of the proposed development on the architectural heritage of each structure is assessed and where necessary mitigation measures are proposed.

Three mid-Victorian houses are the main architectural features of the site. The existing environment, predicted impacts and mitigation measures are all considered on a house by house basis. Two of the houses, Purser House and Trinity Hall, are listed for preservation in List 2 of the 1998 Draft Development Plan.

Archaeology is examined in Chapter 15 and is not considered in this section.

14.2 Proposed Development

The overall site proposals are described in Chapter 4. Here the specific proposals relating to the existing buildings architectural interest are outlined.

Intervention in Trinity Hall (the main house) will be largely restorative, involving removal of partitions. A lightweight glazed atrium is to be inserted at the rear of this building, resolving levels between it and neighbouring buildings.

The existing annexe to the rear of this building will be cleared of all cellular subdivisions and opened up to form generous spaces on lower and upper ground levels, with a gallery on first floor level. These spaces will be used as dining areas. The existing walls, windows and roof will be retained.

The link building between Trinity Hall and Purser House (circa 1920s) will be demolished. A new building will be built on the cleared area. This will be connected to the Trinity Hall annexe via a lightweight glass atrium.

An existing single storey lodge adjacent to the main gate on Dartry Road will be removed, allowing the entrance to be re-aligned in the new site layout.

There will be no works to Grenane House or to the lodge at the north-west corner of the site.

14.3 Grenane House

This house at the south side of the site dates from circa 1875 and is an Italianite free standing house of three bays and two storeys over a low basement. The main feature of the façade is a half hexagon bow. It is cement rendered with vermiculated raised coigns, a cement string course, eaves to hipped roof, a round headed doorcase approached by granite steps and sash windows.

The heritage assessment of this building concludes that the similarity in treatment and date suggests the house might have been part of a development which comprised of Trinity Hall, Purser House and the house to the south of these, outside the grounds of

Trinity Hall. Grenane House is of minor architectural interest though very much part of the Victorian suburban landscape in the southern suburbs

No alterations will take place on this building, consequently there will be no significant impacts on the architectural heritage and context of this building as a result of the proposed development

14.4 Trinity Hall (the main house)

This is a listed building and is the largest of the three houses and perhaps the house built for the original developer of this site. It is three bay with a two storey façade over a high basement. It is cement rendered, with a half hexagonal bow with vermiculated raised coigns and built to a square plan. There is a timber bay window on the right hand side with an enclosed doric porch approached by granite steps and bracketed eaves and a hipped roof. At the south side is a lower two storey service wing with projecting porch on the ground floor, cormice and balustrade. The interior has large reception rooms with contemporary chimney pieces and bracketed cornices. The staircase has turned balusters.

The architectural assessment of this building concludes that it is the finest of the three houses and of more architectural significance than the others. Its central position means that it is the focus point of the present complex of buildings and will remain so in the new development.

Significant alterations including the provision of a 400 seater restaurant will take place to an annexe at the rear of this building. The annexe is described at section 14.4 below.

There will not be any significant adverse impacts on the architectural integrity of Trinity Hall.

14.5 Trinity Hall Annexe

This addition to the northside of Trinity Hall appears to have been constructed around 1900 and is of three storeys and four bays. The decoration follows the characteristics of Trinity Hall, being cement rendered with string courses and architraves to windows though having Georgian style glazing bars in the sash windows. The roof is hipped with bracketed eaves. This addition blends in successfully with Trinity Hall.

The annexe is not considered to be of significant architectural merit. It will be redeveloped mainly for use as a restaurant building with substantial internal alterations taking place. The impact of the alterations will not be significant.

14.6 Purser House

This is a listed building and may be slightly later than the other two. It is a two storey house raised above ground level on a high basement. It is cement rendered, with a pair of half octagonal bows, bracketed eaves and a hipped roof. Granite steps with cast iron lamp stands lead to a simple doorcase. It is simpler in decoration and has been pebble dashed, possibly in the 1920's.

The architectural assessment of this building concludes that there will be no significant impacts on this house as a result of the proposed development.

