DESIGN REPORT
27th May 2022

IN SUPPORT OF
PLANNING APPLICATION

FOR

GAELCHOLÁISTE AN PHIARSAIGH
REDEVELOPMENT
LORETO ABBEY
RATHFARNHAM
DUBLIN 14

Fig. Illustrative only – not reflecting the planning application detail – please refer to drawings

<u>Design Team</u>

SJK Architects

Fitzgerald Kavanagh and Partners Architects (FKP) - Conservation Architects

DBFL Civil & Structural Engineers

BDP Mechanical & Electrical Engineers

CMSE Project Supervisor Design Process

Peter F Costello & Partners Quantity Surveyors

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1 – Introduction

This Design Report has been prepared by SJK Architects as Design Team leaders on behalf of The Department of Education and Skills in support of a planning application for permission for development at Gaelcholáiste an Phiarsaigh, Loreto Abbey, Rathfarnham. It is to be read in conjunction with the Architectural Drawings, Engineering Drawings, Architectural Heritage Impact Assessment, and all other supporting documentation.

The Department of Education and Skills is applying for permission for redevelopment at the site.

The site is in the curtilage of the Loreto Abbey, a protected structure (RPS No.s 252 and 253). The Teresa Ball House element is in the ownership of Loreto National School, and is subject to redevelopment under a recent grant of planning permission (An Bord Pleanala reference ABP-310027-21) for redevelopment as part of the National School.

The project consists of the adaptive re-use of a number of historic buildings on the site and the construction of a new 4-storey glazed link building, that functions as a circulation hub between the existing buildings. The existing buildings have been assigned letters, and a summary of their character and the works proposed is contained in the table below.

The design proposal for the individual blocks facilitates the adaptive re-use of the existing buildings while incorporating sensitive interventions and new construction required to facilitate the successful operation of Gaelcholáiste and Phiarsaigh.

The Design Team have considered the conservation setting of the existing buildings, spatial constraints and circulation issues in order to develop an efficient layout of the specified accommodation identified in the Schedule of Overall Accommodation in order that in the fullness of time, after a Phase 2 masterplan planning application works is carried out, the temporary accommodation may be removed and all accommodation suitable for the needs of a 500-pupil secondary school may be provided within the existing historic buildings.

The overall project includes a masterplan which, once implemented on a phased basis, will ensure the efficient functionality of Gaelcholáiste an Phiarsaigh and its future expansion up to a capacity of 500 pupils, and the removal of the 2-storey temporary accommodation. The masterplan considers the whole site strategy with particular regard to transport logistics and site access, parking and circulation, and amenity and outdoor play areas. The masterplan incorporates a phased occupancy approach which will facilitate the ongoing occupation and operation of the school. Specific consideration has been given to the elements of architectural heritage within the curtilage of the site.

This Planning Application relates to the proposed Phase 1 works only of this overall masterplan.

The application relates to refurbishment, upgrade and modifications to the existing Loreto Abbey complex, Rathfarnham, a protected structure, historically in educational use, with the express outcome of continuance in educational use of these important historic structures into the 21st Century for Gaelcholáiste an Phiarsaigh, a co-educational Irish-language secondary school.

The existing arrangement of buildings has been examined and the optimum masterplan reuse of historic buildings for continued education use has been thoroughly examined by this Design Team in collaboration with the Department of Education since the Design Team's appointment to the project in early 2020. The Department of Education has confirmed capital funding for the Gaelcholáiste an Phiarsaig project Phase 1 works as proposed in this planning application, with funding for the completed Phase 2 / Masterplan completion works to be subject of a follow-on planning application.

The proposed refurbished Loreto Abbey incorporates an adaptive re-use layout for a contemporary secondary school, as developed by the Department of Education, and proposes an entirely appropriate continuance of educational use at these beautiful historic buildings. This is made possible by the proposed small strategic demolitions and insertion of new circulation link, ensuring universal access and accessibility throughout for Gaelcholáiste an Phiarsaigh students of all abilities.

For ease of reference, SJK Architects and the Design Team developed a building label convention which is shown on drawings and various proposals summarized as follows:

Aerial view of existing complex with building blocks labelled

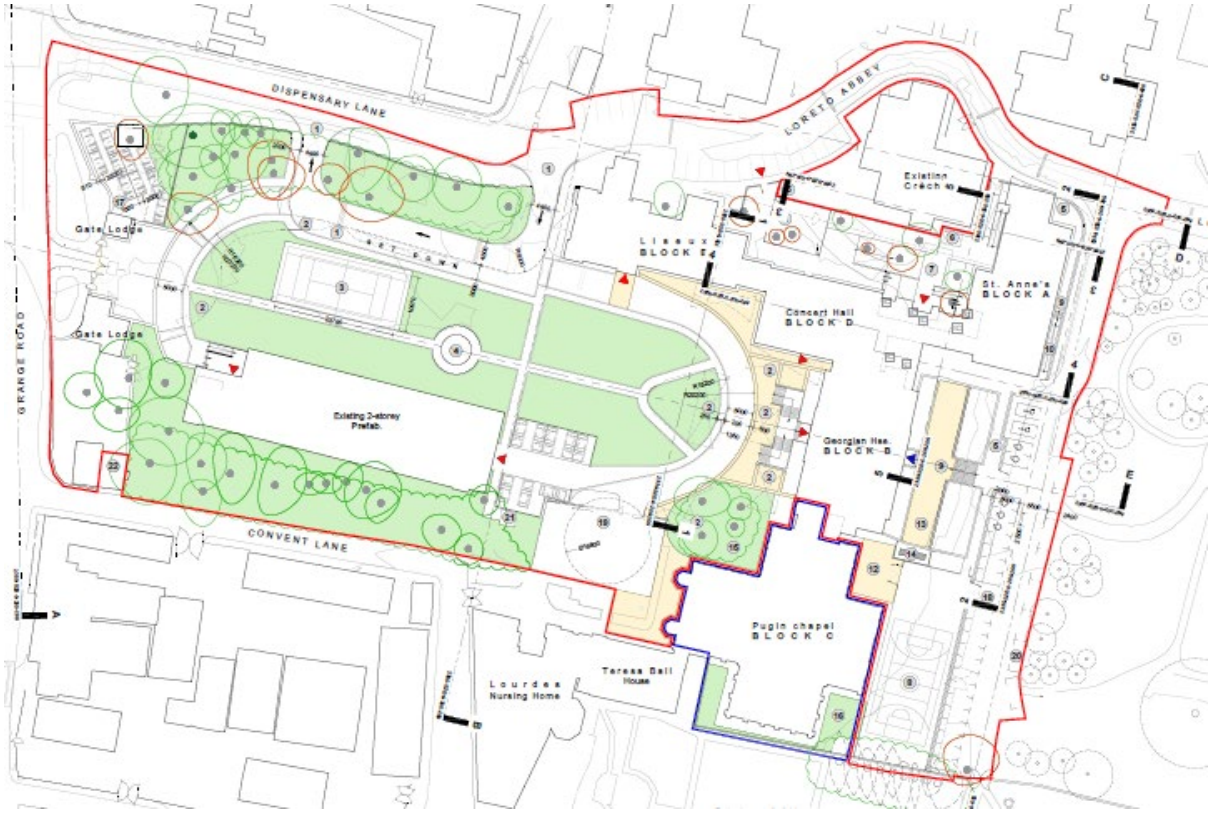
The existing buildings have been assigned letters, and these are as follows: Block A – St. Anne's Dormitory, Block B – Georgian House, Block C – Loreto Abbey (Pugin Chapel), Block D – Concert Hall, Block E – Sports Hall and the H,I - Gatelodges.

Of these buildings the Georgian House, Loreto Abbey (Pugin Chapel) and the Gatelodges are listed on the Record of Protected Structures. In addition, all three are also recorded by the National Inventory of Architectural Heritage as being of Special Interest.

The status of these existing structures and the proposed works are summarised as follows:

Block Designation	Block Name	Descriptor	Works Proposed
Block A	St. Anne's Dormitory	4-storey stone block dating from 1896	**PLANNING APPLICATION PHASE 1** Refurbished and upgraded as classrooms, including science labs, construction studies, and technology rooms
Block B	Georgian House	4 Storey brick and stone house, original sections date from 1725	**PLANNING APPLICATION PHASE 1** Refurbished and upgraded as classrooms, including staffrooms, admin, and headmaster's office

Block C	Loreto Abbey (Pugin Chapel)	Historic chapel dating from c. 1840 designed by AWN Pugin	*FUTURE PROJECT* *No works proposed as part of this project.*
Block D	Concert Hall	4 Storey stone block, dating from 1869	*FUTURE PROJECT* *PHASE 2* *No works proposed* apart from: **PLANNING APPLICATION PHASE 1** a single room on the western corner, between Blocks B&D. Refer to drawings 2350-SJK-S2A-1-180-183 for more detail.
Block E	Sports Hall	East wing 3 storey, dating from 1903 and containing the sports hall on the ground floor	**PLANNING APPLICATION PHASE 1** Refurbished and upgrade ground floor only of Block E as multi-purpose hall. *FUTURE PROJECT* *PHASE 2* *Upper floors*
Block F	St Annes Link	2-storey link building	**PLANNING APPLICATION PHASE 1** Demolished as part of Phase 1 works to make way for Construction of new replacement 757m2 4-storey circulation link building
Block H	Northern Gate lodge	Single storey gate lodge	**PLANNING APPLICATION PHASE 1** Demolition of 20th century extensions, consolidation and holding works. Adjoining site area developed as secure bicycle parking area.
Block I	Southern Gate lodge	Single storey gate lodge and extensions	*FUTURE PROJECT* *PHASE 2* *No works proposed to southern gate lodge,* except minor lime render repairs on Grange Road gable



The proposed redevelopment at Gaelcholáiste an Phiarsaigh consists of:

- Phase 1 refreshment of parts of Loreto Abbey to provide an integrated, fit-for-purpose, 21st century academic campus for the community of secondary school students and staff, while retaining and re-using the essence of the Abbey's historic structure;

- Construction of new replacement 757m2 4-storey circulation link building, mostly glazed with a brick core and consisting of an accommodation stair, lift, new toilet accommodation, and level connections between the Block A St. Anne's and Block B Georgian House buildings, including a new bridge connection within the Block B stairwell linking in with the circulation hub via an intervention to remove a portion of historic fabric below the northern gable arched window, and including the enabling future connectivity to the upper floors of Block D which will be the subject of a future Phase 2 planning application;

- Refurbishment, thermal upgrade and mobility/access improvement throughout 3,510m2 of retained existing Loreto Abbey accommodation at Block A and B;

- Demolitions of ca. 174m2 of Block F St Annes link building and of ca 43m2 of 20th century extensions in poor repair to Block H Northern Gate Lodge additions;

- The new college campus will have a separate staff vehicular parking along the east, with student vehicular drop-off/set-down provisions improved at the existing Dispensary Lane entrance to a new drop off area with a new vehicular egress to Dispensary Lane;

- The proposed redeveloped college campus will have new synthetic-surface play area integrated within the grassed 'Chalice' landscape, hard surface play areas to north of Block D and new link, and to east of Block B / Pugin chapel together with associated landscaping, boundary treatments, and the associated surface water, drainage connections and ancillary services necessary;

- To accommodate the transition from the current Gaelcholáiste an Phiarsaigh to the new redevelopment, a strategic phased construction approach is proposed to allow the college continue to provide education uninterrupted without the need for a decant off campus or for further temporary accommodation (TA) than the current 2-storey TA provided.

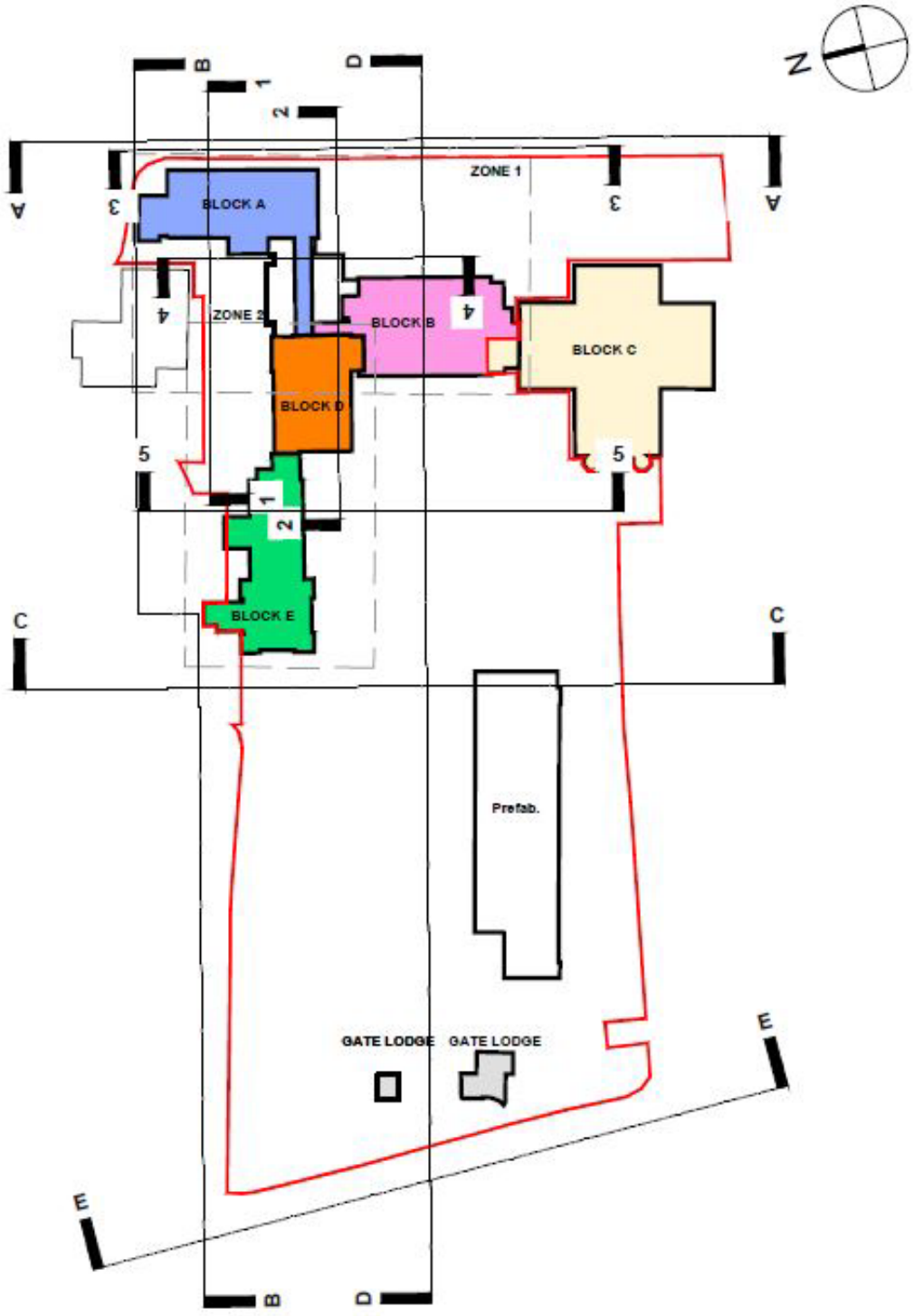
- The development of the planning application design proposal has been closely monitored by the project client, the Department of Education and Skills (DoES), in relation to proposing an optimum education environment within the context of DoES education funding.

The Board of Management, Teachers and Gaelcholáiste an Phiarsaigh community are delighted that the project has been approved to redevelop the college campus, ensuring continuance in education use of this important campus of historic buildings.

The proposed design for the redevelopment of Gaelcholáiste an Phiarsaigh is comprehensive and has fully taken into account the unique heritage of the complex, status and location within South County Dublin and future needs of providing a contemporary teaching environment within its historic setting for its students; and provides an improved approach to arriving, parking and managing traffic around Gaelcholáiste an Phiarsaigh.

The SJK planning application drawings are arranged in zones as follows:

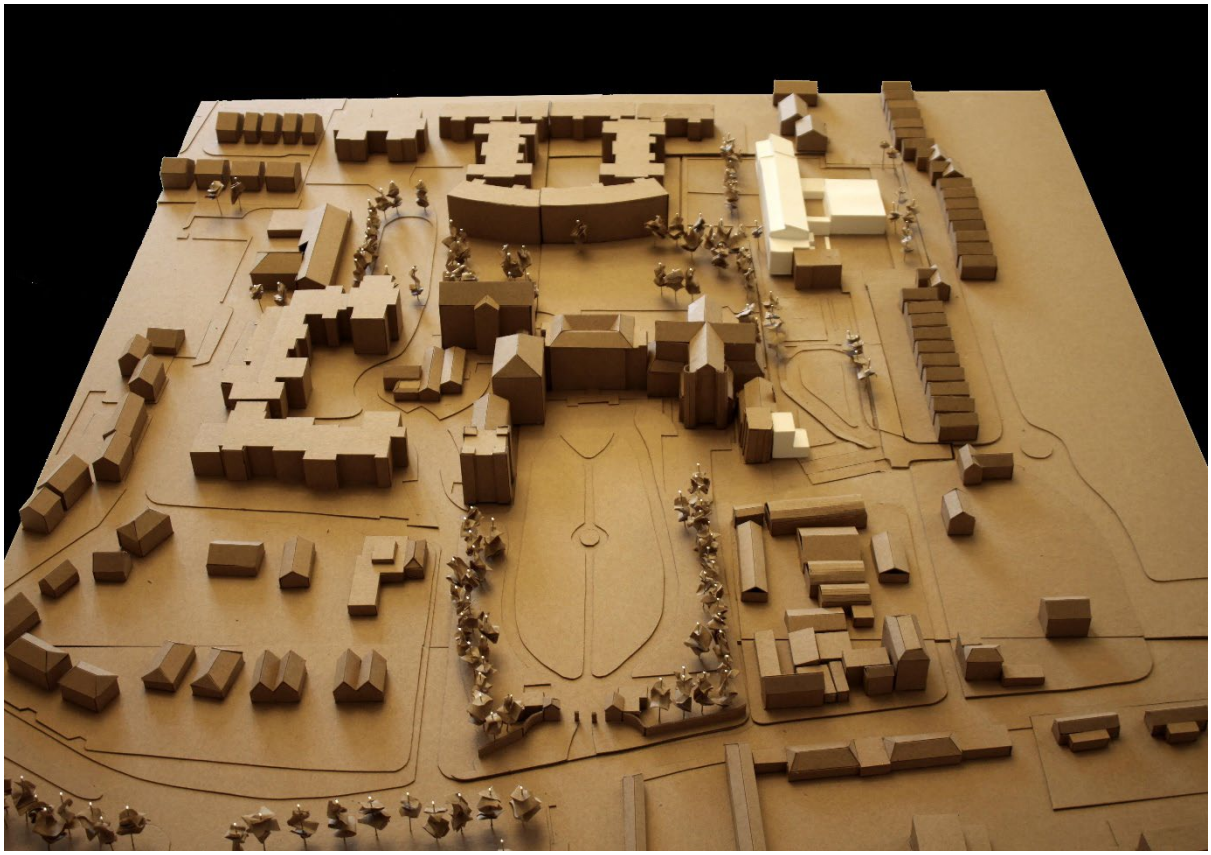
	Job - Stage	-zone-	
		-0-	Relates to overall site
		-1-	Relates to new proposed link area and adjoining Block A and B
		-2-	Relates to Block D and E area
		-A-	Relates to detailed conservation works proposed at Block A
		-B-	Relates to detailed conservation works proposed at Block B



2 – Brief

The project brief for the Phase 1 planning application as agreed to be funded by The Department of Education and Skills includes 2 elements, as follows:

1. Strategic demolition of Block F, to make way for a replacement new build link extension to provide a fully connected and integrated College environment, with students able to move from class to class fully indoors.
2. Existing buildings (St Annes Block A, Georgian House Block B, and Ground floor only of Block E) retained, repaired, upgraded and integrated with the new link.



Photograph of SJK Architects sketch model (illustrate existing Abbey with an early pre-planning concept on adjoining National School site, not planning application design)

Gaelcholáiste an Phiarsaigh Design Statement

A summary of the overall proposal consists of the following elements:

1. Partial demolitions of 2-storey link and toilet extensions;
2. Construction of a new 787m2 replacement four storey glazed circulation extension linking the existing 1725 Georgian House and 1890s St. Anne's buildings;
3. Refurbishment works to the existing 1725 Georgian House and 1890s St. Anne's buildings, with works to the ground floor of the 1903 Gymnasium Building (all forming part of the protected structure RPS no. 253) totalling 3,854m2;
4. Demolition of 20th Century extension to, and holding works for future re-use, to Northern Gate Lodge (RPS No. 252);
5. Construction of temporary school prefabricated toilet accommodation for school use during the phasing of the main construction works;
6. On-site drop-off, set-down and vehicular parking provisions, and associated off-site works adjoining the shared access road / right of way with the Loreto Abbey Apartment Development;

7. All associated hard- and soft- surface play areas, bicycle parking area and landscaping, boundary treatments;
8. Associated surface water attenuation, foul and surface water drainage connections, site works and ancillary services.

The accompanying documentation from Fitzgerald Kavanagh and Partners Conservation Architects addresses the design intention and conservation works proposals in relation to works to Block A, B and ground floor of Block E.

This Planning Application Design Report document addresses the proposed new link building design and site layout design, below:

As part of the project, the existing 2-storey link element and 1970s toilet extensions to the Block B Georgian House are are considered no longer suitable for educational use or non-viable to upgrade to contemporary standards and their strategic demolition unlocks the scheme to create a single linked college campus of buildings. The project proposes to provide an overall interconnected school which allows for universal access throughout and connect the former buildings of different eras and floor levels as an integrated and accessible overall school.

The existing toilet block to the north of St Anne's Block A rises to 4-storeys as an adjunct tower-like element. It is proposed to make an intervention within this element to remove all floors and insert a new escape stair to render the upper floors of the St Anne's Block A building compliant with fire escape requirements. It is submitted this intervention within the historic enclosure is preferable form a conservation setting perspective, than to include another new build 4-storey stair element adjoining the historic structure.

The new build element shown on the planning application drawings consist of the new 4-storey link building which contains an accommodation stair, a lift core, WCs and student circulation / social areas in between Block A, B and D to provide universal access between the two buildings A and B under this Phase 1 application, and three buildings in the fullness of time (ie Block D will be subject to a future Phase 2 application) (the buildings do not currently connect on all floors to current part M accessibility standards)

It is proposed that the students will continue use of the current front gate entrance along the Dispensary Lane.

A contemporary intervention is proposed at the junction of Blocks B and D facing west (the front elevation) in order to provide a clearly visible and identifiable accessible pedestrian entrance into the new circulation link behind. This intervention involves the strategic demolition at lower ground floor of part of the wall to make an accessible entrance, and the addition of a fully glazed 2-storey screen which is designed to align with the Georgian House string course, while being set back and secondary to its corner. Below snip from the planning application drawing and similar approach reference image from the Hugh Lane Gallery to illustrate the design intent:

Extract from planning application drawing 2350-SJK-S2B-0-250 showing the addition of a fully glazed 2-storey screen which is designed to align with the Georgian House string course, while being set back and secondary to its corner

reference image from the Hugh Lane Gallery to illustrate similar design intent of contemporary glazed intervention to the right

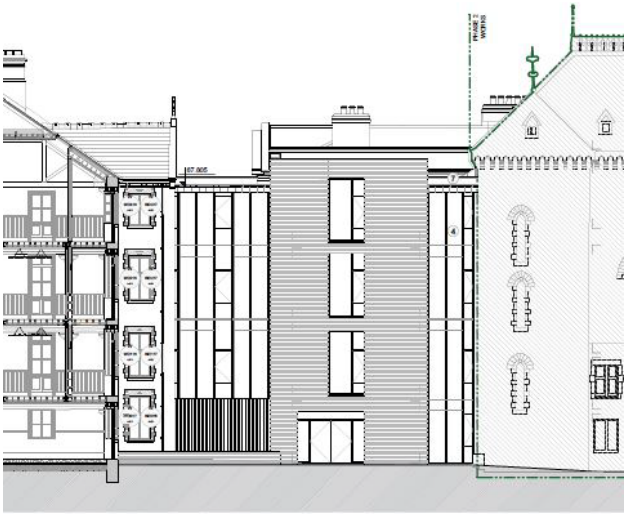
Proposed New Link Building:

The new link circulation area will be at the heart of the refreshed college with circulation and social spaces above and through, stitching the space into the heart of the daily school routine.

The strategy of the central location of the new link provides direct access externally to and from the north (behind Giraffe Creche where this part of the site is proposed to be upgraded as outdoor amenity space for Gaelcholáiste students) and to the east below the raised plinth facilitating students access to the amenity areas proposed to the east of the site.

The upper floors also circulate and flow from the New Link Area at the heart of the school, reinforcing a sense of connectedness to it from the upper levels. A key component to make this successful is the proposal at 2nd floor to partially demolish existing wall below the arched window on the northern gable of the Block B Georgian House, to facilitate a new intervention of a bridge link connection from the Block B stairs into the new link area at this level.

The architecture of the new link is considered to propose a clearly contemporary intervention that is muted in deference to the adjoining historic structures.



Extract from planning application drawing 2350-SJK-S2B-0-252 showing the north elevation of the proposed addition of a fully glazed 4-storey link building

Extract from planning application drawing 2350-SJK-S2B-0-251 showing the east elevation of the proposed addition of a fully glazed 4-storey link building

The design intention of the new link is primarily as a fully glazed 4-storey building which is designed set back and secondary to its adjoining historic structures. The set back is proposed both in plan and elevation.

Within the link there is a toilet and lift core that is proposed as a contemporary solid element within the glazed link finished in selected brick (to South Dublin County Council agreement), with Georgian-proportioned window opes generally aligning with the proportions of the adjoining historic structures, and with the alignment of the brick corner and parapet aligned with the Georgian House behind. The additional height of the brick element parapet is necessary to conceal the required lift over-run height, yet the connection back to historic buildings each side is below their eaves of the adjoining historic buildings with the lower new glazed portion in clear deference as a contemporary intervention.

The glazed curtain wall is considered in calm repeat modules of 1.0m each, and with an express intention to reduce visual clutter in its detailing. The design intention is either for frameless silicone external appearance, or for expressed molded fins / caps projecting ca.200mm-300mm from the plane of the glazing, which fins may generate solar shading and reduce solar gain, while this shading will facilitate a clear visual appearance of the glass within the curtain wall glazing in preference to a reflective glass appearance typically seen in commercial curtain wall developments.

Either approach needs careful consideration at detail design stage subsequent to a grant of planning, including proposals around opening ventilation sashes. SJK Architects note that in general an opening sash within a curtain wall attracts multiple lines of framing, ie for:

1) the opening sash (or a line of black fritting where bonded frameless glazing is deployed);
2) its receiving frame;
3) and the curtain wall mullions and transoms,

all adding to visual weight where the design intention is for transparent levity.

Because of these considerations, SJK propose that the opening sashes may appear lighter and less visually intrusive if installed as solid aluminium panels, where such a solid sash panel may conceal all such framing.

Site Context and Analysis

Site Masterplan Strategy

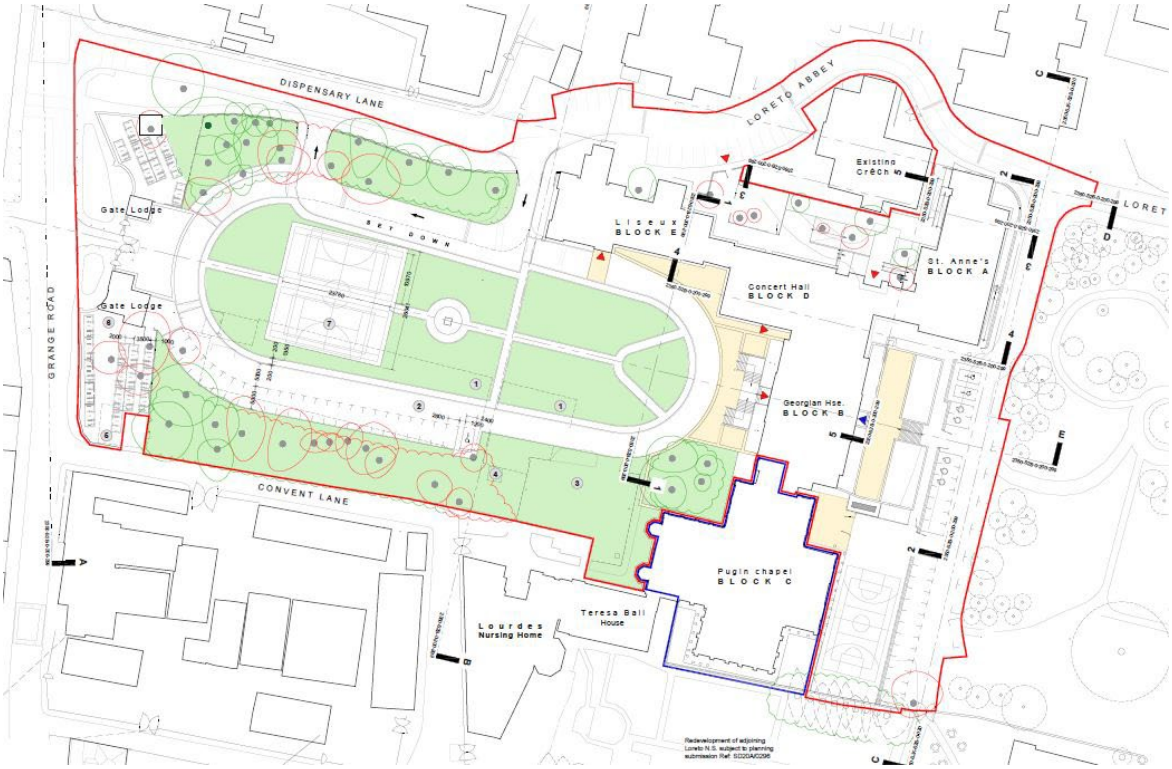
This planning application relates to Phase 1 works only of a 2-phase masterplan that considers all aspects of the project in an integrated manner, reporting on each element of the developed project. The two-storey temporary accommodation will be removed after the completion of Phase 2.

Therefore, this Phase 1 planning application is for works with the 2-storey temporary accommodation remaining on site. The teaching spaces provided within the temporary accommodation will be provided in the historic buildings once they are all refurbished at Phase 2 of the project.

The masterplan considers the future educational re-use of all buildings on the site (ie Block D, Block E upper floors, not forming part of this application) and the proposal for landscaping when the temporary accommodation may be removed.

In summary, the Phase 2 masterplan site layout design will provide, in addition to the proposed Phase 1 works, as follows:

1. demolition of derelict shed and new fenced enclosed / sheltered bicycle parking area for 150 bicycles at the southern gate lodge;
2. a second all-weather play court that may conjoin with the phase 1 all-weather play court across the central axis of the 'chalice' landscape setting
3. a further 26 car-parking spaces in the area from where the temporary accommodation will be removed
4. reinstatement of the historic 'chalice' landscape that has been eroded by the current temporary accommodation and associated hard-standing / bicycle / car parking areas;
5. reinstatement of grass landscape to fore of Pugin chapel / removal of ball court from this area and enabling of future access to Pugin chapel (perhaps from Convent Lane) for non-educational use by doing so.



Extract from Masterplan drawing 2350-SJK-S2B-0-020 showing completed Phase 1 and 2 works, accompanying Phase 1 application for illustrative purposes only.

This Planning Application – proposed Phase 1 Site Layout Plan:

24 no. staff carparking spaces are proposed to be relocated to the east side of the Abbey site, to a new perpendicular carparking location along the shared access road with the adjoining Loreto Abbey Apartment Development. These 24no. spaces are located entirely within the lands owned by Department of Education and Skills, but require regularisation of the access road and reconfiguration of existing parking spaces by way of an offsite works with the agreement with the adjoining Loreto Abbey Apartment Development management company.

A letter of consent from the Loreto Property Management CLG management company dated 13th May 2022 together with the Drawing no. 2350-SJK-S2B-0-023-A as referred to therein describe the extent of the agreed off site works subject to this planning application, and both are submitted as part of this planning application.

The Planning Application proposes a continuance of the current vehicular entrance from Dispensary Lane area with an enhanced one-way drop-off arrangement leading to a new proposed vehicular egress onto Dispensary Lane.

Extract from Phase 1 site layout drawing 2350-SJK-S2B-0-002 accompanying this Phase 1 application

Vehicles are not proposed to access the landscaped forecourt area east of the current access gate leading to the school (except for emergency / disabled access) which is proposed to prioritize pedestrian and student amenity to the fore of the school. A quantum of covered bicycle parking associated with the temporary accommodation will remain in use at Phase 1. The existing tarmac ball court to the fore of the Pugin Chapel will remain during Phase 1 and this provides turning area for emergency vehicles, pending the installation of the full Phase 2 site layout.

Vehicular access is generally proposed to be restricted by a barrier and the pathway up to the school seeks to prioritise student pedestrians and bicycles.

24 carparking spaces are provided in the Phase 1 new staff car park to the east, including. 2 no. disabled spaces are provided close to the new ground floor link doors on the easter side, and 5 no. electric vehicle charging spaces. (A balance of a further 26 car parking spaces will be provided at Phase 2)

The brief for the reuse of the building as a post primary school includes the provision of additional hard play areas which are necessary for school use. Notwithstanding the size of the overall site, the historic setting poses restrictions to integration of these areas and a number of options and layouts have been considered by the design team and client and the impacts of same have been assessed. The proposed location of a new hard ball surface area to the East of the chapel is considered to be less intrusive in this location than to the West of the site given that this ball court must be fenced. The retention of the grassed lawn to the West is considered to be appropriate to the historic setting, however in reality this area is currently difficult to maintain for use as a playing area during winter months. Accordingly, it is proposed to integrate an artificial grass playing area within the natural grass setting which will be useable in all weathers. This area will not be enclosed and will not contain fixed goals or nets therefore is considered relatively unobtrusive to the setting.

In addition to the synthetic grass court proposed within the grass 'chalice' landscape, a hard surface play area is proposed to the east of the Pugin Chapel, and an amenity area to the north of Block D. It is noted that all play surface areas are significantly smaller than would be provided on an equivalent 500-pupil greenfield secondary school location, and the preservation of the chapel landscape curtails the outdoor physical activity provision for the Gaelcholáiste students. The re-use of the Block E sports hall is similarly undersized for the size and age profile of the Gaelcholáiste student body.

It would be welcomed by the Gaelcholáiste student and staff if the Conservation context could be open to consideration of a developed view at a future point in time that the continuance in use by 500 pupils of Loreto Abbey Rathfarnham may benefit from a reappraisal of the context and consider a contemporary landscape that may provide more useable outdoor space for physical activity, designed to integrate into the setting in a sympathetic but contemporary manner.

Student bicycle parking is provided at Phase 1 within a new fenced enclosure adjoining the northern gate lodge with 100 sheltered bicycle parking spaces provided.

