Phoenix Environmental Safety Ltd.

ASBESTOS SURVEY REPORT

(Refurbishment / Demolition Survey)

Client: Molaga Capital Limited,
7 Amberley Lawn, Grange, Douglas, Cork

Location: The Old Rialto Cinema Site,
South Circular Road, Dublin 8

Date: 3rd July 2018

Report No. PE 18-475

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Client Name: Molaga Capital Limited, 7 Amberley Lawn, Grange, Douglas, Cork

Property: The Old Rialto Cinema Site, South Circular Road, Dublin 8

Asbestos Survey Type: Refurbishment/Demolition Asbestos Survey

Survey Company: Phoenix Environmental Safety Ltd.

Surveyors: Eoghan Hickey & Andrew Hickey

Testing Laboratory: G&L Consultancy Ltd.

Date of Survey: 27th June 2018

Date of Survey Report: 3rd July 2018

Report issue: Draft

Signed: *Eoghan Hickey* Date: 3rd July 2018

This report cannot be used for contractual or engineering purposes unless this sheet is signed where indicated by Surveyor. The report must also be designated `final` on the signatory sheet.

Please note that Phoenix Environmental Safety Ltd. cannot be held responsible for the way in which the Client interprets or acts upon the results. The report must be read in its entirety including any appendices. Phoenix Environmental Safety Ltd. accepts no responsibility for sub-division of this report. All measurements in this report are approximate and therefore should not be used by the asbestos removal contractor for pricing purposes. The asbestos removal contractors should ascertain for themselves, by site measurements and inspection, the exact nature and extent of the work to be done.

The survey information should be used to help in the tendering process for removal of ACMs from the building before work starts. 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 this type of survey, where the asbestos is identified so that it can be removed (rather than to manage it), the survey does not normally assess the condition of the asbestos, other than to indicate areas of damage or where additional asbestos debris may be present. However, where the asbestos removal may not take place for some time, the ACMs' condition will need to be assessed and the materials managed.

TABLE OF CONTENTS PAGE

SUMMARY

Following a request made by Murphy Matson O' Sullivan Consulting Engineers Ltd., we have produced this Refurbishment/Demolition Asbestos Survey report of the Old Rialto Cinema Site, South Circular Road, Dublin 8 with the aim of finding asbestos containing materials (ACMs) within the scope of the asbestos survey.

The scope of the asbestos survey was confined to all accessible areas of the Former Rialto Cinema Building on the South Circular Road which is due for major refurbishment and part demolition works in the near future.

During the asbestos survey of the Old Rialto Cinema Site, the following asbestos containing materials were detected in the following locations:

- Asbestos containing textured coating was identified on the ceiling of the 2nd floor and also on the ceiling of the 2nd floor mezzanine store room (1,000 m^2 total approx.)
- Asbestos cement board was identified under the rear slated roof of the 1st floor (80 m^2 approx.)
- Asbestos containing bitumen adhesive was identified under vinyl floor tiles in the ground floor electrical room (10 m^2 approx.)
- Asbestos cement slate debris was identified at the rear of the site
- Asbestos cement replacement slates may be present on the rear lean-to roof and should be inspected once scaffolding has been erected or another similar means of safe access has been arranged

See Appendix C, E & F for more details

INTRODUCTION

Background

Asbestos has been used extensively in the building industry for over one hundred years and has proved to be an excellent product for a variety of uses, having many qualities such as insulation, fire and chemical resistance to name a few. Its suitability across a wide range of uses and its relatively cheap cost made it very popular, with over 3,000 different asbestos products having been recorded.

The use of asbestos containing materials (ACM's) was most prevalent between the 1950's and 1970's when it provided an economic, easy to use and versatile material. Unfortunately, given the constitution and make up of asbestos it can give rise to microscopic airborne fibres being released into the working environment. The fibres have carcinogenic properties caused by inhalation of the fibres which can get lodged in the lining of the lungs causing disease and death.

Scope & Purpose

Molaga Capital Limited has commissioned Phoenix Environmental Safety Ltd. to undertake an asbestos survey of the Old Rialto Cinema Site, South Circular Road, Dublin 8. The aim of the survey was to locate and identify the presence of asbestos containing materials (ACM's) or suspected ACM's. This report provides a record and assessment of the extent and characteristics of ACM's and is based on information made available on 27th June 2018.