14.7 Link Building

This is a long, eight bay, three storey building probably dating from the 1920's. It is pebble dashed with Georgian glazing in wide windows. It may have originally been two storeys with an additional storey added later, it is flat roofed. The building is of no particular architectural importance and will be demolished to make way for a new building.

14.8 North-West Lodge

This is a single storey, four bay building with cement rendered walls, eaves and hipped roof. The gate piers and low walls are of ashlar granite and the gates are ornamented cast iron. The fenestration of the lodge has been altered and it has no features of architectural interest.

14.9 West Lodge

This is an attractive three bay, single storey lodge. It is cement rendered with parallel raised coigns, sash windows, gabled porch with timber fret work, bracketed eaves and a low pitch roof. The gates are simple and the gate piers and low walls are cemented with granite caps.

This is an attractive lodge with simple features. It is not listed for protection and will be removed as it is not possible to incorporate it into the proposed design.

Chapter 15 – Cultural Heritage

15.1 Introduction

This section assesses the archaeological and historical importance of the proposed development lands at Trinity Hall, Dartry. The main purpose of the study is to assess the impact on the receiving archaeological environment and to propose mitigation measures to safeguard any monuments, features or finds of antiquity.

Archaeological sites are generally classified for the purpose of impact assessment in such a way that their importance in the archaeological record is suggested. An Area of Interest is suggested for each site. This is a zone of archaeological potential around the known extant remains in which related archaeological features are likely to occur.

The destroyed site of Rathmines Castle (SMR DU022:087) is located in the north-eastern corner of the development site and is listed for protection under List 6 of the Dublin City Draft Development Plan 1998. There are no stray finds of archaeological objects listed for Trinity Hall in the National Museum Topographical Files.

Two of the three detached houses within the grounds of Trinity Hall (Purser House and Trinity Hall) are listed for protection under List 2 of the 1998 Dublin City Draft Development Plan. The architectural merits and impacts on these listed buildings is examined in Chapter 14 – Architectural Heritage.

15.2 Proposed Development

The proposed development involves the provision of residential student accommodation totalling 1003 bedspaces. This will involve the construction of 9 new buildings and alterations to one existing building on the site. The most sensitive part of the site from an archaeological point of view is the north-eastern part where a zone of archaeological potential exists around the destroyed site of Rathmines Castle. The positioning of buildings has taken special care to avoid disturbing the zone of archaeological importance.

15.3 Existing Environment

15.3.1 Methodology

This section examines the historical context of the site and documents any known or potential archaeology which may exist. This archaeological report is based on a desk study and field inspection of the application area. The archaeological desk study availed of the following sources:

- **Sites and Monuments Record**

The primary source of information for the desk study is the Sites and Monuments Record, Dúchas, The Heritage Services of the Department of Arts, Heritage, Gaeltacht and the Islands (formerly OPW). The SMR records known upstanding archaeological monuments and their original locations (in cases of destroyed monuments) and the position of possible sites identified as cropmarks on vertical aerial photographs. This is based on a comprehensive range of published and publicly available documentary as well as cartographic sources. The information held in the SMR files is read in conjunction with constraint maps. The SMR maps relevant to

Trinity Hall, Dartry are sheets 3328 and 3329 of the Dublin 1 5000 series (see figure 15.2)

SMR No	022:087	**Map No.**	3329
Townland	Palmerston Park	**Nat. Grid Ref.**	3160[illegible]8/2305[illegible]1
Site Type	Castle (site of)	**Classification**	G
Distance	within site boundary	**Area of Interest**	100m

Description
No visible trace. House known as the 'Orchards' off Palmerston Park occupies the site of a 17th century mansion built by Sir George Radcliffe called "Rathmines Castle". It was involved in the Battle of Rathmines 1649 (Ball 1903; Kelly 1995, 32-39). The Down Survey map of 1655 shows a multi-gabled house on the site. An avenue was constructed in 1753 from the gate of Rathmines Castle to Terenure. The avenue now forms Highfield Road and Terenure Road East (MacGiolla-Phadraig 1954, 28).
Map References: 1st edition O.S. map (1837) "Rathmines Castle Old". 3rd edition O.S. (1937-38) Not highlighted as antiquity "The Orchards". Down Survey maps: multi-gabled house ("Rathmines"). Dublin City Draft Development Plan 1998: "Site of Rathmines Castle"
Historical References: Ball, F.E. 'A History of the County of Dublin', 1903, 101, 105-6. Joyce, W. St J. 'The Neighbourhood of Dublin', 1912, 170, 188. MacGiolla-Phadraig, B. 'History of Terenure', 1954, 28.

