THE STORMONT FIRE

AND

FIRE SAFETY IN CROWN BUILDINGS

A Report by

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Following the fire at Parliament Buildings, Stormont, on 2 January you invited me to undertake an Inquiry into the fire precautions arrangements at that building and to consider the implications for Crown buildings generally in Northern Ireland.

The terms of reference for the Inquiry were:

> To examine the circumstances of the fire, the fire safety precautions and the fire fighting arrangements for Parliament Buildings, and make recommendations to the Secretary of State both in relation to Parliament Buildings itself and any consequential implication for other Crown buildings in Northern Ireland.

Unfortunate though the fire was there was no loss of life or injury and hopefully through lessons learnt and the conclusions and recommendations of this report the possibility of further or more serious incidents can be reduced.

In carrying out the Inquiry I have been afforded full and courteous co-operation and assistance from all with whom I have been in contact, the Royal Ulster Constabulary and the full investigation team, the Northern Ireland Fire Brigade, Premises Officers in the Crown buildings which I have visited, Civil Servants and others whom I have interviewed. I am most grateful for all the assistance given.

I would also like to thank those who made submissions to me in the context of the fire. Many valid and useful points were raised and I have endeavoured to cover these in the report.

Throughout the Inquiry I have been more than ably assisted by Mr. Ken Lucas of the Northern Ireland Civil Service. He has helped me in an extremely competent manner and he has been invaluable in the satisfactory completion of the Inquiry. I thank him most sincerely for his commitment.

Reginald Doyle

SIR REGINALD DOYLE

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1

Terms of Reference and Summary of Recommendations

1.1 My Terms of Reference for this Inquiry were:

To examine the circumstances of the fire, the fire safety precautions and the fire fighting arrangements for Parliament Buildings and make recommendations to the Secretary of State, both in relation to Parliament Buildings itself and any consequential implications for other Crown buildings in Northern Ireland.

1.2 I conducted the Inquiry with a view to covering the following issues:

a. to identify as clearly as possible the cause of the fire and how it spread and thereby establish to what extent it could have been prevented;

b. to examine the extent of fire safety precautions which existed in the building at the time of the fire and deduce whether staff could have been at risk. This included examination of alarm systems, escape routes, protection of escape routes, extinguishers, hosereels, etc;

c. to consider the main arrangements for fire fighting viz water supply, hydrants and access;

d. to examine the roles and duties of the various personnel who have responsibilities relating to fire precautions in the building;

e. to examine the extent of liaison with the Fire Brigade to ensure it had adequate information for fire fighting purposes;

f. to visit a range of premises to obtain an overview of the general standard of fire safety precautions in Crown buildings;

g. to examine the roles and duties of those responsible for the application of fire precautions requirements to Government buildings and in particular the arrangements for certification of buildings;

h. to recommend how improvements in fire precautions generally for all Crown buildings could be achieved in view of lessons learned from the Parliament Buildings fire.

1.3 I feel that the scope of these objectives and the pursuit of information relating to them through the Inquiry has been such as to enable me to acquire a broad and detailed grasp of the Fire Precautions scene in relation to Crown buildings in Northern Ireland.

1.4 Summary

On the basis of what I have observed my recommendations are as follows:-

Training

1.4.1 **It is essential that a full fire drill, with evacuation of the building, takes place at least once and preferably twice each year (paragraphs 2.3.2 and 9.4).**

1.4.2 **It is recommended that the Premises Officer course 'hand-out' be issued to every Premises Officer as soon as possible regardless of whether they have yet attended the course (paragraph 4.5.6).**

1.4.3 **It is recommended that it should be the duty of Premises Officers to ensure that all staff in the buildings for which they are personally responsible are aware of the means of raising the alarm, evacuation and use of extinguishers, etc (paragraphs 4.5.6 and 4.5.9).**

1.4.4 **It is essential that Premises Officers responsible for any Crown building should attend this course (paragraph 4.5.8).**

1.4.5 It is recommended that all Premises Officers attend the appropriate course as soon as possible to be more fully aware of their responsibilities (paragraphs 9.4-9.7).

Fire Certification

1.4.6 Article 49 excludes the Crown from a number of important functional requirements of the Fire Services Order. I consider it essential that alternative informal safeguards are put in place to ensure that Crown buildings comply with the standards set out in the Order (paragraphs 2.2.1, 6.2.2.4 and 9.12).

1.4.7 Should the nature of use of a building change, the fire safety requirements of any legislation which would then apply must be taken into account (paragraph 2.2.5).

1.4.8 It is imperative that recommendations by Fire Section should be classified to indicate those which are essential to obtain or maintain a Fire Certificate and those which are advisory (paragraph 4.2.4).

1.4.9 It is recommended that Fire Section be invited to visit every building which should be inspected for compliance (paragraph 4.3.3).

1.4.10 It is recommended that the Fire Precautions Guide be amended to include a mandatory requirement that a Fire Certificate be sought for every Crown building to which Article 22 of the Fire Services (NI) Order 1984 would apply (paragraphs 9.5, 9.6 and 9.10).

1.4.11 It is recommended that the Fire Precautions Guide be revised to include a clear instruction as to how application for a Fire Certificate should be made (paragraphs 9.5, 9.6 and 9.11).

1.4.12 It is recommended that a comprehensive and definitive list of all Crown buildings requiring certification be compiled and held in an appropriate central office (paragraphs 10.1 and 10.2).

1.4.13 If the number of buildings still to be certified is to be dealt with within an acceptable timescale, serious consideration must be given to the resource problem (paragraphs 10.3 and 10.4).

1.4.14 It is recommended that priority be given to working towards every certifiable Crown building having a Fire Certificate (paragraphs 10.1-10.6).

1.4.15 I strongly support the continuation of the programme of routine re-inspections carried out by DOE Fire Section (paragraphs 10.1-10.7).

1.4.16 Each of the disciplines has an essential contribution to make towards the safety of a building and I consider that in relation to recruitment and training the balance of skills available should be maintained (paragraphs 10.10 and 10.11).

1.4.17 It is my opinion that in view of the numbers of buildings involved a radical change in the approach to inspection and certification is required (paragraph 10.13).

Guidance

1.4.18 Close liaison between the GB and NI Departments responsible for producing codes of practice, technical guidance in support of legislation, etc, is essential (paragrpahs 5.6.1-5.6.5).

1.4.19 It is recommended that the advice and records set out in the Fire Precautions Guide be applied and used (paragraphs 9.4 and 9.8).

1.4.20 It is recommended that the Fire Precautions Guide should be given authority at senior level through an Administrative Order or Policy Statement to ensure it is applied to all Government buildings (paragraphs 9.5, 9.6 and 9.9).

Fire Brigade

1.4.21 It is recommended that necessary arrangements be made to ensure appropriate and comprehensive liaison with the Fire Brigade (paragraphs 2.5.5.4- 2.5.5.7).

1.4.22 It is recommended that the Brigade record required under Article 4(2)(d) of the 1984 Fire Services Order should indicate clearly the dates of last visit (paragraphs 2.5.5.4-2.5.5.8).

1.4.23 It is recommended that in relation to valuable artefacts, documents or archive material salvage arrangements should be drawn up for particular buildings (paragraphs 9.15-9.19).

Contracts

1.4.24 It is recommended that all electrical circuits in Parliament Buildings are upgraded to modern standards and that similar consideration be given to other Crown buildings when they are being inspected (paragraph 2.4.1.7).

1.4.25 It is recommended that in relation to the preparation of contract documents it is imperative that any scope for confusion is precluded and the Contractor is left in no doubt as to his responsibilities (paragraphs 2.5.7.8 and 2.5.7.9).

1.4.26 It is recommended that contracts similar to that at Parliament Buildings should include clear direction on the need for full communication between all interested parties and contracts should also underline the need for particular supervision at critical stages (paragraphs 2.5.7.10 and 2.5.7.11).

1.4.27 It is recommended that any contractual work in buildings should be closely supervised to ensure that any additional fire risk created by the contract is controlled (paragraphs 2.5.7.10 and 9.20).

Fire Warning Systems

1.4.28 If, for any reason, a building is currently patrolled consideration must be given to an alternative means of detecting any problems which may arise in the event of areas being rendered inaccessible (paragraph 2.3.2).

1.4.29 It is recommended that greater use is made of modern fire detection systems (paragraphs 9.16 and 9.17).

1.4.30 It is recommended that consideration be given to the use of active fire detection systems such as sprinklers or gas flood systems in specified high value or high risk installations (paragraph 9.18).

1.5 I believe that these recommendations fulfil the objectives of my Terms of Reference and I trust that they will be seen as constructive and that they will lead to a clearer understanding and a more efficient application of Fire Precaution requirements.