This particular survey comprised of a Refurbishment / Demolition Survey, carried out in accordance with S.I. No. 386 of 2006 Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006, the Health and Safety Executive's (UK) guidance document HSG 264 (Asbestos: The Survey Guide) and HSG 227 (A Comprehensive Guide to managing Asbestos in Premises).

This means that:

- As far as reasonably practicable, locate and describe all ACM's in all reasonably accessible areas within the scope of the survey
- A sampling programme is undertaken to identify possible ACM's and estimates of the volumes and the surface areas of ACM made
- A record of the condition of the ACM's or where additional asbestos debris may be expected to be present is produced

Refurbishment / Demolition Surveys (formerly type 3 surveys)

This type of survey is necessary prior to any refurbishment (including "minor") or demolition work being carried out. These "refurbishment / demolition" surveys will be much more intrusive and destructive compared with management surveys as their intention is to locate all the ACMs so that they can be removed before the refurbishment or demolition takes place. Refurbishment/demolition surveys are required as necessary when the needs or use of the building changes and the fabric of the building will be disturbed or complex fixed plant and equipment are to be dismantled.

The purpose of the report is to:

- Enable the client to take appropriate precautions so that people who work at the Old Rialto Cinema Site during the forthcoming demolition works are not exposed to asbestos-related health risks
- Provide information to assist the client in developing and implementing an action plan before any refurbishment works or demolition is carried out

Presentation of Findings

Data Sheets

A series of data sheets have been prepared to provide assessments and recommendations for each of the locations where samples were taken. These data sheets are presented in Appendix C.

Figures

The schematic diagrams presented in Appendix F at the rear of this document shows the locations of all of the asbestos containing materials detected during the asbestos survey.

Caveats

All reasonable steps have been taken to ensure that the contents and findings of this report are true and accurate. Though as stated below, further undetected ACM's may still be present within the premises. The client should therefore be aware of his responsibilities for identifying, locating, removing and/or managing all ACM's within the premises, and for notifying the appropriate authorities where necessary.

Refurbishment / Demolition Surveys

This type of survey employs the use of destructive sampling techniques of an unfamiliar site. Although every effort is made to locate all asbestos containing materials, it is impossible to rule out the possibility that undiscovered asbestos materials may be present. If the building is to undergo major refurbishment or demolition, it is recommended that the persons carrying out the work are made aware of this and take sufficient precautions, as may be appropriate, to ensure the health and safety of their own employees and any other parties who may be affected by the works.

APPENDIX A

ASBESTOS MATERIALS IN BUILDINGS

Sprayed coatings applied in Ireland were typically a mixture of hydrated asbestos cement containing up to 85% asbestos, mainly amosite but crocidolite and mixtures have been used. Primarily used for anti-condensation and acoustic control and fire protection to structural steelwork. It is a friable material but if in a good condition and unlikely to be disturbed presents no immediate danger; however it is likely to release fibres, if disturbed especially during repair and maintenance work. As it ages the binding medium of sprayed asbestos may degrade with the consequent release of more fibres.

Thermal insulation to boilers, vessels, pipe work, valves, pumps etc also known as hand applied lagging. Lagging may have a protective covering of cloth, tape, paper, metal or a surface coating of cement. All types of asbestos may be found in lagging and the content can vary between 15 and 85% asbestos with the protective papers being up to 100% chrysotile. The likelihood of fibre release depends upon its composition, friability and state of repair, but it is particularly susceptible to damage and disturbance through maintenance work or the action of water leaks.

Asbestos insulating boards usually contain between 16 to 40% amosite, although boards may be found to contain other types of asbestos and in other quantities. Insulating boards were developed in the 1950s to provide an economical, lightweight, fire resisting insulating material. As insulation board is semi-compressed it is more likely to release fibres as a result of damage or abrasion. Work on asbestos insulation board can give rise to high levels of asbestos fibre.