- The Topographical Files of the National Museum of Ireland

These files identify recorded stray finds held in the National Museum of Ireland archives. These are provenanced to townland. The files on finds, which have been donated to the State in accordance with National Monuments legislation, sometimes include reports on excavations undertaken by NMI archaeologists earlier in the twentieth century.

- Documentary Sources

Documentary and literary references were consulted as well as the 1998 Dublin City Draft Development Plan.

- Field Inspection

Field inspection was undertaken to assess current and previous land use, the access to the site, the local topography and any additional environmental information relevant to the report. It also sought to identify any low visibility archaeological features with little surface expression.

15.3.2 Historical Background

15.3.2.1 Rathmines

The lands of Rathmines once formed a portion of the property of the See of Dublin and were included in the Manor of St. Sepulchre. They were part of the Parish of St. Peter and, more anciently (in pre-Norman times), of the Parish of St. Kevin (Ball 1903, 100).

The name 'Rathmines' originated in the family of de Meones who came into possession of what was referred to as 'the Rath' in the early 14th century. Richard de

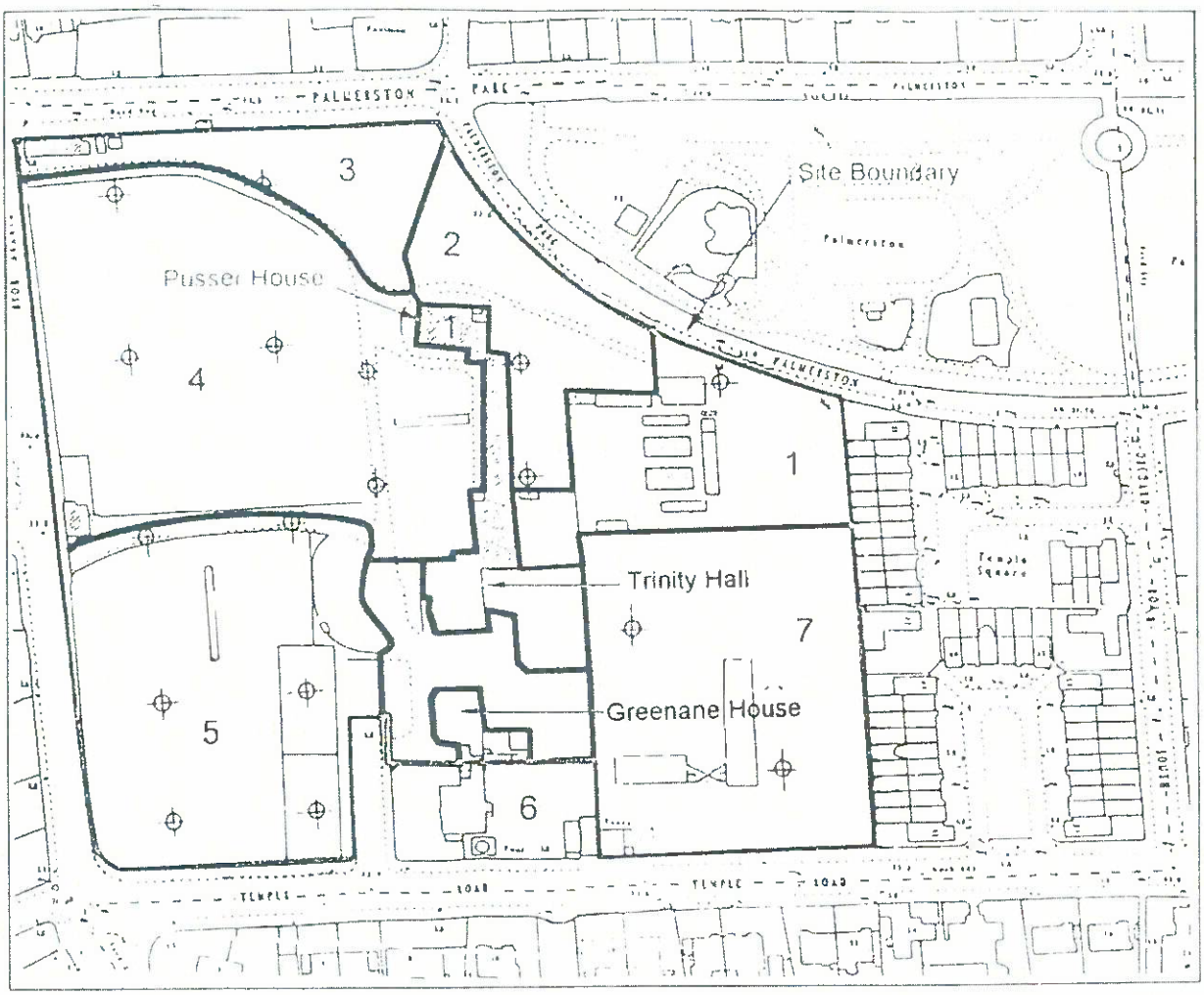


FIGURE 15.1 :
FIELD INSPECTION LOCATIONS

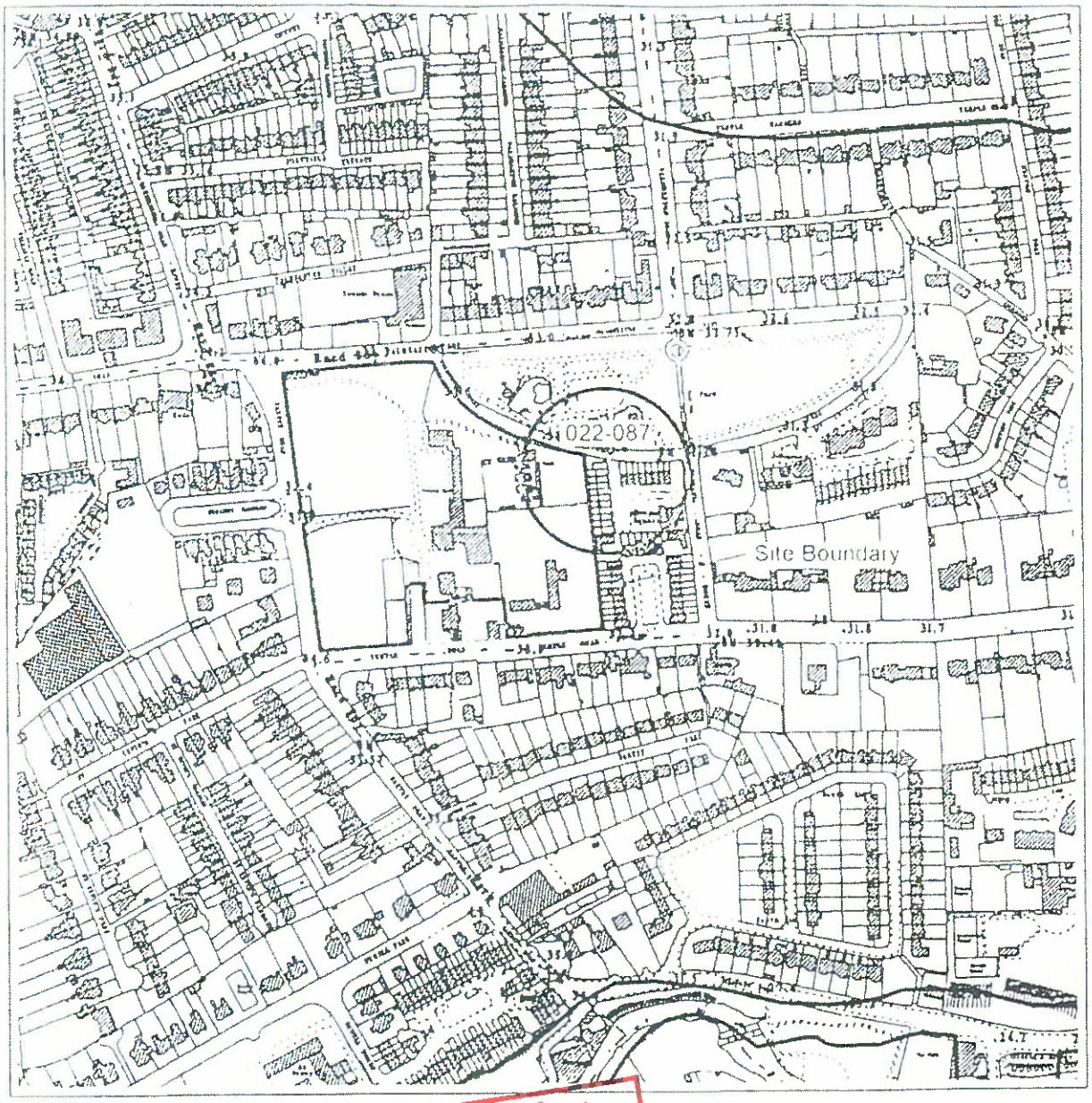