Ca. 80 no. 2-sided bike rails are currently provided adjoining the temporary accommodation and will be removed at Phase 2 when a further 175 covered bicycle parking spaces will be provided within a new fenced enclosure adjoining the southern gate lodge.

Existing mature trees are generally retained. 6 no. trees are identified as having to be removed to facilitate the development proposals.

Appendices

a. Archaeological Desk Study
b. Professional Tree Appraisal
c. Bat Survey
d. Asbestos Survey

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Archaeological Desk Report on Gaelcholaiste An Phiarsaigh, Grange Road, Rathfarnham

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Introduction

This desktop archaeological report was requested by the architects working on behalf of Gaelcholaiste an Phiarsaigh, Grange Road, Rathfarnham. The report details the

impact on features of archaeological, historical and cultural significance in redevelopment of the site of the school. The report excludes an analysis of the standing buildings on the site, except in terms of their overall significance and dating. It is concluded that the impact on potential archaeological resources of the redevelopment is moderate.

Methodology

The report is based on the following sources:
Grey literature, including mainly a documentary study and archaeological monitoring of the large estate at Loreto Abbey, carried out by the writer in early 2000s.
Sites and Monuments Record for the Rathfarnham area, held by National Monuments
Leases on the property of Loreto Abbey held by the solicitors in 2000
Printed sources
A site visit.

Archaeological and historical context

The site lies outside the zone of notification for any monuments listed on the Sites and Monuments Record held by National Monuments, Department of Culture Heritage and the Gaeltacht. It includes several important structures listed on South County Dublin's Record of Protected Structures, ref 252, Loreto Abbey, Rathfarnham, Lodges (2) and Wrought Iron Gates, and ref 253, Loreto Abbey, Rathfarnham, Four storey House, Chapel with Tower, Turrets. The complex of buildings is included on the National Inventory of Architectural Heritage (reg. no 11216011), where it is rated of Regional significance. 'These various extensions surrounding the original early 18th century house – chapel by P. Byrne, J.B. Keane, and WWN Pugin, 1838-184-, northern extension by W.H. Byrne, 1870, and school by C.B. Powell, 1921, = constitute a fine essay in the history of taste and are an outstanding example of the region's architectural and religious heritage'. A former part of the Convent, dating to 1921, now the Lourdes Nursing Home, is also listed on the NIAH inventory (reg. no. 11216061). The original red brick country house, Rathfarnham House, is listed as reg. no 11216062.

Archaeological sites in the immediate area of the site are indicated on Fig. 2. While none of these sites are affected in any way by the proposed development, they represent the sole surviving evidence for earlier archaeological and historical landscapes which encompassed the site.

Rathfarnham lay until recently entirely within the half Barony of Rathdown, but the parish is now split between the baronies of Uppercross and Rathdown. The site lies at the foot of the Dublin mountains, on fairly level ground. The river Dodder and several of its tributary streams converge close by the site.

There is a significant group of prehistoric monuments, mainly portal dolmens, in the nearby hills. While these lie some distance south- east of the subject site, on higher

ground, they provide evidence for the density of settlement of the area in the late Neolithic period.

There is otherwise some documented prehistoric activity in the immediate study area. A possible important site, SMR DU- 022- 022, at Llewellyn Park, appears in an aerial photograph as several enclosures and may have been a Bronze Age ring barrow cemetery. The site has been obliterated by a housing estate.

A mound nearby, also probably a Bronze Age ring barrow, DU- 022-021, is further evidence for settlement and farming of the lands at that period.

The placename "Rathfarnham" is reputed to mean Rath of the Alders. The prefix "Rath", common to so many Dublin villages, indicates a settlement type of the early medieval period. The lands of Rathfarnham lay within the territory of the Ui Briuin Chualann, and were ruled by the Ui Dunchada. The Viking family of the sons of Thorkyl moved into parts of the lands during the tenth century.

There is extensive evidence for settlement in the area in the early medieval period, mainly in the form of early church sites, with remains of cross slabs at Whitechurch and at Rathfarnham, adjacent to the site of the present Church of Ireland church (DU- 022- 013). A grave- slab discovered in the graveyard of Rathfarnham church shows Scandinavian influence, and can be dated to between the 9th- 12th centuries. It is one of a group of similar grave- slabs, which are indicative of settlement in the area by the Norse of Dublin. There is no known site of a Hiberno- Norse settlement in the Rathfarnham area, but one historian has speculated that Butterfield Avenue may lie on the line of the ancient "Slighe Cualann", one of the four great roads of Ireland. If this is so, one can expect a fairly high density of early medieval settlement in the immediate vicinity of this road.

Rathfarnham enters the written record with the advent of the Anglo- Normans. Following the invasion, the lands of Rathfarnham were granted to Milo de Bret, who established a mote and bailey there. A Norman stone castle was in all likelihood located at the site of the Tudor Rathfarnham castle (DU- 022- 022).

Evidence for the Norman castle lies in some earlier stonework and a possible undercroft apparent in the extant structure, which dates to some time after 1583. Archaeological excavations in the vicinity of the castle in 1986 uncovered only five finds which date to the medieval period; these were sherds of pottery, part of a ceramic floor- tile, and the base of a stone window surround. No medieval features were uncovered. More recent excavation at Rathfarnham castle uncovered a storage or latrine pit, which contained a cache of high- quality imported goods of the mid- late 17th century.

The castle at Rathfarnham formed part of the defensive curtain of castles of the Pale, the limit of Anglo- Norman jurisdiction. Irish tribes, mainly the O'Tooles and O' Byrnes, occupied the territory to the south, and frequently wreaked havoc on the Anglo-Norman settlements.

There is also mention of medieval mills on the Dodder or its tributaries at Rathfarnham. At the close of the 12th century, Helena, the widow of William de Waville, confirmed to the economy of St Patrick's a mill, which her husband had built on the Dodder near Rathfarnham. An inquisition of around 1334 states that William, the third Earl of Ulster, then lately deceased, was in his lifetime seised of a water- mill with certain pasturages (in Rathfarnham). We do not know if this is the same mill referred to earlier.

An inquisition of 1618 details the plots and burgages of Dudley Loftus of Rathfarnham thus: .."a castle or manor house here, one stable forty tenements, forty gardens, and three and a half carucates of arable land.." The census of 1659 gives the number of inhabitants at Rathfarnham as seventy persons, occupying twenty- two houses. This included three gentlemen, a smith, a carman, a cow herd, a gardener and a cooper. An additional seventy- seven persons resided at Butterfield.

18th century Rathfarnham

The river Dodder was intrinsic to the life of Dublin city. In addition to providing the main source of water for the city, from the diversion of the weir at Firhouse, the river and its tributaries powered many mills from Tempelogue to Ballsbridge. There is a notable concentration of mills in the Rathfarnham area.

Several of these mills may have medieval antecedents. None however, are shown on the Down survey map of the Rathfarnham area, and none are listed in the book of Survey and Distribution. However, medieval mills may have fallen into disuse in the fifteenth and sixteenth centuries, and particularly in the bloody wars of the mid- 17th century. The political chaos of the mid- 17th century resulted in several atrocities carried out in Rathfarnham, one victim being John Higginson, the owner of a cloth mill in Rathfarnham. He attempted to build a mill at Rathfarnham during the Cessation, when he was attacked, and his business was subsequently ruined.

On balance, however, most of the mills and their waterways were probably constructed initially during the upsurge in land drainage and agricultural intensity of the 18th century. The mills are shown on Rocque's (1760, redrawn 1776) map of the county Dublin.

A summary history of Loreto Abbey, Rathfarnham

The subject site constitutes the core part of the estate of Loreto Abbey, originally called Rathfarnham House. The redbrick house, the current central school building, was constructed after 1731 by William Palliser, the son of the Archbishop of Cashel.
The Pallisers moved in society and were interested in literary and scientific pursuits. By all accounts, they entertained lavishly and decorated their house accordingly. The building is attributed to Edward Lovett Pearse, but there is no real evidence for this. The property passed through several hands in the 18th century, and was reputedly unoccupied and semi- derelict when acquired by Archbishop Murray for Frances Ball

in 1821. Mrs Ball apparently had a keen interest in architecture, and added a third storey to the house. The chapel, started in 1838, was designed by Pugin. Ancillary buildings occupy the grounds to the north and south of the 18th century house.

The property was the mother house of the order of nuns which Mrs Ball founded in Ireland, the Institute of the Blessed Virgin Mary, known as the Loreto Sisters. Her brief was to provide education for the girls of middle -class Catholic families. Many daughter schools, both in Ireland and abroad, were founded in a short space of time from Rathfarnham.

Mother Teresa of Calcutta entered religion at Rathfarnham in 1928. Awarded the Nobel Peace prize in 1979, she is honoured in the Catholic Church as Saint Teresa of Calcutta.

Cartographic and lease evidence

The earliest map of the Rathfarnham area is that of the Down Survey, c. 1655. The castle, the church, and a woods to the east of the castle are the sole features depicted. Rocque's map (1760) of county Dublin, redrawn with additional details by Scale in 1773, depicts in some detail the Palliser estate, with gardens, waterways, mills and land enclosures. The main house on the property is identifiable, but the map is at too small a scale to identify with certainty the buildings on the property.

The maps attached to the various leases of Loreto Abbey from the late 17th century on are an invaluable source of information. Unfortunately, there is no surviving 18th century estate map of the property. Several of the features evident on the lease maps appear on Duncan's (1821) map of county Dublin, and on the Ordnance Survey first and subsequent editions of the property. The gate lodges on Grange road do not appear on Duncan's 1821 map.

The Head Lease for the property is an agreement between Adam Loftus (of Rathfarnham Castle) and D. Redding, dated 14th January 1679, term 999 years from 29th September 1678. This was a lease of half of Rathfarnham, from the castle to Tempelogue. The rent was £280 Irish currency.

The entire premises comprised in the above Head Lease were sub- leased by a lease dated 20th December 1714, James Diamond to Joshua Gunson, for the term of 898 years from the 25th March 1715, subject to the adjusted yearly rent of £86.76. A map by Peter Duffe attached to this lease depicts a house, which lies to the south of the brick house, and partly beneath the later Pugin Chapel. This house is a three- bay gabled structure, showing typical late 17th century Dutch- influenced features. The location of this structure is in the subject site.

There is a smaller structure, a lodge, close by the front of this house, depicted on the map attached to the lease. There are no extant remains of this house in the grounds. The original location of the gates (depicted on the lease map) is some distance east of Grange Road, approximately along the line of Convent Lane, south of the subject site.

The lease states: ..'together with all houses, buildings orchards gardens and other improvements, ways, watercourses....'. The lease mentions ponds, and a canal to the south, also a bleaching yard. The latter is associated with cloth production.

In an under- lease dated 18th June 1731, William Dobson to William Palliser for a term of 881 years from the 25th March 1731, subject to the yearly rent of £65. This lease would date the red brick house built by Palliser to some time after 1731, and not the date of 1725 which is cited by all printed sources.

Further lands were leased by Palliser over the ensuing years. A survey of 1781 shows the entrance to the estate with the position of the gates approximately at the location of the pedestal indicated on the first edition (O.S.). The original access to the house and gardens was via the laneway (now Dispensary Lane) which formed the north-western limit of the site. The main out- buildings of the estate, including Palliser's coach house, lay in the northwest corner to the house; these are indicated on a lease-map dated 1741, and also appear on the 1822 map attached to the lease to Francis Ball.

The lease dated 1822 has a map attached which depicts the red brick house. The drawing is accurate in its depiction of a two storey over basement house, with steps to the front door, and four chimneys. The gate lodges are not depicted on this lease map. This map pictures a second bigger pond where the outfall from the pond now is.

Little remains of the 18th century estate walls and boundaries. The extant walls towards Grange Road are of plastered mixed- rubble granite, limestone and brick, and are likely to date to the 19th century. The original estate walls (now demolished) to the front of the house would probably have been brick built. By 1901 the granite convent buildings which form much of the present site were constructed.

Rocque's map 0f 1760 shows several features of the estate, including rectangular formal gardens to the east of the house. These are now completely gone. A range of out- buildings, of which part remains, now Giraffe Childcare, is indicated to the north of the house, and a watercourse emerges from the north of the estate to flow into "Esq. Boyle's park". The pond has been reconstructed in the recent development.

Prior to redevelopment of the lands of Loreto Abbey as an apartment complex, there was little extant evidence for the 18th century landscaped gardens which would have been a feature of the estate. The grounds were then in lawn and playing fields (tarmac) with mature trees on the perimeter. A line of yew trees formed a walk eastwards from the Pugin Chapel. Several are still extant, while those on the adjacent apartment complex site have been cut down.

The pond dates to the 18th century. The tail race off the pond is cement and granite, and has been relined in recent years. The pond (detailed in some of the leases as "fishponds") appears to have been fed by a spur off the stream which follows Grange road. A lease map of 1731 details the boundary of the south side of the property with

a “canall”: this canal probably also served the bleach ponds to the south of the property.

There appear to have been two ponds initially. The tail race off the pond led into the demesne of Rathfarnham castle, which had a series of ponds. One of the community of sisters at Loreto Abbey remembered severe flooding of the gardens at the rear of the house in the 1950s. When the housing estates were constructed on the fringes of the site in the 1970s, the “Jack” river (probably the “cannall” of the 1731 lease) was dammed or diverted, and the pond dried up.

There was a large grotto adjacent to the site, in the former grounds of the house. The grotto is indicated on the O.S. second edition (1860). The north face of the grotto was constructed of rustic random granite, heavily rendered and overgrown. The south side had a more constructed form, and may in fact be part of the interior of the original structure. The Loreto archive describes the renovations of 1822-3 thus: the clearing of the gardens revealed a number of classical statues. It was thought wise to remove them because of their pagan associations, and no doubt, undraped condition. A small grotto was uncovered, which was thought to have been a drinking den of the Monks of the Screw, a club of eighteenth- century rakes akin to the notorious Hellfire Club. It was eventually transformed into a shrine in honour of Our Lady of Loreto...

Many gardens of the 18th century had grottoes, which did not necessarily have such licentious associations. There were a number of decorated and carved stones, including a carved stone abalone shell, placed in the small garden to the north of the grotto, noted in the site visit in early 2000 by the writer before construction work began. These carved stones probably date to the 18th century garden.
The grotto appears to have been removed.

Site visit, November 2020

The site boundary to the north and east of the original core buildings of Loreto Abbey is very tight. A temporary fence encloses the sides and rear of the buildings. A report on the complex submitted to the planning authority in 2007 states that maintenance work was undertaken in 2002 and the buildings were then considered in good condition.

It is evident where the ground level has been reduced to the east of the complex, and the original steps from the rear of the mansion to the decorative garden have been cut off. Elsewhere to the east of the house and chapel, the ground level appears to have been reduced and covered with either tarmac or hardcore.

A temporary school building (SD16A/0154) has been constructed on the southern part of the site. While the building rests on a series of pads, necessary groundworks in the form of water and waste pipes were installed, along with the pads. No archaeological monitoring was included in the grant of permission for this temporary structure, although the location is close to that of the original 17th century house. The

Conservation document included in the planning file states that this building is not located in an area of archaeological interest.

The report on the archaeological monitoring of groundworks in 2002 by the writer states that the underground car park initially proposed for the west of the house did not take place. No groundworks relating to previous developments on the site under the parent grant S00A/0554 or its alterations have taken place here, excepting for the exhumation of the small early 19th century Founders graveyard close by Grange Road.

Impact

The proposed development of the site may involve extensive ground disturbance. This may be in the form of a temporary compound for construction staff and materials. Stripping of the topsoil on the site to the front of the Georgian House and chapel may reveal features of archaeological interest, which are as yet unknown. The development may disturb all earlier remains in the ground. In the area west of the Pugin Chapel, construction/ conservation works may potentially uncover structural remains of the 17th century structure. Additionally, the original location of the lodge to the original late 17th century house, and the original line of the gates and wall to the 18th century building may be uncovered. These should be recorded and preferably protected in situ.

Most of the intended works will entail modification to the existing historic buildings. The presence of a lower ground floor within the Georgian mansion, and within the Pugin Chapel, probably means that any earlier deposits have been removed. However, any works within the lower floors of the buildings should be monitored by an archaeologist under licence to National Monuments, Department of Culture, Heritage and the Gaeltacht.

Similarly, any works to the rear of the Georgian mansion should be monitored, to record the original steps and paving which may remain, and any other details of the construction of the mansion.

While continuous archaeological monitoring of redevelopment at the large development site at Loreto Abbey did not uncover any significant archaeological remains, water features, a brick arched culvert, and a well at Grange Road were uncovered. Any features which relate to the earlier house on the site, and the evolution of the building complex at the core of the abbey should be recorded.

A full report should be issued to the planning authority and National Monuments on completion.

Suggested Mitigation measures

It is recommended that all ground disturbance, that is construction trenches and sub-surface works, topsoil stripping and preparation of a compound, should be

monitored by an archaeologist under licence from National Monuments, Department of Culture, Heritage and the Gaeltacht. Significant features requiring further investigation would then be excavated and recorded, if it is not possible to retain in situ. It is considered moderately likely that features of archaeological significance to the development of the Loreto Abbey estate will remain on this site.

Licensed archaeological work in the vicinity of the site

Archaeological test excavation and monitoring of sub- surface works at the new Loreto residence at Loreto Terrace did not uncover any features or finds of archaeological significance. Field drains were uncovered.

Archaeological test trenching at Rathfarnham Road, adjacent to the medieval church, did not uncover any remains of significance.

A site at Butterfield Avenue (Du- 022-038) was excavated in 1997. This is an enclosed ecclesiastic site, used as a burial ground, and lies some distance west of the present site.

In summary, the area of Rathfarnham village has not revealed archaeological deposits of considerable significance, excepting site Du- 022- 038, and the full excavation within one of the towers of Rathfarnham Castle. This factor should influence the low probability of significant unknown archaeological deposits occurring on the development site.

Sites and monuments in the area

The monuments in the vicinity of the site range from a probable Bronze Age barrow cemetery to post- medieval mill sites and races. Information from the files of National Monuments, online at www.archaeology.ie

Du- 022-013 Rathfarnham church, ecclesiastic remains and 9- 12th century carved slab with Scandinavian influences.
Du- 022- 014 Rathfarnham castle, probably on site of medieval castle. The present structure built by Archbishop Loftus dates to the late 16th century.
Du- 022-015 Farm buildings, White barn, 18th century
Du- 022-021 LLewellyn Park, possible enclosure site. Shows on aerial photographs, now built over.
Du- 022-022 Mound on Grange Manor Road
Marked on second edition, described as a small mound with a tree on top, diameter 4m. Possibility of it being a Bronze Age barrow.
Du- 022- 038 Ecclesiastic site, Butterfield Avenue. Burials discovered here in the course of construction of a bungalow were dismissed by the National Museum at the time as of little significance. The site was excavated in 1997, as human remains were discovered at the site of the Old Orchard public house. Over 200 burials were excavated, as was evidence for an enclosure and for metal working on the site.

Du- 022-044 Dodder bridge- site of late medieval bridge.
Du- 022- 070 Watermill site, on first edition of the O.S.
Du- 022- 096 Remains of mill and mill- race
Du- 022- 099 Watermill site, Butterfield Avenue. The proximity of this mill to Rathfarnham village indicates that it may be one of the medieval mill sites.

Sources

www.excavations.ie Summary account of excavations in Ireland
National Monuments Sites and Monuments Record: County Dublin files. Online at archaeology.ie
Irish Architectural Archive files
Leases and maps relating to Loreto Abbey, Rathfarnham, formerly held by O' Keefe and Lynch, Solicitors.
Historic maps, available at South County Dublin Mapping.

Printed works
Ball, F.E. 1903. History of the county Dublin.
D'Alton, J. 1838. The history of county Dublin
Forristal, D. 1994. The first Loreto Sister Mother Teresa Ball 1794-1861.
Lewis, S. 1859 Topographical dictionary of Ireland vol. 2.
O' Brien, E. 1988. Churches of south- east Dublin, 7th- 12th century in (eds) G. Mac Niocaill and P.F. Wallace, Keimelia studies in medieval archaeology and history in memory of Tom Delaney
Pearson, P. 1998. Between the mountains and the sea: Dun Laoghaire- Rathdown county.
Turner, K. 1983. If you seek monuments: a guide to the antiquities of the Barony of Rathdown.

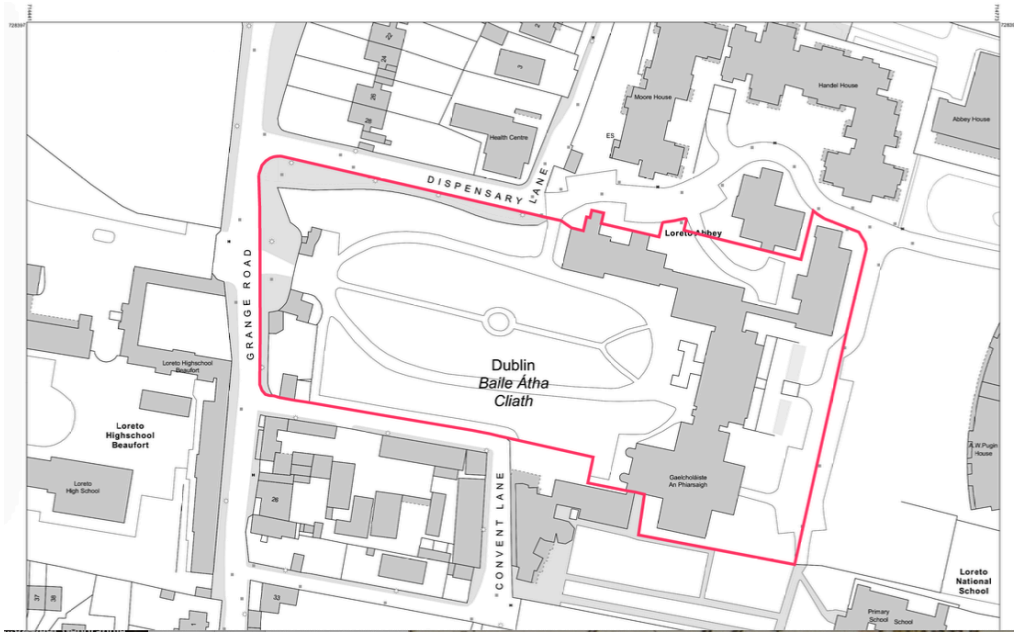

Fig. 1. Site Location

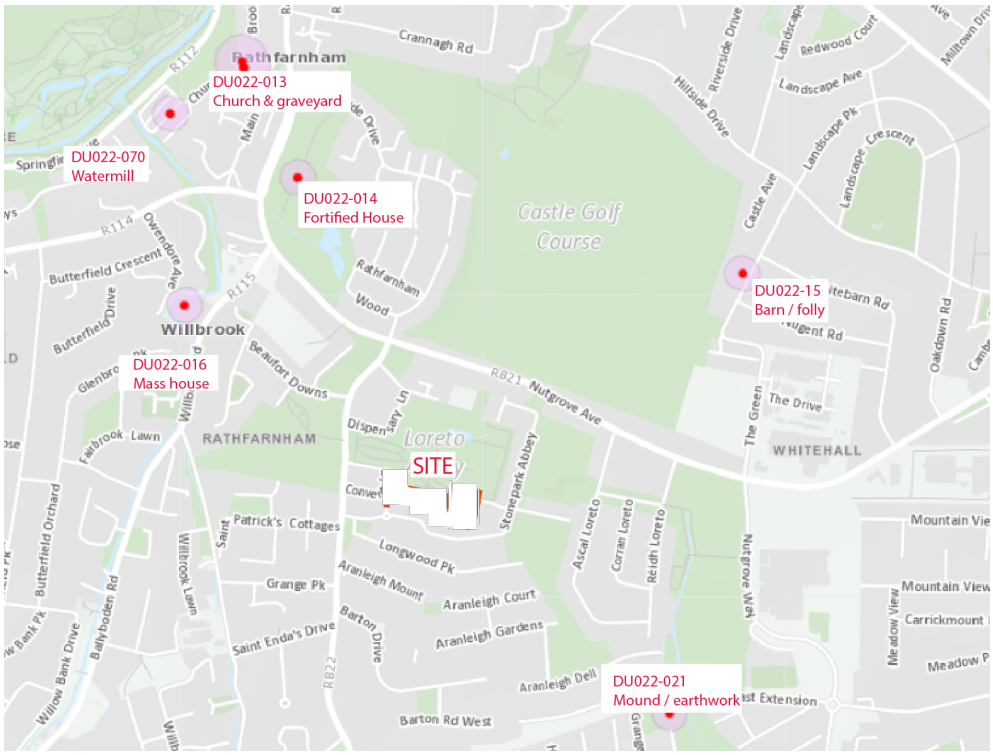

Fig. 2. Recorded Sites and Monuments in vicinity.

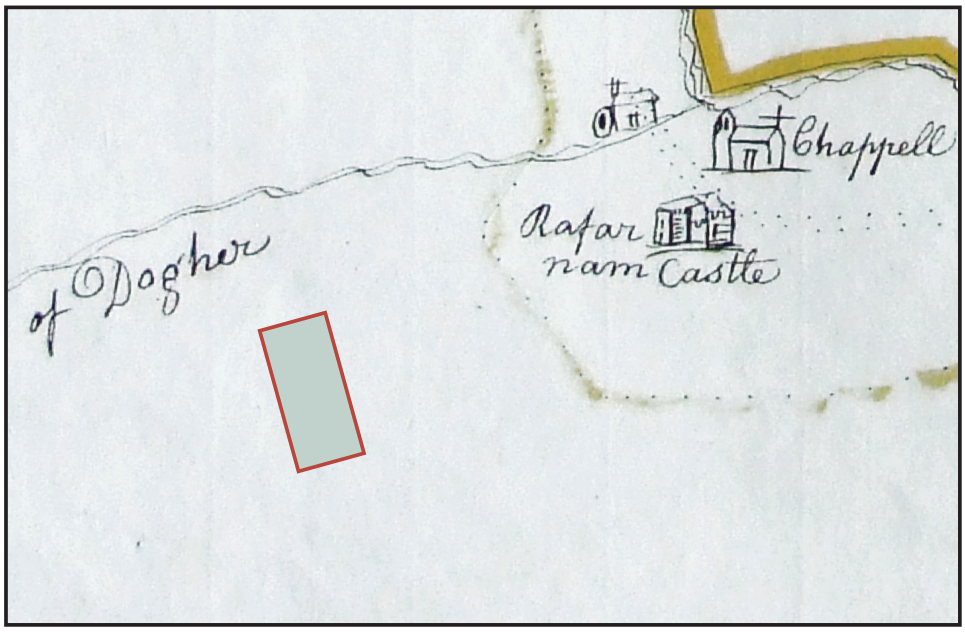

Fig. 3. Detail from Down Survey 1654-6

Fig. 4. Site on Rocque's map of 1760

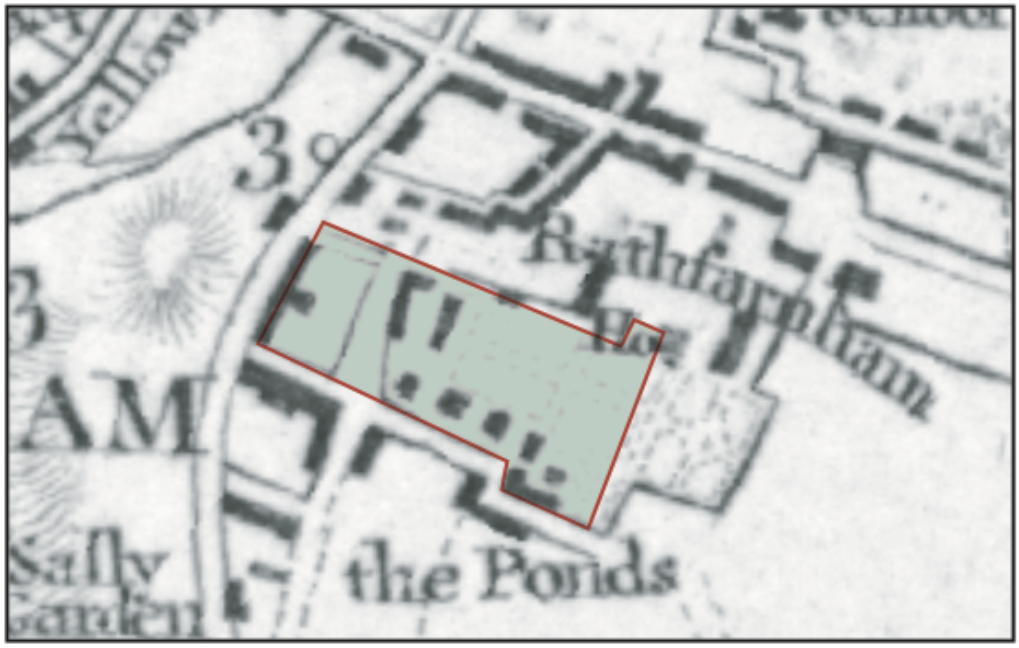

Fig. 5. Taylor's map of 1816

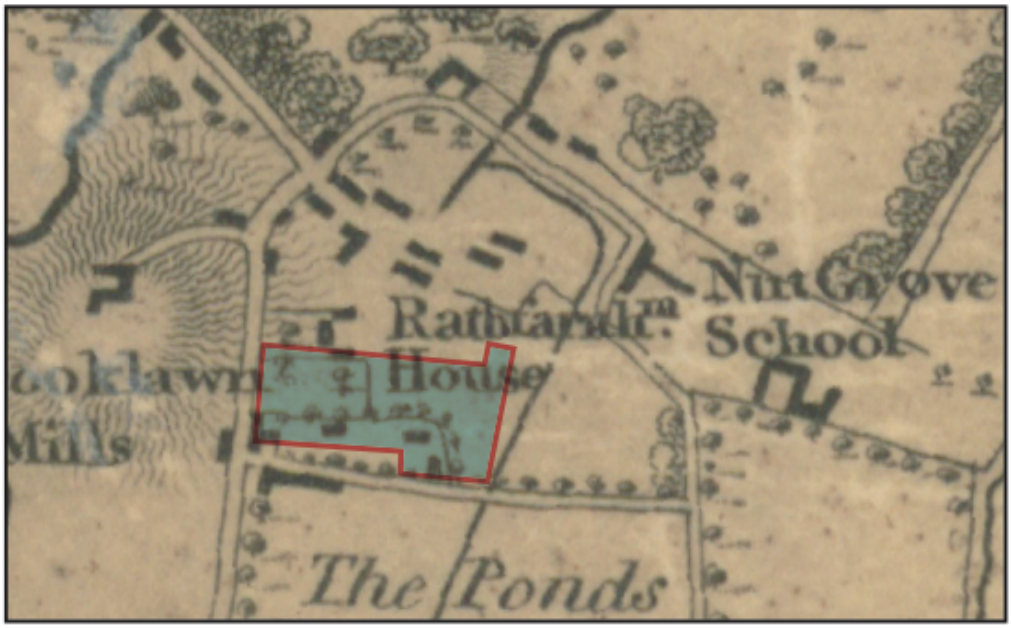

Fig. 6. Duncan's map of 1821

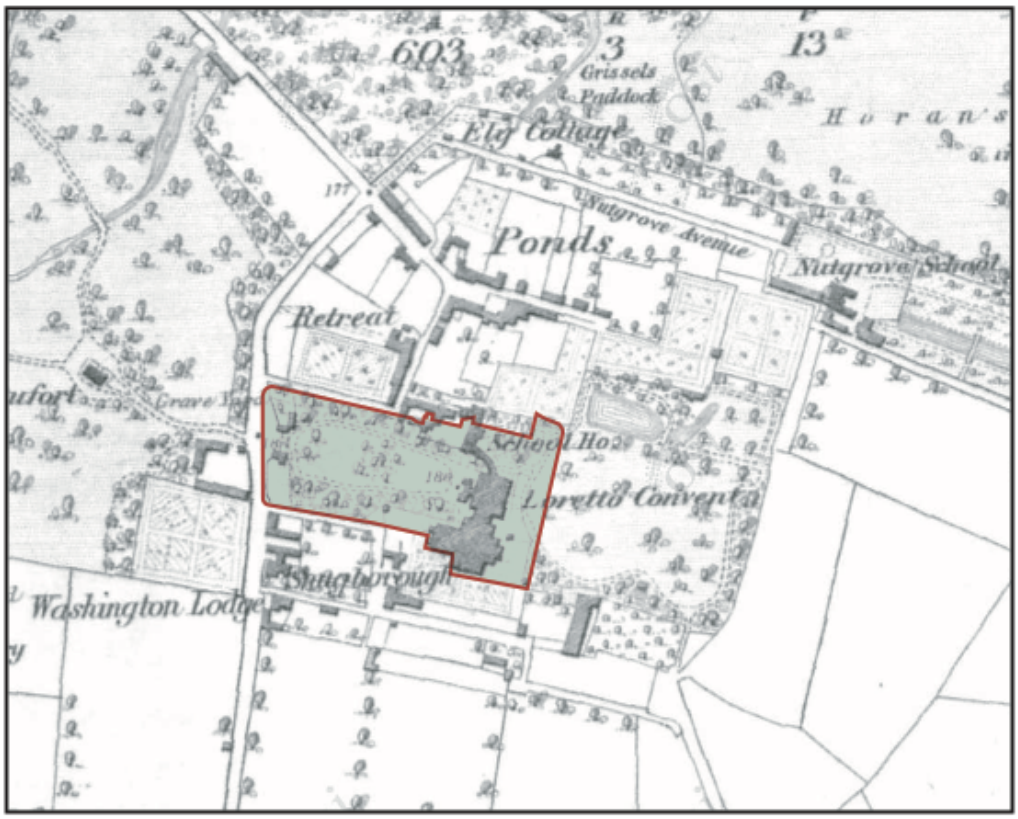

Fig. 7. Ordnance Survey first edition, 1843

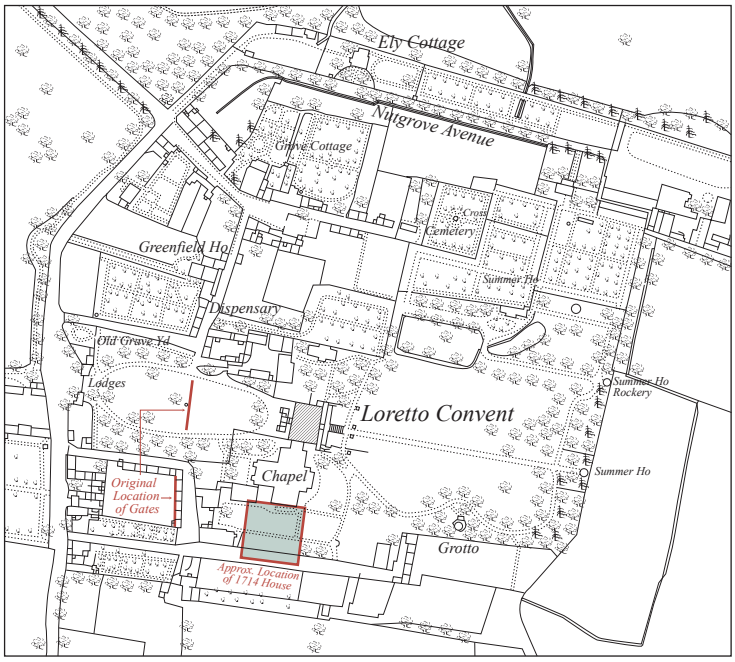

Fig. 8. Ordnance Survey 1901

Plate 1. Aerial Photograph 2013

Plate 2. Front elevation of 1732 mansion.