2

Parliament Buildings

2.1 The Building

2.1.1 Parliament Buildings is situated on an elevated south-facing site in the 300-acre Stormont Estate about 5 miles from the centre of Belfast.

2.1.2 It was designed by Sir Arnold Thornley, FRIBA, of Liverpool in the Greek classical tradition and relies for effect upon simple and well- proportioned masses, the only elaboration being confined to the central feature portico of the southern facade. The building, comprising a basement, ground floor and four upper floors, measures 365 feet long, 164 feet wide and 70 feet high. The exterior is faced in Portland stone above a plinth of unpolished granite. The fine proportions of the building are imposingly presented in the parkland setting of the Estate.

2.1.3 Two wide main avenues lead to the building from formal entrances at the Upper Newtownards Road and Massey Avenue. There is a third indirect and informal route to the building from the Stoney Road entrance on the eastern boundary of the Estate (see Appendix A).

2.1.4 Structurally the building contains two well defined types of construction. The outer rectangle on all four sides consists of load bearing brick and stone walls while a steel frame is used to support the floors and roofs over the Central Hall, Commons Chamber and Senate Chamber. The floors in the building are constructed with reinforced concrete slabs.

2.1.5 Six large rectangular open wells or voids within the core of the building provide light and ventilation to the inner areas. Two of these light wells straddle each of the Commons and Senate Chambers (see Appendix B).

2.1.6 Apart from the Central Hall and the Parliamentary areas such as the Commons and Senate Chambers, the Parliamentary Library, etc the building provides some 150,000 sq ft of office accommodation.

2.1.7 The Commons Chamber, which had not been in use since 1986, is located towards the west end of the building and measures approximately 43 ft x 53 ft and like the Senate Chamber, occupies two floor levels. The woodwork was mainly of Australian Walnut with English burr Walnut panelling on the walls contrasting with marble in the galleries and the blue upholstered benches (see Appendix C).

2.1.8 Parliament Buildings was first occupied by the Northern Ireland Civil Service in 1931 and has been in continuous and intensive use since that time.

2.2 Legislation applying to the Building

2.2.1 **Fire Services (NI) Order 1984** - the building is subject to this Order to the extent specified in Article 49 (application to Crown). Although Article 26 is the key to the process for obtaining a Fire Certificate it is not included under Article 49 as applying to the Crown. However historically Health and Safety Division of the Department of Economic Development has always ensured that a Crown building complies with the safety provisions which are also set out in Article 26 viz:

i. means of escape for staff;

ii. means of ensuring that the escape can be used at all material times;

iii. means of giving warning; and

iv. means of fighting fire.

I would hope that the mechanism recommended at 1.4.6 would ensure that Crown buildings are made to comply with these requirements.

2.2.2 **Health and Safety at Work (NI) Order 1978** - the building/employer/ employees are subject to this Order to the extent specified in Article 44 (application to Crown). Whilst there are no direct fire safety requirements in the Order the general duties apply to/impact upon measures provided for fire safety.

2.2.3 **Building Regulation (NI) Order 1979** - the building was erected prior to the introduction of Building Regulations in NI and the regulations are not retrospective. The works being undertaken currently are not subject to the Building Regulations (NI) 1990 as Article 22 of the Order (Crown Compliance) has not been commenced. However, it is Works Service's policy that all work undertaken by it should comply with the relevant technical requirements of Building Regulations and to that end a Building Regulations Monitoring System operates which applies to the present contract at the building.

2.2.4 **Planning and Listed Building Orders** - the building is listed and alterations to the structure, finishes and furnishings in many areas are subject to approvals under these Orders. Whilst there are no direct fire safety requirements in the Orders their general provisions impact upon measures provided for fire safety.

2.2.5 **Various Other Orders and Regulations** - various other Orders and Regulations apply to specific parts of the building. Some of these have no fire safety requirements, eg, the Health and Hygiene Regulations. **However should the nature of use of the building change eg general conferences, banqueting, etc the fire safety requirements of any legislation which would then apply would have to be taken into account.**

2.3 Department of Finance and Personnel

2.3.1 The Department of Finance and Personnel (DFP) took over Premises Officer responsibilities for Parliament Buildings on 1 April 1994 from the Department of the Environment (DOE) as the bulk of DOE staff had by that time moved to Clarence Court, their new city centre building. With the transfer of Premises Officer responsibilities, DOE transferred watchkeeping staff, messengers and a Security Officer for Parliament Buildings to DFP. (DOE remained fully responsible for the major works contract which had commenced in February 1994.)

2.3.2 DFP have informed me that the Public Address and Fire Alarm systems were tested at regular intervals, the last recorded date before the fire being November 1994. Although I have no doubt from my own inspection that means of escape from the building appear to be adequate I understand the last recorded fire drill including evacuation of staff was in 1989. I appreciate that in a building where many important meetings take place each day it can be difficult to organise a date for a fire drill which minimises disruption. I can also understand that during 1994 with a major contract under way in

the building this would have been particularly difficult. **It is essential however that a full fire drill with evacuation of the building takes place at least once and preferably twice each year.**

2.3.3 DFP is also responsible for security in the Stormont Estate as a whole.

2.3.4 There is a 24-hour Security Guard presence on the Stormont Estate. There is also a 24-hour presence in Parliament Buildings - on normal working days this involves rotas of messengers and watchkeepers; over a holiday period, teams of watchkeepers only operate carrying out patrols in rotation at irregular intervals. Both arrangements - security guarding in the Estate and watchkeepers in Parliament Buildings - were operating over the weekend and public holiday from 31 December 1994 to 2 January 1995.

2.3.5 Security Guards control access to the Stormont Estate. The standing instruction for the Fire Services is to use the Massey Avenue Gates at which there is a 24-hour Security Guard presence. On the morning of 2 January 1995, the Guards at this entrance responded to a telephone call from the RUC and opened the Massey Avenue gates to admit fire tenders.

2.4 DOE Works Service

2.4.1 Refurbishment Proposals

2.4.1.1 As already mentioned Parliament Buildings has been in continuous use for well over 60 years and the condition of many of the building's installations and services reflect their age. Although Works Service kept the building operational through ongoing repair and maintenance the need for major refurbishment had been indicated by Works Service since the mid-1980s.

2.4.1.2 At that time an Interdepartmental Steering Group was set up to consider a strategy for the rationalisation of Government office accommodation in the Belfast/Stormont area. Because of its importance Parliament Buildings featured in all the long term options considered.

2.4.1.3 The extent and nature of the refurbishment work needed to the roof and heating, plumbing, electrical, mechanical and fire precautions systems pointed to a total decant of staff from the building and so the refurbishment of Parliament Buildings became linked to the planned provision of a large new DOE HQ building in central Belfast to which the staff from Parliament Buildings could decant.

2.4.1.4 In the meantime during 1989 and 1990, with the safety of staff in mind, the lighting circuits in the building were completely rewired. In addition work was carried out to a number of fire doors including the provision of electro-magnetic closers.

2.4.1.5 All other work, as far as I can establish, was held pending the major refurbishment of the building. I would mention in passing that at any time during this period an application for a fire certificate could or should have been made and in my view would not have involved major work.

2.4.1.6 Unfortunately, although the new DOE building was completed as planned, financial constraints overtook the proposals for major refurbishment of Parliament Buildings and a decision was taken not to proceed with the scheme. Instead a reduced scheme concentrating only on Health and Safety and Fire Precaution work was extracted from the major proposals. The start of this 'safety' contract was also considerably delayed due to a concern that there could be conflict between the likely disturbance which would be caused by the work and requirements for the building for political discussion. The project, which eventually commenced in February 1994 is still under way and includes:-

(a) re-wiring of electrical power system (lighting already done);

(b) water supply (prevention of Legionnaires disease);

(c) fire-fighting upgrading and new ring main around building for fire-fighting, new hydrants, new water storage tanks and new pump-house;

(d) automatic fire detection, fire alarm and PA upgrading;

(e) refurbishment of lifts to H&S requirements;

(f) improved facilities for disabled;

(g) removal of asbestos;

(h) provision of Intruder Detection System.

2.4.1.7 I am concerned in regard to (a) above that this work may not include all aspects of electrical systems including subsidiary circuits. Such a circuit appears to have been the cause of the fire (see paragraph 3.5.6). **It is recommended that all electrical circuits in Parliament Buildings are upgraded to modern standards and that similar consideration be given to other Crown buildings when they are being inspected.**

2.4.1.8 Having inspected the contract drawings, (dated April 1993) I can confirm that automatic fire detection in the Commons and Senate Chambers and other areas of the building was included in the present contract from the outset.

