

HUMAN REMAINS IN IRISH ARCHAEOLOGY



by

Jerry O'Sullivan and Jim Killgore

An Chomhairle Oidhreachta
The Heritage Council





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CONTENTS

PREFACE	4
I INTRODUCTION	5
II ANCIENT HUMAN REMAINS — SOME FUNDAMENTALS	6
III PLANNING ISSUES AND SITE ASSESSMENT	10
IV EXCAVATION	15
V POST-EXCAVATION ANALYSIS AND REPORTING	18
VI CURATION OR RE-BURIAL?	20
FURTHER INFORMATION	23

PREFACE

This publication is based upon a much larger report drawn from a major study on all aspects of human remains in Irish archaeology, which was commissioned by the Heritage Council at the request of the National Museum of Ireland, in March 1999. The study was conducted by Glasgow University Archaeological Research Division (GUARD) with members of the Law Department, National University of Ireland, Cork College and published in September 2002 by The Heritage Council.¹

¹ J O' Sullivan, M.Hallisey & J Roberts, 2002, *Human Remains in Irish Archaeology: legal, scientific, planning and ethical considerations*

I INTRODUCTION

Ancient human remains merit special consideration as archaeological objects for a number of reasons. Not least of all is their emotive power, offering startling and immediate contact with the dead and a powerful reminder of the inescapable fate of the living. To archaeological specialists they constitute a valuable historical and scientific resource, inscribed with evidence of the working life, living conditions, diet, traumas and diseases of past generations. To developers and planners ancient human remains bring added complexity to projects impacting upon the archaeological heritage.

Ireland has seen an extraordinary rise in the number and scale of archaeological excavations yielding human remains over the last ten years or more. Economic growth has led to sharp increases in urban renewal and infrastructure projects: housing and retail developments, road-building and drainage schemes. In addition, a growing number of disused churches and their burial grounds — especially Church of Ireland buildings — are being redeveloped for new purposes.

In consideration of these trends, this publication sets out the main issues — scientific, legal and ethical — involved in the excavation and treatment of ancient human remains and arrives at some conclusions about best practice in this aspect of Irish archaeology.



Excavation of early modern burials at Ennis Friary in 1998. The excavation preceded proposed conservation works by Dúchas the Heritage Service (J O'Sullivan)

II ANCIENT HUMAN REMAINS

— SOME FUNDAMENTALS

An estimated 15–20,000 individuals were excavated from archaeological sites in Ireland in the period from 1989 to 1998. This number is derived from articulated skeletons, disarticulated bones and cremated bone fragments found on a variety of excavations, and represents a huge increase on previous decades. Human remains in Ireland are found on archaeological sites dating from the Mesolithic period (around 9,000 years ago) up to recent times. Inhumations and cremations are found in megalithic tombs, in cists (stone-lined chambers) and burial mounds, as well as in churchyards and cemeteries.

Bones are the most common finds but soft tissue, skin and muscle can survive in certain conditions, such as in bog burials or where a body has been laid in a lead casket. Most human remains are expected finds, as archaeologists will be working in identified burial grounds. Yet some can be unexpected such as the large protohistoric cemetery complex found at Knoxspark, Co. Sligo, or the cache of teeth found in a lintelled drain during sewage works at Ballinrobe, Co. Mayo.

LEGAL DEFINITION

Excavated human remains are almost always ancient or historic, and defined as 'archaeological objects' under the National Monuments Acts. A 1994 amendment to the Acts vests ownership in the State of all 'archaeological objects' discovered since this date. There is no consensus on the meaning of the term 'ancient', save that it seems to be shifting to an ever later period; in this, most courts would probably defer to the opinion of an archaeologist. Most ancient human remains will be considered of some archaeological interest by archaeologists.

Most of the excavations in Ireland yielding human remains are conducted for pre-development or conservation purposes

TYPES OF EXCAVATIONS YIELDING HUMAN REMAINS

Archaeological fieldwork resulting in the discovery or disturbance of human remains can be categorised as follows:

- legally required excavations carried out in advance of private or public development; such circumstances might include the clearing of soil in advance of a mining operation or laying foundations for a retail development, or a road widening project
- excavations and watching briefs carried out in conjunction with conservation of the fabric of a national monument (e.g. an early church), or works in the area around a monument, such as digging drains, building paths or the construction of interpretative centres
- excavations carried out on sites threatened by destruction from natural forces such as coastal erosion
- excavations carried out on sites not under threat, with the aim of answering a specific research question and/or providing archaeological training.