Plate 3. Pugin chapel, west and north façade.

Plate 4. Temporary school building, from east.

Plate 5. East (rear) elevation of 1732 mansion.

Plate 6. South elevation of early 1900s convent.

Plate 7. North and east elevation, Pugin chapel.

AUSTEN ASSOCIATES

TREE, HEDGEROW & VEGETATION SURVEY, ASSESSMENT, MANAGEMENT & PROTECTION MEASURES

FOR

Gaelcholaiste na Phairsaigh

D 002

CLIENT: DOES

May 2022

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Contents

1.0 Introduction

This tree survey was commissioned as a part of the proposals for the improvement of Gaelcholaiste na Phairsaigh, Rathfarnham. This survey identifies the trees, hedgerows and general vegetation, provides a general assessment, recommendations for their management and protection, and mitigation proposals for the development. A number of trees are located in third party lands but are close to the development and have been surveyed. This survey covers all trees in this area that could potentially be affected by the development.

The trees and hedgerows were surveyed on the 06/11/2020 by this practice and the findings have been summarised and recorded in the following report. The survey was undertaken in November when the trees were starting to lose their leaves and leaf colour was turning. Weather conditions at the time of survey were good. All significant trees have been individually identified and numbers referenced in the survey table, Appendix A.

This report should be read in conjunction with Drawing No. 066520_TS_01 (Tree Survey Plan) and Drawing No. 066520_TP_01 (Tree Retention and Protection Plan).

2.0 Report Limitations

The trees are subject to a basic visual inspection only. A visual inspection is from ground level only and it shall be borne in mind it is subject only to obvious external defects visible at the time of inspection. It does not include a climbing inspection, below ground or internal investigations. A number of trees had heavy Ivy growth prohibiting inspection of structural defects and decay on the main stem and some of the main branches.

The location of the trees shown on the drawings is based on the topographical survey drawing no 4287 Gaelcholaiste Phairsaigh, Rathfarnham_ITM_200_2D_REV3.

3.0 Existing Environment

The proposed site is situated in Rathfarnham. The area is distinctly suburban with mixed development including schools, residential housing, business premises and a golf course in the locality. There are a number of mature trees in the wider area along with mature garden planting of trees and shrubs.

The site itself is a school complex, enclosed by large school buildings to the eastern part of the site. Mature vegetation is located at the northern and southern perimeters to add to the sense of enclosure, while the western part of the site is partially enclosed with mature/semi mature trees.

4.0 Arboricultural Impact Assessment

Tree group 01:

TG 01 is located immediately to the west of the main school building. It consists of a cluster of mature/semi mature trees including tree no.'s 0255 a semi-mature Leyland Cypress *X Cuprocyparis leylandii*, 0256 a mature Cedar *Cedrus atlantica* 'Glauca', 0257 a mature Leyland Cypress *X Cuprocyparis leylandii* and 0258 a mature Holly *Ilex aquifolium*. There are a number of smaller understorey trees and shrubs of low value; *Griselinia littoralis*, *Laburnum x anagyroides* and a small ornamental Cherry *Prunus* spp. Ivy is growing as a groundcover. A skip is located in the group which is causing some compaction in the root zone of the trees. The trees form a small group which soften the building lines; however, they do not offer much in the way of visual amenity outside of their immediate environment and have been categorized as C 2 i.e., Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm. A tree which provides low screening or softening effect to the locality in relation to views in or out of the site, and/or is of a low aesthetic value.

Impacts of the development on the TG 01:

- The area within the root protection area (RPA) of the trees is to be left more or less as is. These trees are to be retained.

Tree group 02: This is a group of mature trees and mixed vegetation located along the southern boundary of the site. It contains tree no.'s 0263 a significant mature Horse Chestnut, *Aesculus hippocastanum* with some decay present, 0264, 0265 Beech *Fagus sylvatica*, 0266 Snake bark Maple, *Acer pensylvanicum*, 0267 Ash *Fraxinus excelsior* Monterey cypress, *Cupressus macrocarpa* , 0268 Monterey cypress, *Cupressus macrocarpa* , 0269 Yew, *Taxus baccata,* 0270 Ash *Fraxinus excelsior*, 0271 Holly *Ilex aquifolium*, 0272 Monterey cypress, *Cupressus macrocarpa*, 0273 Leyland Cypress *X Cuprocyparis leylandii*, 0274 Yew, *Taxus baccata*, 0275 Yew, *Taxus baccata* & 0276 Leyland Cypress *X Cuprocyparis leylandii*. There is a significant understorey of Cherry Laurel *Prunus laurocerasus* along with some lower growing Yew *Taxus baccata* and Holly *Ilex aquifolium.* The placement of a line of portacabin classrooms running parallel tot eh group has resulted in some tree removal (assumed by author) and some works within the RPA of the trees which has most likely caused some damage to the roots of the trees nearest the cabins. The trees in this group are categorized as C 2 and the most westerly of the group are visible from Grange Rd, the majority of the group are visible from the lightly trafficked Convent Lane.

Impacts on development on TG 02: The existing 2 storey prefab on site will be retained as is. There will be no impact form the development that will cause damage to these trees. They will be retained. Tree no. 0263-a large Horse Chestnut, *Aesculus hippocastanum* which may be suffering from Bleeding Canker of Horse Chestnut, this disease is not always fatal and the tree is to be surveyed every 2 years to monitor it health. The understorey in this area is to be retained also.

Tree group 03: This is a significant group of mature trees and mixed vegetation located along the northern boundary of the site. It contains tree no.'s 0277 a mature Grey Alder *Alnus incana*, 0278 a veteran Sycamore, *Acer pseudoplatanus*, 0279 a semi-mature Elm, *Ulmus* spp., 0280 a semi-mature, Cedar, *Cedrus atlantica* 'Glauca' 0281 a semi-mature Cedar, *Cedrus deodara*, 0282 a mature Beech *Fagus sylvatica*, 0283 a semi-mature Maple, *Acer platanoides*, 0284 a mature Larch *Larix decidua*, 0285 a mature Bay laurel *Laurus nobilis*, 0286 a mature Pine *Pinus sylvestris*, 0287 a mature Larch *Larix decidua*, 0288 a mature Holly Ilex aquifolium, 0289 a mature Pine *Pinus sylvestris*, 0290 a mature Beech *Fagus sylvatica*, 0291 a mature , 0292 a mature Leyland Cypress *X Cuprocyparis leylandii*,

0293 a mature Larch *Larix decidua*, 0294 a mature Yew, *Taxus baccata* and 300 a mature Bay laurel *Laurus nobilis.*
There is an understorey of ornamental shrub planting. The majority of trees in this group are categorized as C2. However, there are a number of B category trees; tree no.'s 0280, 0281, 0282, 0286, 0289, 0291 and 0294. There is one veteran Sycamore *Acer pseudoplatanus,* 0278*.* BS 5837:2012 automatically confers an A3 categorisation for veteran trees.

Impacts on development on TG 03: The proposed footpath, grass verge and access road and cycle parking arrangement at tree no. s 0277, 0280, 0281, 0286, 0288, 0289 and 02890 will result in the loss of these trees.

Individual trees:
0259 is a mature Leyland Cypress *X Cuprocyparis leylandii* with significant root damage and dead growth in the crown, this tree has been categorized as C 2 and is considered a low-quality tree. The root damage calls its long-term retention into question even if no development were to take place.
Impact of the development: Review retention during construction.

0260 is a mature Monterey cypress, *Cupressus macrocarpa* causing damage to the nearby blockwork wall. It is at a stage of its growth where it is expected that its crown will start to deteriorate over the next 10 or so years as is common with the species when mature. It has been categorized as C 2.
Impact of the development: There will be no impact form construction, retain.

0261 is a mature Sycamore *Acer pseudoplatanus,* most likely self-seeded. It is not a notable specimen, though is visible from the public road.
Impact of the development: There will be no impact form construction, retain.

2062 is a mature Sycamore *Acer pseudoplatanus,* again most likely self-seeded. As with tree no. 0261 above, it is not a notable specimen, though is visible from the public road.
Impact of the development: There will be no impact form construction, retain.

0295 a juvenile Sycamore, *Acer pseudoplatanus*

0296 a juvenile Lime *Tilia cordata*
0297 a juvenile Lime *Tilia cordata*
0298 a juvenile Hornbeam *Carpinus betulus* 'Fastigiata'
0299 a juvenile Hornbeam *Carpinus betulus* 'Fastigiata'
0301 a juvenile Lime *Tilia cordata*
0302 a juvenile Lime *Tilia cordata*
0303 a juvenile Lime *Tilia cordata*
0304 a juvenile Lime *Tilia cordata*
0305 a juvenile Maple *Acer* spp.

Impacts of the development: A proposed ramp and landscape layout will involve in works in the RPA of these trees and result in their removal of all above apart from 0296, 0297 and 0304 These trees are relatively newly planted, category C 2 trees and it is expected that their removal can easily be mitigated by replacement planting.

Tree no. 0306 is a juvenile Lime *Tilia cordata* and will not be impacted upon by the development.

Tree no 0307 is a mature Field Maple *Acer campestre* is classed as category C 2
Impact of the development; a sports court is proposed within the RPA of this tree which will result in its removal.

Tree Line 01 is located in third party lands adjacent to the development with RPA extending into the development area. This line is categorized as B 1, 2 i.e., Trees of moderate quality with an estimated remaining life expectancy of at least 20 years. A tree which provides moderate screening or softening effect to the locality in relation to views in or out of the site, and/or is of a medium aesthetic value. As such these trees must be retained.
Impact of the development: A portion of the RPA of the trees is in the development lands with a sports court proposed. A 3-D cellular confinement system will be used when constructing the sports court, see section 5 Arboricultural method statement below.

5.0 Arboricultural Method Statement

Introduction:

This section of the report is a method statement which contains information that will allow the building contractor set up the site for dealing with trees. It will also help the contractor prepare their own method statement detailing how they intend to manage construction operations to protect retained trees.

The existing site contains a number of mature trees; however, they are generally of low quality. These trees are called up for removal. Please refer to the drawing 066520_TP_01 and the Arboricultural Impact Assessment above for details.

Tree rooting:

The majority of the tree's roots are in the top 1000mm of the soil, typically spreading laterally from the trunk out beyond the crown. The area of the tree roots is referred to as the **Root Protection Area**, **RPA**, and is indicated on the accompanying plans, 066520_TS_01 and 066520 TP_01. Any damage to roots is to be avoided this includes the excavation of soil and the raising of ground levels in the rooting area.

Removal of trees:

Drawing No. 066520_TP_01 indicates the trees required for removal. Most of which are classed as low-quality category C1, which contribute little outside of their immediate environment.

Trees are to be removed to the standard set out in BS 3998:2010. They are to be felled with stumps and roots to be removed. Care is to be taken not to damage the roots of existing retained trees during removal.

Construction method statement

The building contractor must prepare a construction method statement in relation to retaining trees on site.

- This method statement will detail how construction work and activities including but not limited to; waste management, site traffic management, location of services (both underground and overhead), will be planned so that there is little or no impact on the root protection areas and over-ground plant parts of the trees or protected vegetation.
- This will include outline drawings showing location site traffic routes, storage areas, welfare facilities, waste management areas etc. in relation to the locations of retained trees.
- It will outline the locations of and materials to be used in tree protective fencing. See below for tree protective fencing requirements.
- It will outline the induction process for all staff and sub-contractors in relation to tree protection.
- It will use this tree report document and drawings as a minimum standard for tree protection. All tree protection measures mentioned herein shall be the construction method statement.

Tree work

- Any tree work undertaken on site will be in line with BS 3998. An assessment shall be taken for the presence of any protected wildlife prior to works.

Tree protection areas

The alignment of the temporary tree protective fencing will be as shown on Drawing No. 066520_TP_01. And is specifically designed to protect the trees roots. Construction traffic will be diverted between tree protection areas for the duration of construction and no heavy-duty traffic shall pass over the RPA of retained trees prior to erection of tree protective fencing. The fencing shall remain in place for the duration of the construction works and shall only be removed when all works are complete.

Tree Protection

- No materials, site storage areas, cement washing points, construction waste disposal areas shall be located in or around the Root Protection Areas.
- No noxious liquids shall be disposed of or deposited within the RPA.
- Rubbish shall not be burned in the RPA
- The soil level shall not be altered in any way, (raised or lowered) within the RPA.
- No action that might cause compaction within the RPA are to be carried out, this includes but is not limited to: placement of site facilities, storage of machinery, storage of materials, topsoil storage, staff parking.
- No signage, staples, boards or any other item/material shall be attached to any retained tree.
- Site machinery with extending arms, buckets etc. shall not damage the above ground parts of the trees.

Tree Protective fencing

protective fencing shall be as outlined on Drawing No. 066520_TP_01 and shall remain in place during the construction works. Any works within the tree protective fencing shall be supervised on site by the project Arborist. Signage shall be attached to the fencing reading 'Tree Protective fencing KEEP OUT'

Reports on the successful completion of the works shall be issued by the project Arborist on completion. Once the tree protective fencing is in place and has been approved by the project Arborist, the contractor may commence site set up.

No materials, site storage areas, cement washing points, construction waste disposal areas shall be located in or around the Tree Protection Areas. No noxious liquids shall be disposed of or deposited within the TPA.

This fencing must be checked daily by the site foreman to ensure it is on the alignment shown in the drawings and is rigid with no breaches.

It must be in place for the entirety of the works programme, it is the first item to be installed on site and the last item to be removed off site after completion of works.

Any adjustment to the tree protective fencing alignment for reasons such as works access can only be carried out with the written consent of the arborist and fencing must be relocated along its original alignment once works are completed.

Site Specific Tree Protection Measures

- Cellular confinement system from road access. Tree numbers 0263, 0281 (planing of existing surface and retention of existing sub-base may be permissible here) and 0307 will require a cellular confinement system to protect part of the RPAs. The basic cellular confinement system shall consist of;
    - A porous geo-textile will be placed on the existing levelled surface- **CRITICAL-NO EXCAVATION IS TO TAKE PLACE IN THIS AREA**.
    - A 3-D cellular mesh system, such as cell web is to be placed on top of this and filled with a 20-40mm broken stone with no fines to allow water and air to pass through. This is **not** to be compacted.
    - The above is to be retained with a pressure treated timber edge laid on top of the existing ground level with no excavation into existing ground levels. The edge is to be fixed in place with timber stakes driven into the ground.
    - This system is to be designed and installed in conjunction with the site engineer.
    - This system must be put in place prior to any works, including demolition works taking place on site. This system will be topped with a temporary ground protection system capable of taking the weight of the construction traffic. This system will be modified after the works have ceased to accommodate normal traffic that is expected to access the site. As such a porous monolithic wearing course shall be placed to the top of the system.
    - The above system will be reviewed by the site engineer and shall be refined in consultation with the project arborist.

Review and Management

- It is recommended that the developer appoint an arborist prior to commencement of construction.
- A pre-commencement meeting shall be held with the arborist and contractor in attendance.
- Ongoing meetings shall be held on site during the works, inspections shall be carried out by the arborist at the following stages;
    - Erection of tree protective fencing- i.e., prior to demolition/site enabling works.
    - Installation of 3-D cellular confinement system
    - Post construction review.
    - 2 weeks' notice will be given to the arborist.

- Retained trees are assessed on completion of the development.
- Follow up inspection will be carried out as indicated in appendix 1

6.0 Conclusions

The trees on site are mostly categorized as C2. A number of trees are categorized as B 2 and there is one veteran A3 tree.

A number of these trees are proposed for removal. The majority of these are category C 2 trees of limited value.

There are a number of trees to be retained and protected. Onsite protection measure is required to ensure these trees are retained. To this end it is recommended that a fully qualified arborist (minimum level 4 qualification) is employed to oversee the works.

Signed: _____ Date 25/05/2022

Eunan O'Donnell BSc Ag, Dip Hort, MILI, Arb Cert, TechArborA

Appendix 1 Schedule of Tree Data

List of Abbreviations Used in Schedule of Tree Data Below:

m = Metre

cm = Centimetre

CBH= Circumference at Breast Height

NA = Not Applicable

TS = Twin Stems

MS = Multi Stems

Age Class:

A = Young: A tree which has been planted in the last 10 years or is less than 1/3 expected height of the species in question

B = Middle aged: A tree which is between 1/3 and 2/3's the expected height of the species in question

C. = Mature: A tree that has reached the expected height of the species in question, but is still increasing in size

D =Over Mature: A tree at the end of its life cycle and the crown is starting to break up and decrease in size

V= Veteran: A tree showing signs of biological, cultural or aesthetic value that are characteristic of, but not exclusive to, individuals surviving beyond the typical age range for the species concerned.

Health Status:

L = low vigour

Md = Moderate vigour

N = Normal vigour

Condition Class:

U=Those trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years

A = Trees of high quality with an estimated remaining life expectancy of at least 40 years

B = Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.

C= Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.

The above categories (A, B and C) will be further subdivided with regard to the nature of their values or qualities. A tree may be awarded one or more value categories as below, but such attributes do note infer any additional value and it may be possible for a tree may qualify for one or more of the categories as below.

Sub-categories:

1-mainly Arboricultural Values:

A = Good: Typically, a good quality specimen, which is considered to make a substantial Arboricultural contribution

B = Fair: Typically including trees regarded as being of moderate quality.

C= Poor: Typically including generally poor-quality trees that may be of only limited value.

2- mainly Landscape Values:

A = Good: A tree which provides definitive screening or softening effect to the locality in relation to views in or out of the site, and/or is of a high aesthetic value.

B = Fair: A tree which provides moderate screening or softening effect to the locality in relation to views in or out of the site, and/or is of a medium aesthetic value.

C = Poor: A tree which provides low screening or softening effect to the locality in relation to views in or out of the site, and/or is of a low aesthetic value.

3-Cultural Values:

A = Good: A tree which provides high conservation, historical or commemorative values.

B = Fair: A tree which provides medium conservation, historical or commemorative values.

C = Poor: A tree which provides low conservation, historical or commemorative values.

Appendix 1

Schedule of Tree Data.

No.	Species	Ht	N	S	E	W	Dia (DBH)	Vigour	Age Class	Cond Class	Years	Comments	Priority Action
Tree group 01, 0255 – 0258 Remove as part of development													
0255 TG 01	Leyland Cypress *X Cuprocyparis leylandii*	10-12	1.5	2	2	1.5	29cm, taken below swelling	Md	B	C 2	40-60	Skip located in RPA; smaller branches pruned	Retain
0256 P 0487 TG 01	Cedar *Cedrus atlantica* 'Glauca'	12-14	5	3	5.5	5.5	47cm	N	C	B 2	60-80	Suppressed by Holly to south	Retain
0257 TG 01	Leyland Cypress *X Cuprocyparis leylandii*	12-14	2	2.5	2	2.5	49cm taken below swelling	N	C	C 2	60-80	Close to tarmacadam parkin area, smaller lower branches have been pruned	Retain
0258 TG 01	Holly *Ilex aquifolium*	8-10	3	4	3	4	MS 25, 19cm	N	C	C 2	40-60	Included bark in main union and at 2.5m, decay at branch attachment, crossing branches	Retain
Understorey to tree group 01 is made up of *Griselinia littoralis*, *Laburnum x anagyroides* and a small ornamental Cherry *Prunus* spp. Ivy is growing as a groundcover. A skip is located in the tree planting area													
0259 p 0503	Leyland Cypress *X Cuprocyparis leylandii*	14-16	5	3	3.5	3	64cm	N	C	C 2	80-100	Large basal roots have been damaged, 2 main stems at 4.5m, utility wire through crown, dead growth on east side, suppressed to south	Review retention during construction

Schedule of Tree Data.

No.	Species	Ht	N	S	E	W	Dia (DBH)	Vigour	Age Class	Cond Class	Years	Comments	Priority Action
0260	Monterey cypress, *Cupressus macrocarpa*	12-14	7.5	6	4	7	73cm	N	C	C2	80-100	Suppressed to north, lower limb pruned, block wall cracked from tree growth	Retain
0261	Sycamore *Acer pseudoplatanus*	10-12	2.5	4	4	5	28cm	N	C	C2	30-50	Acer tar spot on leaves, main stem has a twist to the west at base, minimal branching to east	Retain
0262	Sycamore *Acer pseudoplatanus*	12-14	4	3	3	4.5	32cm	N	C	C2	30-50	Acer tar spot on leaves, branching from base	Retain
Tree group 02 0263 – 0276, line of Cherry Laurel *Prunus laurocerasus* grown out along boundary wall, understorey of Yew *Taxus baccata* and Holly *Ilex aquifolium.* Works for the prefab building may have interfered with the RPA of the retained trees and caused damage to the roots. Retain													
0263 TG 02	Horse Chestnut, *Aesculus hippocastanum*	14-16	7	7	7	8.5	73cm	N	C	C2	100+	Ivy on base-pruned, decay pocket @ 4m on north side, branch removed at 2m on east side, minor branch removal in crown with decay at attachment point, large flaking bark sth side at 4m-sign of decay-possible bleeding canker, possible damage to roots from school cabin building	Crown reduce, monitor-survey every 2 years

Appendix 1

Schedule of Tree Data.

No.	Species	Ht	N	S	E	W	Dia (DBH)	Vigour	Age Class	Cond Class	Years	Comments	Priority Action
0264 TG 02	Beech *Fagus sylvatica*	12-14	4.5	8	5	8	59cm	N	C	C2	80-100	Crevices in soil at base-possible rocking, swelling in trunk-sign of decay	Crown reduce, monitor-survey every 2 years
0265 TG 02	Snake bark Maple, *Acer pensylvanicum*	12-14	6	5	5	2.5	MS, 24, 19, 14, 11cm	N	C	C2	60-80	MS at base, flush cut with decay at 1m, union collects detritus and may hold moisture and cause decay	Retain
0266 TG 02	Ash *Fraxinus excelsior*	12-14	2	8	3	4	MS, 36, 32, 22cm	N	C	C2	80-100	Heavily suppressed to nth, sth and east, heavy growth to west, union collects detritus and may hold moisture and cause decay	Retain, monitor for Ash die back annually
0267 P 0496 TG 02	Monterey cypress, *Cupressus macrocarpa*	14-16	8	6	5	3	87cm	N	C	C2	100+	Bark inclusion at 2.5m twin stem at 2.5, dead twiggy growth in crown	Retain
0268 TG 02	Monterey cypress, *Cupressus macrocarpa*	10-12	8	6	5.5	4	60cm taken below union	N	C	C2	80-100	Minor branch arises at 1.5m, heavy ivy in crown, dead branches in crown	Retain
0269 TG 02	Yew, *Taxus baccata*	8-10	2	2	3.5	3	59cm	N	C	C2	80-100	Bare to nth, tree to front removed, decay in main stem	Retain

Appendix 1

Schedule of Tree Data.

No.	Species	Ht	N	S	E	W	Dia (DBH)	Vigour	Age Class	Cond Class	Years	Comments	Priority Action
0270 p 0493 TG 02	Ash *Fraxinus excelsior*	8-10	2	2	3	3	20cm	N	B	C2	30-50	Bare foliage in crown, branches removed	Retain, monitor for Ash die back annually
0270 p 0493 TG 02	Ash *Fraxinus excelsior*	8-10	2	2	3	3	20cm	N	B	C2	30-50	Bare foliage in crown, branches removed	Retain, monitor for Ash die back annually
0271 TG 02	Holly *Ilex aquifolium*	8-10	4	4	3	2.5	MS 29, 17cm	N	C	C2	30-50	Heavy ivy growth	Retain
0272 P 0491 TG 02	Monterey cypress, *Cupressus macrocarpa*	10-12	6	6	6	4	MS 40, 22cm	N	C	C2	60-80	Twin stem at 1m, odd bulge in secondary stem at 1.2m, possible indication of internal decay	Retain
0273 TG 02	Leyland Cypress *X Cuprocyparis leylandii*	8-10	3	4	3	3	MS 26, 26, 25cm	N	C	C2	60-80	Topped, in poor condition, ivy on stem	Retain
0274 TG 02	Yew, *Taxus baccata*	10-12	3	3	3	3	MS est, RPA 27cm	N	C	C2	40-80	Many small stems, regular pruning to maintain shape	Retain
0275 TG 02	Yew, *Taxus baccata*	10-12	3	3	3	3	MS est, RPA	N	C	C2	40-80	Many small stems, regular pruning to maintain shape	Retain
0276 TG 02	Leyland Cypress *X Cuprocyparis leylandii*	12-14	3	4	4	4	MS 44, 24cm	N	C	C2	60-80	Very poor quality, bulge in main stem, 4 stems at 1.5m severe decay at union	Retain

Appendix 1

Schedule of Tree Data.

No.	Species	Ht	N	S	E	W	Dia (DBH)	Vigour	Age Class	Cond Class	Years	Comments	Priority Action
Tree Group 03 has an understorey of rejuvenating Elm *Ulmus* spp. *Eleagnus ebbingei,* Cherry Laurel *Prunus laurocerasus,* Privet *Ligustrum ovalifolium* and Lawson cypress *Cupressus lawsoniana*													
0277 TG 03	Grey Alder *Alnus incana*	10-12	4	4	3.5	3	28cm	N	C	C2	30-50	Unremarkable tree, Alder regen at base, bark split in main stem	Remove
0278 TG 03	Sycamore, *Acer pseudoplatanus*	16-18	6	6.5	8	8	115cm	N	C	A3	100+	Veteran tree, Acer tar spot on leaves, twin stem at 2m, upright branch habit, ivy on main stem	Retain, remove ivy
0279 TG 03	Elm, *Ulmus* spp.	10-12	6	5	7	7	MS 18, 16, 14, 12, 9cm	Md	B	C2	100+	Dead branches in crown, ivy on main stem	Retain, remove ivy
0280 TG 03	Cedar, *Cedrus atlantica* 'Glauca'	10-12	3	5	6	4	42cm	N	B	B2	50-70	Branches removed from lower crown, nice specimen	Remove as part of development
0281 TG 03	Cedar, *Cedrus deodara*	10-12	2	4.5	2	3	30cm	N	B	B2	40-60	Minor branch pruning at base	Remove as part of development
0282 TG 03	Beech *Fagus sylvatica*	10-12	5	7	6.5	3	47cm	N	C	B2	80-100	Small flush cuts on lower trunk	Retain
0283 TG 03	Maple, *Acer platanoides*	10-12	2	4	3	2.5	24cm	N	B	C 2	40-60	Ivy on main stem, twin stemmed at 1.8m	Retain
0284 TG 03	Larch *Larix decidua*	12-14	4	3	3	3	24cm	N	C	C2	40-60	Lean to north, twist to top	Retain

Appendix 1

Schedule of Tree Data.

No.	Species	Ht	N	S	E	W	Dia (DBH)	Vigour	Age Class	Cond Class	Years	Comments	Priority Action
0285 TG 03	Bay laurel *Laurus nobilis*	8-10	4	2.5	4	2	MS 12, 11, 9, 8 6cm	N	C	C2	20-40	Large shrub	Retain
0286 P 0513 TG 03	Pine *Pinus sylvestris*	18-20	4	8	4	5	57cm	N	C	B2	80-100	Branches start at 12m	Remove as part of development
0287 p 0512 TG 03	Larch *Larix decidua*	12-14	3	3	2.5	3	21cm	N	C	C2	40-60		Retain
0288 P 0513 TG 03	Holly *Ilex aquifolium*	6-8	3	3	4	3	33cm	N	C	C2	40-60	Branches pruned, some decay at branch attachment, decay at lost branch at 2m south side	Remove as part of development
0289 P 0514 TG 03	Pine *Pinus sylvestris*	18-20	3	5	6	3	77cm	N	C	B2	80-100	Heavy ivy on stem, thick spongey layer of bark	Remove as part of development
0290 TG 03	Beech *Fagus sylvatica*	10-12	6	4.5	7	6	39	N	C	C2	20-40	Minor decay evident at branch attachments-where branches have been removed	Remove as part of development
0291 TG 03	Pine *Pinus sylvestris*	12-14	5	8	6	2	47cm	N	C	B2	60-80	Branches removed at 6m	Retain
0292 TG 03	Leyland Cypress *X Cuprocyparis leylandii*	10-12	3	2	2.5	2	34cm	N	C	C2	30-50	Possible root damage from gate installation	Retain

Appendix 1

Schedule of Tree Data.

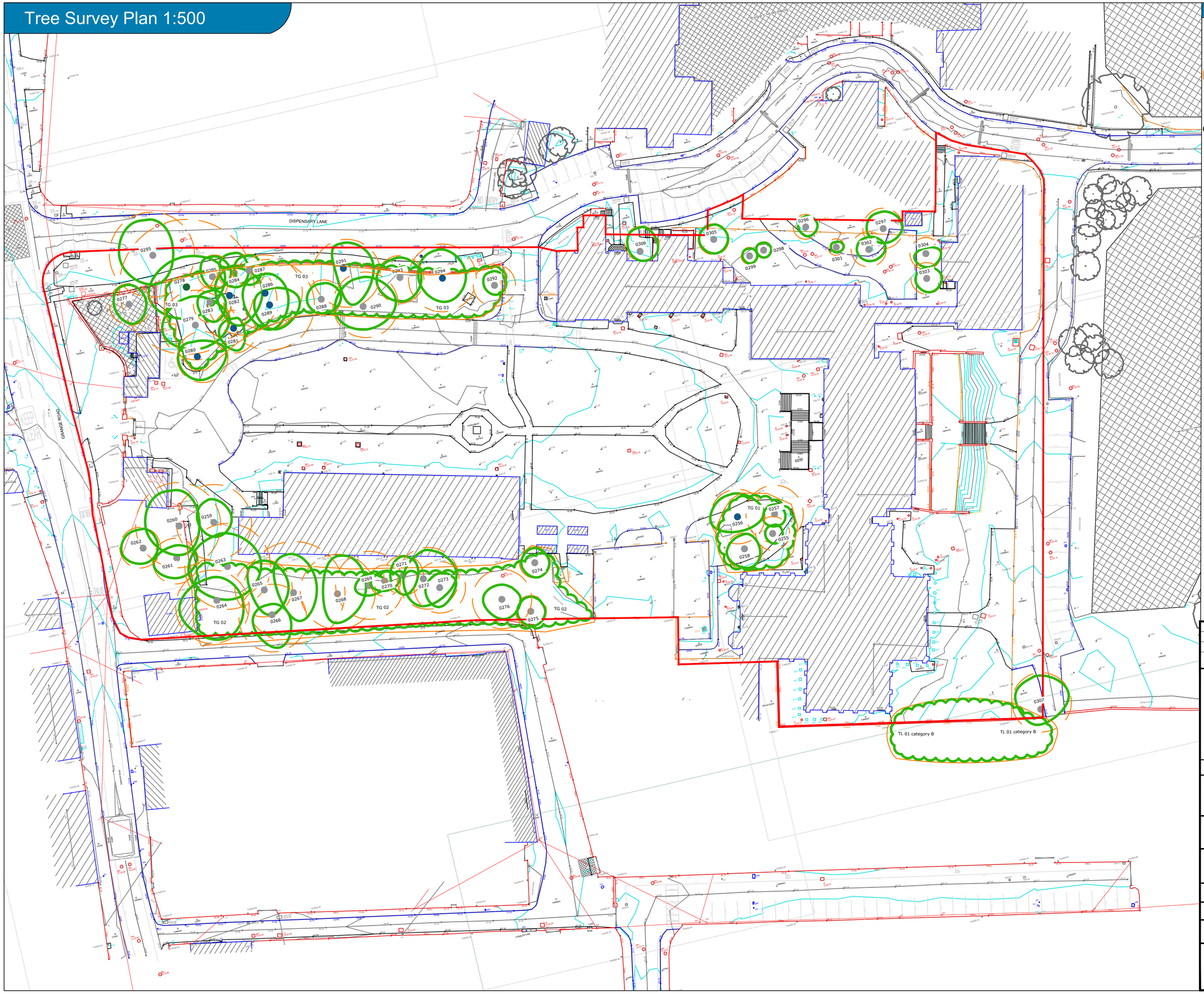
No.	Species	Ht	N	S	E	W	Dia (DBH)	Vigour	Age Class	Cond Class	Years	Comments	Priority Action
0293 TG 03	Larch *Larix decidua*	12-14	4	5	4.5	5	31cm	N	C	C2	30-50	Heavy ivy growth on stem	Retain, remove ivy
0294 TG 03	Yew, *Taxus baccata*	10-12	6	5	5	5	60cm	N	C	B1	60-80	Minor dead growth in crown, heavy ivy on main stem	Retain, remove ivy
0295	Sycamore, *Acer pseudoplatanus*	12-14	8	7	1	8	69cm	N	C	C2	80+	Lean to the west, split in bark at lower trunk and some internal decay, 3 stems at 4m with potential decay pocket, in public verge	Retain, in third party lands
0296 P 0619	Lime *Tilia cordata*	6-8	2	2	2.5	1.5	15cm	N	A	C2	10-20	Nursery planted specimen	Retain
0297 P 0622	Lime *Tilia cordata*	6-8	3.5	3	4	3.5	21cm	N	A	C2	20-30	Nursery planted specimen	Retain
0298	Hornbeam *Carpinus betulus* 'Fastigiata'	6-8	1.5	1.5	1.5	1.5	15cm	N	A	C2	20-30	Nursery planted specimen	Remove as part of development
0299	Hornbeam *Carpinus betulus* 'Fastigiata'	8-10	1.5	1.5	1.5	1.5	17cm	N	A	C2	20-30	Nursery planted specimen, minor bark damage	Remove as part of development

Appendix 1

Schedule of Tree Data.