Asbestos cement products as in roofing slates, wall cladding, permanent shuttering, flue, rain water and vent pipes generally contain 10 to 15% of asbestos fibre bounded in Portland cement, some flexible boards contain a small proportion of cellulose. All three types of asbestos have been used in the manufacture of asbestos cement. The asbestos fibres in asbestos cement are usually firmly bound in the cement matrix and will be released only if the material is mechanically damaged or as it deteriorates with age.

Ropes and yarns are usually high in asbestos content, approaching 100% and all three types of asbestos have been used in their manufacture. They were used as in the pipe lagging process and in pipe jointing and also for packing materials as in heat/fire resistant boiler, oven and flue sealing or anywhere thermal of fire protection was required. The risk of fibre release depends upon the structure of the material; bonded gasket material is unlikely to release asbestos but an unbonded woven material may give rise to high fibre release especially if when damaged or frayed.

Cloth thermal insulation and lagging, including fire resistant blankets, mattresses and protective curtains, gloves, aprons, overalls etc. All types of asbestos have been used in the manufacture but since the mid 60's the majority has been chrysotile, the content of which can be up to 100 %.

Millboard, paper and CAF gaskets usually have an asbestos content approaching 100% with all three types of asbestos being used in their manufacture. They were used for insulation of electrical equipment and for thermal insulation. Asbestos paper has been used as a laminate for fireproofing to various fibre panels. These materials are on some occasions not well bonded and will release asbestos fibres if subject to abrasion and wear.

Bitumen felts and coatings may contain asbestos either bound in the bitumen matrix or as an asbestos paper liner. These materials are not likely to present a hazard during normal installation or use, but should be removed and disposed of in compliance with any regulation applicable.

Thermoplastic floor tiles can contain up to 25% asbestos usually chrysotile, PVC vinyl floor tiles and unbacked PVC flooring normally 7-10% chrysotile and asbestos paper backed PVC flooring the paper backing may contain up to 100% chrysotile. Fibre release is not normally an issue but may occur when the material is cut or subjected to abrasion.

Textured coatings. Decorative coatings on walls and ceilings usually contain 3-5% chrysotile. Fibre release may occur when subjected to abrasion.

Mastics, sealants, putties and floor tile adhesives may contain small amounts of asbestos. The only possible risk is from sanding of hardened material when appropriate precautions should be taken.

Reinforced plastic and resin composites, used for toilet cisterns, seats, banisters, stair nosings, window seals, lab bench tops, brake shoes and clutches in machines. The plastics usually contain 1-10% chrysotile and were used in for example car batteries to improve the acid resistance. Resins may contain between 20 and 50% amosite, but because of its composition fibre release is likely to be low.

ASBESTOS FIBRE TYPE COMMON NAMES	
Chrysotile	**White Asbestos**
Amosite	**Brown Asbestos**
Crocidolite	**Blue Asbestos**
Fibrous Actinolite	**N/A**
Fibrous Anthophyllite	**N/A**
Fibrous Tremolite	**N/A**

APPENDIX B

RESULTS OF LABORATORY ANALYSIS

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ASBESTOS BULK IDENTIFICATION REPORT

Report no: PE18-475	Date of Issue: 29th June 2018

Client details:

Molaga Capital Limited, 7 Amberley Lawn, Grange, Douglas, Cork

Identification of asbestos content of suspected asbestos containing material stated to have been sampled from the following location/site:

Old Rialto Cinema Site, South Circular Road, Dublin 8

No of Samples received: 15	Date of receipt of samples: 27.6.2018	Date of analysis: 29.6.2018

Methodology. Analysis of samples received was carried out in accordance with HSE Method MDHS 77/HGS 248 and documented in-house methods.

For samples received from the client and not sampled by Phoenix Environmental Safety Ltd.

This report is given in good faith on the basis of the samples and information received. Phoenix Environmental Safety Ltd. can take no responsibility for omissions, unrepresentative samples, inaccuracies or discrepancies in samples and information received.