FIGURE 15.2 :
SMR SITE LOCATION

Welton had previously held it In 1382 William de Meones, who styled himself Lord of Meonesrath, held the Rath At some time the name was inverted to become 'Rathmines' or it may simply have been a corruption of Rath de Meones (Ball 1903, 100)

In early times the area was probably heavily wooded and much of it would have been part of Cullenswood The main road going through this area leading towards Wicklow was known as the Bealach Dubhlinne, the Dublin Way From early times there seems to have been a road to Rathmines and one through Cullenswood to Milltown The ancient Slighe Chualann passed along the western border of this area through Harold's Cross to Rathfarnham (Kelly 1996, 17-18)

In the 17th century, Sir George Radcliffe, friend and counsellor of the then Viceroy, the Earl of Strafford, built a 'great mansion in Rathmines' (Rathmines Castle, SMR DU022-087) Its value was estimated at £7,000, a huge sum in those days. However, he did not enjoy it for very long The Earl of Strafford was overthrown and, in, 1640 Radcliffe was imprisoned by the House of Commons (Ball 1903, 101)

The wife and family of the Duke of Ormonde then occupied the castle for a short time. They then moved to Dublin and three days later the castle was burned This act had been attributed to marauding bands of Irish troops, but some thought his own household may have been responsible and made much of the fact that the caretaker had fled and his wife was found dead (Ball 1903, 101).