No.	Species	Ht	N	S	E	W	Dia (DBH)	Vigour	Age Class	Cond Class	Years	Comments	Priority Action
0300 TG 03	Bay laurel *Laurus nobilis*	8-10	5	4	4.5	5	MS 19, 15, 13, 13cm	N	C	C2	20-40	Large shrub, tagged out of sequence	Retain
0301 P 0620	Lime *Tilia cordata*	6-8	1	1	1.5	1	12cm	N	A	C2	20-30	Nursery planted specimen, minor bark damage	Remove as part of development
0302 P 0621	Lime *Tilia cordata*	10-12	2.5	2.5	2.5	2.5	20cm	N	A	C2	20-30	Nursery planted specimen, minor bark damage	Remove as part of development
0303 P 0624	Lime *Tilia cordata*	10-12	2	3	3	2.5	16cm	N	A	C2	20-30	Nursery planted specimen, minor soil disturbance at base	Remove as part of development
0304 P 0623	Lime *Tilia cordata*	10-12	1	3	3	2.5	15cm	N	A	C2	20-30	Nursery planted specimen	Retain
0305 P 0617	Maple *Acer* spp.	8-10	3	3	3	3	17cm	N	A	C2			Remove as part of development
0306	Lime *Tilia cordata*	10-12	5	2	3.5	5	20cm	N	A	C2	20-30	Nursery planted specimen	Retain
0307	Field Maple *Acer campestre*	10-12	7	3	6	4	MS 23,19, 10 cm	N	A	C2	50-70	Twin stem at 1.2m, heavy ivy on stem, crossing and rubbing branches, suppressed to south	Remove as part of development
Tree line 01, a line of trees in adjacent lands with branches overhanging the boundary. No access to trees, measurements are estimated below, the crown is breaking up on the second tree from the east, the line has possibly been pollarded and allowed grow out													
TL 01	Sycamore, *Acer pseudoplatanus*	12-14	8	6	6	6	Avg 33cm	N	C	B1, 2	60-80		Retain

Tree Survey Plan 1:500



Legend

Tree Protection

- Existing Tree to be retained
- Crown spread
- Tree tag reference number (0960)
- Colour coded tree stem
- RPA, Root protection area

Colour coding

- Category A: Trees of high quality
- Category B: Trees of moderate quality
- Category C: Trees of low quality
- Category U: Trees unsuitable/unsafe for retention

Locations of trees o260 - 0275 have been located through measurements taken by hand on site, they are not verified by the topographical survey

This arboricultural survey and plan has been completed by Eunan O'Donnell BSc Ag, Dip Hort, Arb cert, MILI, TechArborA

Rev	Date	By	Details
B	25/05/22	EOD	Stage 2B
A	03/12/20	EOD	Tree Survey

AUSTEN ASSOCIATES
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landscape architecture arboriculture design project management

Client: Department of Education/Board of Management

Project title: Gaelcholaiste na Phiarsaigh

Drawing title: Tree Survey Plan

Drawn by: EOD

Approved by: TA

Status: Stage 2B

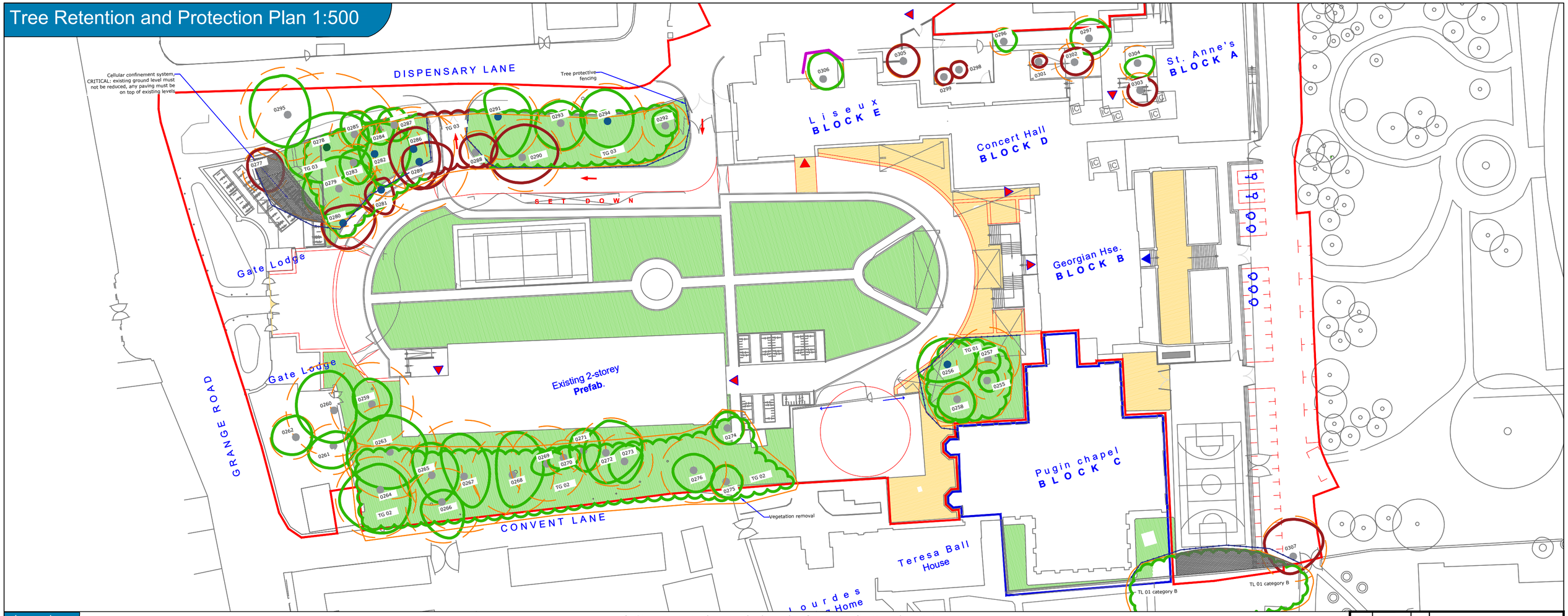
Scale: 1:500 on A2

Date: December 2020

Drawing no: 066520_TS_01

Revision: B

Tree Retention and Protection Plan 1:500



Legend

Tree Protection

- Existing Tree to be retained
- 0960 — Crown spread; Tree tag reference number
- Colour coded tree stem
- Root protection area

Colour coding
- Category A: Trees of high quality
- Category B: Trees of moderate quality
- Category C: Trees of low quality
- Category U: Trees unsuitable/unsafe for retention

Existing trees to be retained

Existing trees proposed for removal indicated with a dashed red line

Existing trees and vegetation proposed for removal

Tree group

Understorey vegetation/hedgeline

Temporary Tree protection fencing to be in place for the duration of construction works

Cellular confinment tree protection system, paved with permeable block paving where road narrows

Tree Protection Fencing

a.)Tree protective barriers (fencing) shall be erected to enclose the tree protection area on the alignments shown on drawing. Any alterations on the exact positions/alignments are to be agreed with the project arboriculturist and local authority at the pre-commencement meetings.

b.)Unless agreed otherwise with the local authority, fencing is to be in accordance with BS 5837 figure 2, reproduced below. Commencement of development including site access of construction machinery and materials, must NOT occur before this tree protection fencing is in place and is confirmed to be adequate and in place.

c.)No materials storage, including soil, debris or cement, within tree protection areas shall be permitted. No waste materials from construction are to be deposited within the RPA, including but not limited to washings and water run-off from cleaning of machinery, containers etc.

d.)Within the indicated tree protection areas, the changing of levels including excavation or raising of evels regardless of purpose is strictly prohibited (other than permitted under direct supervision in point 5 below); this includes surface and foul water drainage, electricity supply and data cables. Under no circumstances should roots over a diameter of 25mm be severed or broken; where such rooting of a retained tree is excavated (in or outside of tree protection areas), the advice of an arboriculturalist shall be sought.

e.) Signage is to be attached to the fencing indicating that it is a tree protective fencing and must be maintained in good condition over the course of the works.

Temporary ground protection areas

a.)THeavy machinery is to be kept out of the RPA's of the trees

b.)For plant up to 2 T gross weight, proprietary interlinked ground protection boards will be placed on top of a compression resistant layer of 150mm depth woodchip laid onto a geotextile membrane.

c.) This system will be employed for any machine access into the RPA and for erection of scaffolding.

Panning ref 20/293

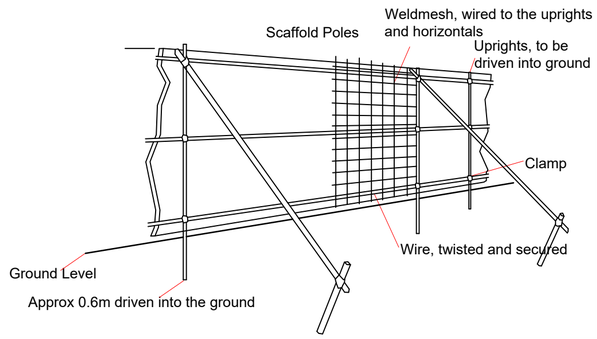
Cellular confinement detail

System to be designed in conjunction with site engineer to allow for correct loading and levels

Tree protective fencing detail

TREE PROTECTION FENCING - BS 5837 : 2012 TREES IN RELATION TO CONSTRUCTION
Item No. 11 Demolition and construction in proximity to existing trees

Panels, secured to uprights with wire ties and where necessary scaffold clamps



Rev	Date	By	Details
B	25/05/22	EOD	Update to latest layout
A	06/12/20	EOD	Tree Protection Plan

AUSTEN ASSOCIATES
Renishaw House, Ballyguile Beg, Wicklow Town, Co. Wicklow, A67 XH92
T: 0404 66827
Email: designdesk@austenassociates.ie | Web: www.austenassociates.ie
landscape architecture arboriculture design project management

Client: Department of Education/Board of Management

Project title: Gaelcholaiste na Phiarsaigh

Drawing title: Tree Retention And Protection Plan

Drawn by: EOD

Scale: 1:500 on A2

Approved by: TA

Date: December 2020

Status: Stage 2B

Drawing no: 066520_TP_01

Revision: B

A bat assessment of Gaelcholaiste an Phiarsaigh - Loreto Abbey, Rathfarnham

For the Department of Education and Skills
C/o Simon J Kelly Architects
21 Middle Street, Galway.

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By Donna Mullen M.P.P.M D.E.N.V.S. P

Brian Keeley BSc hons zool

Maio, Tierworker, Kells Co Meath

Date 20 July 2020

17 August 2020

www.wildlifesurveys.net

Summary

Four species of bat were found feeding and commuting. Most bat activity occurred at the rear of the site with bats seen swarming along the eaves of the Pugin chapel building. This building is a roost of at least two common pipistrelles. A derogation licence will be required before any work on the roof begins. The trees on the site are not roosts at present.

Bat species found roosting on the site

Common pipistrelle -*pipistrellus pipistrellus* at the rear of the Pugin Chapel

Bat species found feeding and commuting on the site

Common pipistrelle -*pipistrellus pipistrellus*

Soprano pipistrelle – *pipistrellus pygmaeus*

Leisler's bat – *nyctalus Leisleri*

Daubenton's bat – *myotis daubentonii*

Recommendations

(1) The attic and stone of the chapel building is a roost and a derogation licence will be required if any work takes place on this attic. Work cannot take place in the breeding season (May- August inclusive). A bat exclusion may be required prior to the commencement of work. The work must be supervised by a bat specialist. Bat access to the roof must be retained by the provision of a bat slate, available from nhbs.com. All water tanks in all attics must be covered.

(2) Bats will suffer a loss of feeding and shelter if any trees or hedgerow are removed. Semi-mature native shrubs and trees must be used to replace any hedgerow loss if the hedgerow is removed. Where climbers and shrubs are required, they should be taken from the approved list from the All-Ireland Pollinator Plan - http://www.biodiversityireland.ie/wordpress/wp-content/uploads/Pollinator-friendly-planting-code-temporary-draft.pdf

(3) If bats are discovered at any stage of the development, building work must cease and myself and the wildlife ranger must be contacted.

(4) All bats are intolerant of light. Daubenton's bats are particularly light sensitive and have been recorded at the front of the school. It is important to keep this area dark. The lighting on the wooden building should be switched off or placed on a sensor timer at night.

Light spillage and pollution must be kept to a minimum with the use of timers, sensor lights, cowls, caps, and low-level bollard lighting.

Lighting design will be in accordance with

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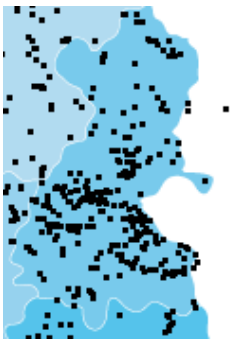
- Guidance Notes for the Reduction of Obtrusive Light GN01 (Institute of Lighting Professionals, 2011).
-

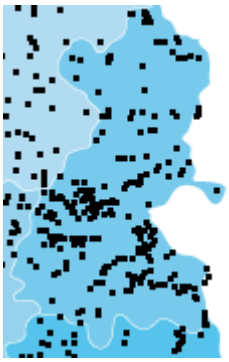
(5) Three 2F and three 1FF Schwegler bat boxes with built-in timber panel bat boxes must be put in place. These should be placed on trees or posts, at least 3m high, with a clear drop below (as bats need to drop to start their flight). These can be purchased from www.nhbs.com They must be placed in a dark area – ideally on the Scot's pine trees near the entrance,

Desktop Survey of the existing environment

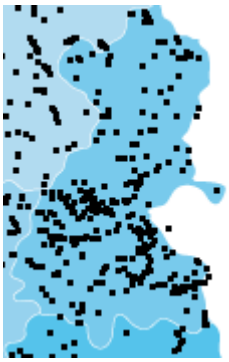
Thanks to Bat Conservation Ireland for their data. All data from this report will be placed on their database.



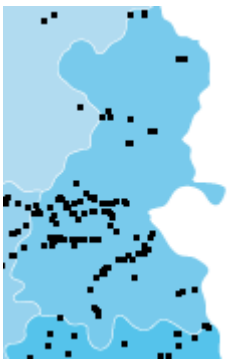
Distribution of Leisler's bats in Dublin



Soprano pipistrelle distribution in Dublin



Common pipistrelle distribution in Dublin



Daubenton's bat distribution in Dublin

Habitat Classification (Fossitt 2000)

GA2 (Amenity grassland)

BL3 (Buildings)

WL2 (Treelines) semi- mature and mature trees

Date –20 July 2020 and 17 August 2020

Sunrise – 5.25 July, 6.11 August

Sunset – 21.39 July 10.46 August

Temperature and weather conditions – 15C – 10C Good insect activity in July. Light to heavy rain, some insect activity, 16C-14C in August.

Lux levels – 0 lux at 4.40 at the fields rising to 24 lux by the lights at the timber building

Light pollution at 4.40am

Complexity of lands and ability to cover ground during surveys –All lands were accessible

Survey constraints

(1) Mobility of bats – Bat species are mobile and can move from roost to roost, depending on roost availability, feeding availability and weather conditions. They may move to other roosts which have not been identified in this report in order to hibernate or create mating or feeding perches. A bat survey is a snapshot of bat activity over the survey time. As there is high potential for roosts on this site, two surveys were carried out to maximise the survey potential for finding nursery roosts.

(2) Identification of bats- It can be difficult to differentiate myotis species. For this reason, the sound files are included within the report. Brown long eared bats are

very quiet, and their presence can be overlooked in bat surveys as they may not register on bat detectors.

Methodology

The survey took place with two surveyors over two nights, 20- 21 July and 17-18 August

Bat Survey - Equipment

Exide Lamps

Pletzl Tikka Head torch

Two EM3 time expansion detectors and kaleidoscope sound analysis software with GPS – handheld by Donna Mullen and Brian Keeley

Two Mini song meter bat detectors were placed overnight- one by the front of the school on a windowsill, one by the gate lodge by the entrance gate

Mini 3 remote recording overnight

Survey July
The survey commenced at 21.15. Attics were checked for bat potential where accessible. No signs of bat were found

Attics were checked for bats

At 21.55, a Leisler's bat was seen at the rear of the school. A common pipistrelle was seen at the south western part of the site. then was seen at the roof. A common pipistrelle appeared to come from the Chapel roof. Both pipistrelles were swarming around the chimneys and roof area at the rear of the Pugin chapel. This area is a roost. There is an attic behind the chimneys, and the bats may be using this. Common pipistrelles continued swarming in this area until 22.09, when they moved around to the front of the building.

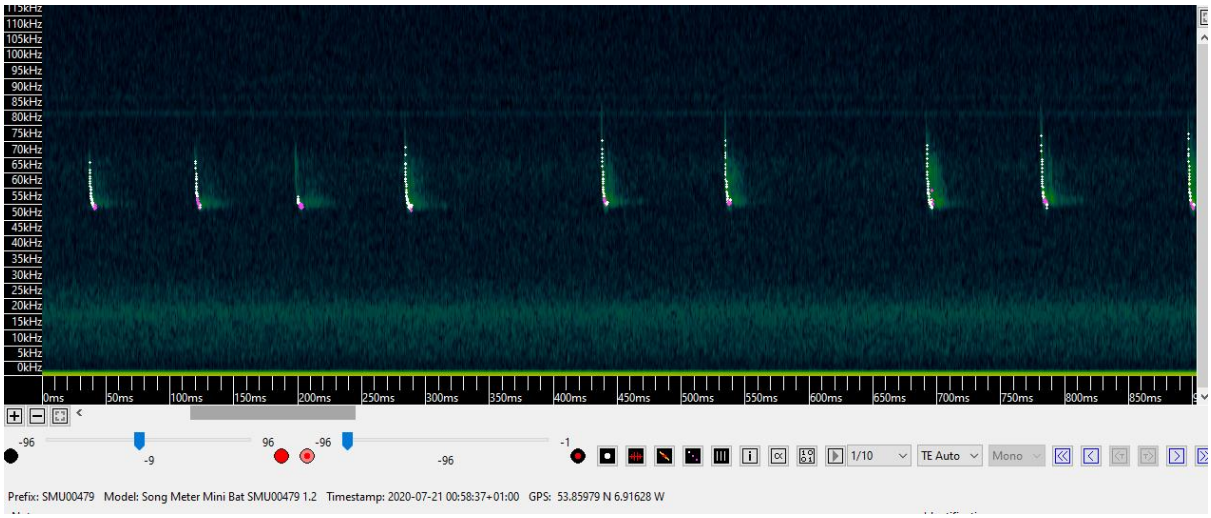
Bats swarming hereat the Pugin Chapel building. This area is a roost.

At 22.13 a common pipistrelle was seen feeding at the rear of the school. A Leisler's bat also fed in this area. A common pipistrelle was seen flying from the main gate to the corner of the school. A soprano pipistrelle was seen at the back of the school.

At 22.18 a common pipistrelle flew along the west wing of the building. At 22.19 there was intense swarming of common pipistrelles, and one entered the Pugin Chapel building at the eaves. Feeding and swarming continued at this area until 22.38

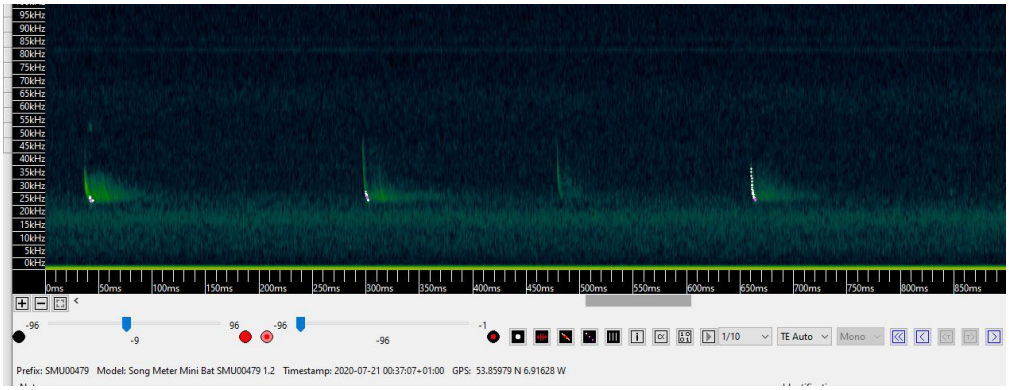
Common pipistrelle at the Pugin Chapel

A soprano pipistrelle was seen by the rear of the building at 22.44 and a common pipistrelle was seen by the basketball court at 22.49. it then fed by the Scots pine trees.



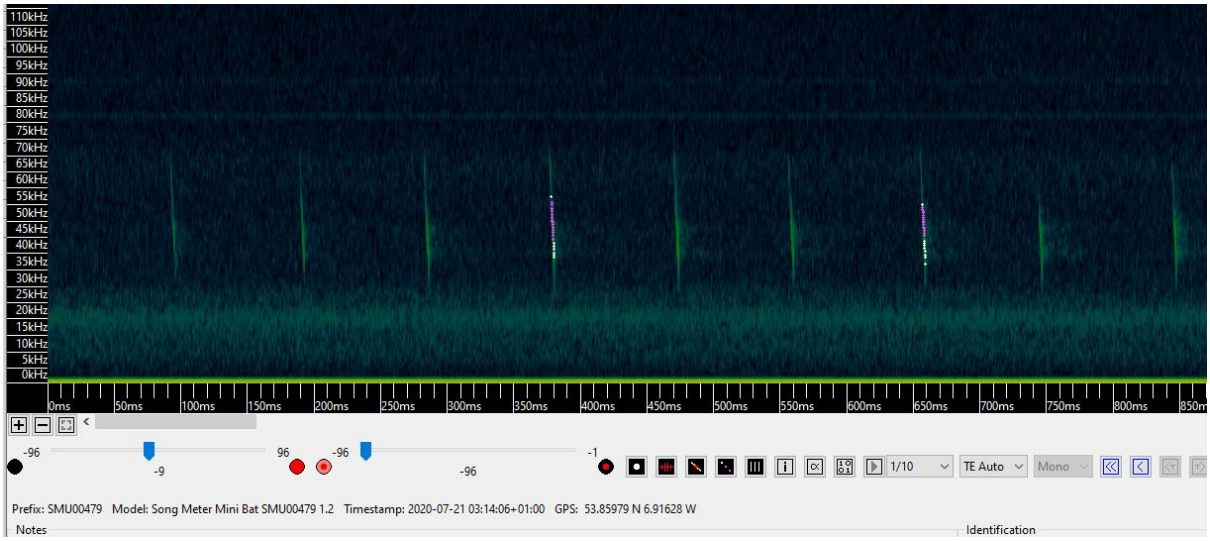
Soprano pipistrelle at the front of the building at 00.58

At 00.37 a Leisler's bat passed the front of the school



Leisler's bat 00.37

A Daubenton's bat was recorded passing the front of the school at 3.14



Daubenton's bat 3.14

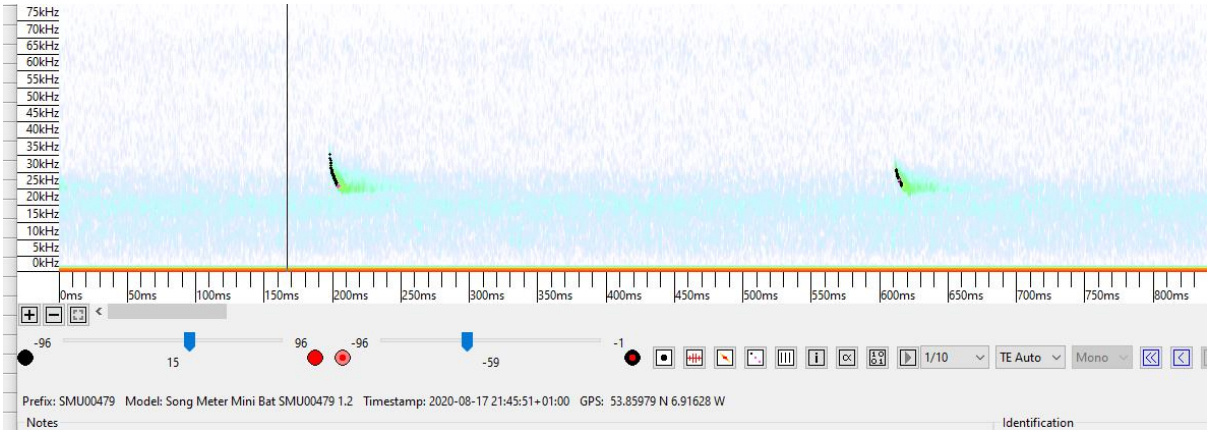
At 4.32 a Leisler's bat was recorded in the distance to the north of the site. It moved to the back of the building at 4.52. A male soprano pipistrelle was recorded off the site at the pond at 4.57. The Leisler's bat headed west, off the site at 5.05

Survey August

The survey commenced at 20.45 with two surveyors, Donna Mullen and Ciaran Monaghan. The mini song meter was placed in a windowsill of the college to the south of the site.

Mini remote detector placed overnight

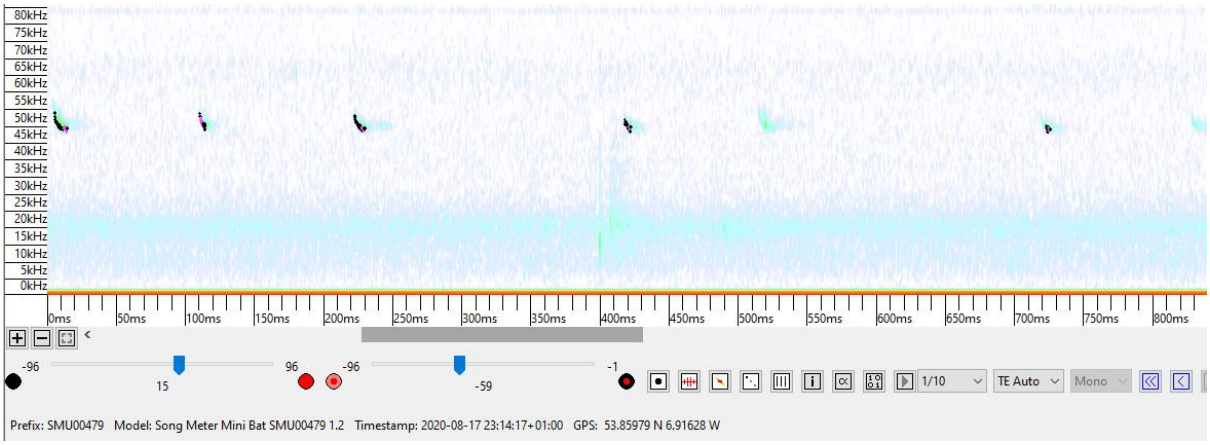
The weather was poor with moderate to heavy rain throughout the night. At 21.47 a Leilser's bat was seen flying above the Pugin chapel. It then flew north east and off site by the Giraffe Childcare Centre.



Leisler's bat flying over the chapel building

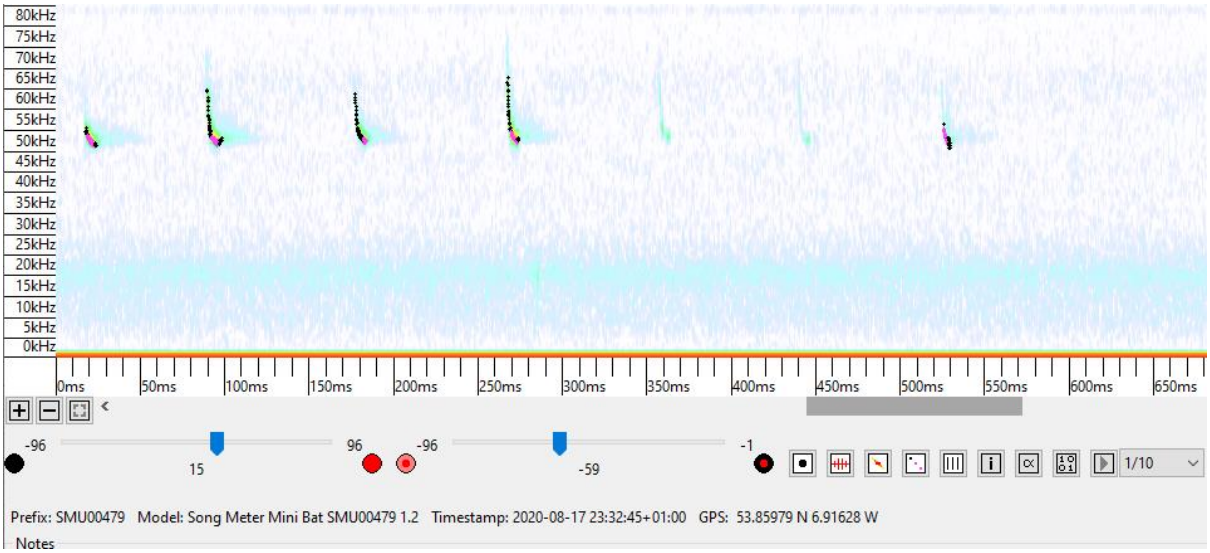
At 23.54 a Leilser's bat flew through the grounds at the front of the school. It returned here at 2.47. Rain was heavy.

A common pipistrelle flew to the north of the school at 23.11



Common pipistrelle 23.11

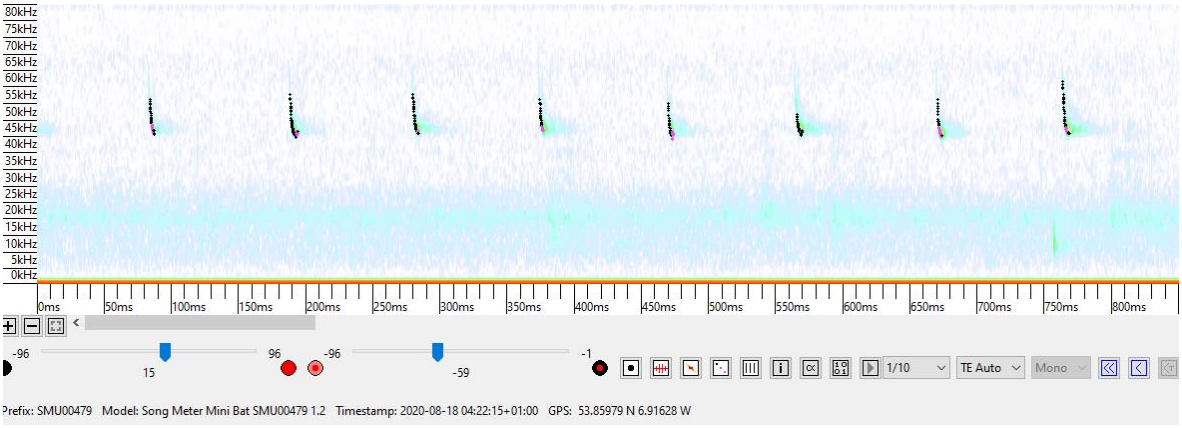
A soprano pipistrelle flew through near the front of the school at 23.32



Soprano pipistrelle

It was recorded again at the same place at 4.14

A common pipistrelle was recorded in the grounds at 4.22. It was seen flying to the back of the building at 5.52



Common pipistrelle 4.22

Heavy rain reduced the bat activity on this night; however, three species were recorded on the site. No bats were seen entering or exiting the buildings.

Main bat activity as recorded by Donna Mullen on handheld detector and song meter mini on July 20-21st

Blue triangle – Common pipistrelle

Orange arrow – Common pipistrelle feeding/commuting route

Red triangle- Leisler's bat

Red arrow – Leisler's bat feeding/commuting

Yellow triangle – Soprano pipistrelle

Purple triangle – Daubenton's bat

Main bat activity as recorded by Brian Keeley on 20 July with an EM3 Handheld recorder

Green- Common pipistrelle

Green with star- Common pipistrelle + Leisler's bat

Blue- Soprano pipistrelle

Yellow- Leisler's bat

Main bat activity as recorded by handheld Song meters and Mini detector on August 17

Blue triangle – Common pipistrelle

Orange arrow – Common pipistrelle feeding/commuting route

Red triangle- Leisler's bat

Red arrow – Leisler's bat feeding/commuting

Yellow triangle – Soprano pipistrelle

Potential impact on roosts, flight paths and feeding areas

(1) Roost loss -. The roof around the Pugin Chapel is a roost. Access will be retained, and bat boxes will be installed along the boundary. This will lead to an overall long-term neutral effect on individual bats.

(2) Loss of feeding –Most feeding occurred along the rear of the site. With retention of this area, retention or replacement of trees and hedgerows, and planting from the All-Ireland pollinator plan, there will be a long-term neutral effect on individual bats

(3) Light pollution – Lux levels within the site are from zero to twenty-four lux throughout the night. Reduction of light levels overnight will lead to a long-term positive effect on individual bats.

Result

Four species of bat were found feeding and commuting. Most bat activity occurred at the rear of the site with bats seen swarming along the eaves of the Pugin chapel building. This building is a roost of at least two common pipistrelles. A derogation licence will be required before any work on the roof begins. The trees on the site are not roosts at present.

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Recommendations

(1) The attic and stone of the chapel building is a roost and a derogation licence will be required if any work takes place on this attic. Work cannot take place in the breeding season (May- August inclusive). A bat exclusion may be required prior to the commencement of work. Access to the roof must be retained by the provision of a bat slate, available from nhbs.com. All water tanks in all attics must be covered.

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These Scots pine trees are ideal for the placement of bat boxes

Bat Biology

Female bats gather in groups known as maternity roosts in summer to have their young. They generally have one baby each year, so are slow to reproduce, and disturbance of a maternity roost can be catastrophic.

In winter bats move to old stonework, trees, and caves to hibernate. They are especially vulnerable here as they are slow to awaken, and if tree felling is carried out, they can easily be killed.

Legislation

Bats are protected under the 1996 Wildlife Act, the 2000 Wildlife (Amendment) Act, Stat Ist 94 of 1997, Stat Ist 378 of 2005, The Habitats Directive, The Bonn and Bern Convention, and the Euro bats agreement.

The European Community (Natural Habitats) Regulations S.I. No 94 of 1997 states:

23(1) The minister shall take the requisite measures to establish a system of strict protection for the fauna consisting of the animal species set out in Part 1 of the First Schedule prohibiting –

a) All forms of deliberate capture or killing of specimens of those species in the wild.

1. The deterioration or destruction of breeding sites or resting places of those species.

The EU Habitats Directive

Article 12(1) of the ‘Council Directive 92/43/EEC on the conservation of natural habitats and wild fauna and flora (Habitats Directive) states:

“Member States shall take the requisite measures to establish a system of strict protection for the animal species listed in Annex IV(a) and their natural range, prohibiting:

a) all forms of deliberate capture or killing of specimens of these species in the wild.

b) deliberate disturbance of these species, particularly during the period of breeding, rearing, hibernation, and migration.

c) deliberate destruction or taking of eggs from the wild.

d. deterioration or destruction of breeding sites or resting places.”

The EU Habitats Directive (92/43/EEC) lists all Irish bat species in Annex IV and one Irish species, the lesser horseshoe bat (Rhinolophus hipposideros), in Annex II. Annex II includes animal and plant species of community interest whose

conservation requires the designation of Special Areas of Conservation (SACs) because they are endangered, rare, vulnerable, or endemic. Annex IV includes various species that require strict protection. Article 11 of the Habitats Directive requires member states to monitor all species listed in the Habitats Directive and Article 17 requires States to report to the EU on the findings of monitoring schemes.