TEST RESULTS

LAB. REF.	SAMPLE NO.	LOCATION	MATERIAL	ASBESTOS TYPE
S 01	BS 161590	Rear flat roof - Asphalt	Asphalt	No asbestos detected in sample
S 02	BS 161591	2nd Floor - Rear store room - Ceiling	Textured coating	Chrysotile
S 03	BS 161592	2nd Floor - Main area - Ceiling	Textured coating	Chrysotile
S 04	BS 161593	2nd Floor - Heater Unit	Gasket	No asbestos detected in sample
S 05	BS 161594	1st floor - Stairs to W/C & Canteen - Ceiling	Textured coating	No asbestos detected in sample
S 06	BS 161595	1st floor - Stairs to W/C & Canteen - Nosing	Nosing	No asbestos detected in sample
S 07	BS 161596	1st floor - Rear lean-to roof - Internal ceiling board	Cement	Chrysotile
S 08	BS 161597	1st floor - Store room	Floor tile	No asbestos detected in sample
S 09	BS 161598	1st floor - Corridor	Floor tile & adhesive	No asbestos detected in sample
S 10	BS 161599	1st floor - Front corridor - Pipe work	Rope	No asbestos detected in sample
S 11	BS 161600	Ground floor - Electrical switch room	Floor tile & adhesive	Chrysotile
S 12	BS 161601	Rear of property - Debris	Cement	Chrysotile
S 13	BS 161602	Side of property - Oil Tank - Floor	Felt	No asbestos detected in sample
S 14	BS 161603	Side extension - Flat roof	Felt	No asbestos detected in sample
S 15	BS 161604	Ground floor - Ceilings & Walls	Textured coating	No asbestos detected in sample

LABORATORY ANALYST	G&L Consultancy Ltd.	DATE:	29th June 2018

APPENDIX C

ASBESTOS DATA SHEETS

Old Rialto Cinema Site, South Circular Road, Dublin 8

PHOENIX ENVIRONMENTAL SAFETY LTD.

ASBESTOS DATA SHEET

Created By	Eoghan Hickey
Date	3rd July 2018
Site Details	Old Rialto Cinema Site, South Circular Road, Dublin 8
Client Name	Molaga Capital Ltd.
Survey Type	R/D Asbestos Survey
Site Ref	PE 18-475
Building Ref.	Old Rialto Cinema Site
Location	2nd Floor & Mezzanine Level
Extent/ Amount	1,000 m² approx.

Survey Date	27.6.2018	Sample No.	BS 161591
Survey Company	Phoenix Environmental Safety Ltd.		
Testing Laboratory.	G&L Consultancy Ltd.		

	MATERIAL ASSESSMENT		PRIORITY ASSESSMENT
Product type	Textured coating	Normal occupant activity	N/A
Extent of damage	Medium damage	Likelihood of disturbance	N/A
Surface treatment	Unsealed	Human exposure potential	N/A
Asbestos type	Chrysotile	Maintenance activity	N/A
	Material assessment score: N/A	TOTAL SCORE: N/A	Priority assessment score: N/A

CONCLUSIONS AND RECOMMENDATIONS

The textured coating identified the ceiling of the 2nd floor and also on the ceiling of the 2nd floor mezzanine store room contains Chrysotile (white) asbestos fibres. Asbestos containing textured coatings typically contain between 2-5% asbestos fibres

The asbestos containing textured coating should be removed by an asbestos removal contractor and disposed of as asbestos waste before the demolition works commence

See Appendix F for more details

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 2006-2010

PHOENIX ENVIRONMENTAL SAFETY LTD.

ASBESTOS DATA SHEET

Created By	Eoghan Hickey
Date	3rd July 2018
Site Details	Old Rialto Cinema Site, South Circular Road, Dublin 8
Client Name	Molaga Capital Ltd.
Survey Type	R/D Asbestos Survey
Site Ref	PE 18-475
Building Ref.	Old Rialto Cinema Site
Location	Under rear pitched roof
Extent/ Amount	80 m² approx.

Survey Date	27.6.2018	Sample No.	BS 161596
Survey Company	Phoenix Environmental Safety Ltd.		
Testing Laboratory.	G&L Consultancy Ltd.		