Most of the excavations in Ireland yielding human remains are conducted for pre-development or conservation purposes and, thus, these categories form the focus of this publication.



An early medieval gravestone on Inishmurray, County Sligo, marks the spot as special, in perpetuity, and asks for 'A prayer for Conmursce' (Ross Trench-Jellicoe)

WHY STUDY ANCIENT HUMAN REMAINS?

Analysis of excavated human remains is a fast developing branch of archaeological science. Osteoarchaeologists use a variety of methods to tease out evidence of the lifestyles and living conditions of people from remote periods. Detailed examination of bones and teeth can provide evidence of age, sex, diet and even occupation. High-powered (scanning electron) microscopy allows close definition of bone development and inferences about formative life stresses. Isotope analysis of bone collagen and trace element analysis of bone minerals are opening new chapters in the study of diet and environment. DNA analysis is emerging as a promising line of inquiry into past migrations and, more locally, family relationships within individual populations.

Paleopathology is a related discipline informing modern medical research with insight into the evolution of diseases and their expression in past times when modern drug and other therapies were unavailable. Paleodemography brings such data to bear on the study of ancient populations, using the physical evidence — health and other characteristics — to help understand social and cultural change.

ETHICAL CONSIDERATIONS

Most archaeologists hold to the view that the excavation and analysis of human remains is undertaken in pursuit of knowledge which has value to society, and in the consciousness that the remains under study still represent human subjects, with residual rights and innate dignity. A recent survey shows that the Irish general public also supports this view. It is in the curation or permanent storage of human remains that the public differs from the archaeological community (see Section VI).

Four fundamental principles can serve as a framework for conduct and decision-making in this area:

1. The conduct of archaeologists must be within the law
2. Ancient and historic human remains should always be treated as the remains of people
3. Ancient and human remains comprise a finite scientific resource
4. There is a legitimate public interest in the treatment and disposal of human remains by archaeologists.

On a development site containing known human remains the ideal outcome in terms of conservation and preservation would be abandonment or relocation of the proposed development.



III PLANNING ISSUES AND SITE ASSESSMENT



Any development project involving the disturbance of archaeological deposits is certain to involve added legal complexity, cost and potential delay. Excavations yielding human remains can be especially time-consuming and expensive. In some cases the best solution may be relocation or abandonment of the proposed development. It is important, therefore, to assess these issues carefully at the outset of a project.

PLANNING CONDITIONS FOR THE ARCHAEOLOGICAL RESOLUTION OF DEVELOPMENT

Local government regulations require that planning applications likely to impinge on an archaeological site should be referred to several national bodies for advice. These include An Taisce, the Tourist Board, the Heritage Council and the Heritage and Planning Service at the Department of the Environment and Local Government. These bodies can influence the conditions accompanying a grant of planning permission, and it is now usual to require that developers fund any excavation and post-excavation analyses on sites of archaeological interest.

None of the provisions of the National Monuments Acts is exclusive to human remains, but the relevant ones can be applied to graves or burial grounds. Two months notice is required before works can be carried out in relation to any monument entered on the Register of Historic Monuments and on the Record of Monuments and Places. Any disturbance to, or in the proximity of, a protected monument is prohibited unless in accordance with the Acts or under consent of the Department of the Environment and Local Government. Even a graveyard within the site of a national monument, e.g. an ancient church, may enjoy equivalent protection even if it is not of 'national importance' in itself. See 'Further Information' (below) to find out where to obtain more detailed information on planning procedures.

SITE ASSESSMENT

Most pre-development archaeological assessment and excavation is carried out by private archaeological contractors hired by the development company. An important first step in the process is an accurate site assessment to estimate the scale and nature of archaeological deposits contained within a proposed development site. This stage is especially important in work conducted on burial grounds where an underestimate of the number, extent and complexity of burials can lead to serious unforeseen costs and project delays.

The minimum information sought by any assessment of a burial place should include the location, extent, complexity (including depth), condition and probable date of the burials. An assessment report should consider:

- the research potential of the threatened archaeological resource
- the likely impact of development
- appropriate mitigation
- the outline costed schedule for resolution of the archaeological implications of development by excavation, analysis and reporting.