The Bern and Bonn Conventions

Ireland is also a signatory to a number of conservation agreements pertaining to bats such as the Bern and Bonn Conventions. The European Bats Agreement (EUROBATS) is an agreement under the Bonn Convention. Ireland and the UK are two of the 31 signatories. The Agreement has an Action Plan with priorities for implementation. Devising strategies for monitoring of populations of selected bat species in Europe is among the resolutions of EUROBATS.

1.3.1 The Berne Convention

Article 6 of the "Convention on the Conservation of European Wildlife and Natural Habitats' (Berne Convention) reads:

"Each Contracting Party shall take appropriate and necessary legislative and administrative measures to ensure the special protection of the wild fauna species specified in Appendix II. The following will in particular be prohibited for these species:

a) all forms of deliberate capture and keeping and deliberate killing.

b) the deliberate damage to or destruction of breeding or resting sites.

c) the deliberate disturbance of wild fauna, particularly during the period of breeding, rearing and hibernation, insofar as disturbance would be significant in relation to the objectives of this Convention; ...

Appendix II lists strictly protected fauna species and this list includes "Microchiroptera, all species except Pipistrellus pipistrelles".

The EUROBATS Agreement

The 'Agreement on the Conservation of Populations of European Bats' (EUROBATS) was negotiated under the 'Convention for the Conservation of Migratory Wild Species' (Bonn Convention) and came into force in January 1994. The legal protection of bats and their habitats are given in Article III as fundamental obligations:

"1. Each Party shall prohibit the deliberate capture, keeping or killing of bats except under permit from its competent authority

2. Each Party shall identify those sites within its own area of jurisdiction which are important for the conservation status, including for the shelter and protection, of bats. It shall, taking into account as necessary economic and social considerations,

protect such sites from damage or disturbance. In addition, each Party shall endeavour to identify and protect important feeding areas for bats from damage or disturbance."

The Agreement covers all European bat species.

Contact Details:

The phone number for Bat Conservation Ireland is 086 4049468. Their website is www.batconservationireland.org. I can be contacted at 087 7454233. My email is donnamullen@wildlifesurveys.net and web site is www.wildlifesurveys.net

Appendix 1

Mini song meter recordings Donna Mullen 20 July – front of school

File Help

		OUT FILE FS	OUT FILE ZC	AUTO ID	PULSES	MATCHING	MATCH RATIO	MANUAL ID
1		SMU00479_20200721_031406_000.wav		MYODAU	17	8	0.471000	MYODAU
2		SMU00479_20200721_003707_000.wav		NYCLEI	11	9	0.818000	NYCLEI
3		SMU00479_20200721_050408_000.wav		NYCLEI	6	6	1.000000	NYCLEI
4		SMU00479_20200721_010137_000.wav		NYCLEI	4	4	1.000000	NYCLEI
5		SMU00479_20200721_041841_000.wav		NYCLEI	3	3	1.000000	NYCLEI
6		SMU00479_20200721_002010_000.wav		NYCLEI	2	2	1.000000	NYCLEI
7		SMU00479_20200721_040459_000.wav		NYCLEI	2	2	1.000000	NYCLEI
8		SMU00479_20200721_040412_000.wav		NoID	4	0	0.000000	PIP
9		SMU00479_20200721_052014_000.wav		NoID	3	0	0.000000	Noise
10		SMU00479_20200721_052209_000.wav		NoID	2	0	0.000000	Noise
11		SMU00479_20200721_043132_000.wav		Noise				Noise
12		SMU00479_20200721_052007_000.wav		Noise				Noise
13		SMU00479_20200721_051914_000.wav		Noise				Noise
14		SMU00479_20200721_052045_000.wav		Noise				Noise
15		SMU00479_20200721_051929_000.wav		Noise				Noise
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18		SMU00479_20200721_052124_000.wav		Noise				Noise
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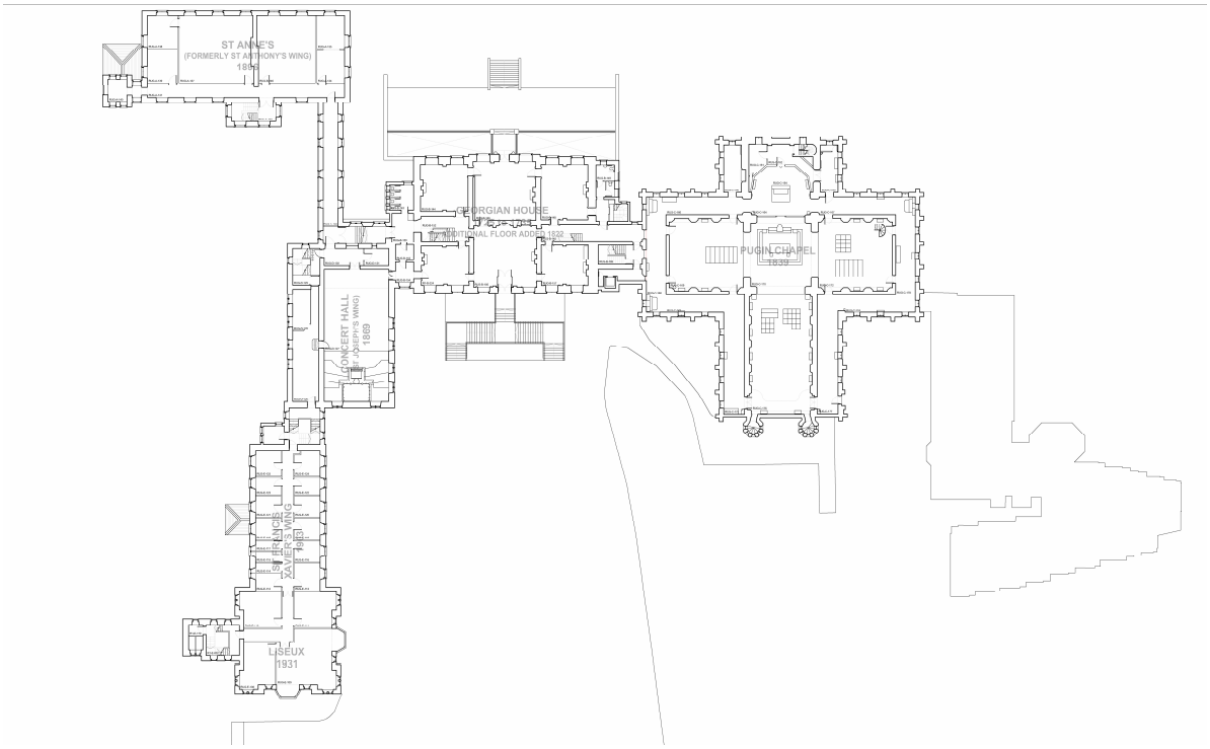
Appendix II

Site layout



Appendix III

Brian Keeley EM3 Handheld recorder 20 July

DATE	TIME	AUTO ID*	PULSES	MANUAL ID
20/07/2020	22:06:36	PIPPIP	11	PIPPIP
20/07/2020	22:09:16	PIPNAT	39	PIPPIP
20/07/2020	22:14:57	PIPNAT	17	PIPPIP
20/07/2020	22:15:07	PIPNAT	17	PIPPIP
20/07/2020	22:15:18	PIPNAT	2	PIPPIP
20/07/2020	22:21:21	NoID	18	PIPPIP
20/07/2020	22:21:31	PIPNAT	15	PIPPIP
20/07/2020	22:21:42	PIPNAT	24	PIPPIP
20/07/2020	22:21:53	PIPNAT	7	PIPPIP
20/07/2020	22:22:03	PIPNAT	13	PIPPIP
20/07/2020	22:22:14	PIPNAT	10	PIPPIP
20/07/2020	22:22:25	PIPNAT	12	PIPPIP
20/07/2020	22:22:35	PIPNAT	7	PIPPIP NYCLEI
20/07/2020	22:22:46	PIPNAT	12	PIPPIP

20/07/2020	22:22:57	PIPNAT	11	PIPPIP
20/07/2020	22:23:18	PIPNAT	6	PIPPIP
20/07/2020	22:23:29	PIPNAT	3	PIPPIP
20/07/2020	22:23:39	PIPNAT	7	PIPPIP
20/07/2020	22:23:50	PIPNAT	10	PIPPIP
20/07/2020	22:24:01	PIPNAT	3	PIPPIP
20/07/2020	22:24:11	PIPNAT	13	PIPPIP
20/07/2020	22:24:22	PIPNAT	8	PIPPIP
20/07/2020	22:24:33	PIPNAT	17	PIPPIP
20/07/2020	22:24:43	PIPNAT	10	PIPPIP
20/07/2020	22:24:54	PIPNAT	8	PIPPIP
20/07/2020	22:25:05	PIPPIP	3	PIPPIP
20/07/2020	22:25:48	PIPPIP	23	PIPPIP
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20/07/2020	22:32:44	NoID	9	PIPPIP
20/07/2020	22:32:55	PIPPIP	12	PIPPIP
20/07/2020	22:33:05	NoID	3	PIPPIP
20/07/2020	22:33:16	PIPNAT	2	PIPPIP
20/07/2020	22:33:27	NoID	13	PIPPIP
20/07/2020	22:35:14	PIPPIP	13	PIPPIP
20/07/2020	22:35:35	PIPPIP	6	PIPPIP
20/07/2020	22:45:45	NoID	6	PIPPIP
20/07/2020	22:45:56	NoID	3	PIPPIP
20/07/2020	22:46:07	NoID	5	PIPPIP
20/07/2020	22:46:17	NoID	15	PIPPIP
20/07/2020	22:46:28	NoID	4	PIPPIP
20/07/2020	22:46:39	PIPNAT	7	PIPPIP
20/07/2020	22:46:49	NoID	4	PIPPIP
20/07/2020	22:47:11	PIPNAT	9	PIPPIP
20/07/2020	22:47:21	PIPPIP	8	PIPPIP
20/07/2020	22:47:32	PIPNAT	5	PIPPIP
20/07/2020	22:47:52	NoID	6	PIPPIP
20/07/2020	22:48:14	NoID	2	PIPPIP
20/07/2020	22:48:24	PIPNAT	12	PIPPIP
20/07/2020	22:49:07	PIPNAT	9	PIPPIP
20/07/2020	22:49:18	PIPNAT	9	PIPPIP
20/07/2020	22:49:39	PIPNAT	8	PIPPIP
20/07/2020	22:49:50	NoID	2	PIPPIP
20/07/2020	22:50:01	PIPNAT	2	PIPPIP
20/07/2020	22:56:17	PIPNAT	7	PIPPIP
20/07/2020	22:56:28	NoID	4	PIPPIP
20/07/2020	22:56:38	PIPPIP	10	PIPPIP
21/07/2020	04:51:15	NYCLEI	15	NYCLEI
21/07/2020	04:56:09	PIPPYG	3	PIPPYG
21/07/2020	04:56:20	PIPPYG	44	PIPPYG
21/07/2020	04:56:30	PIPPYG	75	PIPPYG

21/07/2020	04:56:41	PIPPYG	78	PIPPYG
21/07/2020	04:56:51	PIPPYG	77	PIPPYG
21/07/2020	04:57:01	PIPPYG	72	PIPPYG
21/07/2020	04:57:12	PIPPYG	94	PIPPYG
21/07/2020	04:57:22	PIPPYG	70	PIPPYG
21/07/2020	04:57:33	PIPPYG	57	PIPPYG
21/07/2020	05:00:09	PIPPYG	16	PIPPYG
21/07/2020	05:00:19	PIPPYG	91	PIPPYG
21/07/2020	05:00:29	PIPPYG	88	PIPPYG
21/07/2020	05:00:40	PIPPYG	96	PIPPYG
21/07/2020	05:00:50	PIPPYG	113	PIPPYG
21/07/2020	05:01:01	PIPPYG	100	PIPPYG
21/07/2020	05:01:09	PIPPYG	21	PIPPYG
21/07/2020	05:04:48	NYCLEI	31	NYCLEI

Appendix IV

EM3 Recordings 20 July Donna Mullen

File Help

	FOLDER	IN FILE	OUT FILE FS	OUT FILE ZC	AUTO ID	PULSES	MATCHING
1		EM3___20200720_221436.wav	EM3___20200720_221451_000.wav		NYCLEI	30	16
2		EM3___20200721_045046.wav	EM3___20200721_045101_000.wav		NYCLEI	11	11
3		EM3___20200720_215503.wav	EM3___20200720_215503_000.wav		NYCLEI	8	8
4		EM3___20200720_220534.wav	EM3___20200720_220534_000.wav		NYCLEI	4	4
5		EM3___20200720_220534.wav	EM3___20200720_220549_000.wav		NYCLEI	3	3
6		EM3___20200720_220835.wav	EM3___20200720_220835_000.wav		NoID	77	0
7		EM3___20200720_220835.wav	EM3___20200720_220850_000.wav		NoID	25	0
8		EM3___20200720_221405.wav	EM3___20200720_221405_000.wav		NoID	16	0
9		EM3___20200720_221506.wav	EM3___20200720_221506_000.wav		NoID	30	0
10		EM3___20200720_221636.wav	EM3___20200720_221636_000.wav		NoID	20	0
11		EM3___20200720_221205.wav	EM3___20200720_221220_000.wav		NoID	3	0
12		EM3___20200720_221906.wav	EM3___20200720_221906_000.wav		NoID	15	0
13		EM3___20200720_221936.wav	EM3___20200720_221936_000.wav		NoID	26	0
14		EM3___20200720_221736.wav	EM3___20200720_221751_000.wav		NoID	22	0
15		EM3___20200720_222006.wav	EM3___20200720_222021_000.wav		NoID	26	0
16		EM3___20200720_222106.wav	EM3___20200720_222121_000.wav		NoID	2	0
17		EM3___20200720_222237.wav	EM3___20200720_222252_000.wav		NoID	29	0
18		EM3___20200720_223208.wav	EM3___20200720_223223_000.wav		NoID	3	0
19		EM3___20200720_224209.wav	EM3___20200720_224209_000.wav		NoID	3	0
20		EM3___20200720_224209.wav	EM3___20200720_224224_000.wav		NoID	5	0
21		EM3___20110101_091055.wav	EM3___20110101_091055_000.wav		Noise		
22		EM3___20110101_092143.wav	EM3___20110101_092143_000.wav		Noise		
23		EM3___20110101_092213.wav	EM3___20110101_092213_000.wav		Noise		
24		EM3___20110101_092243.wav	EM3___20110101_092243_000.wav		Noise		
25		EM3___20110101_091055.wav	EM3___20110101_091110_000.wav		Noise		
26		EM3___20110101_092315.wav	EM3___20110101_092315_000.wav		Noise		
27		EM3___20110101_092415.wav	EM3___20110101_092415_000.wav		Noise		
28		EM3___20110101_092143.wav	EM3___20110101_092158_000.wav		Noise		
29		EM3___20110101_092213.wav	EM3___20110101_092228_000.wav		Noise		
30		EM3___20110101_092243.wav	EM3___20110101_092258_000.wav		Noise		
31		EM3___20110101_092345.wav	EM3___20110101_092345_000.wav		Noise		
32		EM3___20110101_092445.wav	EM3___20110101_092445_000.wav		Noise		
33		EM3___20110101_092515.wav	EM3___20110101_092515_000.wav		Noise		
34		EM3___20110101_092545.wav	EM3___20110101_092545_000.wav		Noise		
35		EM3___20110101_092615.wav	EM3___20110101_092615_000.wav		Noise		
36		EM3___20110101_092645.wav	EM3___20110101_092645_000.wav		Noise		
37		EM3___20200720_213733.wav	EM3___20200720_213733_000.wav		Noise		
38		EM3___20200720_213804.wav	EM3___20200720_213804_000.wav		Noise		
39		EM3___20200720_213834.wav	EM3___20200720_213834_000.wav		Noise		
40		EM3___20200720_213904.wav	EM3___20200720_213904_000.wav		Noise		
41		EM3___20200720_213934.wav	EM3___20200720_213934_000.wav		Noise		
42		EM3___20200720_214004.wav	EM3___20200720_214004_000.wav		Noise		
43		EM3___20200720_214034.wav	EM3___20200720_214034_000.wav		Noise		
44		EM3___20200720_214104.wav	EM3___20200720_214104_000.wav		Noise		
45		EM3___20200720_214134.wav	EM3___20200720_214134_000.wav		Noise		
46		EM3___20110101_092315.wav	EM3___20110101_092330_000.wav		Noise		

Results

File Help

		OUT FILE FS	OUT FILE ZC	AUTO ID	PULSES	MATCHING	MATCH RATIO	MANUAL ID
1		EM3___20200720_221451_000.wav		NYCLEI	30	16	0.533000	NYCLEI
2		EM3___20200721_045101_000.wav		NYCLEI	11	11	1.000000	NYCLEI
3		EM3___20200720_215503_000.wav		NYCLEI	8	8	1.000000	NYCLEI
4		EM3___20200720_220534_000.wav		NYCLEI	4	4	1.000000	NYCLEI
5		EM3___20200720_220549_000.wav		NYCLEI	3	3	1.000000	NYCLEI
6		EM3___20200720_220835_000.wav		NoID	77	0	0.000000	NoID
7		EM3___20200720_220850_000.wav		NoID	25	0	0.000000	NoID
8		EM3___20200720_221405_000.wav		NoID	16	0	0.000000	NYCLEIS
9		EM3___20200720_221506_000.wav		NoID	30	0	0.000000	NYCLEIS
10		EM3___20200720_221636_000.wav		NoID	20	0	0.000000	Noise
11		EM3___20200720_221220_000.wav		NoID	3	0	0.000000	PIP
12		EM3___20200720_221906_000.wav		NoID	15	0	0.000000	PIP
13		EM3___20200720_221936_000.wav		NoID	26	0	0.000000	Noise
14		EM3___20200720_221751_000.wav		NoID	22	0	0.000000	PIP
15		EM3___20200720_222021_000.wav		NoID	26	0	0.000000	PIP
16		EM3___20200720_222121_000.wav		NoID	2	0	0.000000	Noise
17		EM3___20200720_222252_000.wav		NoID	29	0	0.000000	Noise
18		EM3___20200720_223223_000.wav		NoID	3	0	0.000000	Noise
19		EM3___20200720_224209_000.wav		NoID	3	0	0.000000	PIP
20		EM3___20200720_224224_000.wav		NoID	5	0	0.000000	Noise
21		EM3___20110101_091055_000.wav		Noise				Noise
22		EM3___20110101_092143_000.wav		Noise				
23		EM3___20110101_092213_000.wav		Noise				
24		EM3___20110101_092243_000.wav		Noise				
25		EM3___20110101_091110_000.wav		Noise				
26		EM3___20110101_092315_000.wav		Noise				
27		EM3___20110101_092415_000.wav		Noise				
28		EM3___20110101_092158_000.wav		Noise				
29		EM3___20110101_092228_000.wav		Noise				
30		EM3___20110101_092258_000.wav		Noise				
31		EM3___20110101_092345_000.wav		Noise				
32		EM3___20110101_092445_000.wav		Noise				
33		EM3___20110101_092515_000.wav		Noise				
34		EM3___20110101_092545_000.wav		Noise				
35		EM3___20110101_092615_000.wav		Noise				
36		EM3___20110101_092645_000.wav		Noise				
37		EM3___20200720_213733_000.wav		Noise				
38		EM3___20200720_213804_000.wav		Noise				
39		EM3___20200720_213834_000.wav		Noise				
40		EM3___20200720_213904_000.wav		Noise				
41		EM3___20200720_213934_000.wav		Noise				
42		EM3___20200720_214004_000.wav		Noise				
43		EM3___20200720_214034_000.wav		Noise				
44		EM3___20200720_214104_000.wav		Noise				
45		EM3___20200720_214134_000.wav		Noise				
46		EM3___20110101_092330_000.wav		Noise				
47		EM3___20110101_092430_000.wav		Noise				

Results

File Help

		OUT FILE FS	OUT FILE ZC	AUTO ID	PULSES	MATCHING	MATCH RATIO	MANUAL ID
505		EM3___20200721_052209_000.wav		Noise				
506		EM3___20200721_052239_000.wav		Noise				
507		EM3___20200720_220604_000.wav		PIPNAT	43	41	0.953000	PIPPIP
508		EM3___20200720_220805_000.wav		PIPNAT	38	37	0.974000	PIPPIP
509		EM3___20200720_220705_000.wav		PIPNAT	32	30	0.938000	PIPPIP
510		EM3___20200720_220634_000.wav		PIPNAT	35	30	0.857000	PIPPIP
511		EM3___20200720_220649_000.wav		PIPNAT	30	28	0.933000	PIPPIP
512		EM3___20200720_220720_000.wav		PIPNAT	31	28	0.903000	PIPPIP
513		EM3___20200720_220750_000.wav		PIPNAT	31	28	0.903000	PIPPIP
514		EM3___20200720_220820_000.wav		PIPNAT	26	25	0.962000	PIPPIP
515		EM3___20200720_221050_000.wav		PIPNAT	35	25	0.714000	PIPPIP
516		EM3___20200720_221020_000.wav		PIPNAT	30	23	0.767000	PIPPIP
517		EM3___20200720_221736_000.wav		PIPNAT	30	23	0.767000	PIPPIP
518		EM3___20200720_221706_000.wav		PIPNAT	31	22	0.710000	PIPPIP
519		EM3___20200720_222051_000.wav		PIPNAT	22	21	0.955000	PIPPIP
520		EM3___20200720_222136_000.wav		PIPNAT	24	21	0.875000	PIPPIP
521		EM3___20200720_220735_000.wav		PIPNAT	20	20	1.000000	PIPPIP
522		EM3___20200720_221551_000.wav		PIPNAT	25	20	0.800000	PIPPIP
523		EM3___20200720_222221_000.wav		PIPNAT	21	19	0.905000	PIPPIP
524		EM3___20200720_221621_000.wav		PIPNAT	35	19	0.543000	PIPPIP
525		EM3___20200720_221035_000.wav		PIPNAT	24	17	0.708000	PIPPIP
526		EM3___20200720_222036_000.wav		PIPNAT	24	17	0.708000	PIPPIP
527		EM3___20200720_220950_000.wav		PIPNAT	23	16	0.696000	PIPPIP
528		EM3___20200720_221721_000.wav		PIPNAT	19	15	0.789000	PIPPIP
529		EM3___20200720_221806_000.wav		PIPNAT	23	15	0.652000	PIPPIP
530		EM3___20200720_221250_000.wav		PIPNAT	15	14	0.933000	PIPPIP
531		EM3___20200720_222006_000.wav		PIPNAT	19	14	0.737000	PIPPIP
532		EM3___20200720_222206_000.wav		PIPNAT	21	14	0.667000	PIPPIP
533		EM3___20200720_221536_000.wav		PIPNAT	13	13	1.000000	PIPPIP
534		EM3___20200720_221005_000.wav		PIPNAT	17	13	0.765000	PIPPIP
535		EM3___20200720_221521_000.wav		PIPNAT	17	13	0.765000	PIPPIP
536		EM3___20200720_220905_000.wav		PIPNAT	18	13	0.722000	PIPPIP
537		EM3___20200720_221606_000.wav		PIPNAT	30	13	0.433000	PIPPIP
538		EM3___20200720_221651_000.wav		PIPNAT	16	12	0.750000	PIPPIP
539		EM3___20200720_222622_000.wav		PIPNAT	13	11	0.846000	PIPPIP
540		EM3___20200720_220920_000.wav		PIPNAT	18	11	0.611000	PIPPIP
541		EM3___20200720_221305_000.wav		PIPNAT	12	9	0.750000	PIPPIP
542		EM3___20200720_220935_000.wav		PIPNAT	17	9	0.529000	PIPPIP
543		EM3___20200720_222237_000.wav		PIPNAT	17	9	0.529000	PIPPIP
544		EM3___20200720_221921_000.wav		PIPNAT	18	9	0.500000	PIPPIP
545		EM3___20200720_222337_000.wav		PIPNAT	9	8	0.889000	PIPPIP
546		EM3___20200720_221420_000.wav		PIPNAT	8	7	0.875000	PIPPIP
547		EM3___20200720_221235_000.wav		PIPNAT	11	7	0.636000	PIPPIP
548		EM3___20200720_222322_000.wav		PIPNAT	6	6	1.000000	PIPPIP
549		EM3___20200720_222807_000.wav		PIPNAT	7	6	0.857000	PIPPIP
550		EM3___20200720_221951_000.wav		PIPNAT	10	6	0.600000	PIPPIP
551		EM3___20200720_222352_000.wav		PIPNAT	8	5	0.625000	PIPPIP

File Help

		OUT FILE FS	OUT FILE ZC	AUTO ID	PULSES	MATCHING	MATCH RATIO	MANUAL ID
533		EM3___20200720_221536_000.wav		PIPNAT	13	13	1.000000	PIPPIP
534		EM3___20200720_221005_000.wav		PIPNAT	17	13	0.765000	PIPPIP
535		EM3___20200720_221521_000.wav		PIPNAT	17	13	0.765000	PIPPIP
536		EM3___20200720_220905_000.wav		PIPNAT	18	13	0.722000	PIPPIP
537		EM3___20200720_221606_000.wav		PIPNAT	30	13	0.433000	PIPPIP
538		EM3___20200720_221651_000.wav		PIPNAT	16	12	0.750000	PIPPIP
539		EM3___20200720_222622_000.wav		PIPNAT	13	11	0.846000	PIPPIP
540		EM3___20200720_220920_000.wav		PIPNAT	18	11	0.611000	PIPPIP
541		EM3___20200720_221305_000.wav		PIPNAT	12	9	0.750000	PIPPIP
542		EM3___20200720_220935_000.wav		PIPNAT	17	9	0.529000	PIPPIP
543		EM3___20200720_222237_000.wav		PIPNAT	17	9	0.529000	PIPPIP
544		EM3___20200720_221921_000.wav		PIPNAT	18	9	0.500000	PIPPIP
545		EM3___20200720_222337_000.wav		PIPNAT	9	8	0.889000	PIPPIP
546		EM3___20200720_221420_000.wav		PIPNAT	8	7	0.875000	PIPPIP
547		EM3___20200720_221235_000.wav		PIPNAT	11	7	0.636000	PIPPIP
548		EM3___20200720_222322_000.wav		PIPNAT	6	6	1.000000	PIPPIP
549		EM3___20200720_222807_000.wav		PIPNAT	7	6	0.857000	PIPPIP
550		EM3___20200720_221951_000.wav		PIPNAT	10	6	0.600000	PIPPIP
551		EM3___20200720_222352_000.wav		PIPNAT	8	5	0.625000	PIPPIP
552		EM3___20200720_221320_000.wav		PIPNAT	12	5	0.417000	PIPPIP
553		EM3___20200720_222407_000.wav		PIPNAT	4	4	1.000000	PIPPIP
554		EM3___20200720_223839_000.wav		PIPNAT	3	3	1.000000	PIPPIP
555		EM3___20200720_222437_000.wav		PIPNAT	4	2	0.500000	PIPPIP
556		EM3___20200720_222422_000.wav		PIPNAT	2	1	0.500000	PIPPIP
557		EM3___20200720_220619_000.wav		PIPPIP	55	37	0.673000	PIPPIP
558		EM3___20200720_221821_000.wav		PIPPIP	39	29	0.744000	PIPPIP
559		EM3___20200720_223739_000.wav		PIPPIP	27	27	1.000000	PIPPIP
560		EM3___20200720_221436_000.wav		PIPPIP	31	27	0.871000	
561		EM3___20200720_222537_000.wav		PIPPIP	22	22	1.000000	
562		EM3___20200720_222607_000.wav		PIPPIP	37	14	0.378000	
563		EM3___20200720_221350_000.wav		PIPPIP	13	10	0.769000	
564		EM3___20200720_222752_000.wav		PIPPIP	10	8	0.800000	
565		EM3___20200720_222151_000.wav		PIPPIP	14	8	0.571000	
566		EM3___20200720_221335_000.wav		PIPPIP	29	8	0.276000	
567		EM3___20200720_223924_000.wav		PIPPIP	7	7	1.000000	
568		EM3___20200720_223308_000.wav		PIPPIP	10	5	0.500000	
569		EM3___20200720_221836_000.wav		PIPPIP	4	4	1.000000	
570		EM3___20200720_222907_000.wav		PIPPIP	4	4	1.000000	
571		EM3___20200720_224239_000.wav		PIPPIP	4	4	1.000000	
572		EM3___20200720_224810_000.wav		PIPPIP	3	3	1.000000	
573		EM3___20200720_222106_000.wav		PIPPIP	5	3	0.600000	
574		EM3___20200721_050005_000.wav		PIPPIP	2	2	1.000000	
575		EM3___20200720_223253_000.wav		PIPPIP	2	1	0.500000	
576		EM3___20200720_224154_000.wav		PIPPIP	2	1	0.500000	
577		EM3___20200720_224324_000.wav		PIPPYG	5	5	1.000000	
578		EM3___20200721_050551_000.wav		PIPPYG	3	3	1.000000	

Appendix V

Songmeter Mini at main gate 20th July 2020 BK

DATE	TIME	AUTO ID*	PULSES	MANUAL ID
20/07/2020	21:14:22	NYCLEI	5	NYCLEI
20/07/2020	21:15:50	NYCLEI	6	NYCLEI
20/07/2020	21:19:33	NYCLEI	17	NYCLEI
20/07/2020	21:22:45	NYCLEI	18	NYCLEI
20/07/2020	21:29:50	NoID	3	NYCLEI
20/07/2020	21:30:45	NYCLEI	7	NYCLEI
20/07/2020	21:34:38	NYCLEI	14	NYCLEI
20/07/2020	21:36:25	NoID	6	NYCLEI
20/07/2020	21:36:48	NYCLEI	11	NYCLEI
20/07/2020	21:52:40	NYCLEI	7	NYCLEI
20/07/2020	22:16:07	NYCLEI	22	NYCLEI
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20/07/2020	23:26:38	PIPPYG	12	PIPPYG
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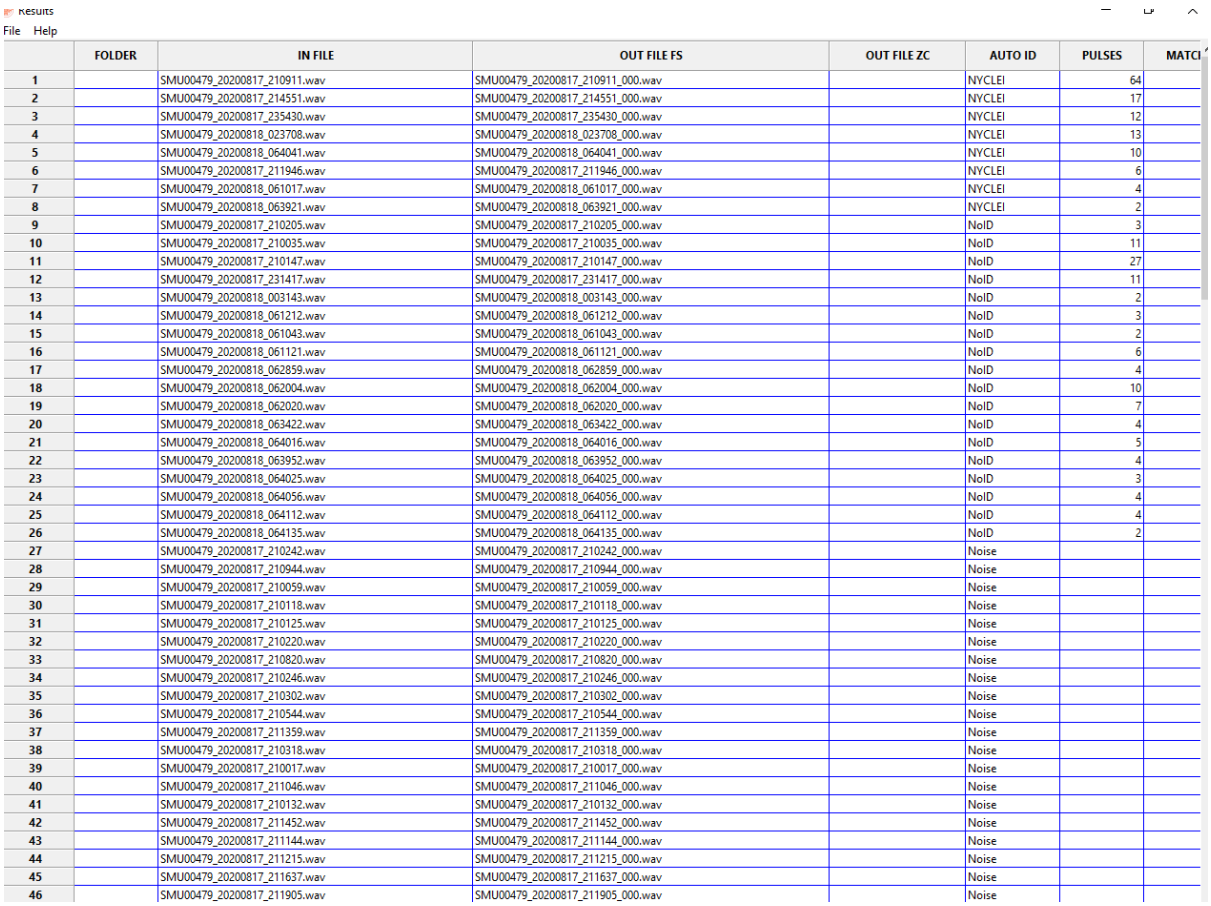
Appendix VI

Mini songmeter recordings from August



Results

File Help

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File Help

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Celtic Asbestos Consultancy Ltd

60 Grange Way, Baldoyle Industrial Estate, Baldoyle, Dublin 13, D13 F8F5
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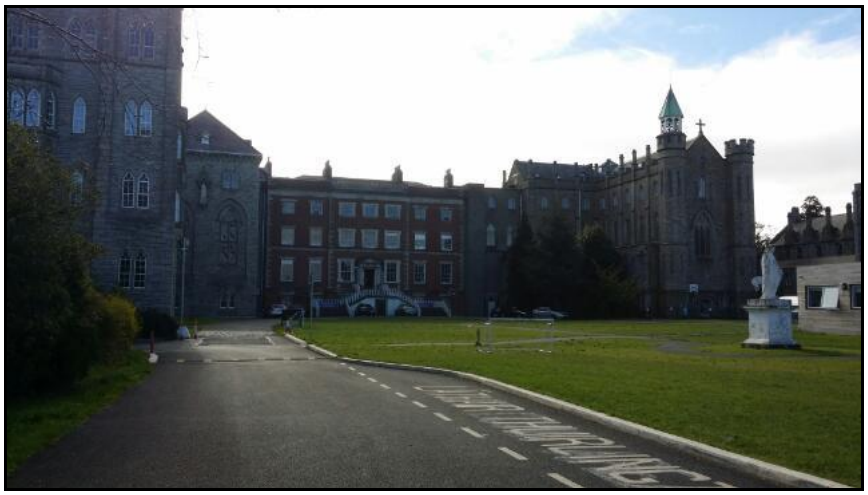
Asbestos Refurbishment Survey (including Sampling and Analysis) for

Fitzgerald Kavanagh + Partners

at

Loreto Abbey, Rathfarnham, Dublin 14



Project Number: A-01077
Revision 1 Issued on: 23/05/2018
QA doc 90c: Rev 3 20/03/2018

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Document Control

Client Name:

Fitzgerald Kavanagh + Partners

71 Lower Baggot St., Dublin 2, Ireland

Site Full Name:

Loreto Abbey, Rathfarnham, Dublin 14

Contact: James Glancy

Phone: +353 1 6764128

Email jamesg@fkp.ie

Project N° and Revision N°	Report Status	Surveyor	Report Author	Approved by	Issue Date
A-01077 (Rev 1)	Issued	Sean Kenny	Alessio Brancaleoni	 Daragh Gogarty	23/05/2018

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Celtic Asbestos Consultancy Ltd
60 Grange Way, Baldoyle Industrial Estate, Baldoyle, Dublin 13, D13 F8F5
Tel 01 8323547 Email: info@cacl.ie Website: www.cacl.ie

Section 1 - Executive Summary

1. **General Information:**

Celtic Asbestos Consultancy was instructed by ***Fitzgerald Kavanagh + Partners*** to carry out an **Asbestos Refurbishment Survey** to inspect for the presence of asbestos containing materials (ACMs) at the following site:

Loreto Abbey, Rathfarnham, Dublin 14

(See below for full list of areas inspected)

2. The actual Report covers the remaining part (former school and church - Block: A, B, C, D, E) of the building that was not surveyed during the first visit carried out on February 2014 by David Croft (see Report: A-00064 - Main Building). Light intrusions have been carried out during this survey due to the fact that some areas are still occupied and the whole structure is protected.