	MATERIAL ASSESSMENT		PRIORITY ASSESSMENT
Product type	Cement board	Normal occupant activity	N/A
Extent of damage	Medium damage	Likelihood of disturbance	N/A
Surface treatment	Unsealed	Human exposure potential	N/A
Asbestos type	Chrysotile	Maintenance activity	N/A
	Material assessment score: N/A	TOTAL SCORE: N/A	Priority assessment score: N/A

CONCLUSIONS AND RECOMMENDATIONS

The cement board identified internally on the underside of the 1st floor rear slated roof contains Chrysotile (white) asbestos fibres. Asbestos cement products generally contain between 10 to 15 % asbestos fibres, bound in Portland cement

The asbestos cement board should be removed by an asbestos removal contractor and disposed of as asbestos waste before the demolition works commence

See Appendix F for more details

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 2006-2010

PHOENIX ENVIRONMENTAL SAFETY LTD.

ASBESTOS DATA SHEET

Created By	Eoghan Hickey
Date	3rd July 2018
Site Details	Old Rialto Cinema Site, South Circular Road, Dublin 8
Client Name	Molaga Capital Ltd.
Survey Type	R/D Asbestos Survey
Site Ref	PE 18-475
Building Ref.	Old Rialto Cinema Site
Location	Ground floor electrical room
Extent/ Amount	10 m² total approx

Survey Date	27.6.2018	Sample No.	BS 161600
Survey Company	Phoenix Environmental Safety Ltd.		
Testing Laboratory.	G&L Consultancy Ltd.		

	MATERIAL ASSESSMENT		PRIORITY ASSESSMENT
Product type	Floor tile & bitumen adhesive	Normal occupant activity	N/A
Extent of damage	Medium damage	Likelihood of disturbance	N/A
Surface treatment	Composite material	Human exposure potential	N/A
Asbestos type	Chrysotile	Maintenance activity	N/A
	Material assessment score: N/A	TOTAL SCORE: N/A	Priority assessment score: N/A

CONCLUSIONS AND RECOMMENDATIONS

The floor tile & bitumen adhesive identified in the ground floor electrical room contains Chrysotile (white) asbestos fibres. Bitumen adhesives contain small amounts of asbestos fibres

The floor tiles and bitumen adhesive should be removed by an asbestos removal contractor and disposed of as asbestos waste before the demolition works commence

See Appendix F for more details

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 2006-2010

PHOENIX ENVIRONMENTAL SAFETY LTD.

ASBESTOS DATA SHEET

Created By	Eoghan Hickey
Date	3rd July 2018
Site Details	Old Rialto Cinema Site, South Circular Road, Dublin 8
Client Name	Molaga Capital Ltd.
Survey Type	R/D Asbestos Survey
Site Ref	PE 18-475
Building Ref.	Old Rialto Cinema Site
Location	Rear of site
Extent/ Amount	Not quantified

Survey Date	27.6.2018	Sample No.	BS 161601
Survey Company	Phoenix Environmental Safety Ltd.		
Testing Laboratory.	G&L Consultancy Ltd.		

MATERIAL ASSESSMENT		PRIORITY ASSESSMENT	
Product type	Cement debris	Normal occupant activity	N/A
Extent of damage	High damage	Likelihood of disturbance	N/A
Surface treatment	Unsealed	Human exposure potential	N/A
Asbestos type	Chrysotile	Maintenance activity	N/A
Material assessment score: N/A		TOTAL SCORE: N/A	Priority assessment score: N/A

CONCLUSIONS AND RECOMMENDATIONS

The cement slate debris identified at the rear of the site contains Chrysotile (white) asbestos fibres. Asbestos cement products generally contain between 10 to 15 % asbestos fibres, bound in Portland cement

The asbestos cement slate debris should be removed by an asbestos removal contractor and disposed of as asbestos waste before the demolition works commence

See Appendix F for more details

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 2006-2010

APPENDIX D

NON ASBESTOS CONTAINING MATERIALS

Metal roof cladding. No Asbestos Containing Materials (ACM's) detected

Asphalt on flat roof. No ACM's detected

NON ASBESTOS CONTAINING MATERIALS

Stair nosing. No ACM's detected

Fiberglass pipework insulation. No ACM's detected

NON ASBESTOS CONTAINING MATERIALS

Floor coverings and asphalt in front areas. No ACM's detected

Textured floor coverings on the 1st floor side stairwell ceiling. No ACM's detected