15.3.2.2 The Battle of Rathmines

The Battle of Rathmines between Parliamentarian and Royalist forces, in 1649, took place in the vicinity of Rathmines Castle (see figure 15.3). The battle was the single greatest historic event in the area and resulted in the defeat of the Royalist Army under the command of the Duke of Ormonde by the troops of the Parliament, then garrisoning Dublin, under the command of Colonel Michael Jones (A. Brooke-Tyrrell: Michael Jones, Governor of Dublin, Dublin Historical Record,5 Vol. XXIV, No. 1). The battle took place in the grounds now occupied by Palmerston Park and the adjacent roads. Ormonde encamped his troops here on moving from Finglas, where he had lingered for many weeks (H.O. Brumskill: The Battle of Rathmines, Dublin Historical Record, Vol. II). This area subsequently became known as 'The Bloody Fields'.

There on the 27th July 1649, at a council of war, attended by Lord Inchiquin, Lord Castlehaven, Lord Taaffe, General Thomas Preston, Sir Arthur Aston, Sir William Vaughan and Major-General Patrick Purcell the disastrous decision was made to send Lord Inchiquin to Munster with two regiments to apprehend Cromwell, where it was thought he might land (Ball 1903, 102). A rumour had gone round that Cromwell himself had set sail for Ireland to quell the rebellion. This decision diminished the number of troops available to Ormonde.