This level of assessment requires at least a desk-based or documentary search and extensive 'test-pitting' by hand (testing by mechanical excavator is inappropriate on a known or suspected burial ground).

Ideally, site assessment should precede a planning application, thus requiring the developer to seek early archaeological advice. Alternatively, a local authority may request 'testing for information' before the outcome of the planning application is formally determined.

Site assessment cannot be relied on in all instances. Human remains can turn up in unexpected places, like the severed heads found in an excavation of Dublin's medieval town ditch. More typical unexpected finds are small groups of prehistoric cremation burials, which can often be missed even with

comprehensive site assessment. Another example would be an excavation conducted within the environs of an urban medieval religious house where often the site of the main church will be known but the extent and boundary of the precinct seldom defined. Within these extensive but poorly defined areas, the presence of human remains must always be expected but can seldom be predicted.

Early involvement of an osteoarchaeologist at the site assessment stage can improve the quality of the project design and allow an accurate estimate of the time, equipment, storage space and funds needed to complete the work. Large inhumation cemeteries, for instance, can be very complex, as over time they will have grown both in area and depth. This is especially true of medieval sites where individuals were sometimes subdivided by class, age, sex, religious status and even cause of death. An expert in burial archaeology will be able to advise on the extent and scale of the remains likely to be encountered.

EXCAVATION LICENCE

An excavation licence is required in order to 'dig or excavate in or under any land ... for the purpose of searching generally for archaeological objects or of searching for, exposing or examining any particular structure or thing of archaeological interest' (National Monuments Act 1930). Licences are issued to archaeologists by the Department of the Environment and Local Government in consultation with the National Museum of Ireland. Applicants for excavation licences must be 'willing to undertake that the necessary resources are available to complete the archaeological excavation to a professional standard and to the satisfaction' of the Department. More explicitly, the applying archaeologist is asked to state whether adequate funds are available for the excavation and any post-excavation work, and also to identify the source of the funds. This is all the more reason to ensure that early project costings are as accurate as possible and agreed with the developer.