2.5 The Fire Hydrant System

2.5.1 Background

2.5.1.1 Parliament Buildings has been served by the existing fire hydrant system for many years. A new system is in the process of being installed. At the time of the fire the new system was not complete and had not been commissioned.

2.5.1.2 The old system was maintained by DOE Works Service Estate Maintenance Division (EMD) and the Contractor installing the new system was under a contractural obligation to ensure that the old system was 'maintained' in operation until the new system was fully operational (see Appendix E).

2.5.2 The Existing System (Appendix F)

General

2.5.2.1 Water is fed by gravity from the main reservoir (500,000 Gal) and two 7,000 Gal underground tanks via 9" cast iron pipework to two gravity hydrants (Nos 1 and 2) at the east side of Parliament Buildings. An extension of this pipework is then brought down to the fire booster pump and to the fire hydrants around Stormont Castle which are gravity fed.

2.5.2.2 The fire booster pump feeds the fire hydrant main around Parliament Buildings. When a fire hydrant is opened around Parliament Buildings the booster pump comes on automatically and boosts the pressure in the hydrants and the fire hose-reels in the building. It will continue to run until the hydrant is closed, then the pump shuts down. The hose-reels will still operate on the gravity supply though with reduced pressure if a hydrant is not opened. The main reservoir which has two independent compartments obtains water from a stream from the Craigantlet hills. This stream feeds a coffer dam and the spill from this dam in turn fills the main reservoir.

2.5.2.3 The two underground tanks are filled by mains water pumped from the Valley Pumping Station just below Stormont House. If necessary the Valley Pumping Station can also fill the main reservoir. This is a manual operation.

2.5.2.4 Should the main reservoir empty then as the head of water decreases the two underground tanks come into operation. If these were also to empty water must then be brought from the nearest mains hydrant which is outside the Massey Avenue gates.

2.5.3 Valves

2.5.3.1 Water discharges from the two compartments in the main reservoir into the hydrant system through two valves. These valves are located in a valve chamber and are operated by a hydrant key which is held by EMD in the basement of Parliament Buildings.

2.5.3.2 The feed pipe from the two underground tanks to the hydrant system is controlled by a non return valve to ensure that the hydrostatic head from the main reservoir does not cause the two underground tanks to overflow and so drain the main reservoir. The non-return valve is located between two isolation valves so that it can be isolated if required for repair. Both of the isolation valves are operated by a hydrant key. At the time of the fire the brick chamber, lid, etc had been dismantled as a result of nearby excavation for pipework. This had left the valves exposed.

2.5.3.3 An isolation valve is positioned on the main 9" gravity feed pipe from the reservoir and tanks just beyond the branch to the two gravity hydrants at the east side of Parliament Buildings (Nos 1 and 2). Closure of this valve enabled work to be carried out at the pumphouse without prejudicing the supply to Parliament Buildings completely.

2.5.4 Maintenance

2.5.4.1 The system was maintained by DOE/WS EMD. The system has been checked twice per year for the past 25 years. The check included all hydrants in the Estate - servicing filters, greasing spindles, etc.

2.5.4.2 As an additional precaution one of the hydrants was opened each week (on a random basis) to ensure that the automatic booster pump triggered and performed properly. This was arranged by one officer opening the hydrant and via a 'Walkie Talkie' checking with a second officer in the pumphouse that the booster pump had started up. Unfortunately EMD stopped carrying out this check in October 1994 when the Contractor was seen working at the new fire main and hydrant system alongside the old system. It was wrongly assumed by EMD that the old system had been subsumed by the new.

2.5.4.3 Once per year a Fire Surveyor from DOE Works Service Fire Section carries out a random check of the fire hydrant pits. Pits would be opened and visually inspected and the signs would be checked. Any defects would be reported to EMD for making good. Flushing of the hydrants was carried out by EMD who would advise Fire Surveyors of any problems.

2.5.4.4 Once per year a Fire Mechanic from DOE WS Fire Section would check the hose-reels in the building. They would completely reel off the hoses and discharge them into a convenient light well or toilet. The Fire Mechanics would repair any defects found in the hose or hose nozzle and report any plumbing defect to EMD. The hose-reels had last been inspected in October 1993 and were due to be checked one week before the incident but this had been postponed at EMD's suggestion in view of particular work which was being carried out in the building at the time.

2.5.5 Liaison with Fire Brigade

2.5.5.1 Regular joint visits to Parliament Buildings Stormont Estate by DOE WS Fire Surveyors and the Fire Brigade were instituted in 1989 when the lighting circuits in Parliament Buildings were being rewired (August 1989, September 1989, June 1990 and July 1990). After the rewiring contract was complete the joint visits were reduced to six-monthly intervals.

2.5.5.2 These joint visits were carried out so that local firemen could acquaint themselves with the hydrant system, the hose-reels and the general layout of the building both internal and external. A hydrant at Parliament Buildings was flushed as part of the examination. Two fire crews (10 men) from Knock Fire Station would normally attend. The visit would last about 3 hours and whilst the reservoir or pumphouse were not embraced the tour did include the other buildings in the Stormont Estate, eg Stormont Castle, Dundonald House, Craigantlet Buildings, etc.

2.5.5.3 In April 1993 WS Fire Section sent a note and a copy of the drawings showing the proposed new fire system to the Brigade for information and comment. Brigade replied that it was content with the proposals.

2.5.5.4 On 29 March 1994, prior to the commencement of the work on the new fire hydrant system, a full joint visit by DOE WS Fire Surveyors and Brigade took place.

2.5.5.5 On 20 July 1994 a joint visit was scheduled but the Brigade had to leave in response to a fire call soon after arrival.

2.5.5.6 On 11 October 1994 Brigade were unable to attend a prearranged joint visit due to a last minute fire call.

2.5.5.7 **It is recommended that necessary arrangements be made to ensure appropriate and comprehensive liaison with the Fire Brigade.**

2.5.5.8 **It is recommended that the Brigade record required under Article 4(2)(d) of the 1984 Fire Services Order should indicate clearly the dates of last visit.**

2.5.6 The New System (see Appendix G)

2.5.6.1 The purpose of the new system is to provide a modern reliable and efficient fire fighting water supply to Parliament Buildings.

2.5.6.2 Work on the new system commenced in May 1994. It includes the provision of new reinforced concrete water storage tanks, a new pumphouse and associated new and replacement pipework and hydrants.

2.5.7 Fire Hydrants - Position at 2 January 1995

2.5.7.1 At the time of the incident the new system was not in operation although the new ring main and hydrants at Parliament Buildings had been completed, the majority of the new and replacement pipework had been positioned and the new storage tanks and pumphouse were well under construction.

2.5.7.2 When laying the new hydrant ring main to the building the Contractor commenced at the south-east corner of the building. Because both the new and the existing mains were to be laid in the footpath and as the line of the new main coincided with the position of existing hydrants pits the Contractor demolished the existing pit structures. He then reused the existing yellow coloured lids, frames, and boxes (as indicated in the contract documents - see Appendix H) in the new hydrant pit a few feet away. This left the existing live hydrants in open pits, some filled with muddy water, and the new dry hydrants with a yellow, well used cover, also close to the existing hydrant signs. Some of the open pits were covered with boards to prevent pedestrians falling into them.

2.5.7.3 The scene was therefore set for confusion in the event of the existing live hydrants being required for fire fighting at this critical time. As we now know that is exactly what happened.

2.5.7.4 Having until now described the existing system as 'live' I must now contradict myself and explain that this was not so. At the time the Brigade arrived to fight the fire they would have been unable to obtain water from either system; obviously in the case of the new system because it had not yet been connected and was therefore totally dry and in the case of the existing 'live' hydrants (in the open pits) because the water had been closed off at source.

2.5.7.5 The outlet valves from the main reservoir and the underground tanks had been closed.

2.5.7.6 Despite numerous interviews with the contractor and his staff, Estate Maintenance Division and Civil Engineering Division personnel, the Contract Manager and the Clerk of Works, I have been unable to establish why or when the valves had been closed. From my enquiries I know that the valves were definitely open on 20 September 1994 when a hydrant was used successfully by a private contractor working in the Estate to flush a drain. When it was attempted to use the hydrant again for the same purpose on 15 December no water was present. On the 20 December other existing hydrants were tried around the building with the same result - no water. Although the private contractor involved in the drainage work reported that he had been unable to obtain water from the hydrants and although management was informed the matter appears to have "fallen between stools" and no action was taken. Estate Maintenance Division knew of no reason why the valves would have been closed for any of its operations in the Estate; the main works Contractor and DOE staff supervising the main contract knew that the existing and new fire mains systems were completely separate and there would be no need for the valves controlling supply to the existing to be closed off while working at the new. Indeed as already mentioned the contract documents indicate that the existing system must be maintained (Appendix E) although there is conflict here in relation to re-use of lids and frames and demolition of pits (Appendix H). The fact remains however that sometime between 20 September and 15 December someone closed the valves and left the large metal hydrant key in place on the closed valves at the reservoir. As mentioned before this hydrant key was normally stored in the boiler room in the basement of the building. It is my opinion that the valves were closed for some works or operational reason and the person or persons involved neglected to go back to the reservoir and reopen the valves.