3. The general structure of the buildings has: stone/block/concrete external walls; concrete/timber/plaster board/lathe & plaster/stone internal walls; timber/concrete floors; plaster board/lathe & plaster/concrete ceilings; bangor/cement/new technology slates to roof areas (flat roof areas have felt on it).

4. Samples of suspect materials have been taken from different spots of the whole building (see Sections 1, 8, 9, 10, 11, 12 & 13 for better identification of materials). Where it was not possible to take a representative sample of suspect material, presumptions and/or strong presumptions have been made.

5. This survey was carried out on 04/05/18 to 16/05/18 by Sean Kenny.

6. The report was completed on 23/05/2018 by Alessio Brancaleoni and authorised by Daragh Gogarty.

7. The premises were surveyed as follows:

Survey Plan was put together through communication with the client. A walk through of the building was performed with the client's representative to note any areas of concern and clarify scope.

6.1 Samples were obtained of suspect materials. Where access was not possible, presumptions or strong presumptions were made.

6.2 This report should be read in its entirety, including any Appendices and CACL accepts no responsibility for sub division of this report or the way in which its recommendations are acted upon.

6.3 This purpose of this report is to assist the client identify ACM's within the building in order for them to be removed without risk, prior to the building being demolished.

7. This report does not imply that all other hazards were under control at the time of the survey.

Celtic Asbestos Consultancy Ltd
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Section 1 - Executive Summary

Asbestos was identified in the following:

Loreto Abbey, Rathfarnham, Dublin 14						
Sample	**Floor**	**Location**	**Description**	**Asbestos**	**Extent / Amount**	**Recommended Action**
S16	2nd Floor	Toilets 2-001	Vinyl Floor Tiles (green) & Bitumen	Chrysotile in: VFT & Bitumen	11 m²	Remove
S17	2nd Floor	Science room 2-008	Cement Board	Chrysotile	48 lin m	Remove
S14	1st Floor	Toilets 1-001	Vinyl Floor Tiles (red) & Bitumen	Chrysotile in: VFT & Bitumen	4 m²	Remove
S15	1st Floor	Toilets 1-001	Vinyl Floor Tiles (purple) & Bitumen	Chrysotile in: VFT & Bitumen	8 m²	Remove
S13	Ground Floor	Toilet 0-018	Vinyl Floor Tiles (cream) & Bitumen	Chrysotile in: VFT	6 m²	Remove
S3	Basement	Hall -1-004	Vinyl Floor Tiles (brown) & Bitumen	Chrysotile in: VFT & Bitumen	1 m²	Remove
S4	Basement	Toilets -1-010	Cistern (PVC / Reinforced Plastics)	Amosite	1 no	Remove
S5	Basement	Dining area -1-014	Vinyl Floor Tiles (orange) & Bitumen	Chrysotile in: VFT & Bitumen	78 m²	Remove
S6	Basement	Dining area -1-014	Bitumen Sink Pad	Chrysotile	2 no	Remove
S10	Basement	Toilets -1-023	Pipework (Rope / Woven Product)	Chrysotile	1 no	Remove
S9	Basement	Toilets -1-023	Pipework (Pipe Insulation & String)	Chrysotile in: String	4 lin m	Remove
S11	Basement	Hall -1-026	Vinyl Stair Nosing (dark brown)	Chrysotile	2 no	Remove
S23	Basement	Store -1-037	Cement Board	Chrysotile	15 m²	Remove
S21	External	Roof area 99-002	Cement Slates	Chrysotile	350 m²	Repair, label & manage
S22	External	Roof area 99-005	Insulating Board (debris)	Amosite	1 m²	Remove
S24	External	External wall 99-008	Cement Flue Pipe	Chrysotile & Crocidolite	8 lin m	Remove

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Section 1 - Executive Summary

Asbestos was Strongly Presumed in the following:

Loreto Abbey, Rathfarnham, Dublin 14						
Sample	**Floor**	**Location**	**Description**	**Asbestos**	**Extent / Amount**	**Recommended Action**
XS4	3rd Floor	Toilet 3-038	Cistern (PVC / Reinforced Plastics)	Amosite	1 no	Remove
XS4	2nd Floor	Toilets 2-001	Cistern (PVC / Reinforced Plastics)	Amosite	3 no	Remove
XS4	1st Floor	Toilets 1-001	Cistern (PVC / Reinforced Plastics)	Amosite	2 no	Remove
XS4	Ground Floor	Toilets 0-001	Cistern (PVC / Reinforced Plastics)	Amosite	2 no	Remove
XS4	Ground Floor	Toilets 0-041	Cistern (PVC / Reinforced Plastics)	Amosite	no	Remove
SP	Basement	Chapel -1-001	Cement Board (debris)	Chrysotile/ Amosite/ Crocidolite	1 m²	Remove
XS4	Basement	Toilets -1-023	Cistern (PVC / Reinforced Plastics)	Amosite	1 no	Remove
XS9	Basement	Hall -1-026	Pipework (Pipe Insulation & String)	Chrysotile in: String	1 lin m	Remove
XS3	Basement	Hall -1-026	Vinyl Floor Tiles (brown) & Bitumen	Chrysotile	2 m²	Remove
XS4	Basement	Toilets -1-032	Cistern (PVC / Reinforced Plastics)	Amosite	1 no	Remove
XS21	External	Roof area 99-002	Cement Slates (debris)	Chrysotile	2 m²	Remove
SP	External	Roof area 99-005	Glazed window cord (rope gaskets)	Chrysotile	48 no	Label & manage
SP	External	Roof area 99-005	Felt (bituminous product)	Chrysotile	250 m²	Label & manage

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Section 1 - Executive Summary

Asbestos was presumed in the following:

Loreto Abbey, Rathfarnham, Dublin 14						
Sample	**Floor**	**Location**	**Description**	**Asbestos**	**Extent / Amount**	**Recommended Action**
P	3rd Floor	Corridor 3-011	Fuse Box (Flash Guards)	Chrysotile	4 no	Remove
P	2nd Floor	Room 2-003	Fuse Box (Flash Guards)	Chrysotile	4 no	Remove
P	2nd Floor	Stairwell 2-009	Fuse Box (Flash Guards)	Chrysotile	2 no	Remove
P	2nd Floor	Hall 2-012	Fuse Box (Flash Guards)	Chrysotile	2 no	Remove
P	2nd Floor	Room 2-029	Fuse Box (Flash Guards)	Chrysotile	2 no	Remove
P	2nd Floor	Corridor 2-032	Water Heater (Rope Gaskets)	Chrysotile	1 no	Remove
P	2nd Floor	Corridor 2-039	Fuse Box (Flash Guards)	Chrysotile	3 no	Remove
P	Ground Floor	Corridor 0-002	Fuse Box (Flash Guards)	Chrysotile	2 no	Remove
P	Ground Floor	Room 0-013	Fuse Box (Flash Guards)	Chrysotile	4 no	Remove
P	Basement	Chapel -1-001	Fuse Box (Flash Guards)	Chrysotile	12 no	Remove
P	Basement	Chapel -1-001	Water Heater (Rope Gaskets)	Chrysotile	1 no	Remove
P	Basement	Chapel -1-012	Fuse Box (Flash Guards)	Chrysotile	7 no	Remove
P	Basement	Stairwell -1-027	Fuse Box (Flash Guards)	Chrysotile	9 no	Remove
P	Basement	Electrical room -1-028	Fuse Box (Flash Guards)	Chrysotile	3 no	Remove
P	External	Flat roof 99-006	No Access (felt PRESUMED)	Chrysotile	N/A	INVESTIGATE FURTHER FOR NO ACCESS
P	External	Flat roof 99-010	No Access (felt PRESUMED)	Chrysotile	N/A	INVESTIGATE FURTHER FOR NO ACCESS

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Section 2 - Survey Objectives

1. Produce a report, in a database format, indicating areas containing asbestos identified and suspected asbestos based materials, including photographic records of asbestos occurrences where possible.
2. To carry out a Refurbishment Asbestos Survey and subject all areas within the scope and proposed for refurbishment to a survey under the requirements of HSG264.
3. To include a risk assessment for each individual sample
4. A refurbishment survey is needed before any refurbishment work is carried out. This type of survey is used to locate and describe, as far as reasonably practicable, all ACMs in the area where the refurbishment work will take place.
5. The survey will be fully intrusive and involve destructive inspection, as necessary, to gain access to all areas; including those that may be difficult to reach.
6. The survey report should be supplied, by the client, to designers and contractors who may be bidding for the work, so that the asbestos risks can be addressed. In a Refurbishment survey, the asbestos is identified for safe removal so no exposure is caused during works. This type of survey does not normally assess the condition of the asbestos as there is no need to manage it once removal has taken place.

Section 3 - Survey Techniques

1. Materials of a similar type were only occasionally sampled and it was assumed that other surfaces identical to where the sample was taken, was of a similar composition.

2. Photographs were taken at all of the sample locations (unless otherwise stated).

3. Samples were returned to the Laboratory for analysis.

4. All Asbestos Bulk Sample Analysis is conducted by using Polarised Light and Dispersion Staining Techniques. Dispersion Staining is used to describe the colour effects produced when a transparent colourless particles or fibre is immersed in a liquid having a refractive index near that of the particle or fibre, and is viewed under a microscope using transmitted white light (based on HSE Publication HSG 248).

5. BOHS qualified surveyors carry out an inspection of the premises in order to identify ACM's. Samples of suspected ACM's are taken using fibre suspension techniques in order to minimise respirable fibre release and were analysed to determine the presence of asbestos.

6. The samples taken were analysed to determine whether the sample contains a certain type of asbestos and do not give out a quantity of asbestos present. Whether a material is determined friable and notifiable to the HSA is a decision made by the surveyor based upon material type and condition, sample result and experience. The surveyor will err on the side of caution where any doubt exists.

7. The risk assessment is carried out by applying the risk algorithms of a Material Assessment algorithm. The risk assessment determines the recommendation of management, removal or encapsulation.

8. There are two levels of presumption which may be noted in the report and these are described below:

    a. Presumed to contain asbestos – for example where no access was gained to an area, building, piece of plant, equipment or similar because it was locked, inaccessible or unsafe (e.g. floor tiles or textured coating).

    b. Strongly presumed to contain asbestos – where similar materials continue throughout rooms, corridors, ducts, roof voids etc and have either been sampled and positively identified, or the experience of the surveyor, is obviously an ACM (e.g. cement rainwater pipe, spray coating, insulating board).

Section 4 - Survey Caveat

1. This report is based upon a destructive inspection of an unfamiliar site. During the course of the survey, all reasonable efforts were made to identify the physical presence of materials containing asbestos within the areas of the building. Whilst every effort was made to locate all Asbestos Containing Material's, some may have been missed due to repairs, alterations etc., where false and other finishes have been applied or where different specifications (including a possible mixture of asbestos and non-asbestos) panels have been used in the same area. Only by sampling each panel would the composition of all the materials be known. This is not practical in terms of cost or time. It is known that asbestos materials are frequently concealed within the fabric of buildings or within sealed building voids so that it is not possible to regard the findings of any survey as being definitive. It must always remain a possibility that further asbestos containing materials may be found during refurbishment or demolition activities. For reasons set out in this report, the results cannot give an assurance that all asbestos materials have been found and must not be thought to do so. CACL do not accept responsibility for any omissions or areas of the building not addressed in the report.

2. We recommend that if any suspicious products are uncovered during works that an asbestos consultant should be contacted and further samples should be taken of suspect materials which may be uncovered within the areas of the site which were not uncovered and included in this survey.

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Section 5 - Survey Notes

1. This report has been written with reference to the various Guidance Notes etc, issued, and current at the date of this report and describes circumstances at the site on the date the investigation took place.

2. No air monitoring, unless specifically requested and noted, was carried out whilst the survey was undertaken and therefore care was taken not to cause disturbance of fibre or contamination of clean surfaces.

3. Samples were only taken where deemed necessary, and where a suspected material appeared to be repeatedly used within an area only a representative number of samples were taken, i.e. insulation boards, sprayed insulation, cement products etc.

4. If a product is uncovered that appears different to the majority of areas, a consultant should be contacted a further sampling arranged.

5. Any person undertaking work within the buildings should be informed of the presence of asbestos. This briefing also applies to any other person associated with the site, including staff, sub-contractors and others.

6. The drawings in the report are not to scale and are illustrative only to indicate approximate locations. The descriptions used are for location identification purposes.

7. All the recommendation in this report are based upon assumptions made after consideration of the type of material, condition of the material, its location, analysis result and type of use the area is thought to be subjected to. However, statutory authorities or others, could require amendments based on local knowledge, change in legislation, change in use or indeed, other conditions of criteria.

8. Equipment, machinery, ducting etc. were not moved, opened up or examined for the purpose of this investigation except in the occasion where hatches were available.

9. The quantifications stated, within this survey report, are based on our Surveyor's estimates and should not be used for contractual purposes.

Section 6 - Excluded Areas

The Following rooms / areas could not be accessed during the survey. Asbestos Containing Materials (ACMs) should be deemed as being present in these areas until proven otherwise.

Building Name	Floor	Room / Area	Comments
Loreto Abbey, Rathfarnham, Dublin 14	External	99-006 / Flat roof	No access to flat roof area of old church. Height restriction (over 6m high).
Loreto Abbey, Rathfarnham, Dublin 14	External	99-010 / Flat roof	No access to flat roof area. Height restriction (over 8m high). Presumed roof felt.

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Section 7 - Explanation of Survey Terms

1 REFURBISHMENT ASBESTOS SURVEY

A Refurbishment Asbestos Survey is to be carried out within a building or within a defined area of a building that is planned or preparing for the structure and finishing fabric of that area to undergo radical refurbishment works. The recommendation for any Asbestos Containing Material, (ACM) identified is: remove/label and manage/repair/encapsulate/seal, depending on the type, condition, product type or asbestos type, in order to proceed with refurbishment. The subsequent outline of type, condition, product type accessibility and asbestos type is given to provide information for the removal process.

The method of assessment, which has been adopted, is generally based on Health and Safety Executive publication HSG264: "Asbestos-The Survey Guide".

2 MATERIAL ASSESSMENT AND ALGORITHM

The material assessment is an assessment of the condition of the ACM, or the presumed ACM, and the likelihood of it releasing fibres in the event of it being disturbed in some way. This material assessment will give a good initial guide to the priority for management, and also friability for removal, as it will identify the materials, which will most readily release airborne fibres if disturbed. However, there are other factors to take into account when prioritising action.

HSG264 recommends the use of an algorithm to carry out the material assessment, and contains an example. The algorithm is a numerical way of taking into account several influencing factors, giving each factor considered a score. These scores can then be totalled to give a material assessment score. The use of algorithms is not infallible, but the assessment process is clear for all to see, so if discrepancies arise, it should be possible to track back through the assessment process to find the root of the error. The algorithm shown in HSG264 considers four parameters that determine the risk from an ACM: that is the ability to release fibres if disturbed. These four parameters are:

- Product type;
- Extent of damage;
- Surface treatment; and
- Asbestos type

Each of the parameters is scored and added to give a total score between 2 and 12:

- Score of 10 or more - high potential to release fibres if disturbed
- Score 7-9 - medium potential to release fibres if disturbed
- Score 5-6 - low potential to release fibres if disturbed
- Less than 4 - very low potential to release fibres if disturbed

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Section 8 – Explanation of Survey Recommendations

1 The recommendations detailed are based on each item's potential for releasing fibres as described in HSG264 Asbestos: the survey guide. The positive identification of asbestos bearing materials are detailed in the individual sample data sheets which outlines the risk assessment and recommendations.

2 A quantifiable assessment of the risk of fibre release is only made during a management survey, where asbestos can remain in place and managed by using an algorithm which takes into account all factors relevant to the item and the normal activities of the building occupants.

3 When refurbishment is planned, any asbestos identified that the refurbishment work will affect, will be removed prior to works starting.

4 All asbestos removal work must be carried out in accordance with S.I. No. 386 of 2006 Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006 and amended version 2010 and Guidelines issued by the Health & Safety Authority in Ireland. All contractors must undertake specific training in order to work with any asbestos and must take all steps reasonably practicable to prevent exposure to asbestos. Competent asbestos removal contractors should be able to provide their client their asbestos specific insurance.

5 All asbestos waste outlined above must be transported under hazardous waste license to a landfill or hazardous waste facility with a consignment note.

6 Notification must be submitted to the HSA 14 days prior to removal of friable asbestos with a certificate of reoccupation given on completion.

7 Recommendations for the asbestos products identified in this survey are as described in the executive summary/material assessment and asbestos register at the end of the report.

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	Basement	**SURVEY DATES:**	04/05/2018
ROOM NAME / NO.:	-1-004	**SAMPLE REF NO.:**	S3

USE OF MATERIAL:	Vinyl Floor Tiles (brown) and Bitumen			**ACCESSIBILITY:**	Medium		
LOCATION:	Hall			**EXTENT / QUANTITY:**	1 m²		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	
	AMOSITE	2			MEDIUM DAMAGE	2	✓
	CROCIDOLITE	3			HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0	✓	**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1			MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	✓
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1	✓	**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2			REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

All work with asbestos materials must be carried out in accordance with SI No 386 of the Safety, Health & Welfare at Work (Exposure to Asbestos) Regulations 2006 & amended version 2010 & Guidelines issued by the Health & Safety Authority in Ireland. 14 days notification may be required to the HSA. Ensure valid asbestos insurance & evidence of current training & competency is obtained from your selected approved contractor prior to works commencing.

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address: Loreto Abbey, Rathfarnham, Dublin 14

Client Name: Fitzgerald Kavanagh + Partners
Project Number: A-01077

FLOOR:	Basement	**SURVEY DATES:**	08/05/2018
ROOM NAME / NO.:	-1-026	**SAMPLE REF NO.:**	Same as S3

USE OF MATERIAL:	Vinyl Floor Tiles (brown) and Bitumen			**ACCESSIBILITY:**	Medium		
LOCATION:	Hall			**EXTENT / QUANTITY:**	2 m²		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	
	AMOSITE	2			MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	✓
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0	✓	**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1			MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	✓
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1	✓	**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2			REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

All work with asbestos materials must be carried out in accordance with SI No 386 of the Safety, Health & Welfare at Work (Exposure to Asbestos) Regulations 2006 & amended version 2010 & Guidelines issued by the Health & Safety Authority in Ireland. 14 days notification may be required to the HSA. Ensure valid asbestos insurance & evidence of current training & competency is obtained from your selected approved contractor prior to works commencing.

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	Basement			**SURVEY DATES:**	04/05/2018		
ROOM NAME / NO.:	-1-010			**SAMPLE REF NO.:**	S4		
				No Photo Available			
USE OF MATERIAL:	Cistern (PVC / Reinforced Plastics)			**ACCESSIBILITY:**	Medium		
LOCATION:	Toilets			**EXTENT / QUANTITY:**	1 no		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1			LOW DAMAGE	1	✓
	AMOSITE	2	✓		MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0	✓	**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1			MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	✓
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1	✓	**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2			REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

All work with asbestos materials must be carried out in accordance with SI No 386 of the Safety, Health & Welfare at Work (Exposure to Asbestos) Regulations 2006 & amended version 2010 & Guidelines issued by the Health & Safety Authority in Ireland. 14 days notification may be required to the HSA. Ensure valid asbestos insurance & evidence of current training & competency is obtained from your selected approved contractor prior to works commencing.

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address: Loreto Abbey, Rathfarnham, Dublin 14

Client Name: Fitzgerald Kavanagh + Partners
Project Number: A-01077

FLOOR:	3rd Floor	**SURVEY DATES:**	16/05/2018
ROOM NAME / NO.:	3-038	**SAMPLE REF NO.:**	Same as S4

USE OF MATERIAL:	Cistern (PVC / Reinforced Plastics)			**ACCESSIBILITY:**	Medium		
LOCATION:	Toilet			**EXTENT / QUANTITY:**	1 no		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1			LOW DAMAGE	1	✓
	AMOSITE	2	✓		MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0	✓	**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1			MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	✓
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1	✓	**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2			REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

All work with asbestos materials must be carried out in accordance with SI No 386 of the Safety, Health & Welfare at Work (Exposure to Asbestos) Regulations 2006 & amended version 2010 & Guidelines issued by the Health & Safety Authority in Ireland. 14 days notification may be required to the HSA. Ensure valid asbestos insurance & evidence of current training & competency is obtained from your selected approved contractor prior to works commencing.

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address: Loreto Abbey, Rathfarnham, Dublin 14

Client Name: Fitzgerald Kavanagh + Partners
Project Number: A-01077

FLOOR:	2nd Floor	**SURVEY DATES:**	09/05/2018
ROOM NAME / NO.:	2-001	**SAMPLE REF NO.:**	Same as S4

USE OF MATERIAL:	Cistern (PVC / Reinforced Plastics)			**ACCESSIBILITY:**	Easy		
LOCATION:	Toilets			**EXTENT / QUANTITY:**	3 no		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1			LOW DAMAGE	1	✓
	AMOSITE	2	✓		MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0	✓	**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1			MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	✓
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1	✓	**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2			REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

All work with asbestos materials must be carried out in accordance with SI No 386 of the Safety, Health & Welfare at Work (Exposure to Asbestos) Regulations 2006 & amended version 2010 & Guidelines issued by the Health & Safety Authority in Ireland. 14 days notification may be required to the HSA. Ensure valid asbestos insurance & evidence of current training & competency is obtained from your selected approved contractor prior to works commencing.

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address: Loreto Abbey, Rathfarnham, Dublin 14

Client Name: Fitzgerald Kavanagh + Partners
Project Number: A-01077

FLOOR:	1st Floor	**SURVEY DATES:**	09/05/2018
ROOM NAME / NO.:	1-001	**SAMPLE REF NO.:**	Same as S4

USE OF MATERIAL:	Cistern (PVC / Reinforced Plastics)			**ACCESSIBILITY:**	Easy		
LOCATION:	Toilets			**EXTENT / QUANTITY:**	2 no		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1			LOW DAMAGE	1	✓
	AMOSITE	2	✓		MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0	✓	**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1			MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	✓
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1	✓	**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2			REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

All work with asbestos materials must be carried out in accordance with SI No 386 of the Safety, Health & Welfare at Work (Exposure to Asbestos) Regulations 2006 & amended version 2010 & Guidelines issued by the Health & Safety Authority in Ireland. 14 days notification may be required to the HSA. Ensure valid asbestos insurance & evidence of current training & competency is obtained from your selected approved contractor prior to works commencing.

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address: Loreto Abbey, Rathfarnham, Dublin 14

Client Name: Fitzgerald Kavanagh + Partners
Project Number: A-01077

FLOOR:	Ground Floor	**SURVEY DATES:**	08/05/2018
ROOM NAME / NO.:	0-001	**SAMPLE REF NO.:**	Same as S4

USE OF MATERIAL:	Cistern (PVC / Reinforced Plastics)			**ACCESSIBILITY:**	Easy		
LOCATION:	Toilets			**EXTENT / QUANTITY:**	2 no		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1			LOW DAMAGE	1	✓
	AMOSITE	2	✓		MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0	✓	**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1			MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	✓
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1	✓	**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2			REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	Ground Floor	**SURVEY DATES:**	09/05/2018
ROOM NAME / NO.:	0-041	**SAMPLE REF NO.:**	Same as S4

No Photo Available

USE OF MATERIAL:	Cistern (PVC / Reinforced Plastics)			**ACCESSIBILITY:**	Easy		
LOCATION:	Toilets			**EXTENT / QUANTITY:**	no		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1			LOW DAMAGE	1	✓
	AMOSITE	2	✓		MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0	✓	**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1			MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	✓
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1	✓	**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2			REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	Basement			**SURVEY DATES:**	08/05/2018		
ROOM NAME / NO.:	-1-023			**SAMPLE REF NO.:**	Same as S4		
				No Photo Available			
USE OF MATERIAL:	Cistern (PVC / Reinforced Plastics)			**ACCESSIBILITY:**	Easy		
LOCATION:	Toilets			**EXTENT / QUANTITY:**	1 no		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1			LOW DAMAGE	1	
	AMOSITE	2	✓		MEDIUM DAMAGE	2	✓
	CROCIDOLITE	3			HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0	✓	**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1			MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	✓
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1	✓	**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2			REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

All work with asbestos materials must be carried out in accordance with SI No 386 of the Safety, Health & Welfare at Work (Exposure to Asbestos) Regulations 2006 & amended version 2010 & Guidelines issued by the Health & Safety Authority in Ireland. 14 days notification may be required to the HSA. Ensure valid asbestos insurance & evidence of current training & competency is obtained from your selected approved contractor prior to works commencing.

Celtic Asbestos Consultancy Ltd

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	Basement			**SURVEY DATES:**	08/05/2018		
ROOM NAME / NO.:	-1-032			**SAMPLE REF NO.:**	Same as S4		
				No Photo Available			
USE OF MATERIAL:	Cistern (PVC / Reinforced Plastics)			**ACCESSIBILITY:**	Easy		
LOCATION:	Toilets			**EXTENT / QUANTITY:**	1 no		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1			LOW DAMAGE	1	✓
	AMOSITE	2	✓		MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0	✓	**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1			MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	✓
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1	✓	**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2			REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	Basement	**SURVEY DATES:**	04/05/2018
ROOM NAME / NO.:	-1-014	**SAMPLE REF NO.:**	S5

USE OF MATERIAL:	Vinyl Floor Tiles (orange) & Bitumen under modern glued down vinyl covering.			**ACCESSIBILITY:**	Medium		
LOCATION:	Dining area			**EXTENT / QUANTITY:**	78 m²		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	
	AMOSITE	2			MEDIUM DAMAGE	2	✓
	CROCIDOLITE	3			HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0	✓	**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1			MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	✓
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1	✓	**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2			REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

If refurbishment work involves floor, remove this item. Otherwise encapsulate, label & manage.

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	Basement	**SURVEY DATES:**	04/05/2018
ROOM NAME / NO.:	-1-014	**SAMPLE REF NO.:**	S6

USE OF MATERIAL:	Bitumen Sink Pad			**ACCESSIBILITY:**	Easy		
LOCATION:	Dining area			**EXTENT / QUANTITY:**	2 no		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	✓
	AMOSITE	2			MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0	✓	**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1			MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	✓
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1	✓	**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2			REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

All work with asbestos materials must be carried out in accordance with SI No 386 of the Safety, Health & Welfare at Work (Exposure to Asbestos) Regulations 2006 & amended version 2010 & Guidelines issued by the Health & Safety Authority in Ireland. 14 days notification may be required to the HSA. Ensure valid asbestos insurance & evidence of current training & competency is obtained from your selected approved contractor prior to works commencing.

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address: Loreto Abbey, Rathfarnham, Dublin 14

Client Name: Fitzgerald Kavanagh + Partners
Project Number: A-01077

FLOOR:	Basement	**SURVEY DATES:**	08/05/2018
ROOM NAME / NO.:	-1-023	**SAMPLE REF NO.:**	S9

USE OF MATERIAL:	Pipework (Pipe Insulation & String & Cloth)			**ACCESSIBILITY:**	Medium		
LOCATION:	Toilets			**EXTENT / QUANTITY:**	4 lin m		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	
	AMOSITE	2			MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	✓
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0		**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1			MEDIUM RISK	7 -9	✓
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	
	UNSEALED LAGGING / SPRAY COATING	3	✓		VERY LOW RISK	1-4	
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1		**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2	✓		REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

pipe insulation and string to pipework in riser. CHRYSOTILE fibers in string only.

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	Basement	SURVEY DATES:	08/05/2018
ROOM NAME / NO.:	-1-026	SAMPLE REF NO.:	Same as S9

USE OF MATERIAL:	Pipework (Pipe Insulation & String & Cloth)	ACCESSIBILITY:	Difficult
LOCATION:	Hall	EXTENT / QUANTITY:	1 lin m

ASBESTOS TYPE				EXTENT OF DAMAGE / DETERIORATION			
	NON ASBESTOS	0			GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	
	AMOSITE	2			MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	✓
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0		FIBRE RELEASE POTENTIAL	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1			MEDIUM RISK	7 -9	✓
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	
	UNSEALED LAGGING / SPRAY COATING	3	✓		VERY LOW RISK	1-4	
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1		RECOMMENDED ACTION	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2	✓		REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

pipe insulation and string to pipework built in to wall at door to convent hall. CHRYSOTILE fibers in string only.

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	Basement	**SURVEY DATES:**	08/05/2018
ROOM NAME / NO.:	-1-023	**SAMPLE REF NO.:**	S10

USE OF MATERIAL:	Rope to pipework			**ACCESSIBILITY:**	Difficult		
LOCATION:	Toilets			**EXTENT / QUANTITY:**	1 no		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	
	AMOSITE	2			MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	✓
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0		**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1			MEDIUM RISK	7 -9	✓
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	
	UNSEALED LAGGING / SPRAY COATING	3	✓		VERY LOW RISK	1-4	
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1		**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2	✓		REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

rope packing seal to pipe in concrete ceiling (wrapped around pipe). Possibly located also in other not visible areas.

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	Basement			**SURVEY DATES:**	08/05/2018		
ROOM NAME / NO.:	-1-026			**SAMPLE REF NO.:**	S11		
							
USE OF MATERIAL:	Vinyl Stair Nosing (dark brown)				**ACCESSIBILITY:**	Medium	
LOCATION:	Hall			**EXTENT / QUANTITY:**	2 no		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	✓
	AMOSITE	2			MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0	✓	**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1			MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	✓
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1	✓	**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2			REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	Ground Floor	**SURVEY DATES:**	08/05/2018
ROOM NAME / NO.:	0-018	**SAMPLE REF NO.:**	S13

USE OF MATERIAL:	Vinyl Floor Tiles (cream) and Bitumen			**ACCESSIBILITY:**	Medium		
LOCATION:	Toilet			**EXTENT / QUANTITY:**	6 m²		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	✓
	AMOSITE	2			MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0	✓	**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1			MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	✓
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1	✓	**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2			REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

CHRYSOTILE fibers in Vinyl Floor Tiles only.

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	1st Floor	**SURVEY DATES:**	09/05/2018
ROOM NAME / NO.:	1-001	**SAMPLE REF NO.:**	S14

USE OF MATERIAL:	Vinyl Floor Tiles (red) and Bitumen			**ACCESSIBILITY:**	Easy		
LOCATION:	Toilets			**EXTENT / QUANTITY:**	4 m²		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	
	AMOSITE	2			MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	✓
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0	✓	**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1			MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	✓
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1	✓	**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2			REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	1st Floor	**SURVEY DATES:**	09/05/2018
ROOM NAME / NO.:	1-001	**SAMPLE REF NO.:**	S15

USE OF MATERIAL:	Vinyl Floor Tiles (purple) and Bitumen			**ACCESSIBILITY:**	Easy		
LOCATION:	Toilets			**EXTENT / QUANTITY:**	8 m²		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	
	AMOSITE	2			MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	✓
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0	✓	**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1			MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	✓
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1	✓	**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2			REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	2nd Floor	**SURVEY DATES:**	09/05/2018
ROOM NAME / NO.:	2-001	**SAMPLE REF NO.:**	S16

USE OF MATERIAL:	Vinyl Floor Tiles (green) and Bitumen			**ACCESSIBILITY:**	Easy		
LOCATION:	Toilets			**EXTENT / QUANTITY:**	11 m²		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	
	AMOSITE	2			MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	✓
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0	✓	**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1			MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	✓
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1	✓	**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2			REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

All work with asbestos materials must be carried out in accordance with SI No 386 of the Safety, Health & Welfare at Work (Exposure to Asbestos) Regulations 2006 & amended version 2010 & Guidelines issued by the Health & Safety Authority in Ireland. 14 days notification may be required to the HSA. Ensure valid asbestos insurance & evidence of current training & competency is obtained from your selected approved contractor prior to works commencing.

Celtic Asbestos Consultancy Ltd

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	2nd Floor	**SURVEY DATES:**	09/05/2018
ROOM NAME / NO.:	2-008	**SAMPLE REF NO.:**	S17

USE OF MATERIAL:	Cement Board			**ACCESSIBILITY:**	Difficult		
LOCATION:	Science room			**EXTENT / QUANTITY:**	48 lin m		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	
	AMOSITE	2			MEDIUM DAMAGE	2	✓
	CROCIDOLITE	3			HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0		**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1	✓		MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	✓
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1	✓	**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2			REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

cement board lining around pipework at rear of teachers desk. Also box shape 200mm x150mm continues under cabinets around room.

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address: Loreto Abbey, Rathfarnham, Dublin 14

Client Name: Fitzgerald Kavanagh + Partners
Project Number: A-01077

FLOOR:	External	**SURVEY DATES:**	16/05/2018
ROOM NAME / NO.:	99-002	**SAMPLE REF NO.:**	S21

USE OF MATERIAL:	Cement Slates			**ACCESSIBILITY:**	Difficult		
LOCATION:	Roof area			**EXTENT / QUANTITY:**	350 approx m²		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	
	AMOSITE	2			MEDIUM DAMAGE	2	✓
	CROCIDOLITE	3			HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0		**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1	✓		MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	✓
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1	✓	**RECOMMENDED ACTION**	REMOVE		
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2			REPAIR / SEAL ENCAPSULATE		✓
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		✓

OTHER RELEVANT INFORMATION:

cement slates roof to outer slopes of box shaped roof. Repair label and manage, remove if refurbishment involves roof. Small amount of damage.