APPENDIX E

NON ACCESSIBLE LOCATIONS

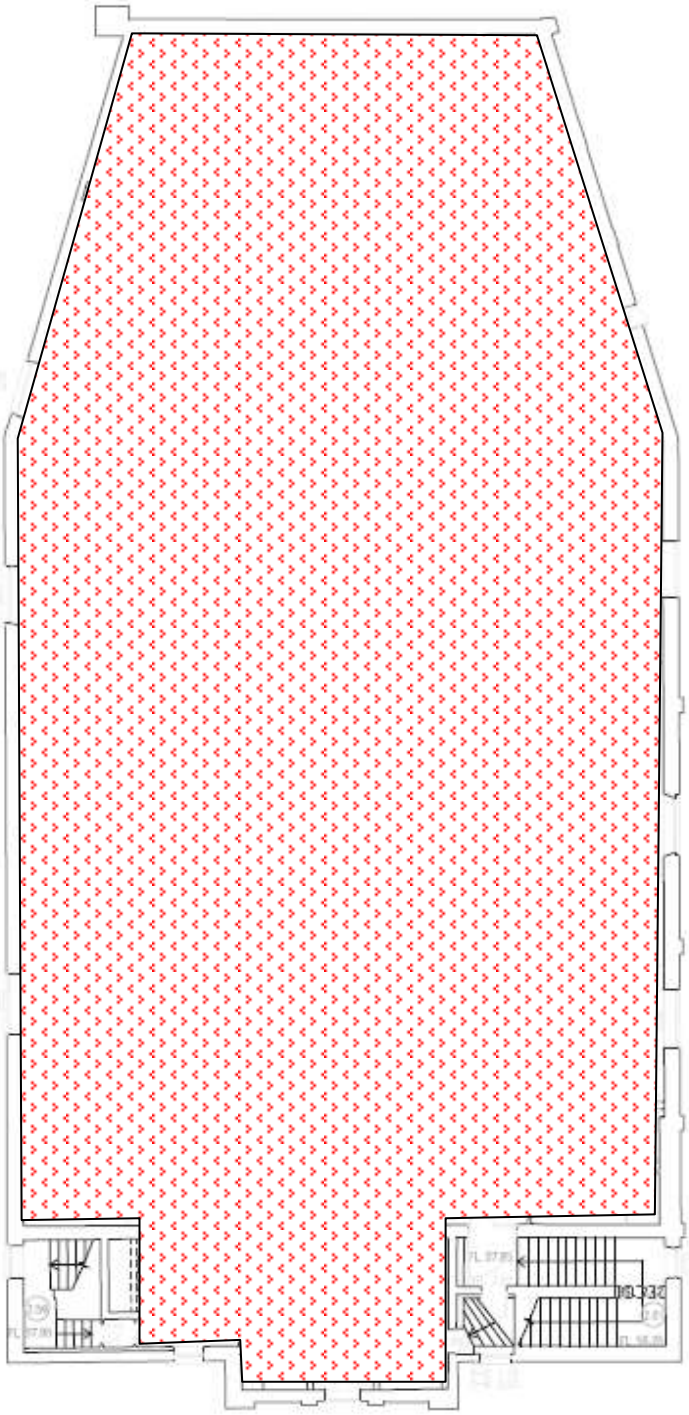
- The rear lean-to roof could not be accessed safely to sample the slates. While the slates were found to be natural slates when visually inspected internally, it is possible that some asbestos containing replacement cement slates may be present in this area and should be inspected once scaffolding or another means of safe access to the roof area can be arranged
- Some areas were not accessible on the day of the survey as the doors were blocked up or unsafe to enter, these will need to be accessed prior to the demolition works commencing. These areas are outlined in appendix F
- No inspection of live electrical or mechanical plant or similar was carried out
- No inspection of any areas requiring specialist access equipment other than telescopic ladder was carried out
- All contractors working on site should always remain vigilant to the possibility that other asbestos containing materials may be concealed within the fabric of the building or equipment. If any suspect asbestos containing materials are uncovered during the course of the work, works must stop in that area and the suspect material should be sampled and analysed immediately for the presence of asbestos