2.5.7.7 To summarise the water supply situation at the time of the fire we have:-

a. a new ring main and hydrant system complete with metal lids (from

the old system) in place but not connected and close to the existing hydrant markers;

b. the existing 'live' hydrants in open pits some filled with dirty water and some of the pits covered with boards; and

c. no water supply to the existing hydrants or internal hose reels because the valves at the reservoir and underground tanks had been closed.

2.5.7.8 Whereas the Contractor was required under the terms of the contract to maintain the existing system in operation there appears to have been a conflict within the contract itself in that it allowed for re-use of surface boxes, frames, etc and also for removal of existing hydrant pits.

2.5.7.9 **It is recommended that in relation to the preparation of contract documents it is imperative that any scope for confusion is precluded and the Contractor is left in no doubt as to his responsibilities.**

2.5.7.10 In the circumstances which pertained in relation to the existence of the two systems it was essential that those normally responsible for the operational condition of the system (EMD) and those responsible for the use of the system (Fire Brigade) should have been kept fully informed of the work in progress. It also appears, albeit in hind-sight, that specific day-to-day supervision of the work was required from the time the two sets of hydrants appeared.

2.5.7.11 **It is recommended that any similar contracts should include clear direction on the need for full communication between all interested parties and contracts should also underline the need for particular supervision at critical stages.**

3

Fire

3.1 Introduction

3.1.1 At approximately 8.50 am on Monday 2 January 1995 smoke was observed from some distance away, rising above Parliament Buildings, Stormont. Those who appear to have first noticed the smoke were unsure whether it was coming from the building itself or the fields behind. As it was a public holiday the building was unoccupied apart from watch-keeping staff. The fire, though severe (see Appendix D), was confined to the Commons Chamber on the ground floor, the galleries and three small adjoining ante-rooms off the press gallery on the first floor. The Fire Brigade attended and by 11.30 am had brought the fire under control.

3.2 Investigation

3.2.1 The fire was investigated by the Royal Ulster Constabulary (Belfast Regional CID), the Northern Ireland Forensic Science Laboratory and an independent specialist electrical consultant appointed by the RUC. It is normal practice for the RUC to perform this function in Northern Ireland whereas in GB a fire investigation would be carried out by the local Fire Brigade unless a crime was suspected. The RUC took control of the fire scene from the actual time of the incident.

3.3 The Start of the Fire

3.3.1 Between midnight and 1.00 am on 2 January watch-keepers on patrol in the building noticed an unusual smell which they could not identify or associate with a specific area in the building. It was sufficiently strong however to prompt a further search of the building including the basement

area but no cause for the smell could be found. They concluded the smell was from new lagging recently placed on heating pipes as part of the works contract at present under way in the building. Nothing else of an unusual nature was observed.

3.3.2 Due to a misunderstanding about the extent of permitted access to the west end of the building at first floor level, which had restricted access due to its use for talks with political parties, I am informed that the watchkeepers did not include this section in their patrol. Unfortunately in view of the probable slow build up of heat, smoke and fumes the west end of the first floor would have been the area (closest to the top section of the Chamber) where early indication of the fire would have been strongest. **If for any reason part of the building or corridors cannot be patrolled consideration must be given to an alternative means of detecting any problems which may arise.**

3.3.3 The final inspection of their shift commenced around 7.00 am. I am told that this included a circuit of the ground floor passing the doors to the Commons Chamber at approximately 8.20 am. Although the smell mentioned at paragraph 3.3.1 was still present through the building nothing untoward was noticed by the patrol.

3.3.4 At about 08.50 am two Stormont Estate Rangers who were opening the pedestrian gates at the Prince of Wales (Upper Newtownards Road) entrance to the Estate (approximately 1 mile from the building) noticed smoke above the west wing of the building. They proceeded by car to the building.

3.3.5 At about the same time two RUC dog handlers entering the Estate by the Massey Avenue gate (approximately half a mile from the building) observed the smoke. They drove to the building and attempted to enter by the revolving doors at the west end. These were locked and they proceeded to the East Annex entrance. By this time they had radioed police control for Fire Brigade assistance.

3.3.6 Smoke was also observed above the building by one of the watch-keeping staff who was coming off duty at that time and by an RUC mobile patrol. All converged on the East Annex entrance. A call for Fire Brigade assistance was made. Police made their way through the building together with a member of the watch-keeping staff. They were joined by the two Estate Rangers. Smoke in the corridors at the west end of the building was thick and the fire could be seen burning fiercely in the Commons Chamber. The police and Rangers attempted to fight the fire with fire extinguishers. At this time they also attempted to activate a fire hose in the corridor near the

entrance to the Chamber but were unable to obtain a flow of water from the hose. Smoke and heat from the fire was intense and forced them to retreat back along the corridor to the central hall. They exited the building by breaking the glass emergency bolt on the main front doors. This provided additional access for the Fire Brigade who by this time had arrived.

3.4 Fire Brigade Operations

3.4.1 Brigade control received the first call at 9.05 from a member of the public in the Abbey Park area which overlooks the Stormont Estate. Several more calls followed. As already explained others in the Estate had observed the smoke earlier from some distance away and had proceeded to the building to check before alerting the Fire Brigade. Watchkeepers in the building were unaware of the fire until informed by those arriving.

3.4.2 At 9.06 appliances from Knock and Central Stations were mobilised in accordance with pre-determined arrangements. The first appliances from Knock Station approached the Estate via the Upper Newtownards Road main gates. Being a public holiday the vehicular gates were chained and padlocked. The fire crews observed a considerable amount of smoke above the west wing of the building and it was decided to cut the chain to gain access to the Prince of Wales Avenue. The extent of delay due to the chained gate was less than one minute.

3.4.3 Upon arrival at the west door of the building at 9.12 Brigade officers could see through the entrance lobby that the Commons Chamber was well alight and that the door to the Chamber had already been burnt through. The Brigade forced the external revolving door of the west wing to gain entry. A water jet was then brought in. A second door giving access across a main corridor to the Chamber was also forced. An informative message "Building well alight" was sent from the scene to Brigade control at 9.12. From my subsequent inspection of the fire damage it is my opinion that at this stage the fire was about to erupt and break out along the first floor corridors and offices. There is little doubt that intervention by the Brigade at this time played a great part in preventing a much more serious fire given that there would have been a major problem had more water been required.

3.4.4 Attempts by the Brigade to obtain a water supply from the fire hydrants around the building were unsuccessful and arrangements were initiated to relay an alternative supply from Massey Avenue. While this was being done water was ferried to the fire ground pumps. A second water jet was brought in through the front door which had already been opened from the inside by the police.

3.4.5 Further unsuccessful attempts were made to obtain water from the hydrants around the building. An appliance was sent to the main reservoir which is located in the trees about 300 metres behind the building, to establish if water could be restored. Firemen opened valves at the reservoir and underground tanks which were found to be closed when they arrived. While returning from the reservoir a fireman noticed water coming from a hydrant approximately 200 metres away from the east side of the building and this was utilised to supply the fire ground pumps. Water was still not available from the hydrants tried by the Brigade close to the building. Water would now have been available from the hydrants on the existing system in the pits as the valves had been opened.

3.4.6 By this time, approximately 9.40, the fire had a firm hold on the Chamber. Three jets and 2 hosereel jets were in use. Further appliances were ordered to the building with a 'Make Pumps 10 - Major Incident' message to Brigade Command at 9.48.

3.4.7 In liaison with senior civil servants who were present the Brigade initiated work to recover and/or protect public records and documents in the Parliamentary Library and the basement.

3.4.8 Due to the volume of smoke a considerable number of Breathing Apparatus sets were in use.

3.4.9 At 9.50 the Chief Fire Officer was informed of developments and proceeded to the incident. Upon arrival he inspected the scene, assumed control of fire fighting operations and briefed senior civil servants.

3.4.10 In view of the water situation it was considered prudent to lay on a further water relay supply from the Upper Newtownards Road and a 'Make Pumps 14' message was sent at 10.23. Additional BA sets had also been requested.

3.4.11 At 10.53 the Chief Fire Officer sent the 'Fire Surrounded' message. Five fire fighting jets and 16 Breathing Apparatus sets were in use.