At Rathmines another council of war was held at which it was decided to fortify Baggotrath Castle if practicable. However, the Parliamentarians decided to attack while the Royalist troops were in disarray. They routed the defenders of Baggotrath, killing General Vaughan whose army retreated in the direction of the Dodder and the Dublin Mountains. Jones then sent some of his troops along the Dodder to surprise the

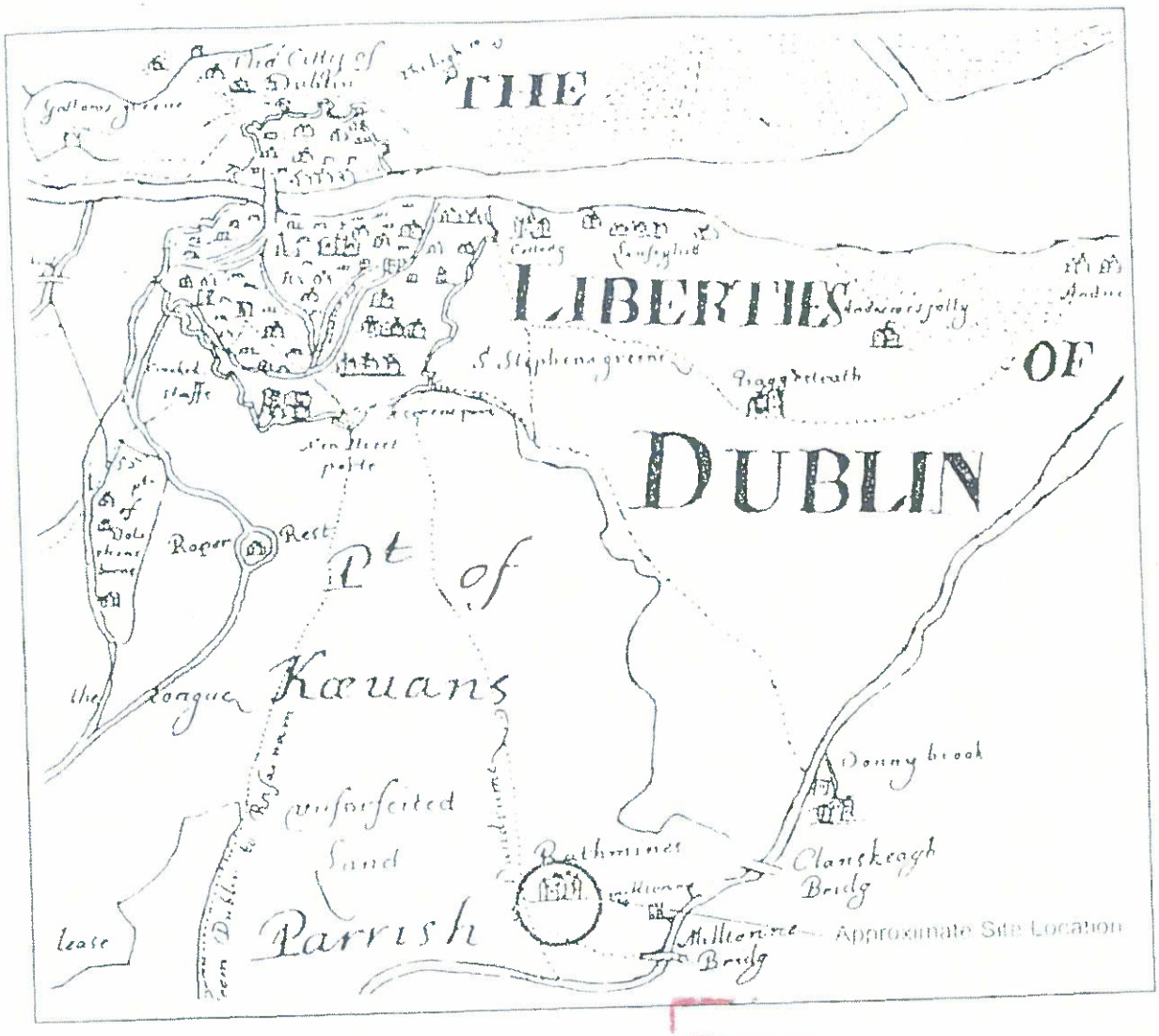


FIGURE 15.3 :
DOWN SURVEY (1655)