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	External	**SURVEY DATES:**	16/05/2018
ROOM NAME / NO.:	99-002	**SAMPLE REF NO.:**	Same as S21

USE OF MATERIAL:	Cement Slates			**ACCESSIBILITY:**	Difficult		
LOCATION:	Roof area			**EXTENT / QUANTITY:**	2 m²		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	
	AMOSITE	2			MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	✓
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0		**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1	✓		MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	✓
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1	✓	**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2			REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

cement slates debris as S21 in different places along gutters. Remove cement slates debris from gutters.

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	External	**SURVEY DATES:**	16/05/2018
ROOM NAME / NO.:	99-005	**SAMPLE REF NO.:**	S22

USE OF MATERIAL:	Insulating Board debris			**ACCESSIBILITY:**	Difficult		
LOCATION:	Roof area			**EXTENT / QUANTITY:**	1 m²		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1			LOW DAMAGE	1	
	AMOSITE	2	✓		MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	✓
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0		**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1			MEDIUM RISK	7 -9	✓
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2	✓		LOW RISK	5 -6	
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1		**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2	✓		REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

insulating board (in very poor condition) debris on flat roof at access door to roof. Maybe lining to old timber door left on roof beside debris.

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	Basement	**SURVEY DATES:**	16/05/2018
ROOM NAME / NO.:	-1-037	**SAMPLE REF NO.:**	S23

USE OF MATERIAL:	Cement Board			**ACCESSIBILITY:**	Medium		
LOCATION:	Store			**EXTENT / QUANTITY:**	15 m²		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	✓
	AMOSITE	2			MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0		**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1	✓		MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	✓
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1	✓	**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2			REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

Cement Board lining to internal wall of old fridge cold room. if refurbishment involves this area, remove this (otherwise label & manage) and do not forget:

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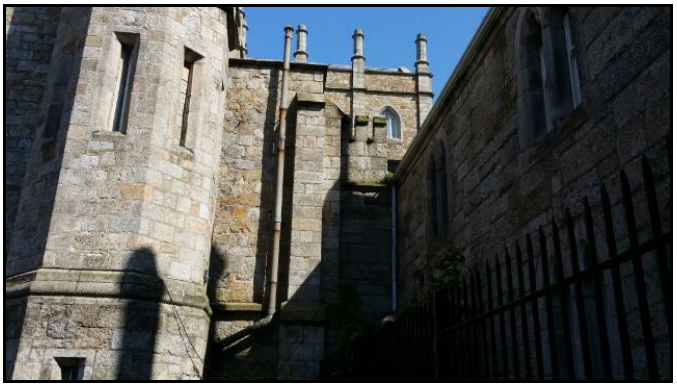
Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	External	**SURVEY DATES:**	16/05/2018
ROOM NAME / NO.:	99-008	**SAMPLE REF NO.:**	S24



USE OF MATERIAL:	Cement Flue Pipe			**ACCESSIBILITY:**	Difficult		
LOCATION:	Externals			**EXTENT / QUANTITY:**	8 lin m		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	
	AMOSITE	2			MEDIUM DAMAGE	2	✓
	CROCIDOLITE	3	✓		HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0		**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1	✓		MEDIUM RISK	7 -9	✓
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1	✓	**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2			REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

cement flue pipes (2 in total) built into wall. One is broken at wall juncture (no visible debris on ground). The other one has a full length of 8m approx.

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	Basement	**SURVEY DATES:**	04/05/2018
ROOM NAME / NO.:	-1-001	**SAMPLE REF NO.:**	Strongly Presumed

USE OF MATERIAL:	Cement Board debris			**ACCESSIBILITY:**	Medium		
LOCATION:	Chapel			**EXTENT / QUANTITY:**	1 m²		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	
	AMOSITE	2	✓		MEDIUM DAMAGE	2	✓
	CROCIDOLITE	3	✓		HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0		**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1	✓		MEDIUM RISK	7 -9	✓
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1	✓	**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2			REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	External	**SURVEY DATES:**	16/05/2018
ROOM NAME / NO.:	99-005	**SAMPLE REF NO.:**	Strongly Presumed

USE OF MATERIAL:	Bituminous Product (felt)			**ACCESSIBILITY:**	Difficult		
LOCATION:	Roof area			**EXTENT / QUANTITY:**	250 approx m²		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	✓
	AMOSITE	2			MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0	✓	**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1			MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	✓
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1	✓	**RECOMMENDED ACTION**	REMOVE		
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2			REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		✓

OTHER RELEVANT INFORMATION:

It was not possible to take a sample (building in use). Felt has been presumed to contain asbestos.
If refurbishment involves roof, a sample can be taken, otherwise label and manage.

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	External			**SURVEY DATES:**	16/05/2018		
ROOM NAME / NO.:	99-005			**SAMPLE REF NO.:**	Strongly Presumed		
							
USE OF MATERIAL:	Rope seal to glazed windows			**ACCESSIBILITY:**	Difficult		
LOCATION:	Roof area			**EXTENT / QUANTITY:**	4 block with 48 no of cords in total		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	✓
	AMOSITE	2			MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0		**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1	✓		MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	✓
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1		**RECOMMENDED ACTION**	REMOVE		
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2	✓		REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		✓

OTHER RELEVANT INFORMATION:

Cord visible in glazing bars (no access without opening up glazing and, possibly, damaging it; occupied building).

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	3rd Floor			**SURVEY DATES:**	15/05/2018		
ROOM NAME / NO.:	3-011			**SAMPLE REF NO.:**	Presumed		
				No Photo Available			
USE OF MATERIAL:	Fuse box (Flash Guards)			**ACCESSIBILITY:**	Difficult		
LOCATION:	Corridor			**EXTENT / QUANTITY:**	4 no		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	✓
	AMOSITE	2			MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0		**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1	✓		MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	✓
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1		**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2	✓		REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

If refurbishment involves electrics, remove this item (otherwise label and manage) and do not forget:

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	2nd Floor			**SURVEY DATES:**	09/05/2018		
ROOM NAME / NO.:	2-003			**SAMPLE REF NO.:**	Presumed		
				No Photo Available			
USE OF MATERIAL:	Fuse box (Flash Guards)			**ACCESSIBILITY:**	Difficult		
LOCATION:	Room			**EXTENT / QUANTITY:**	4 no		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	✓
	AMOSITE	2			MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0		**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1	✓		MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	✓
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1		**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2	✓		REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

If refurbishment involves electrics, remove this item (otherwise label and manage) and do not forget:

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Celtic Asbestos Consultancy Ltd

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address: Loreto Abbey, Rathfarnham, Dublin 14

Client Name: Fitzgerald Kavanagh + Partners
Project Number: A-01077

FLOOR:	2nd Floor			**SURVEY DATES:**	15/05/2018		
ROOM NAME / NO.:	2-009			**SAMPLE REF NO.:**	Presumed		
				No Photo Available			
USE OF MATERIAL:	Fuse box (Flash Guards)			**ACCESSIBILITY:**	Difficult		
LOCATION:	Stairwell			**EXTENT / QUANTITY:**	2 no		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	✓
	AMOSITE	2			MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0		**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1	✓		MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	✓
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1		**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2	✓		REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	2nd Floor			**SURVEY DATES:**	15/05/2018		
ROOM NAME / NO.:	2-012			**SAMPLE REF NO.:**	Presumed		
				No Photo Available			
USE OF MATERIAL:	Fuse box (Flash Guards)			**ACCESSIBILITY:**	Difficult		
LOCATION:	Hall			**EXTENT / QUANTITY:**	2 no		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	✓
	AMOSITE	2			MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0		**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1	✓		MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	✓
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1		**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2	✓		REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

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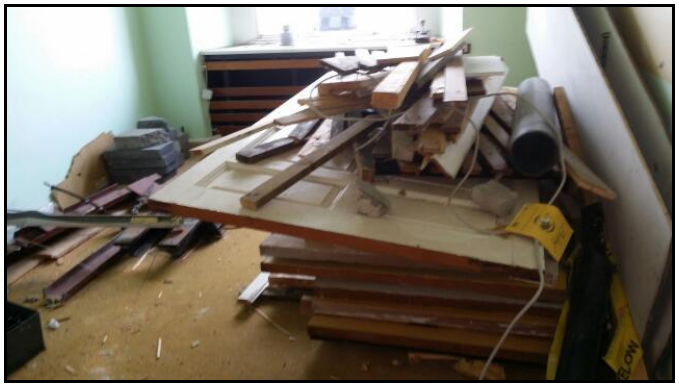
Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	2nd Floor	**SURVEY DATES:**	15/05/2018
ROOM NAME / NO.:	2-029	**SAMPLE REF NO.:**	Presumed



USE OF MATERIAL:	Fuse box (Flash Guards) stored on the floor			**ACCESSIBILITY:**	Difficult		
LOCATION:	Room			**EXTENT / QUANTITY:**	2 no		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	✓
	AMOSITE	2			MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0		**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1	✓		MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	✓
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1		**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2	✓		REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	2nd Floor			**SURVEY DATES:**	15/05/2018		
ROOM NAME / NO.:	2-032			**SAMPLE REF NO.:**	Presumed		
				No Photo Available			
USE OF MATERIAL:	Water heater (Rope Gaskets)			**ACCESSIBILITY:**	Difficult		
LOCATION:	Corridor			**EXTENT / QUANTITY:**	1 no		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	✓
	AMOSITE	2			MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0		**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1	✓		MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	✓
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1		**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2	✓		REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

old water heater dated 1967.

All work with asbestos materials must be carried out in accordance with SI No 386 of the Safety, Health & Welfare at Work (Exposure to Asbestos) Regulations 2006 & amended version 2010 & Guidelines issued by the Health & Safety Authority in Ireland. 14 days notification may be required to the HSA. Ensure valid asbestos insurance & evidence of current training & competency is obtained from your selected approved contractor prior to works commencing.

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	2nd Floor			**SURVEY DATES:**	15/05/2018		
ROOM NAME / NO.:	2-039			**SAMPLE REF NO.:**	Presumed		
				No Photo Available			
USE OF MATERIAL:	Fuse box (Flash Guards)			**ACCESSIBILITY:**	Difficult		
LOCATION:	Corridor			**EXTENT / QUANTITY:**	3 no		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	✓
	AMOSITE	2			MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0		**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1	✓		MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	✓
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1		**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2	✓		REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	Ground Floor			**SURVEY DATES:**	08/05/2018		
ROOM NAME / NO.:	0-002			**SAMPLE REF NO.:**	Presumed		
				No Photo Available			
USE OF MATERIAL:	Fuse box (Flash Guards)			**ACCESSIBILITY:**	Difficult		
LOCATION:	Corridor			**EXTENT / QUANTITY:**	2 no		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	✓
	AMOSITE	2			MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0		**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1	✓		MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	✓
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1		**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2	✓		REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	Ground Floor			**SURVEY DATES:**	08/05/2018		
ROOM NAME / NO.:	0-013			**SAMPLE REF NO.:**	Presumed		
				No Photo Available			
USE OF MATERIAL:	Fuse box (Flash Guards)			**ACCESSIBILITY:**	Difficult		
LOCATION:	Room			**EXTENT / QUANTITY:**	4 no		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	✓
	AMOSITE	2			MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0		**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1	✓		MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	✓
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1		**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2	✓		REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	Basement			**SURVEY DATES:**	04/05/2018		
ROOM NAME / NO.:	-1-001			**SAMPLE REF NO.:**	Presumed		
				No Photo Available			
USE OF MATERIAL:	Fuse box (Flash Guards)			**ACCESSIBILITY:**	Difficult		
LOCATION:	Chapel			**EXTENT / QUANTITY:**	12 no		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	✓
	AMOSITE	2			MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0		**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1	✓		MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	✓
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1		**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2	✓		REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	Basement			**SURVEY DATES:**	04/05/2018		
ROOM NAME / NO.:	-1-001			**SAMPLE REF NO.:**	Presumed		
				No Photo Available			
USE OF MATERIAL:	Water heater (Rope Gaskets)			**ACCESSIBILITY:**	Difficult		
LOCATION:	Chapel			**EXTENT / QUANTITY:**	1 no		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	✓
	AMOSITE	2			MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0		**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1	✓		MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	✓
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1		**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2	✓		REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address: Loreto Abbey, Rathfarnham, Dublin 14

Client Name: Fitzgerald Kavanagh + Partners
Project Number: A-01077

FLOOR:	Basement	**SURVEY DATES:**	04/05/2018
ROOM NAME / NO.:	-1-012	**SAMPLE REF NO.:**	Presumed

USE OF MATERIAL:	Fuse box (Flash Guards)			**ACCESSIBILITY:**	Difficult		
LOCATION:	Chapel			**EXTENT / QUANTITY:**	7 no		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	✓
	AMOSITE	2			MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0		**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1	✓		MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	✓
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1		**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2	✓		REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address: Loreto Abbey, Rathfarnham, Dublin 14

Client Name: Fitzgerald Kavanagh + Partners
Project Number: A-01077

FLOOR:	Basement	**SURVEY DATES:**	08/05/2018
ROOM NAME / NO.:	-1-027	**SAMPLE REF NO.:**	Presumed

USE OF MATERIAL:	Fuse box (Flash Guards)				**ACCESSIBILITY:**	Difficult	
LOCATION:	Stairwell			**EXTENT / QUANTITY:**	9 no		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	✓
	AMOSITE	2			MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0		**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1	✓		MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	✓
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1		**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2	✓		REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

If refurbishment involves electrics, remove this item (otherwise label and manage) and do not forget:

All work with asbestos materials must be carried out in accordance with SI No 386 of the Safety, Health & Welfare at Work (Exposure to Asbestos) Regulations 2006 & amended version 2010 & Guidelines issued by the Health & Safety Authority in Ireland. 14 days notification may be required to the HSA. Ensure valid asbestos insurance & evidence of current training & competency is obtained from your selected approved contractor prior to works commencing.

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	Basement			**SURVEY DATES:**	08/05/2018		
ROOM NAME / NO.:	-1-028			**SAMPLE REF NO.:**	Presumed		
				No Photo Available			
USE OF MATERIAL:	Fuse box (Flash Guards)			**ACCESSIBILITY:**	Difficult		
LOCATION:	Electrical room			**EXTENT / QUANTITY:**	3 no		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	✓
	AMOSITE	2			MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0		**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1	✓		MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	✓
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1		**RECOMMENDED ACTION**	REMOVE		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2	✓		REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

If refurbishment involves electrics, remove this item (otherwise label and manage) and do not forget:

All work with asbestos materials must be carried out in accordance with SI No 386 of the Safety, Health & Welfare at Work (Exposure to Asbestos) Regulations 2006 & amended version 2010 & Guidelines issued by the Health & Safety Authority in Ireland. 14 days notification may be required to the HSA. Ensure valid asbestos insurance & evidence of current training & competency is obtained from your selected approved contractor prior to works commencing.

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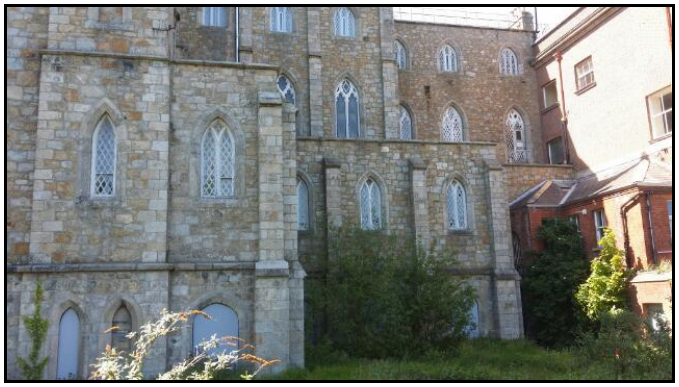
Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	External	**SURVEY DATES:**	16/05/2018
ROOM NAME / NO.:	99-006	**SAMPLE REF NO.:**	Presumed



USE OF MATERIAL:	Felt (bituminous product) - No Access Gained			**ACCESSIBILITY:**	No Access		
LOCATION:	Flat roof			**EXTENT / QUANTITY:**	N/A		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	
	AMOSITE	2			MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0		**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1			MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1		**RECOMMENDED ACTION**	INVESTIGATE FURTHER FOR NO ACCESS		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2			REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

No access to flat roof area of old church. Height restriction (over 6m high).

INVESTIGATE FURTHER FOR NO ACCESS

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Section 9 - Material Assessment (Photo Small)

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	External			**SURVEY DATES:**	16/05/2018		
ROOM NAME / NO.:	99-010			**SAMPLE REF NO.:**	Presumed		
				No Photo Available			
USE OF MATERIAL:	Felt (bituminous product) - No Access Gained			**ACCESSIBILITY:**	No Access		
LOCATION:	Flat roof			**EXTENT / QUANTITY:**	N/A		
ASBESTOS TYPE	NON ASBESTOS	0		**EXTENT OF DAMAGE / DETERIORATION**	GOOD CONDITION	0	
	CHRYSOTILE	1	✓		LOW DAMAGE	1	
	AMOSITE	2			MEDIUM DAMAGE	2	
	CROCIDOLITE	3			HIGH DAMAGE	3	
	OTHER	2			LOOSE ASBESTOS	3	
SURFACE TREATMENT	COMPOSITE MATERIAL	0		**FIBRE RELEASE POTENTIAL**	HIGH RISK	10-12	
	ENCLOSED SPRAY / LAGGING, PAINTED / ENCAPSULATED AIB, ASBESTOS CEMENT SHEETS	1			MEDIUM RISK	7 -9	
	UNSEALED AIB OR ENCAPSULATED LAGGING AND SPRAYS	2			LOW RISK	5 -6	
	UNSEALED LAGGING / SPRAY COATING	3			VERY LOW RISK	1-4	
PRODUCT TYPE	ASBESTOS REINFORCED COMPOSITES	1		**RECOMMENDED ACTION**	INVESTIGATE FURTHER FOR NO ACCESS		✓
	ASBESTOS INSULATING BOARD, TEXTILES, GASKETS, ROPE, PAPER, FELT	2			REPAIR / SEAL ENCAPSULATE		
	THERMAL INSULATION, SPRAYED ASBESTOS, LOOSE ASBESTOS	3			LABEL AND MANAGE		

OTHER RELEVANT INFORMATION:

No access to flat roof area. Height restriction (over 8m high).

INVESTIGATE FURTHER FOR NO ACCESS

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Section 10 - Non Asbestos Items

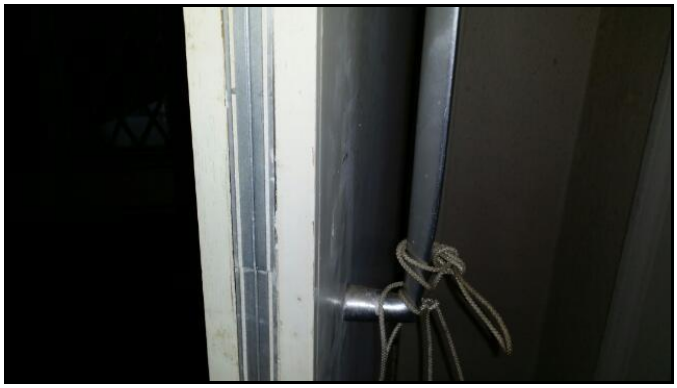
Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	3rd Floor	**SURVEY DATES:**	15/05/2018
ROOM NAME / NO.:	3-003	**SAMPLE REF NO.:**	S18

USE OF MATERIAL:	Insulating Board to fire door	**ACCESSIBILITY:**	Difficult
LOCATION:	Stairs + landing	**EXTENT / QUANTITY:**	1 no

FLOOR:	3rd Floor	**SURVEY DATES:**	15/05/2018
ROOM NAME / NO.:	3-011	**SAMPLE REF NO.:**	Same as S18



USE OF MATERIAL:	Insulating Board to fire door	**ACCESSIBILITY:**	Difficult
LOCATION:	Corridor	**EXTENT / QUANTITY:**	4 no

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Section 10 - Non Asbestos Items

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	3rd Floor	**SURVEY DATES:**	16/05/2018
ROOM NAME / NO.:	3-037	**SAMPLE REF NO.:**	Same as S7
			
USE OF MATERIAL:	Vinyl Floor Covering (red) & Adhesive	**ACCESSIBILITY:**	Easy
LOCATION:	Stairwell	**EXTENT / QUANTITY:**	5 m²

FLOOR:	2nd Floor	**SURVEY DATES:**	09/05/2018
ROOM NAME / NO.:	2-009	**SAMPLE REF NO.:**	Same as S7
		No Photo Available	
USE OF MATERIAL:	Vinyl Floor Covering (red) & Adhesive	**ACCESSIBILITY:**	Medium
LOCATION:	Stairwell	**EXTENT / QUANTITY:**	15 m²

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Section 10 - Non Asbestos Items

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	2nd Floor	**SURVEY DATES:**	08/05/2018
ROOM NAME / NO.:	2-009	**SAMPLE REF NO.:**	Same as S8

USE OF MATERIAL:	Vinyl stair nosing (black)	**ACCESSIBILITY:**	Medium
LOCATION:	Stairwell	**EXTENT / QUANTITY:**	26 no

FLOOR:	2nd Floor	**SURVEY DATES:**	15/05/2018
ROOM NAME / NO.:	2-026	**SAMPLE REF NO.:**	S20

USE OF MATERIAL:	Insulating Board to fire door	**ACCESSIBILITY:**	Difficult
LOCATION:	Room	**EXTENT / QUANTITY:**	1 no

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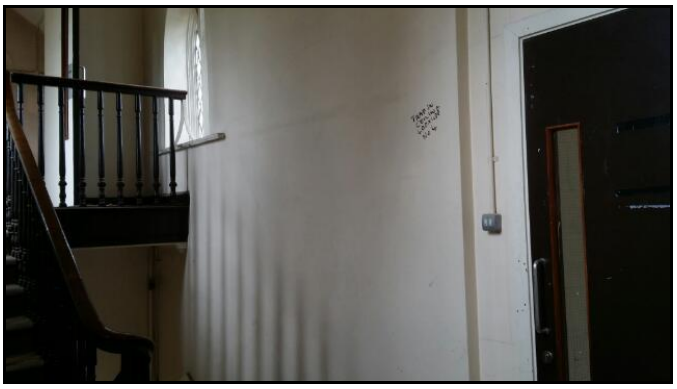
Section 10 - Non Asbestos Items

Sorted by: Location ID

Site Address: Loreto Abbey, Rathfarnham, Dublin 14

Client Name: Fitzgerald Kavanagh + Partners
Project Number: A-01077

FLOOR:	2nd Floor	**SURVEY DATES:**	15/05/2018
ROOM NAME / NO.:	2-030	**SAMPLE REF NO.:**	Same as S8
		No Photo Available	
USE OF MATERIAL:	Vinyl stair nosing (black)	**ACCESSIBILITY:**	Medium
LOCATION:	Hall & Stairs	**EXTENT / QUANTITY:**	7 no

FLOOR:	2nd Floor	**SURVEY DATES:**	15/05/2018
ROOM NAME / NO.:	2-030	**SAMPLE REF NO.:**	Same as S20
			
USE OF MATERIAL:	Insulating Board to fire door	**ACCESSIBILITY:**	Difficult
LOCATION:	Hall & Stairs	**EXTENT / QUANTITY:**	2 no

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Section 10 - Non Asbestos Items

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	2nd Floor	**SURVEY DATES:**	15/05/2018
ROOM NAME / NO.:	2-033	**SAMPLE REF NO.:**	S19

USE OF MATERIAL:	Bitumen Adhesive to floor	**ACCESSIBILITY:**	Easy
LOCATION:	Bedroom	**EXTENT / QUANTITY:**	0.750 m²

FLOOR:	2nd Floor	**SURVEY DATES:**	15/05/2018
ROOM NAME / NO.:	2-036	**SAMPLE REF NO.:**	Same as S19

USE OF MATERIAL:	Bitumen Adhesive to floor	**ACCESSIBILITY:**	Easy
LOCATION:	Bedroom	**EXTENT / QUANTITY:**	0.750 m²

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Section 10 - Non Asbestos Items

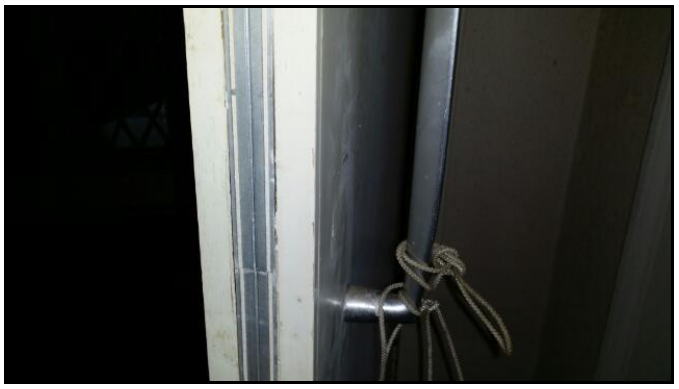
Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	2nd Floor	**SURVEY DATES:**	15/05/2018
ROOM NAME / NO.:	2-038	**SAMPLE REF NO.:**	Same as S19

USE OF MATERIAL:	Bitumen Adhesive to floor	**ACCESSIBILITY:**	Easy
LOCATION:	Bedroom	**EXTENT / QUANTITY:**	0.750 m²

FLOOR:	2nd Floor	**SURVEY DATES:**	15/05/2018
ROOM NAME / NO.:	2-039	**SAMPLE REF NO.:**	Same as S18



USE OF MATERIAL:	Insulating Board to fire door	**ACCESSIBILITY:**	Difficult
LOCATION:	Corridor	**EXTENT / QUANTITY:**	4 no

Section 10 - Non Asbestos Items

Sorted by: Location ID

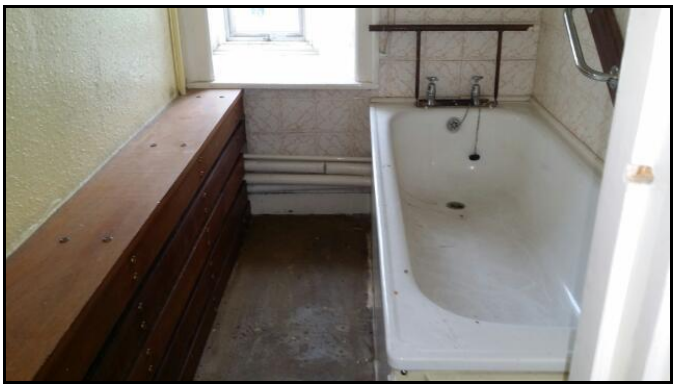
Site Address: Loreto Abbey, Rathfarnham, Dublin 14

Client Name: Fitzgerald Kavanagh + Partners
Project Number: A-01077

FLOOR:	2nd Floor	**SURVEY DATES:**	15/05/2018
ROOM NAME / NO.:	2-041	**SAMPLE REF NO.:**	Same as S19

USE OF MATERIAL:	Bitumen Adhesive to floor	**ACCESSIBILITY:**	Easy
LOCATION:	Bedroom	**EXTENT / QUANTITY:**	0.750 m²

FLOOR:	2nd Floor	**SURVEY DATES:**	15/05/2018
ROOM NAME / NO.:	2-043	**SAMPLE REF NO.:**	Same as S19



USE OF MATERIAL:	Bitumen Adhesive to floor	**ACCESSIBILITY:**	Easy
LOCATION:	bathroom	**EXTENT / QUANTITY:**	0.750 m²

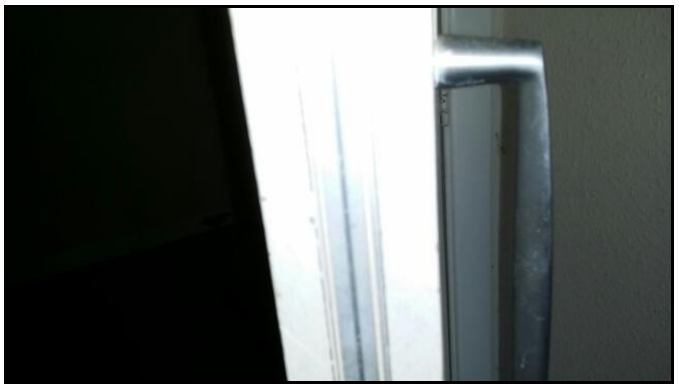
Section 10 - Non Asbestos Items

Sorted by: Location ID

Site Address: Loreto Abbey, Rathfarnham, Dublin 14

Client Name: Fitzgerald Kavanagh + Partners
Project Number: A-01077

FLOOR:	2nd Floor	**SURVEY DATES:**	15/05/2018
ROOM NAME / NO.:	2-046	**SAMPLE REF NO.:**	Same as S18



USE OF MATERIAL:	Insulating Board to fire door	**ACCESSIBILITY:**	Difficult
LOCATION:	Stairwell	**EXTENT / QUANTITY:**	2 no

FLOOR:	2nd Floor	**SURVEY DATES:**	15/05/2018
ROOM NAME / NO.:	2-047	**SAMPLE REF NO.:**	Same as S19

USE OF MATERIAL:	Bitumen Adhesive to floor	**ACCESSIBILITY:**	Easy
LOCATION:	Bedroom	**EXTENT / QUANTITY:**	0.750 m²

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Section 10 - Non Asbestos Items

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	2nd Floor	**SURVEY DATES:**	15/05/2018
ROOM NAME / NO.:	2-049	**SAMPLE REF NO.:**	Same as S19
		No Photo Available	
USE OF MATERIAL:	Bitumen Adhesive to floor	**ACCESSIBILITY:**	Easy
LOCATION:	Bedroom	**EXTENT / QUANTITY:**	0.750 m²

FLOOR:	2nd Floor	**SURVEY DATES:**	15/05/2018
ROOM NAME / NO.:	2-051	**SAMPLE REF NO.:**	Same as S18
			
USE OF MATERIAL:	Insulating Board to fire door	**ACCESSIBILITY:**	Difficult
LOCATION:	Stairwell	**EXTENT / QUANTITY:**	2 no

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Section 10 - Non Asbestos Items

Sorted by: Location ID

Site Address: Loreto Abbey, Rathfarnham, Dublin 14

Client Name: Fitzgerald Kavanagh + Partners
Project Number: A-01077

FLOOR:	2nd Floor	**SURVEY DATES:**	15/05/2018
ROOM NAME / NO.:	2-055	**SAMPLE REF NO.:**	Same as S19
		No Photo Available	
USE OF MATERIAL:	Bitumen Adhesive to floor	**ACCESSIBILITY:**	Easy
LOCATION:	Bedroom	**EXTENT / QUANTITY:**	0.750 m²

FLOOR:	2nd Floor	**SURVEY DATES:**	15/05/2018
ROOM NAME / NO.:	2-061	**SAMPLE REF NO.:**	Same as S18
			
USE OF MATERIAL:	Insulating Board to fire door	**ACCESSIBILITY:**	Difficult
LOCATION:	Stairwell	**EXTENT / QUANTITY:**	2 no

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Section 10 - Non Asbestos Items

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	2nd Floor	**SURVEY DATES:**	15/05/2018
ROOM NAME / NO.:	2-066	**SAMPLE REF NO.:**	Same as S19
		No Photo Available	
USE OF MATERIAL:	Bitumen Adhesive to floor	**ACCESSIBILITY:**	Difficult
LOCATION:	Bedroom	**EXTENT / QUANTITY:**	0.750 m²

FLOOR:	1st Floor	**SURVEY DATES:**	09/05/2018
ROOM NAME / NO.:	1-008	**SAMPLE REF NO.:**	Same as S7
			
USE OF MATERIAL:	Vinyl Floor Covering (red) & Adhesive	**ACCESSIBILITY:**	Medium
LOCATION:	Stairwell	**EXTENT / QUANTITY:**	18 m²

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Section 10 - Non Asbestos Items

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	1st Floor	**SURVEY DATES:**	09/05/2018
ROOM NAME / NO.:	1-008	**SAMPLE REF NO.:**	Same as S8
			
USE OF MATERIAL:	Vinyl stair nosing (black)	**ACCESSIBILITY:**	Medium
LOCATION:	Stairwell	**EXTENT / QUANTITY:**	26 no

FLOOR:	1st Floor	**SURVEY DATES:**	09/05/2018
ROOM NAME / NO.:	1-009	**SAMPLE REF NO.:**	Same as S7
		No Photo Available	
USE OF MATERIAL:	Vinyl Floor Covering (red) & Adhesive	**ACCESSIBILITY:**	Medium
LOCATION:	Stairwell	**EXTENT / QUANTITY:**	15 m²

Section 10 - Non Asbestos Items

Sorted by: Location ID

Site Address: Loreto Abbey, Rathfarnham, Dublin 14

Client Name: Fitzgerald Kavanagh + Partners
Project Number: A-01077

FLOOR:	1st Floor	**SURVEY DATES:**	08/05/2018
ROOM NAME / NO.:	1-009	**SAMPLE REF NO.:**	Same as S8

USE OF MATERIAL:	Vinyl stair nosing (black)	**ACCESSIBILITY:**	Medium
LOCATION:	Stairwell	**EXTENT / QUANTITY:**	26 no

FLOOR:	Ground Floor	**SURVEY DATES:**	08/05/2018
ROOM NAME / NO.:	0-008	**SAMPLE REF NO.:**	Same as S8

USE OF MATERIAL:	Vinyl stair nosing (black)	**ACCESSIBILITY:**	Medium
LOCATION:	Stairwell	**EXTENT / QUANTITY:**	26 no

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Section 10 - Non Asbestos Items

Sorted by: Location ID

Site Address: Loreto Abbey, Rathfarnham, Dublin 14

Client Name: Fitzgerald Kavanagh + Partners
Project Number: A-01077

FLOOR:	Ground Floor	**SURVEY DATES:**	08/05/2018
ROOM NAME / NO.:	0-008	**SAMPLE REF NO.:**	Same as S7
			
USE OF MATERIAL:	Vinyl Floor Covering (red) & Adhesive	**ACCESSIBILITY:**	Medium
LOCATION:	Stairwell	**EXTENT / QUANTITY:**	18 m²

FLOOR:	Ground Floor	**SURVEY DATES:**	08/05/2018
ROOM NAME / NO.:	0-009	**SAMPLE REF NO.:**	Same as S7
		No Photo Available	
USE OF MATERIAL:	Vinyl Floor Covering (red) & Adhesive	**ACCESSIBILITY:**	Medium
LOCATION:	Corridor	**EXTENT / QUANTITY:**	41 m²

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Section 10 - Non Asbestos Items

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	Ground Floor	**SURVEY DATES:**	08/05/2018
ROOM NAME / NO.:	0-010	**SAMPLE REF NO.:**	Same as S7
		No Photo Available	
USE OF MATERIAL:	Vinyl Floor Covering (red) & Adhesive	**ACCESSIBILITY:**	Medium
LOCATION:	Hall & Stairs	**EXTENT / QUANTITY:**	24 m²