3.4.12 Following a further inspection of the scene the Chief Fire Officer sent the 'Stop' message at 11.29 am.

3.4.13 Fire damage was considerable but within the confines of the Commons Chamber, the galleries and small rooms off the press gallery. Heavy timber and glass doors had held the fire in check but were failing when the Brigade arrived. Despite the problems with water supply the strategic and timely positioning of water jets prevented the fire from spreading beyond the immediate area of the Chamber.

3.4.14 Conditions for firefighters inside the building were very difficult due to heavy smoke logging and heat so intense that structural steelwork had expanded significantly lengthwise through brick walls. Despite this the fire crews had penetrated the building quickly, located the fire and dealt with it in an effective manner.

3.4.15 Firefighting crews remained at the scene of the incident overnight and the last appliance returned to station at 9.53 am on 3 January.

3.5 Cause of Fire

3.5.1 It was apparent from my initial inspection of the scene of the fire on Friday 6 January that the most intense burning had taken place at the west end of the Commons Chamber in the immediate vicinity of the Speaker's Chair and in the south-west corner of the Chamber behind the Speaker's Chair.

3.5.2 As already indicated the fire had been confined to a large extent to the Chamber itself, the galleries and three small ante-rooms off the press gallery at first floor level. Some heat and smoke damage had occurred in the surrounding corridors but this was generally of a minor nature.

3.5.3 Deep charring of the timber at the base of the Speaker's Chair had taken place and similarly in the floor joists under the Chair (see Appendices I.1 and I.2). A section of one of the joists had been totally burnt away down to the level of the concrete floor. Charcoal was present in this area.

3.5.4 I did not observe such low level intense burning at any other location in the Chamber.

3.5.5 The deep charring and presence of charcoal indicates a slow burning fire.

3.5.6 A number of electric wires accessed the Chamber from the basement via metal conduit directly beneath the Chair (see Appendix I.1). These were for lighting, heating controls and a push-button bell system. One of the joints in a length of metal conduit was not secure and a gap existed which would have left the wires within exposed (see Appendix I.2). The two lengths of the metal conduit were at slightly different levels which, because the joint had not been made secure, would have left the edge of the conduit pressing on the insulating casing of the wire. Any movement of the wires could have caused damage to the sheathing at the joint. There was evidence that electrical arcing (a short circuit) had taken place at this joint.

3.5.7 No evidence of any incendiary device or any flammable liquids such as petrol or paraffin had been found.

3.5.8 Taking into account the watchkeeper's report of having noticed an unusual smell some eight hours before the fire was detected, the deep charring of the timber at the base of the Speaker's Chair indicating a long slowly smouldering heat source, the evidence indicating an electrical short- circuit at this location and the indications that there had been a long slow build-up of heat in the Chamber it is my opinion that the most likely cause of fire was an electrical fault in the wiring below the Chair.

3.5.9 From my inspection of the scene and the evidence made available to me, I consider it improbable that the fire was started deliberately by the ignition of paper or other material beneath the Speaker's Chair. As I have said it does not appear that this was a sudden fire but rather a long slow build-up of heat such as would be compatible with an electrical fault.

3.5.10 I have noted that my conclusion on the cause of the fire is in accord with the findings of the Northern Ireland Forensic Laboratories assisted by an independent electrical consultant following their very detailed investigation.

3.6 **Spread of Fire**

3.6.1 The apparent spread of fire is consistent with the fire starting at the Speaker's Chair.

3.6.2 With the Speaker's Chair burning first the fire would have moved to the lectern and the three chairs in front of the lectern (see Appendix C). The Speaker's Chair and the lectern despite being constructed of heavy solid wood were almost completely destroyed. The three chairs were totally destroyed. The fire would have spread to the dispatch table. This table, again of very solid construction, was deeply charred on top and underneath.

3.6.3 Most severe burning (above floor level) in the Chamber occurred at the south-west wall behind the Speaker's Chair. The high back to the Chair was found having fallen towards this south-west wall. The fire would then have spread along the seating. The wooden panelling on this wall was totally destroyed and the brickwork behind was seriously spalled (see Appendix J).

3.6.4 At this stage there would have been an intense build up of heat, smoke and fumes in the Chamber particularly at high level and over the south-west

corner. The strongest external evidence of the fire breaking out of the building (see Appendix K) suggests that a window in the ante-room off the south-west corner of the press gallery was the first to give way and vent the fire.

This would have had two immediate effects (a) to create a blow-torch effect from the Chamber out through this window and again visual evidence supports this possibility, and (b) to allow a considerable amount of heat to escape into the exterior well thus reducing the potential for the fire to spread from the Chamber internally to the remainder of the building.

3.6.5 Without doubt the solid construction of the building, the heavy well fitted doors (see Appendices L.1-L.4) and the fact that the fire was able to vent externally into the light wells all contributed significantly to the fire remaining confined for as long as it did.

3.6.6 Much credit is due to the Fire Brigade. I have no doubt that but for their timely and professional intervention the fire would have been considerably more serious than it was.

4

Crown Buildings in Northern Ireland

4.1 Crown Buildings - General

4.1.1 Crown Buildings fall into 3 broad categories:-

a. those which are the personal property of the Queen;

b. those which are the property of the Crown Estate Commissioners; and

c. those which belong to the Crown "in right of Government".

4.1.2 This latter category constitutes the main (if not the only) body of Crown Buildings in Northern Ireland. Thus Crown Buildings would comprise the office estate of DOE (NI) Works Service, the specialised buildings managed by the NI Departments ie Department of the Environment (Northern Ireland), Department of Education for Northern Ireland, Department of Health and Social Services, Department of Agriculture for Northern Ireland, Department of Economic Development, Department of Finance and Personnel and properties owned by GB Departments ie Northern Ireland Office (including Prisons), Inland Revenue, Courts Service, Customs and Excise and some smaller Departments.

4.1.3 I have been given to understand that unless specifically provided for in the establishing enactment, the property of Non-Departmental Public Bodies are not Crown Buildings eg Police Authority buildings are not Crown Buildings.

4.2 The Government Office Estate

4.2.1 The Government Office Estate comprises some 185 buildings located throughout Northern Ireland (see Appendix M). In size the buildings range from the largest, such as Dundonald House (accommodating over 1,000 staff), Parliament Buildings and Clarence Court to small offices in provincial towns and villages which may only be occupied by one or two staff for a limited period each week. I visited a random selection, both large and small, of these buildings - see Section 9. The buildings are a mixture of owned and leased properties. Most of the Department Headquarters are located in owned buildings as are the major offices in provincial towns. Leased property is used where the space required is too small to justify an owned building and to meet fluctuating short-term requirements.

4.2.2 Day-to-day management of the office estate is carried out by Office Accommodation Branch (OAB) within Works Service in the Department of the Environment (Northern Ireland). OAB is responsible for meeting accommodation costs such as rent, rates, service charges and for jointly occupied buildings the fuel cost. Maintenance of the estate is carried out for OAB by Estate Maintenance Division (EMD), also part of Works Service, using, in the main, private sector contractors.

4.2.3 When the need for new accommodation has been established, OAB uses the services of the Valuation and Lands Agency (VLA) to negotiate for the leasing of appropriate accommodation. As a fundamental part of the process, a condition report is prepared which includes recommendations from the Fire Section of Works Service as to what fire precaution measures are necessary. Fire Section would have checked with the Fire Authority to ascertain whether a fire certificate had been given for the building or whether a list of work necessary for certification (Notice of Steps) had been issued. If such measures would be the responsibility of the landlord under the terms of a lease, no agreement to lease would be entered into until the necessary work had been undertaken. If new accommodation is to be constructed, New Works Division within Works Service will act on behalf of OAB and liaise with Fire Section as appropriate to ensure all fire precautions are included in the design of the new building.

4.2.4 OAB policy in relation to maintenance expenditure on the estate is to accord top priority to rectifying Health and Safety and Fire Precautions deficiencies. However difficulties can arise from time to time, where the remedying of any defect falls to the landlord - some are quicker to respond than others. It is imperative that recommendations by Fire Section

surveyors should be classified to indicate those which are essential to obtain or maintain a fire certificate and those which are advisory.

4.3 Specialised Buildings

4.3.1 Apart from the 185 buildings which comprise the Government Office Estate there are another 876 buildings (see Appendix N) which can be described as functional or specialised buildings. This category is wide ranging and covers buildings such as Residential Agricultural Colleges, Roads Depots, Historic Monuments, Water Treatment Works, Sewage Disposal Works, Pumping Stations, Veterinary Research Laboratories, Vehicle Inspection Depots and many more. All of these are also Crown buildings but unlike the general office buildings for which OAB is responsible these premises are maintained and run both in management and financial terms by the occupying service, eg Roads Service, Water Service, Veterinary Research, etc.