APPENDIX F

FLOOR PLANS & LOCATION OF ASBESTOS CONTAINING MATERIALS

Schematic diagram only Not to scale 3rd July 2018	Old Rialto Cinema Site, South Circular Road, Dublin 8

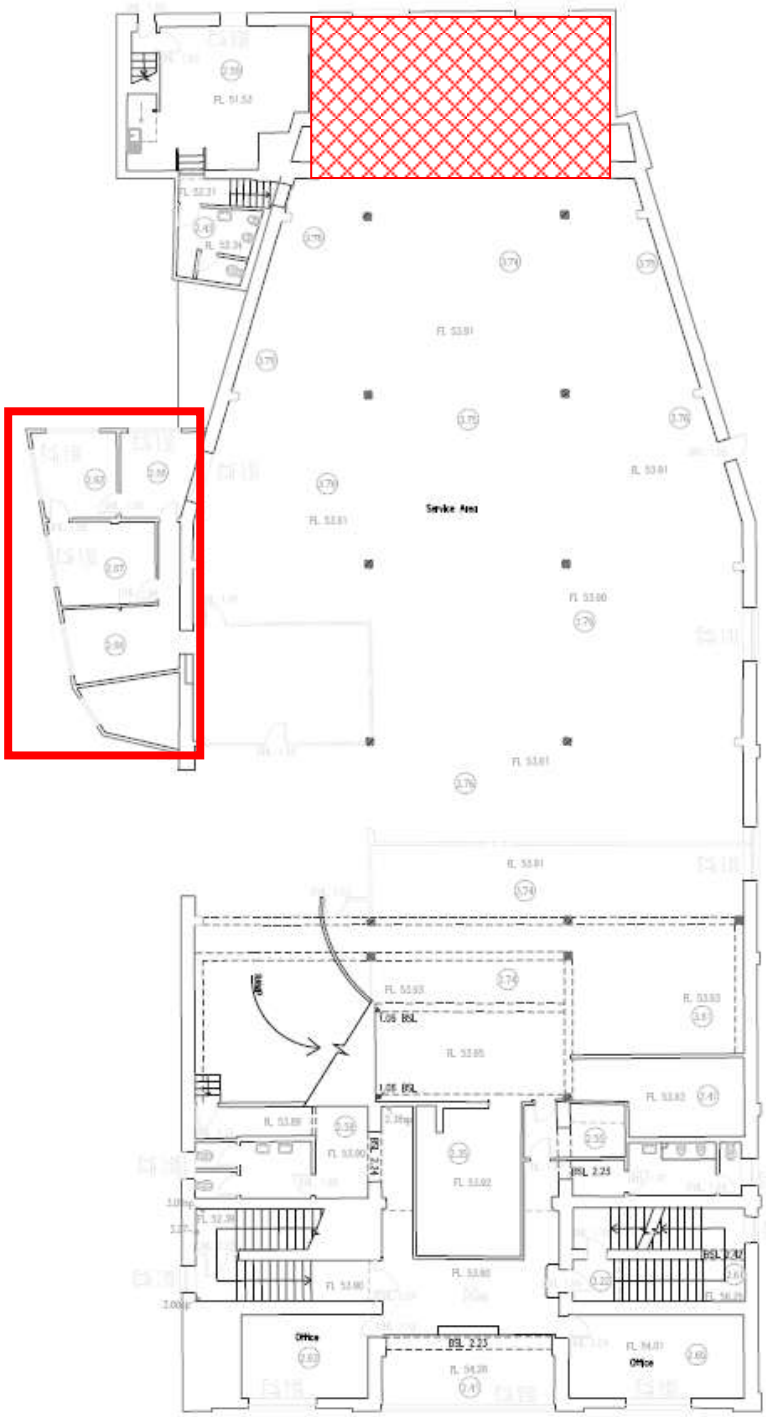
2nd FLOOR PLAN



	Areas where asbestos containing textured coating was identified

Schematic diagram only Not to scale 3rd July 2018	Old Rialto Cinema Site, South Circular Road, Dublin 8