PUBLIC CONSULTATION

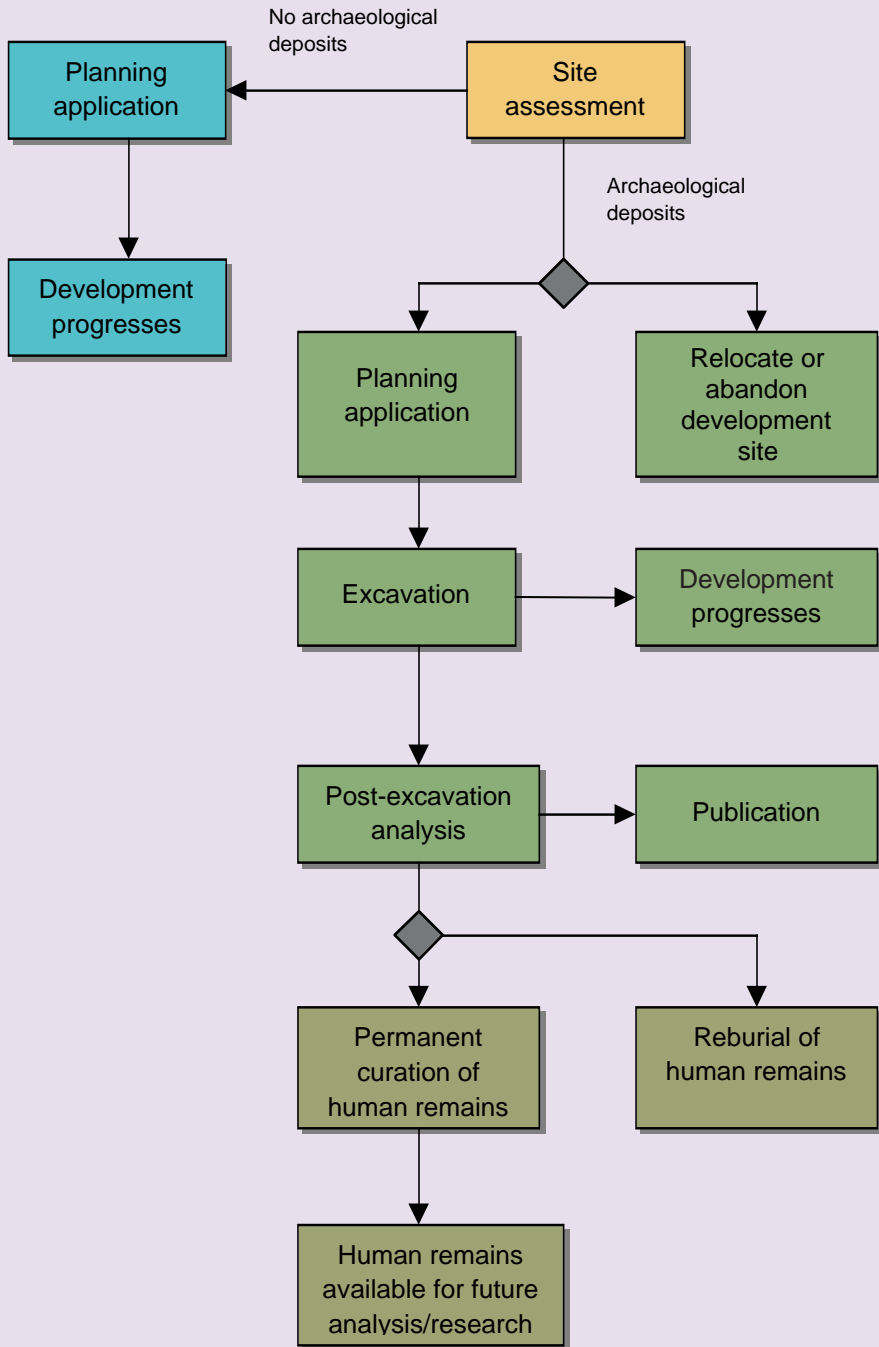
Archaeological excavation is exempt from planning control on the basis that its purpose is 'research or discovery'. Such an exemption removes the legal requirement for public consultation in decisions regarding excavation on archaeological sites. This can be an especially sensitive issue when involving burial grounds and cemeteries. To avoid possible controversy one solution would be to ensure that public planning notices at the proposed development site and in newspapers clearly state that excavation of human remains is likely to be a consequence of the proposed works.

AVOIDANCE AND MITIGATION

On a development site containing known human remains the ideal outcome in terms of conservation and preservation would be abandonment or relocation of the proposed development. The difficulty here is that large previously unrecorded groups of well-preserved skeletons are most likely to be encountered on urban development sites where space is limited, land is valuable and options for re-development are closely controlled. Other options might include the use of existing buildings (rather than demolition and rebuilding) or employing rafted or piled foundations in a new structure.

Rafted foundations create a 'building footprint' to a minimum of 500 mm beneath the ground surface. Human remains in medieval or post-medieval cemeteries commonly occur between 10 to 1500 mm below the surface. Rafting would thus involve destruction or excavation of some or all of the burials in the footprint. Piled foundations involve full hand excavation of the pile sites. Both methods may also require excavation beyond the limits of the site area to avoid truncation of individual skeletons in intercutting graves. Neither rafting or piling alone is likely to provide an acceptable solution in archaeological terms.

Partial preservation of a site (see 'Subsampling' below) is also undesirable from the point of view of archaeological interpretation and analysis. Often, therefore, the only reasonable alternative to site abandonment or relocation is 'preservation by record', i.e. full excavation of threatened burials and other deposits to an acceptable standard, followed by analysis, reporting and publication.



Outcome of a 'pre-development' archaeological assessment of a site potentially containing human remains

IV EXCAVATION



Standard current practice in the excavation of ancient human remains involves:

- identification of individual graves
- careful excavation with brush and trowel
- detailed recording of individual burials *in situ*
- packaging and numbering of individual remains and associated samples in protective materials.

These activities are generally carried out by trained fieldworkers or a specialist osteoarchaeologist and supervised by an excavation director. An excavation can last anywhere from days to months, depending on the extent and number of remains uncovered. Costs can vary from a few thousand euros to hundreds of thousands of euros depending on the time and resources demanded.