4.3.2 Although the Departments using specialised buildings are free to make their own arrangements for new works, alterations, maintenance, etc, the assistance of Works Service is available upon request for any of the facilities provided in relation to the main office estate.

4.3.3 To a large extent Departments do tend to take advantage of the range of advisory services provided by Works Service and this is particularly true in relation to advice from Fire Section on fire precautions and the maintenance of fire fighting appliances. **However I understand that Fire Section may not be invited to visit every building which should be inspected for compliance and it would appear that some tightening of procedures is required in this context.**

4.4 GB Departments

4.4.1 Several Great Britain Civil Service Departments have offices in Northern Ireland which function either as regional offices where the Department concerned provides a UK-wide service or as "back-offices" which process work which originates in a mainland region.

4.4.2 I understand that GB Departments occupy approximately 30 properties, the Inland Revenue and Customs and Excise occupying the bulk of the accommodation. The other Departments represented are Ministry of Defence, the Benefits Agency, the Immigration Service, Passport Agency and the Radio Investigation Service.

4.4.3 The Northern Ireland Office, while technically a GB Department, is largely accommodated in buildings which it shares with NI Departments. It does, however, occupy some buildings in its own right eg Lagan House and Hillsborough Castle.

4.4.4 Until 1994, the office estate of GB Departments in NI formed part of the Common User Estate (CUE) managed by the Property Services Agency through its Building Management arm. Following the sale of Building Management in Great Britain and the absorption of Building Management (NI) by the Ministry of Defence the various GB Departments have assumed responsibility for the maintenance of their own estates. Some have market tested the maintenance function which has been taken on by the private sector while others are in the process of doing so.

4.4.5 Following the acceptance by Government in London of the conclusions of an Efficiency Scrutiny of the Management of Government Land and Buildings, the CUE will disappear entirely from 1 April 1996 and will be apportioned to become part of the Departmental Estate of each Department. A central advice unit and clearing house will remain within DOE (GB). As far as NI is concerned it has been agreed that this clearing house will not operate. However a separate (more informal) clearing house arrangement will be established with the lead being taken by Office Accommodation Branch of Works Service who will convene meetings as and when required.

4.4.6 At present the GB Departments in Northern Ireland appear to be employing private consultants for Fire Precautions advice. Where appropriate GB buildings remain subject to certification under the Fire Services Order by the Health and Safety Division of the Department of Economic Development.

4.5 Premises Officer Role

4.5.1 The Premises Officer is defined as that person, nominated by their Department to DOE Works Service as the officer in charge of the building, having responsibility for a range of duties assigned to him/her. Where appropriate a Deputy Premises Officer is also identified.

4.5.2 Whereas buildings in the Office Estate have a Premises Officer who normally works on a full-time basis in that particular building, some "specialised" buildings are unmanned, eg pumphouses, and may be grouped together on a regional basis under the responsibility of an area manager.

4.5.3 The Premises Officers, in addition to any other duties which are assigned to them, are responsible for the following tasks in their respective buildings:-

a. organising minor maintenance;

b. energy management;

c. security and emergency arrangements;

d. accommodation;

e. first aid; and

f. health and safety matters.

4.5.4 In late 1992 the DOE Senior Safety Advisory Officers (SSAO) Committee was made aware that the majority of DOE Premises Officers were not fully conversant with the full range of duties for which they were responsible (eg aspects of health and safety matters). It was agreed that Premises Officers would be trained in the generality of existing and new legislation and by December 1993 a specification had been drawn up.

4.5.5 While the specification was initially and primarily for buildings in the Office Estate it was also broadly acceptable for specialised buildings.

4.5.6 A section of the course, given by a member of staff from Fire Section deals specifically with the Fire Services Order and aims to make the Premises Officers comprehensively aware of their responsibility in regard to all aspects of fire safety. The course "hand out" material includes relevant information extracted from the Fire Precautions Guide which is also issued to all managers with responsibilities for one or more buildings. **It is recommended that this 'hand-out' be issued to every Premises Officer as soon as possible regardless of whether they have yet attended the course.**

4.5.7 The series of training courses (entitled Health and Safety Training for Officers in Charge of Buildings) commenced in February 1994 with 13 courses held to date attended by some 134 staff from approximately 60 buildings (of which around 30 are within the Office Estate). With a further 2 courses planned for April 1995 it is anticipated that all designated Premises and Deputy Premises Officers for DOE buildings will have attended.

4.5.8 DOE Training and Development Branch have recently extended the course, on the basis of request, to staff of other Departments. **It is essential that Premises Officers responsible for <u>any</u> Crown Building should attend this course.**

4.5.9 **It is recommended that it should be the duty of Premises Officers to ensure that all staff in the buildings for which they are personally responsible are aware of the means of raising the alarm, evacuation and use of extinguishers, etc.**

5

Fire Safety Legislation in Northern Ireland

5.1 Introduction

Fire safety legislation in Northern Ireland tends to mirror its GB counterpart. It is aimed primarily at ensuring that practicable precautions are taken for the purpose of life safety. Building regulations apply to new buildings. Inter alia, The Fire Services (Northern Ireland) Order 1984 applies to existing occupied buildings.

Northern Ireland fire legislation is based on making adequate provisions to reasonably assure that persons can escape from fire should it occur.

5.2 The Fire Services (Northern Ireland) Order 1984

5.2.1 The Order, as amended, is the principal legislation dealing with fire safety in occupied premises and aims at ensuring adequate means of escape are provided and precautions are taken to ensure that the means of escape are maintained.

5.2.2 The Order enables the Department of the Environment for Northern Ireland to declare that, for the purposes of Article 22 of the Order, certain types of use to which premises may be put shall be "designated uses". Premises put to a "designated use" require a fire certificate, unless expressly exempted by a provision made in the "designating order".

5.2.3 It is the duty of the Fire Authority for Northern Ireland to issue fire certificates for premises which are owned and occupied by the private

sector. In the case of premises which are owned and/or occupied by the Crown, certification is, by virtue of Article 49(3), a function of the Department of Economic Development. This function is discharged by officers of that Department's Health and Safety Division. The power in Article 49(4), whereby, members of the Fire Brigade may be authorised to inspect and report in connection with this function, has not been exercised.

5.2.4 In accordance with Article 26 prior to issuing a fire certificate the relevant authority must be satisfied that the premises':

a. means of escape in case of fire;

b. means for securing that the means of escape can be safely and effectively used at all material times;

c. means for fighting fire; and

d. means for giving warning in the event of fire;

are such as may reasonably be required.

Although Article 26 does not apply in the case of premises occupied by the Crown, DED will satisfy itself that these criteria are met before issuing a fire certificate.

Pending certification, Article 26(2A) of the Order imposes the following duties on the occupier:

a. the means of escape in case of fire with which the premises are provided can be safely and effectively used at all material times;

b. the means for fighting fire with which the premises are provided are maintained in efficient working order; and

c. any persons employed to work in the premises receive instruction or training in what to do in case of fire.

5.2.5 When the premises has been issued with a certificate the certificate may impose requirements:

a. for securing that the means of escape in case of fire with which the premises are provided are properly maintained and kept free from obstruction;

b. for securing that the means with which the relevant building is provided for maintaining means of escape, for fighting fire and for giving warning in case of fire are properly maintained;

c. for securing that persons employed to work in the premises receive appropriate instruction or training in what to do in case of fire, and that records are kept of instruction or training given for that purpose;

d. for limiting the number of persons who may be in the premises at any one time; and

e. as to other precautions to be observed in the relevant building in relation to the risk, in case of fire, to persons in the premises.

5.2.6 The Fire Authority has wide ranging powers of entry and inspection of non-Crown premises whereas officers authorised by the Department of Economic Development have no such powers under the Order in premises occupied by the Crown. It should however be stressed that DED has never encountered any difficulty or opposition in such cases. It should also be noted that DED officers have powers of entry under the Health and Safety at Work (Northern Ireland) Order 1978.

5.2.7 The Department of the Environment has, to date, made four designating orders requiring fire certificates for all but the smallest hotels and boarding houses; betting gaming and amusement premises; leisure premises; and for any factory, office and shop which employs more than 20 persons in total or an aggregate of more than 10 persons, elsewhere than on the ground floor.

5.2.8 While the Fire Authority has the power to exempt certain low risk factory, office and shop premises from the requirement to have a fire certificate, these and other premises not employing a sufficient number of staff to require a certificate have a statutory duty to provide adequate means of escape and means for fighting fire.