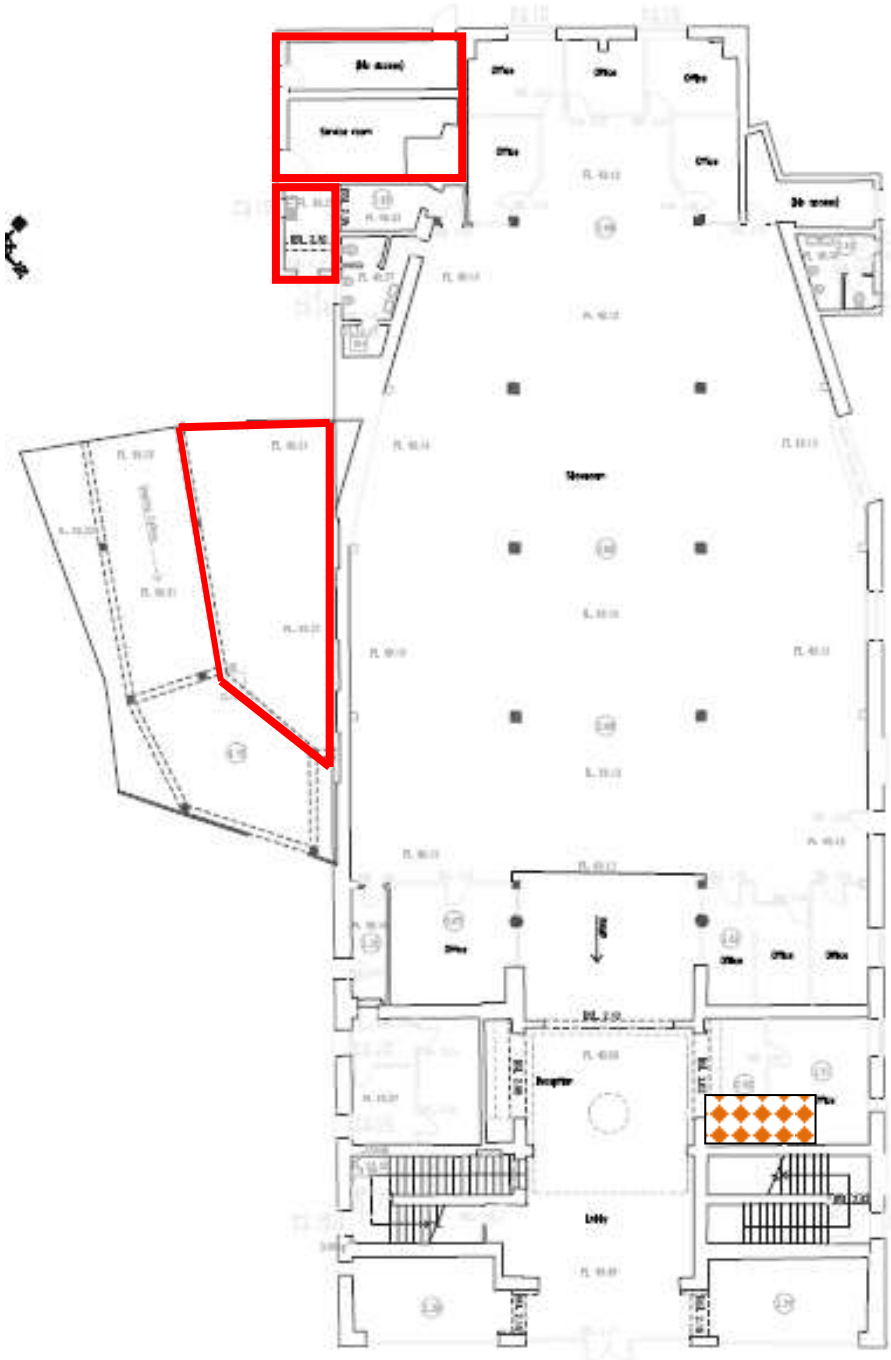
1st FLOOR PLAN



	Areas where asbestos cement boards were identified
	Areas which were inaccessible

Schematic diagram only Not to scale 3rd July 2018	Old Rialto Cinema Site, South Circular Road, Dublin 8

GROUND FLOOR PLAN



	Areas which were inaccessible
	Areas where asbestos containing floor tiles and bitumen adhesive was identified