PROJECT DESIGN

An important first stage in the process is to produce a comprehensive project design based on the site assessment. Here, the archaeological contractor must assess staffing and other resources needed to complete a project in the desired timescale and to budget. It is good practice on burial sites to involve an osteoarchaeologist at this early stage to advise on excavation strategy and to ensure that the project is adequately resourced. Onsite processing of excavated human remains requires at minimum:

- adequate dedicated space
- basic microscopy
- good light

- water
- appropriate packing materials
- sufficient, secure, short-term storage facilities.

An osteoarchaeologist can also advise on the potential of other analytical activities such as soil sampling of the burial deposit and immediate environment.

LEGAL ISSUES

Most finds of ancient human remains will be on archaeological sites excavated under licence. It is illegal to exhume ancient or historic human remains without a licence, and this applies even to an archaeologist hired to monitor ongoing development work under a non-licensed 'watching brief'. An exception to the law can be made when the finder of an archaeological object 'has reasonable cause to believe that it is necessary to remove it so as to preserve it or keep it safe' (e.g. a skeleton eroding out of a beach dune). In cases like this the finder can remove the remains to any safe place with 30 miles of discovery but must contact the Director of the National Museum within 96 hours.

Other laws and legal principles can apply to the exhumation of human remains, as follows.

CORONERS ACT 1962

This act deals with the bodies of individuals who may have died in a 'violent or unnatural' manner. Arising from this, the coroner commands first legal possession of all newly discovered human remains until their status is established. Archaeological fieldworkers should, therefore, report any discovery of human remains to the local coroner as a matter of good practice. Even a licensed excavator may not always be competent to judge the antiquity of human skeletal remains or their cause of death.

LOCAL GOVERNMENT (SANITARY SERVICES) ACT 1948

Sections 46.1 to 46.4 of this Act prohibit disinterment of an individual from a burial ground without an exhumation licence as granted by the local authority. As the intent of the Act is to protect the public on health grounds, it is unlikely in the majority of cases that it would apply to a licensed excavation of ancient human remains. Yet it is advisable to err on the side of caution and apply for an exhumation licence when working in a burial ground. Any disturbance of recent human remains in the course of archaeological work (e.g. in conservation work on an historic church) would certainly require an exhumation licence under the Act.

TRESPASS AND CIVIL REMEDIES AVAILABLE TO OBJECTORS TO EXCAVATIONS

An archaeologist undertaking an excavation (even with a licence) must first obtain the landowner's permission in order to avoid an action in trespass. This applies equally to the owners of graveyards or burial grounds, which can include cemetery companies, burial boards, church bodies or religious denominations. The legal situation is less clear as regards a graveyard plot, where what is most often obtained is an 'exclusive right of burial'. A sufficient right of ownership among the identifiable descendants of an interred individual could be argued in order to prevent trespass or interference with a grave. Consideration should always be given to such a possibility..

V POST-EXCAVATION

ANALYSIS AND REPORTING



Excavated human remains are numbered and packaged on site for transport and temporary storage before undergoing detailed analysis by an osteoarchaeologist at a museum, university or archaeological unit. Dedicated facilities for these activities are important. Storage of skeletal material in unsuitable conditions can be damaging to the bone surface and result in irretrievable loss of data. Repeated packing and unpacking of bones can also cause damage.

A full catalogue of individual burials from the site will be compiled and will include the following details:

- archaeological context/mode of burial
- skeletal elements present
- record of dentition
- age, sex and stature
- skull and other bone measurements
- non-metric traits
- skeletal anomalies and pathological conditions.

Disarticulated bones are also measured and recorded. Other more specialised analyses such as scanning electron microscopy, chemical analysis, radiocarbon dating, and DNA profiling may be conducted on selected material. This osteological data can then be used to produce a demographic profile of the assemblage and disease frequency rates (where preservation and completeness permit).

SUBSAMPLING OR TOTAL ANALYSIS

Osteoarchaeologists prefer total analysis of an entire excavated skeletal assemblage to representative 'subsampling'. Burial assemblages can often be complex, with individuals sometimes segregated by age, sex, class and cause of death: to sample a portion would be unrepresentative of the entire assemblage. Most cemetery excavations are partial at best (especially in a developer-funded context) and often based on a random area of investigation corresponding to the 'footprint' of a proposed development. Thus, they already constitute a subsample, and there can be no scientific argument for further de-selection. A limited budget based upon agreed project costs is the reason most often cited for subsampling. This again highlights the importance of an accurate site assessment with realistic costings.