5.3 Other Fire Safety Legislation Applying to Occupied Premises

5.3.1 In addition to the Fire Services (NI) Order 1984, there exists other primary and subordinate legislation covering fire safety, including:-

Cinemas (NI) Order 1991

Local Government (Miscellaneous Provisions) (NI) Order 1985

Fire Certificates (Special Premises) Regulations (NI) 1991

5.4 Application of Fire Safety Legislation to Crown Premises

5.4.1 Article 49 of the Order indicates those Articles which are applicable to Crown owned and/or Crown occupied premises.

5.4.2 While the Crown is exempt from the requirements of legislation unless expressly included, Government Departments with a property management responsibility do have a duty to comply with fire safety provisions.

5.4.3 Crown premises which satisfy the criteria specified in the designating orders require a fire certificate, ie Crown premises are not exempt from the requirement to have a fire certificate. However the requirement to apply for a fire certificate applies only to those premises which are owned by the Crown but not occupied by it. Although there is no legal requirement for Crown-occupied premises to apply for a fire certificate there is a legal requirement for those premises to have one. As there is a duty on Government Departments to comply with fire safety provisions Accommodation Branches normally apply for a fire certificate for premises for which they have responsibility.

5.4.4 Both Crown owned and Crown occupied premises put to a designated use but which do not require a certificate by virtue of exemption, are still subject to Article 31 (as amended), to provide reasonable means of escape and means for fighting fire.

5.4.5 As with certificates issued by the Fire Authority (Fire Brigade) the fire certificate issued to Crown premises may impose requirements as outlined in Section 5.2.5.

5.5 Fire Precautions (Places of Work) Regulations (Northern Ireland)

5.5.1 The Department of the Environment (London) is currently considering draft regulations to implement the general fire safety provisions of European Council Directives 89/391/EC (known as the framework directive) and 89/654/EC (known as the workplace directive). Both directives cover the health and safety of workers, and include requirements to encourage and improve fire safety.

5.5.2 Parallel regulations are being drawn up for Northern Ireland by the Department of the Environment (NI) which are expected to come into operation in 1995. These will apply to any premises used as a place of work by one or more employees.

5.5.3 One important aspect of the regulations is to extend control of fire safety measures to non-designated parts of designated workplaces. The aim will be for self-compliance and therefore guidance will be focused on assisting employers in carrying out a fire risk assessment, evaluating the extent of fire safety provision and drawing up an emergency fire plan.

5.6 Fire Precautions Guidance

5.6.1 Fire safety legislation in the UK focuses on function rather than prescription. Although functional requirements provide greater flexibility, they also require supporting guidance to ensure consistency in application and enforcement.

5.6.2 DOE (NI) issues guidance on fire precautions in occupied premises, copies of which are obtainable from Her Majesty's Stationery Office. Most of the guidance has no statutory status. However the "Code of Practice for fire precautions in factories, offices, shops not required to have a fire certificate" under Article 31A(1) of the Fire Services (1984 Order) Amendment (NI) Order 1993 may legally be used to demonstrate compliance with the statutory duty.

5.6.3 DOE (NI) has issued a Technical Booklet E which gives practical guidance on meeting the fire safety requirements of the Building Regulations (NI) Order 1994. The Booklet can be used as evidence supporting compliance with the regulations.

5.6.4 The Department of the Environment (London) has also issued circulars which are used to support fire safety requirements laid down by Northern Ireland statute eg Circular 12/92 fitness standards for means of escape/fire precautions for flats and hostels.

5.6.5 **Clearly close liaison between the GB and NI Departments responsible for producing codes of practice, technical guidance in support of legislation, etc is essential.**

6

Role of Fire Section, Health and Safety Division (DED)

6.1 General

6.1.1 The principal function of the Fire Section of Health and Safety Division (Department of Economic Development) involves the inspection and associated activities leading to certification of premises under the applicable fire safety legislation.

6.1.2 This function in relation to Crown premises arises from the provision in Article 49(3) of the Fire Services (Northern Ireland) Order 1984 that, for the purposes of Part III of that Order, the Department of Economic Development shall be substituted for the Fire Authority for Northern Ireland. Under that Order DED has functions in relation to offices and factories owned or occupied by the Crown. This includes not only Northern Ireland Civil Service Departments, but also Imperial Civil Service Departments such as Inland Revenue, Customs and Excise etc, as well as other premises which are occupied by the Crown.

6.1.3 Fire Section (H&S) have also a statutory responsibility for the certification of premises under the Fire Certificates (Special Premises) Regulations (Northern Ireland) 1991. These Regulations were made under the Health and Safety at Work (Northern Ireland) Order 1978 and cover installations such as the ESSO/Shell/BP Oil/Petroleum terminals, the Calor Gas main storage and distribution depot for LPG and various major construction sites.

6.1.4 Officers in the Fire Section are also required to provide, on request, advice to other health and safety inspectors on fire hazards and appropriate fire safety precautions.

6.1.5 The largest area of the Sections workload is that concerned with the fire certification of Crown offices, and the Division's annual plan of work sets targets as to progress towards certification of specific premises. Selection of premises for inclusion in the work plan takes account of the following key points.

a. Number of persons employed and number of persons liable to be in the building.

b. Number of floors in the building.

c. Age and construction of the building.

d. Any undesirable features which may be gleaned from plans, eg dead-end corridors, etc.

e. Presence of specific fire hazards such as the storage of flammable liquids.

6.1.6 Account is also taken of factors in the history of particular buildings such as the absence of any form of fire certification or the execution of structural works which could have invalidated an existing certificate. If Fire Section is informed of premises which are ready for certification or where only minor works are required to enable a certificate to be issued, these may be included in the planned work.

6.2 Inspection Procedure Followed by DED Fire Officers

6.2.1 New Build Premises

6.2.1.1 It has been found to be advantageous for DOE fire surveyors to consult DED with respect to means of escape, etc, at planning stage. The lead role in advice for new build premises rests with DOE fire surveyors. It is customary for DOE to consult with DED at plan stage and keep DED informed of any proposed changes relating to means of escape, means for maintaining means of escape, etc.

6.2.1.2 It is not usual for DED to be involved in interim inspections during construction. These fall to DOE.

6.2.1.3 Upon completion a joint (DOE & DED) inspection will normally be carried out. The DED fire inspector may comment on structural or other matters

relating to means of escape, etc. The DOE fire surveyor may make comments relating to structural protection of the building. DED fire inspector's comments will be included in a report issued by DOE, copied to DED.

6.2.1.4 It is expected that DOE will obtain and forward all necessary certificates to DED viz:-

a. Standard fire-resisting doorset certificates.

b. Fire alarm, design, installation and commissioning certificates.

c. Emergency escape lighting, design, installation and commissioning certificates.

d. Any other information which may be required eg mechanical services drawings, indicating positions of fire/smoke dampers in air handling ducts, etc.

6.2.1.5 If the DED fire inspector is satisfied that all is in order, a fire certificate will then be issued.

6.2.1.6 If remedial work is required, DED will re-inspect on completion prior to the issue of the fire certificate.

6.2.1.7 DED may carry out follow-up inspections.

6.2.2 Existing Premises

6.2.2.1 DED will request clear up-to-date plans of the premises which are to be inspected.

6.2.2.2 When inspecting the premises, the DED fire inspector may, at his discretion, invite the occupying department's fire advisor (DOE fire surveyor, PSA building management fire officer, private consultant) to accompany him.

6.2.2.3 Following the inspection DED will either:-

a. issue the fire certificate if the inspector is satisfied with the means of escape, means for maintaining means of escape, means for giving warning and means for fighting fire; or

b. issue a notice, indicating clearly the steps which would need to be taken to satisfy the inspecting officer as to the adequacy of the matters referred to in (a).

6.2.2.4 All notices issued by DED are accompanied by a standard letter indicating a consultation period and a suggested date for completion of the required works. I would hope that through the mechanism referred to at Recommendation 1.4.6 appropriate authority will be given to ensure that work to be carried out to Crown buildings is not delayed.

6.2.2.5 The occupying department is expected to inform DED when the works have started, and, during execution, to inform DED of any changes proposed, other than those which are required by the notice. DED may be requested to visit while work is in progress and may provide interpretation of requirements or answer any queries which arise.

6.2.2.6 Upon completion of the works required by the notice, the occupying department should inform DED, which will carry out a follow-up inspection.

6.2.2.7 If all works indicated by the notice have been satisfactorily completed, no other alterations affecting the relevant matters have been carried out and all certificates relating to fire alarm, emergency lighting, fire- resisting doorsets etc have been received DED will issue the fire certificate.

6.2.2.8 If any outstanding items are noted during the follow-up inspection, DED will so inform the occupying department (normally through the relevant accommodation branch) and the fire certificate will not be issued until these matters are rectified to the satisfaction of the fire inspector.