FLOOR:	Ground Floor	**SURVEY DATES:**	08/05/2018
ROOM NAME / NO.:	0-013	**SAMPLE REF NO.:**	S12
			
USE OF MATERIAL:	Pipework (compressed gaskets)	**ACCESSIBILITY:**	Difficult
LOCATION:	Room	**EXTENT / QUANTITY:**	2 no

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Section 10 - Non Asbestos Items

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	Ground Floor	**SURVEY DATES:**	08/05/2018
ROOM NAME / NO.:	0-014	**SAMPLE REF NO.:**	Same as S8

USE OF MATERIAL:	Vinyl stair nosing (black)	**ACCESSIBILITY:**	Medium
LOCATION:	Stairwell	**EXTENT / QUANTITY:**	26 no

FLOOR:	Ground Floor	**SURVEY DATES:**	08/05/2018
ROOM NAME / NO.:	0-014	**SAMPLE REF NO.:**	Same as S7

No Photo Available

USE OF MATERIAL:	Vinyl Floor Covering (red) & Adhesive	**ACCESSIBILITY:**	Medium
LOCATION:	Stairwell	**EXTENT / QUANTITY:**	15 m²

Section 10 - Non Asbestos Items

Sorted by: Location ID

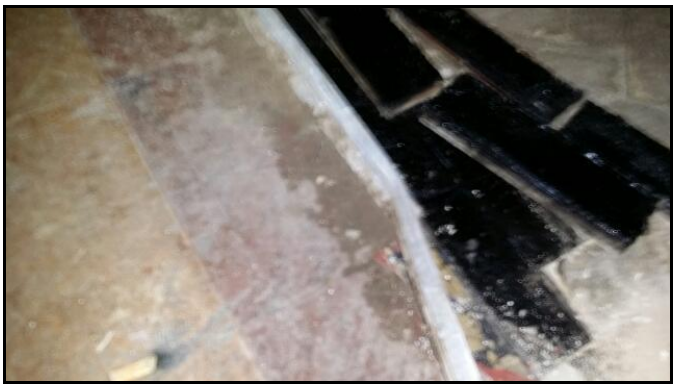
Site Address: Loreto Abbey, Rathfarnham, Dublin 14

Client Name: Fitzgerald Kavanagh + Partners
Project Number: A-01077

FLOOR:	Ground Floor	**SURVEY DATES:**	09/05/2018
ROOM NAME / NO.:	0-041	**SAMPLE REF NO.:**	Same as S2

USE OF MATERIAL:	Window seal (insulating board)	**ACCESSIBILITY:**	Medium
LOCATION:	Entrance	**EXTENT / QUANTITY:**	2 no

FLOOR:	Basement	**SURVEY DATES:**	04/05/2018
ROOM NAME / NO.:	-1-001	**SAMPLE REF NO.:**	S1



USE OF MATERIAL:	Bitumen Residue to floor	**ACCESSIBILITY:**	Difficult
LOCATION:	Chapel	**EXTENT / QUANTITY:**	250 approx m^2

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Section 10 - Non Asbestos Items

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	Basement	**SURVEY DATES:**	04/05/2018
ROOM NAME / NO.:	-1-002	**SAMPLE REF NO.:**	Same as S1

USE OF MATERIAL:	Bitumen Residue to floor	**ACCESSIBILITY:**	Difficult
LOCATION:	Chapel	**EXTENT / QUANTITY:**	210approx m²

FLOOR:	Basement	**SURVEY DATES:**	04/05/2018
ROOM NAME / NO.:	-1-003	**SAMPLE REF NO.:**	Same as S1

USE OF MATERIAL:	Bitumen Residue to floor	**ACCESSIBILITY:**	Difficult
LOCATION:	Entrance	**EXTENT / QUANTITY:**	5 m²

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Section 10 - Non Asbestos Items

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	Basement	**SURVEY DATES:**	04/05/2018
ROOM NAME / NO.:	-1-003	**SAMPLE REF NO.:**	S2

USE OF MATERIAL:	Window seal (insulating board)	**ACCESSIBILITY:**	Medium
LOCATION:	Entrance	**EXTENT / QUANTITY:**	20 no

FLOOR:	Basement	**SURVEY DATES:**	04/05/2018
ROOM NAME / NO.:	-1-022	**SAMPLE REF NO.:**	S8

USE OF MATERIAL:	Vinyl stair nosing (black)	**ACCESSIBILITY:**	Medium
LOCATION:	Stairwell	**EXTENT / QUANTITY:**	22 no

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Section 10 - Non Asbestos Items

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	Basement	**SURVEY DATES:**	04/05/2018
ROOM NAME / NO.:	-1-022	**SAMPLE REF NO.:**	S7
			
USE OF MATERIAL:	Vinyl Floor Covering (red) & Adhesive	**ACCESSIBILITY:**	Medium
LOCATION:	Stairwell	**EXTENT / QUANTITY:**	14 m²

FLOOR:	Basement	**SURVEY DATES:**	08/05/2018
ROOM NAME / NO.:	-1-027	**SAMPLE REF NO.:**	Same as S7
		No Photo Available	
USE OF MATERIAL:	Vinyl Floor Covering (red) & Adhesive	**ACCESSIBILITY:**	Medium
LOCATION:	Stairwell	**EXTENT / QUANTITY:**	10 m²

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Section 10 - Non Asbestos Items

Sorted by: Location ID

Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Name:	Fitzgerald Kavanagh + Partners
		Project Number:	A-01077

FLOOR:	Basement	SURVEY DATES:	08/05/2018
ROOM NAME / NO.:	-1-027	SAMPLE REF NO.:	Same as S8

USE OF MATERIAL:	Vinyl stair nosing (black)	ACCESSIBILITY:	Medium
LOCATION:	Stairwell	EXTENT / QUANTITY:	21 no

Section 11 - Bulk Certificate

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CERTIFICATE FOR THE IDENTIFICATION OF ASBESTOS FIBRES

Client:	Fitzgerald Kavanagh + Partners	Sampled by:	Sean Kenny
Client Address:	71 Lower Baggot St., Dublin 2	Analysis Report No.	A-01077
Attention of:	James Glancy	Report Date:	21/05/2018
Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Client Order Number:	N/A
		Client Project Number:	N/A
Date Samples Taken:	04 & 08 & 09 & 15 & 16/05/2018	No. of Samples Obtained:	24
Date Samples Received:	16/05/2018		
Date of Analysis:	18 & 21/05/2018	We participate in the Asbestos In Materials Proficiency Scheme	AIMS
Analysed by:	Alessio Brancaleoni		

Method Statement
Samples of material, referenced below, have been examined to determine the presence of asbestos fibres, using in-house CACL documented method (QA doc 19c) of transmitted/ polarized light microscopy and dispersion staining, based on the HSG 248 Asbestos: The Analyst Guide.
Calibration of equipment and general quality control procedures are in accordance with our quality control documentation (QA doc 19e and QA doc 19f)
Sampling methods are in accordance with our INAB accreditation, including documented in-house procedures: QA doc 19a based on guide lines procedures HSG 264. All samples are analysed at our INAB accredited laboratory.
Disclaimer
Where samples have been delivered then the site address and actual sample location or sample type is given by the client at the time of delivery. CACL accept no responsibility for the accuracy or competence of the sampling other parties. Under these circumstances CACL cannot be held responsible for the interpretation of the results shown. CACL takes responsibility of sample location/description, only when our own staff obtains the sample(s).

Sample Number	Client Ref	Sample Location (Level-Room No) / Sample Type	Fibre Type Detected
1	N/A	Basement Chapel (floor) -1-001 / Bitumen Adhesive	NADIS
2	N/A	Basement Entrance (to window) -1-003 / Insulating Board	NADIS
3	N/A	Basement Hall -1-004 / Vinyl Floor Tile (brown) & Bitumen	**CHRYSOTILE in: VFT & Bitumen**
4	N/A	Basement Toilets (cistern) -1-010 / PVC / Reinforced Plastics	**AMOSITE**
5	N/A	Basement Dining Area -1-014 / Vinyl Floor Tile (orange) & Bitumen	**CHRYSOTILE in: VFT & Bitumen**
6	N/A	Basement Dining Area -1-014 / Bitumen Sink Pad	**CHRYSOTILE**
7	N/A	Basement Stairwell -1-022 / Vinyl Floor Covering (red) & Adhesive	NADIS
8	N/A	Basement Stairwell -1-022 / Vinyl Stair Nosing (black)	NADIS
9	N/A	Basement Toilets -1-023 / Pipe Insulation & Cloth & String	**CHRYSOTILE in: String**
10	N/A	Basement Toilets (pipe seal) -1-023 / Woven Product	**CHRYSOTILE**
11	N/A	Basement Hall -1-026 / Vinyl Stair Nosing (dark brown)	**CHRYSOTILE**
12	N/A	Ground Floor Room 0-013 / Gaskets (compressed)	NADIS
13	N/A	Ground Floor Toilet 0-018 / Vinyl Floor Tile (cream) & Bitumen	**CHRYSOTILE in: VFT**
14	N/A	1st Floor Toilets 1-001 / Vinyl Floor Tile (red) & Bitumen	**CHRYSOTILE in: VFT & Bitumen**
15	N/A	1st Floor Toilets 1-001 / Vinyl Floor Tile (purple) & Bitumen	**CHRYSOTILE in: VFT & Bitumen**
16	N/A	2nd Floor Toilets 2-001 / Vinyl Floor Tile (green) & Bitumen	**CHRYSOTILE in: VFT & Bitumen**
17	N/A	2nd Floor Science Room 2-008 / Cement Product (board)	**CHRYSOTILE**
18	N/A	3rd Floor Stairs + Landing 3-003 / Insulating Board (to fire door)	NADIS
19	N/A	2nd Floor Bedroom (floor) 2-033 / Bitumen Adhesive	NADIS
20	N/A	2nd Floor Room 2-026 / Insulating Board (to fire door)	NADIS

Section 11 - Bulk Certificate

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Sample Number	Client Ref	Sample Location (Level-Room No) / Sample Type	Fibre Type Detected
21	N/A	External Roof Area 99-002 / Cement Slate	**CHRYSOTILE**
22	N/A	External Roof Area 99-005 / Insulating Board (debris)	**AMOSITE**
23	N/A	Basement Store (to old fridge) -1-037 / Cement Board	**CHRYSOTILE**
24	N/A	External (front) 99-008 / Cement Pipe	**CHRYSOTILE & CROCIDOLITE**

- Material type is a subjective opinion by the analyst based on asbestos content, appearance and experience.

- All samples will be retained in the laboratory for a minimum of 6 months

KEY		
	NADIS	= NO ASBESTOS DETECTED IN SAMPLE
	CROCIDOLITE	= Typically know as Blue Asbestos (Amphibole Group)
	AMOSITE	= Typically Known as Brown Asbestos (Amphibole Group)
	CHRYSOTILE	= Typically Known as White Asbestos (Serpentine Group)
	ANTHOPHYLLITE	= Asbestos (Amphibole Group)
	ACTINOLITE	= Asbestos (Amphibole Group)
	TREMOLITE	= Asbestos (Amphibole Group)

Typed By:	***Alessio Brancaleoni***	Authorised by:	
Position:	***Laboratory Manager***	Print Name:	***Alessio Brancaleoni***

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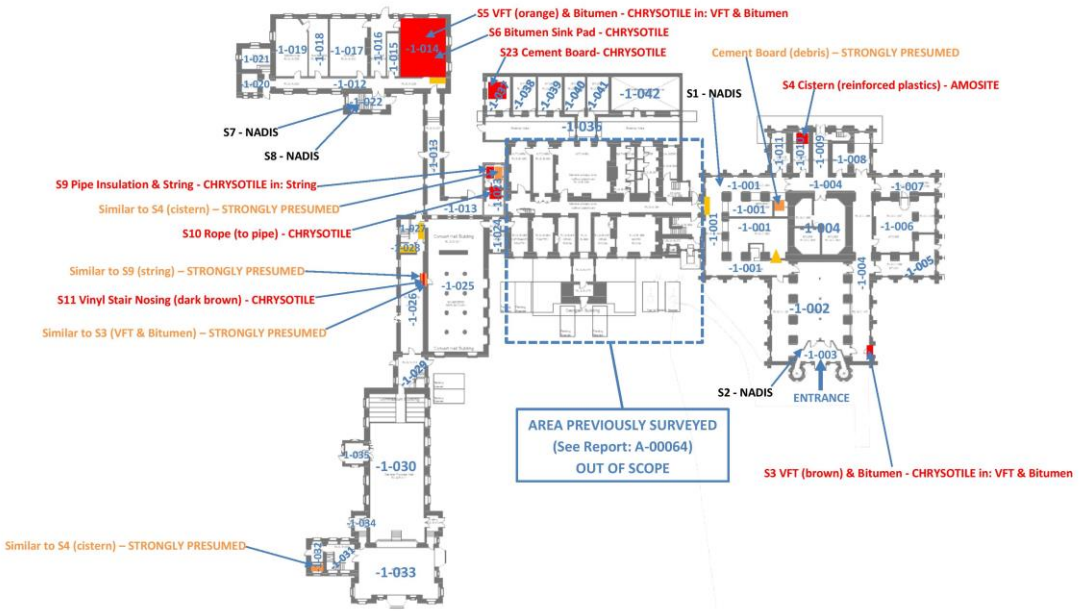
Section 12 - Survey Drawings and Documentation

Project Number: A-01077



LOWER GROUND FLOOR – Level -1

Key	
NADIS	No Asbestos Detected In Sample
	Asbestos Identified in sample
	Strong Presumption of Asbestos to similar sample
	No Access – Presumed to contain Asbestos ▲ = Water Heater (gaskets) ▬ = Fuse Boxes (flash guards)

DO NOT SCALE DRAWING

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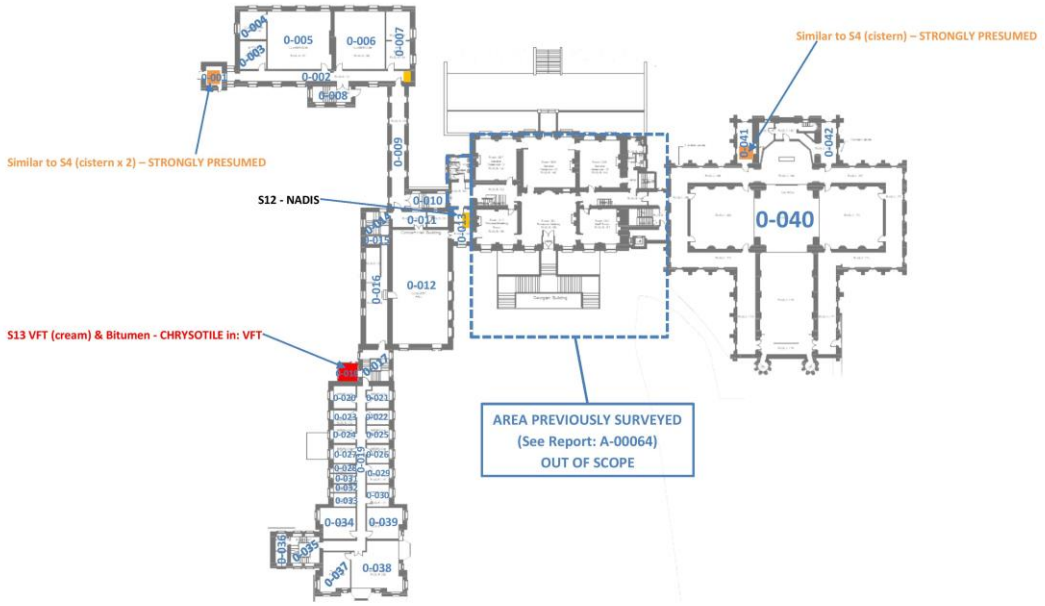
Section 12 - Survey Drawings and Documentation

Project Number: A-01077



GROUND FLOOR – Level 0

Key	
NADIS	No Asbestos Detected In Sample
	Asbestos Identified in sample
	Strong Presumption of Asbestos to similar sample
	No Access – Presumed to contain Asbestos ▲ = Water Heater (gaskets) ▬ = Fuse Boxes (flash guards)

DO NOT SCALE DRAWING

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Section 12 - Survey Drawings and Documentation

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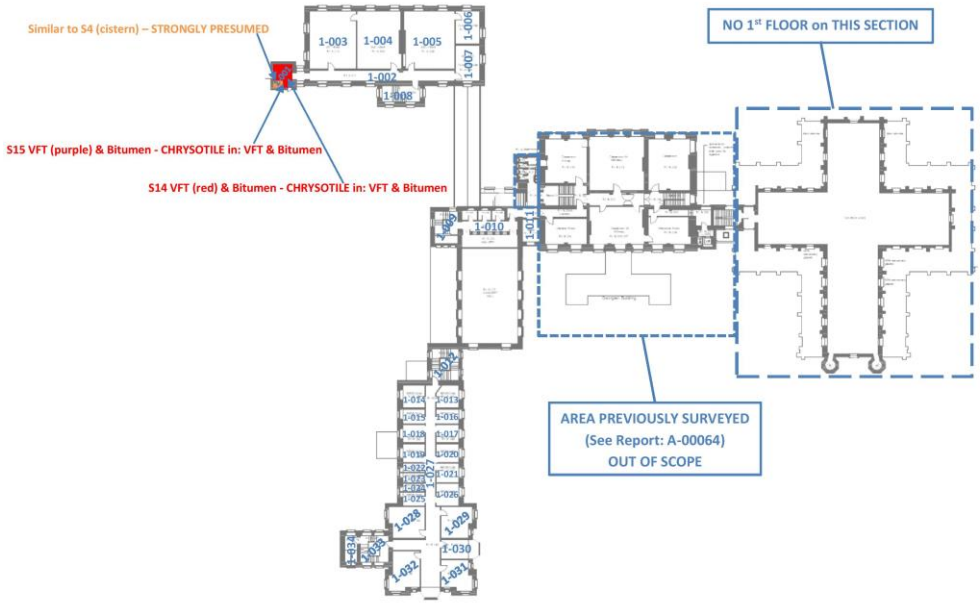

FIRST FLOOR – Level 1

Key	
NADIS	No Asbestos Detected In Sample
	Asbestos Identified in sample
	Strong Presumption of Asbestos to similar sample
	No Access – Presumed to contain Asbestos ▲ = Water Heater (gaskets) ▬ = Fuse Boxes (flash guards)

DO NOT SCALE DRAWING

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Section 12 - Survey Drawings and Documentation

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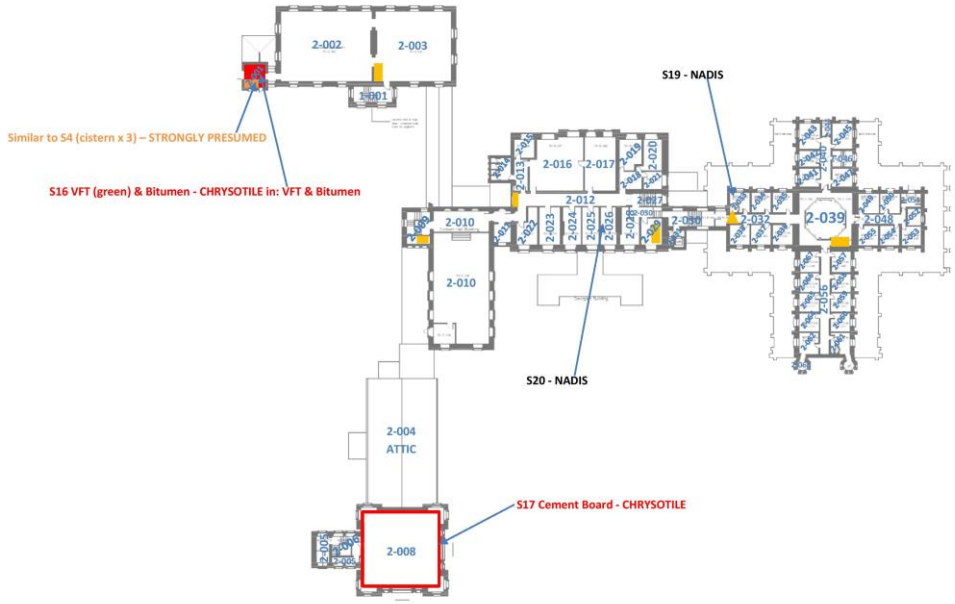

SECOND FLOOR – Level 2

Key	
NADIS	No Asbestos Detected In Sample
	Asbestos Identified in sample
	Strong Presumption of Asbestos to similar sample
	No Access – Presumed to contain Asbestos ▲ = Water Heater (gaskets) ▬ = Fuse Boxes (flash guards)

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Section 12 - Survey Drawings and Documentation

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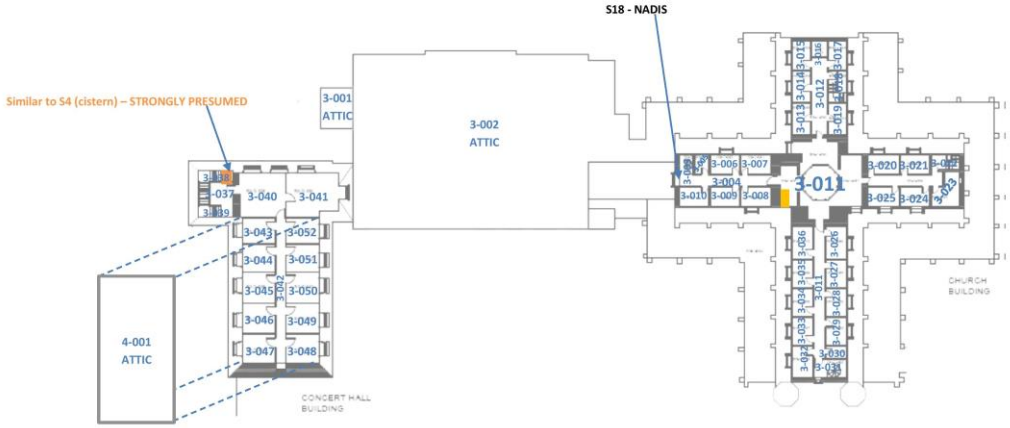

THIRD FLOOR – Level 3 & FOURTH FLOOR – Level 4

Key	
NADIS	No Asbestos Detected In Sample
	Asbestos Identified in sample
	Strong Presumption of Asbestos to similar sample
	No Access – Presumed to contain Asbestos ▲ = Water Heater (gaskets) ▬ = Fuse Boxes (flash guards)

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Section 12 - Survey Drawings and Documentation

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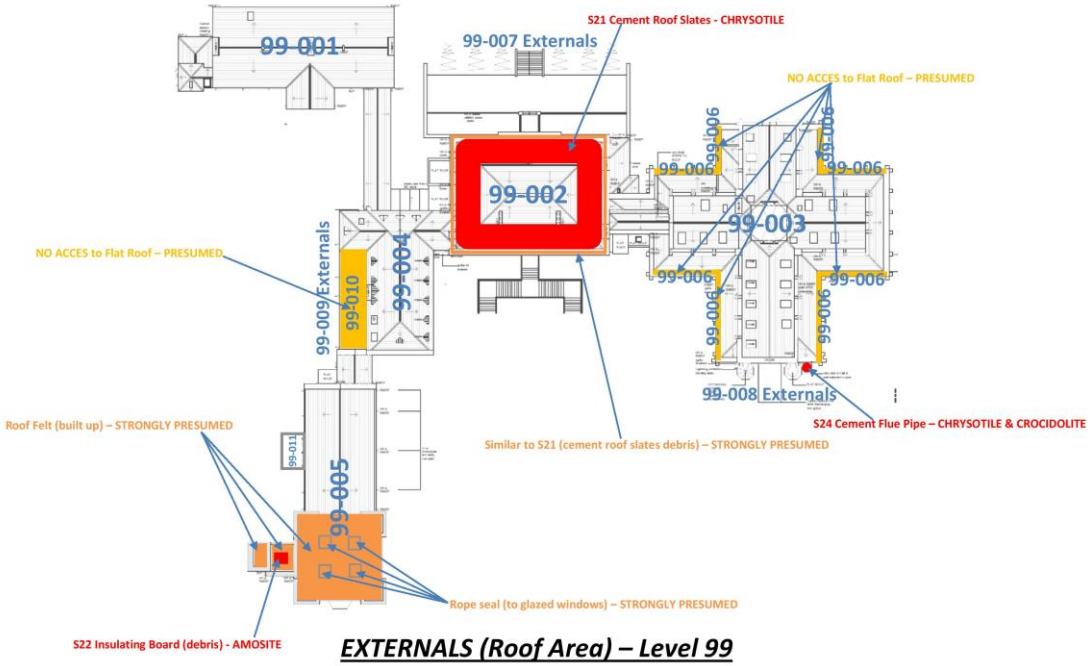

EXTERNALS (Roof Area) – Level 99

Key	
NADIS	No Asbestos Detected In Sample
	Asbestos Identified in sample
	Strong Presumption of Asbestos to similar sample
	No Access – Presumed to contain Asbestos ▲ = Water Heater (gaskets) ▬ = Fuse Boxes (flash guards)

DO NOT SCALE DRAWING

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Section 13 - Asbestos Register

Project Number: A-01077

Refurbishment Survey:	Loreto Abbey, Rathfarnham, Dublin 14	Surveyor(s):	Sean Kenny	Survey Date:	04/05/18 to 16/05/18

Loreto Abbey, Rathfarnham, Dublin 14

Area Surveyed	Sample Number	Location and Use of Material	Asbestos Type	Condition	Accessibility	Extent	Material Risk Assessment Score	Recommended Action
3rd Floor	Presumed	Corridor 3-011 - Fuse box (Flash Guards)	Chrysotile	Low Damage	Difficult	4 no	5	Remove
3rd Floor	Same as S4	Toilet 3-038 - Cistern (PVC / Reinforced Plastics)	Amosite	Low Damage	Medium	1 no	4	Remove
2nd Floor	S16	Toilets 2-001 - Vinyl Floor Tiles (green) & Bitumen	Chrysotile in: VFT & Bitumen	High Damage	Easy	11 m²	5	Remove
2nd Floor	Same as S4	Toilets 2-001 - Cistern (PVC / Reinforced Plastics)	Amosite	Low Damage	Easy	3 no	4	Remove
2nd Floor	Presumed	Room 2-003 - Fuse box (Flash Guards)	Chrysotile	Low Damage	Difficult	4 no	5	Remove
2nd Floor	S17	Science room 2-008 – Cement Board	Chrysotile	Medium Damage	Difficult	48 lin m	5	Remove
2nd Floor	Presumed	Stairwell 2-009 - Fuse box (Flash Guards)	Chrysotile	Low Damage	Difficult	2 no	5	Remove
2nd Floor	Presumed	Hall 2-012 - Fuse box (Flash Guards)	Chrysotile	Low Damage	Difficult	2 no	5	Remove
2nd Floor	Presumed	Room 2-029 - Fuse box (Flash Guards)	Chrysotile	Low Damage	Difficult	2 no	5	Remove
2nd Floor	Presumed	Corridor 2-032 - Water Heater (Rope Gaskets)	Chrysotile	Low Damage	Difficult	1 no	5	Remove
2nd Floor	Presumed	Corridor 2-039 - Fuse box (Flash Guards)	Chrysotile	Low Damage	Difficult	3 no	5	Remove
1st Floor	S14	Toilets 1-001 - Vinyl Floor Tiles (red) & Bitumen	Chrysotile in: VFT & Bitumen	High Damage	Easy	4 m²	5	Remove

MATERIAL RISK SCORES ABOVE 10 HAVE HIGH POTENTIAL TO RELEASE FIBRES

Client Name:	Fitzgerald Kavanagh + Partners	Project Number:	A-01077
		Survey Date:	04/05/18 to 16/05/18
Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Report Revision Date:	23/05/2018
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ISO 17020 IVNAB ACCREDITED INSPECTION DETAILED IN SCOPE REG NO.9026

Section 13 - Asbestos Register

Project Number: A-01077

Loreto Abbey, Rathfarnham, Dublin 14

Area Surveyed	Sample Number	Location and Use of Material	Asbestos Type	Condition	Accessibility	Extent	Material Risk Assessment Score	Recommended Action
1st Floor	Same as S4	Toilets 1-001 - Cistern (PVC / Reinforced Plastics)	Amosite	Low Damage	Easy	2 no	4	Remove
1st Floor	S15	Toilets 1-001 - Vinyl Floor Tiles (purple) & Bitumen	Chrysotile in: VFT & Bitumen	High Damage	Easy	8 m²	5	Remove
Ground Floor	Same as S4	Toilets 0-001 - Cistern (PVC / Reinforced Plastics)	Amosite	Low Damage	Easy	2 no	4	Remove
Ground Floor	Presumed	Corridor 0-002 - Fuse box (Flash Guards)	Chrysotile	Low Damage	Difficult	2 no	5	Remove
Ground Floor	Presumed	Room 0-013 - Fuse box (Flash Guards)	Chrysotile	Low Damage	Difficult	4 no	5	Remove
Ground Floor	S13	Toilet 0-018 - Vinyl Floor Tiles (cream) & Bitumen	Chrysotile in: VFT	Low Damage	Medium	6 m²	3	Remove
Ground Floor	Same as S4	Toilets 0-041 - Cistern (PVC / Reinforced Plastics)	Amosite	Low Damage	Easy	1 no	4	Remove
Basement	Strongly Presumed	Chapel -1-001 – Cement Board (debris)	Chrysotile/ Amosite/ Crocidolite	Medium Damage	Medium	1 m²	7	Remove
Basement	Presumed	Chapel -1-001 - Water Heater (Rope Gaskets)	Chrysotile	Low Damage	Difficult	1 no	5	Remove
Basement	Presumed	Chapel -1-001 - Fuse box (Flash Guards)	Chrysotile	Low Damage	Difficult	12 no	5	Remove
Basement	S3	Hall -1-004 - Vinyl Floor Tiles (brown) & Bitumen	Chrysotile in: VFT & Bitumen	Medium Damage	Medium	1 m²	4	Remove
Basement	S4	Toilets -1-010 - Cistern (PVC / Reinforced Plastics)	Amosite	Low Damage	Medium	1 no	4	Remove
Basement	Presumed	Chapel -1-012 - Fuse box (Flash Guards)	Chrysotile	Low Damage	Difficult	7 no	5	Remove

MATERIAL RISK SCORES ABOVE 10 HAVE HIGH POTENTIAL TO RELEASE FIBRES

Client Name:	Fitzgerald Kavanagh + Partners	Project Number:	A-01077
		Survey Date:	04/05/18 to 16/05/18
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ISO 17020 IVNAB ACCREDITED INSPECTION DETAILED IN SCOPE REG NO.9026

Section 13 - Asbestos Register

Project Number: A-01077

Loreto Abbey, Rathfarnham, Dublin 14

Area Surveyed	Sample Number	Location and Use of Material	Asbestos Type	Condition	Accessibility	Extent	Material Risk Assessment Score	Recommended Action
Basement	S6	Dining area -1-014 - Bitumen Sink Pad	Chrysotile	Low Damage	Easy	2 no	3	Remove
Basement	S5	Dining area -1-014 - Vinyl Floor Tiles (orange) & Bitumen	Chrysotile in: VFT & Bitumen	Medium Damage	Medium	78 m²	4	Remove
Basement	S9	Toilets -1-023 - Pipe Insulation & Cloth & String	Chrysotile in: String	High Damage	Medium	4 lin m	9	Remove
Basement	S10	Toilets -1-023 - Pipework (Woven Product / Rope)	Chrysotile	High Damage	Difficult	1 no	9	Remove
Basement	Same as S4	Toilets -1-023 - Cistern (PVC / Reinforced Plastics)	Amosite	Medium Damage	Easy	1 no	5	Remove
Basement	S11	Hall -1-026 - Vinyl Stair Nosing (dark brown)	Chrysotile	Low Damage	Medium	2 no	3	Remove
Basement	Same as S3	Hall -1-026 - Vinyl Floor Tiles (brown) & Bitumen	Chrysotile in: VFT & Bitumen	High Damage	Medium	2 m²	5	Remove
Basement	Same as S9	Hall -1-026 - Pipe Insulation & Cloth & String	Chrysotile in: String	High Damage	Difficult	1 lin m	9	Remove
Basement	Presumed	Stairwell -1-027 - Fuse box (Flash Guards)	Chrysotile	Low Damage	Difficult	9 no	5	Remove
Basement	Presumed	Electrical room -1-028 - Fuse box (Flash Guards)	Chrysotile	Low Damage	Difficult	3 no	5	Remove
Basement	Same as S4	Toilets -1-032 - Cistern (PVC / Reinforced Plastics)	Amosite	Low Damage	Easy	1 no	4	Remove
Basement	S23	Store -1-037 – Cement Board	Chrysotile	Low Damage	Medium	15 m²	4	Remove
External	S21	Roof area 99-002 - Cement Slates	Chrysotile	Medium Damage	Difficult	350 approx m²	5	Repair, label & manage

MATERIAL RISK SCORES ABOVE 10 HAVE HIGH POTENTIAL TO RELEASE FIBRES

Client Name:	Fitzgerald Kavanagh + Partners	Project Number:	A-01077
		Survey Date:	04/05/18 to 16/05/18
Site Address:	Loreto Abbey, Rathfarnham, Dublin 14	Report Revision Date:	23/05/2018
		Page:	Page 91 of 92
		QA doc 90c:	Rev 3 20/03/2018

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Section 13 - Asbestos Register

Project Number: A-01077

Loreto Abbey, Rathfarnham, Dublin 14

Area Surveyed	Sample Number	Location and Use of Material	Asbestos Type	Condition	Accessibility	Extent	Material Risk Assessment Score	Recommended Action
External	Same as S21	Roof area 99-002 - Cement Slates (debris)	Chrysotile	High Damage	Difficult	2 m²	6	Remove
External	Strongly Presumed	Roof area 99-005 - Glazed Window Cord	Chrysotile	Low Damage	Difficult	48 no	5	Label & manage
External	Strongly Presumed	Roof area 99-005 – Felt (bituminous product)	Chrysotile	Low Damage	Difficult	250 approx m²	3	Label & manage
External	S22	Roof area 99-005 - Insulating Board (debris)	Amosite	High Damage	Difficult	1 m²	9	Remove
External	Presumed	Flat roof 99-006 - Felt - No Access Gained	Chrysotile	N/A	NO ACCESS	N/A	N/A	INVESTIGATE FURTHER FOR NO ACCESS
External	S24	External wall 99-008 - Cement Flue Pipe	Chrysotile, Crocidolite	Medium Damage	Difficult	8 lin m	7	Remove
External	Presumed	Flat roof 99-010 - Felt - No Access Gained	Chrysotile	N/A	NO ACCESS	N/A	4	INVESTIGATE FURTHER FOR NO ACCESS