PUBLICATION

Publication of a site report is a standard condition of the excavation licence. It is the main justification of the work, as it makes the results widely available to scholars and the public. Reports are most often published in standard journals of record or as separate monographs. The publication will incorporate reports from numerous specialists involved in the excavation and analysis, including that of the osteoarchaeologist. Findings from these



An osteoarchaeologist examines excavated skeletal remains in the cloister at Ennis Friary in 1998. This excavation preceded proposed conservation works by Dúchas the Heritage Service (J O'Sullivan)

reports are then integrated into the discussion and interpretation of the entire site. It is important that site reports provide details of methodologies employed. This allows the validity of the results and conclusions to be re-assessed, and facilitates comparison with data from other sites.

VI CURATION OR RE-BURIAL?



Ancient human remains may be defined legally as 'archaeological objects' but obviously differ from other objects, not least of all in the public perception. For this reason the long-term treatment of human remains can be a contentious issue. Most of the assemblages excavated in the past 75 years are now either:

- partly or entirely reburied on the site of discovery or other locations
- partly or completely retained in permanent curation by the National Museum of Ireland
- in temporary storage awaiting a decision on either curation or reburial.

It has been estimated that over half of the assemblages excavated in the last 10-15 years fall into the last category.

OWNERSHIP OF ANCIENT HUMAN REMAINS

The National Monuments Acts vest ownership in the State of all archaeological objects, including ancient human remains, discovered after 1994. The Director of the National Museum of Ireland is empowered to 'dispose' of these objects at discretion, either by taking them into permanent curation or by waiving claim of ownership. Legal ownership of human remains not retained by the Museum is not straightforward. Are they the property of the excavating archaeologist or the landowner of the site of discovery? Common Law holds that there can be 'no property in a corpse' but should a court decide to regard ancient human remains as 'chattels' the landowner will almost certainly have superior title to that of the finder/archaeologist, even if the archaeologist is excavating under licence and with the landowner's permission. A landowner could in such circumstances demand that an archaeologist return ancient human remains for reburial.

CURATION

It is the current policy of the National Museum of Ireland to retain all archaeologically significant human remains. This policy arises from the view that these objects constitute a valuable scientific resource. Permanent curation allows the potential for assemblages to be re-assessed in later years when analytical methods have advanced, or to answer new research questions. Assemblages are currently kept at the Museum's storage facility at Collins Barracks in Dublin. Bones are cleaned and dried and then packed in an acid-free material by the licensed excavator before delivery to the Museum, where a catalogue of remains — the 'Bone Coffin Lists' — is maintained. Any individual with a legitimate research interest is allowed access to the collection. Storage capacity is a problem at present and is partly the reason for the large amount of material currently in temporary storage. Ongoing renovation at Collins Barracks and increased staffing at the Museum should help to rectify this situation.

REBURIAL

Not everyone agrees that permanent curation of ancient human remains is the best policy. A survey of public opinion in Ireland found that most people viewed the storage of skeletal material in a museum as inappropriate and lacking in due respect for the dead. Most would prefer reburial with an appropriate ceremony. One alternative solution might be reburial in controlled conditions that would allow the material to be re-interred undamaged for later analysis if necessary (i.e. burial vaults). Any blanket policy on this issue may not be workable and decisions may need consideration on a case-by-case basis in consultation with local communities. Reburial of ancient human remains without the consent of the Museum (unless ownership has been waived) is an offence under the National Monuments Acts.



The skeletal remains of these medieval friars were recorded but otherwise undisturbed in the course of conservation works by the Office of Public Works at Sherkin Friary, County Cork, in 1990 (J O'Sullivan)

FURTHER INFORMATION

For further advice on the proper treatment of ancient or historic human remains, readers are advised to apply to the following national bodies:

1. The Director, National Museum of Ireland, Kildare Street, Dublin 2
2. National Monuments Section, Heritage and Planning Service, Department of Environment, Heritage and Local Government, Dún Scéine, Harcourt Lane, Dublin 2
3. Archaeological Officer, The Heritage Council, Kilkenny.



Aerial view of an early medieval settlement enclosure and cemetery at Johnstown, County Meath. The site was excavated in advance of building a new national road (Archaeological Consultancy Services Ltd)

Notes