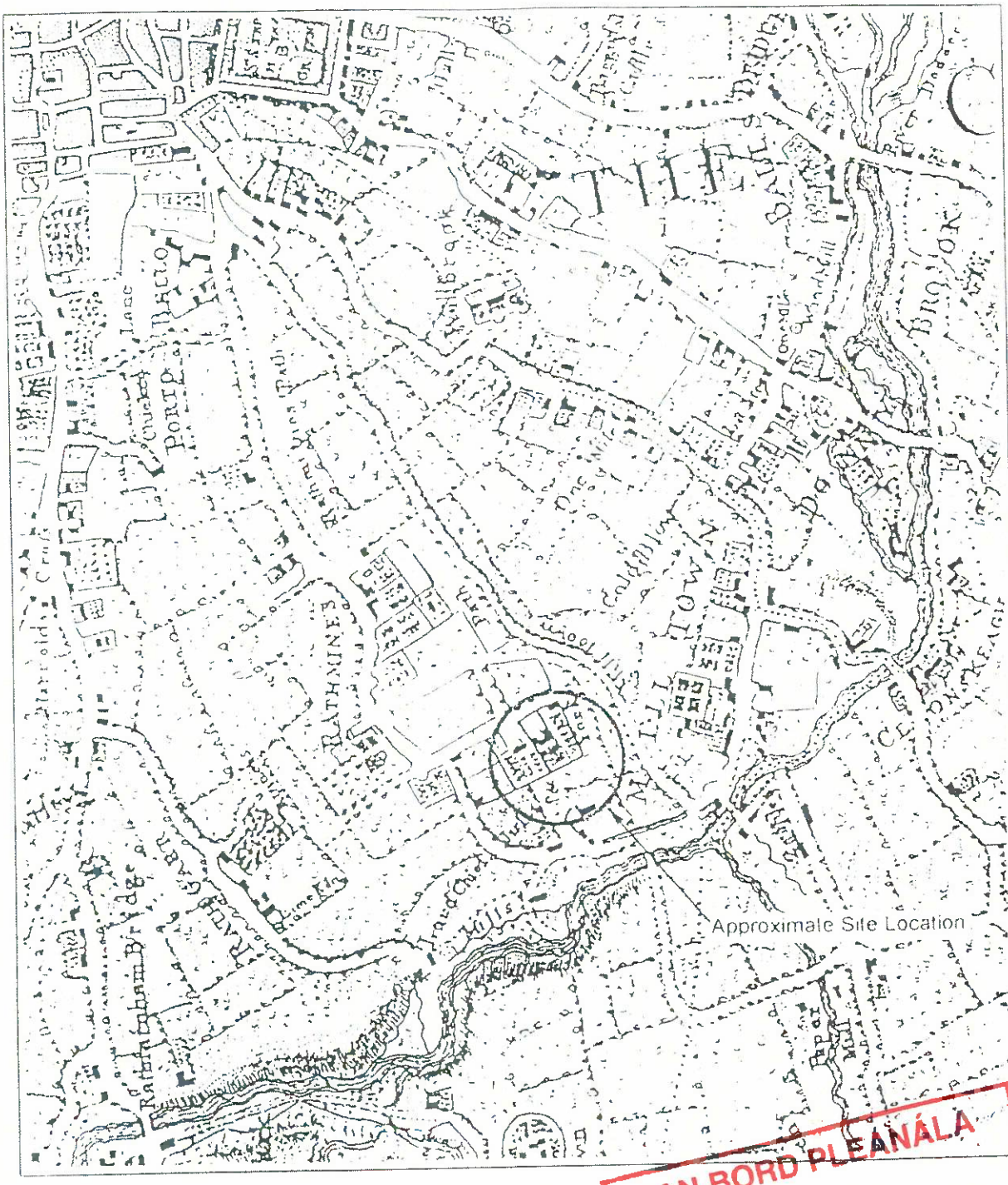


FIGURE 15.4 :
ROCQUE (1760)