7

Role of Fire Section, Works Service (DOE)

The Main functions of Fire Section are as follows:

7.1 Advice to Works Service's New Works and Estate Maintenance Divisions.

7.1.1 Ensuring Project Teams incorporate fire safety measures in buildings being designed including -

a. means of escape

b. property and content protection measures

c. Building Regulations requirements

d. PSA/DOE (E & W) Fire Precautions recommendations

e. access and facilities for the Fire Brigade - to fight fire

7.1.2 Assessing proposed and actual constructions in relation to their likely fire resistance and surface spread of flame and advising on suitable methods for upgrading.

7.1.3 Inspecting construction on site to ensure it is acceptable from the fire safety point of view.

7.2 Advising Office Accommodation Branch (and other Client Bodies) on the suitability and upgrading of new acquisitions, leases, etc. This is usually as part of a property suitability report.

7.3 Specifying the measures needed in existing buildings to bring them up to a suitable standard of fire safety. Where the building is put to a designated use the aspects covered by fire certification are given as requirements and those related to property protection, PSA Fire Precautions etc, as recommendations.

7.4 Specifying, providing and maintaining the hand held fire fighting equipment. The maintenance is carried out on a 12-month cycle.

7.5 Periodically inspecting all buildings that Client Bodies have requested a service on. Fire risk assessments determine whether the inspection cycle is 12, 24 or 60 months. Each inspection is followed by a report to the "Buildings Branch" of the Client Body.

7.6 Training of building occupants in procedures to be followed in the event of fire. Training of those with specific duties in the event of fire eg Premises Officer, Floor Wardens, etc.

7.7 Advising management on fire prevention and establishing the procedures to be followed in the event of fire.

7.8 Liaising with Certifying Authorities regarding the issue of Fire Certificates. Liaising with both Certifying Authorities where the building is jointly occupied with the private sector.

7.9 Retaining records on fire safety measures in each building, equipment supplied, tests undertaken, etc.

7.10 Observing evacuation exercises, audibility of alarm, escape lighting, automatic fire detection and similar tests.

7.11 Investigating fire occurrences, reporting thereon and recommending action to prevent reoccurrences.

7.12 Advising Works Service staff on all aspects of fire including commenting to British Standards Institution, British Board of Agrément, Building Research Establishment/Fire Research Station and various Departments on proposals which they have circulated for comment.

7.13 Assisting in preparing the technical aspects of the Building Regulations ie Technical Booklet wording.

7.14 Advising/assisting Mechanical and Electrical Engineers with their installations eg dampers in ducts, fire stopping, etc, and with the fire safety installations, eg, alarm systems, smoke ventilation, fire suppression etc, systems.

7.15 Researching materials, forms of construction, etc, in relation to fire aspects.

7.16 Advising D.O.E. Supplies Branch and some Client Bodies (eg PANI and Prisons) on fire safety of furnishing and fittings. Occasionally attending tests on such furnishings.

7.17 Advising Client Bodies on legislative requirements which they may have to comply with eg Entertainment, Petroleum, Liquor, etc, licensing.

8

Role of Risk Assessment Unit, Estate Maintenance Division (DOE)

8.1 To comply with Regulation 3 of the Management of Health and Safety at Work Regulations (NI) 1992, (which requires an employer to carry out an assessment to identify any measures necessary to enable him to comply with relevant statutory provisions), and Article 4(3) of the Health and Safety at Work Order (NI) 1978 (whereby an employer is required to prepare and revise, as necessary, a written statement of his general policy for the health and safety of his workforce) Works Service Office Accommodation Branch is required to carry out a Risk Assessment of all the office buildings owned or leased within the Northern Ireland Civil Service General Office Estate.

8.2 To that end a Risk Assessment Unit was set up in October 1993 to prepare Risk Assessment Registers for Building Owners/Employers. By a programme of inspections the Risk Assessment unit is examining all buildings within the Government Estate concentrating initially on those premises with the greatest number of staff. Following inspections the risk assessment is recorded in the form of a Risk Assessment Register held by Office Accommodation Branch. A copy is also provided for the Premises Officer and will form part of the Safety Audit of the workplace carried out by Works Service Health and Safety Advisory Unit who are required as part of the Audit to determine if such a report exists.

8.3 In relation to fire particular attention is given to means of escape, restricted access, defective fire doors, fire resistance of glazing, etc, and the Risk Assessment Register records individual registers for Fire Fighting Equipment, Fire Alarm Tests, Smoke Detectors, Fire Precautions (including bomb evacuation), Test Evacuations and Public Address Systems.

8.4 Line Management within Works Service is responsible, by virtue of existing legislation and its own in-house policy, for all aspects of health and safety.

8.5 The Risk Assessment Unit are currently looking at the four main areas of risk associated with fire, bomb, building fabric and electrical services and will, among other measures, recommend to Works Service senior management any action considered necessary to ensure compliance with statutory regulations, as well as procedures to be followed in the event of serious or imminent danger, including fire, to staff arising from occupation of a workplace.

9

Government Buildings Visited

9.1 As I have already mentioned Crown buildings in Northern Ireland number approximately 1,100 and range from large office blocks accommodating hundreds of staff to small offices in provincial towns accommodating one or two staff for perhaps one or two days per week. In addition there are the specialised buildings such as Roads and Water Depots, Veterinary Laboratories and functional buildings such as stores and pumphouses which may only be visited once per month.

9.2 I selected and visited a number of large and small office buildings occupied by different Departments, Agricultural Colleges including residential blocks, Roads Service depots, Water Section Offices, etc.

9.3 My impression is that the overall standard of staff safety provided by fire alarms, escape routes, protection of escape routes, fire extinguishers, hose reels, etc is generally satisfactory. I was impressed by the standards maintained both in large and small buildings. It is also apparent that fire fighting equipment in buildings for which DOE Fire Section are responsible is checked and tested on a regular basis.

9.4 It did appear however that not all Premises Officers are aware of the full range of their duties and responsibilities in relation to fire precautions issues. It was the exception rather than the rule for example for proper tabular records to be kept as recommended and illustrated in the Fire Precautions Guide. Fire drills, including evacuations of buildings, do not in all cases appear to be as regular as recommended in the Guide and proper records would highlight the need for more regular drills, checks, etc.

9.5 There is also a disturbing lack of knowledge concerning the importance of Fire Certificates. The Fire Certificate is an important document which not

only indicates that the building complied at time of issue but lists also many Fire Precautions requirements relating specifically to the building which are the Premises Officer's responsibility.

9.6 A recurring problem appears to be the postponement of application for a Fire Certificate because of pending refurbishment work in buildings. Parliament Buildings itself has been a classic example of this syndrome since the mid-80s although all the work is now under way. If there is going to be any significant delay, work necessary to obtain a Fire Certificate should be proceeded with and completed and the Certificate applied for. The building can in due course be re-inspected after any alterations have been carried out and Certificates amended as necessary.

9.7 **It is recommended again that all Premises Officers attend the appropriate course as soon as possible to be more fully aware of their responsibilities.**

9.8 **It is recommended that the content and records set out in the Fire Precautions Guide be applied and used.**

9.9 **It is recommended that the Fire Precautions Guide should be given authority at senior level through an Administrative Order or Policy Statement to ensure it is applied to all Government Buildings.**

9.10 **It is recommended that the Fire Precautions Guide be amended to include a mandatory requirement that a Fire Certificate be sought for every Crown Building to which Article 22 of the Fire Services (NI) Order 1984 would apply.**

9.11 **It is recommended that the Fire Precautions Guide be revised to include a clear instruction as to how application for a Fire Certificate should be made.**

9.12 **Article 49 excludes the Crown from a number of important functional requirements of the Fire Services Order. I consider it essential that alternative informal safeguards are put in place to ensure that Crown buildings comply with the standards set out in the Order.**

9.13 From my brief inspection of buildings I did observe some shortcomings such as the use of inappropriate accommodation, inadequate fire stopping between floors and use of misleading signage. Inspection for certification would identify such defects in all buildings and hopefully lead to necessary work being carried out quickly.

9.14 Whereas this report arises from a serious fire at Parliament Buildings historically fires in Crown buildings have not been of a major significance. In the past 10 years approximately 80 fires have occurred at Crown buildings. Apart from the Parliament Buildings fire and a number of fires resulting from terrorist attacks on Government buildings all of the fires have been of a minor nature.

9.15 Although my prime consideration in this Report has been Fire Precautions in the context of safety of staff I cannot fail but to have regard to the Inquiry carried out by Sir Alan Bailey into the fire at Windsor Castle.

While the nature of the buildings considered in that report were significantly different to the Crown buildings in Northern Ireland nevertheless the principles relating to protection of buildings and their contents remain the same.

9.16 **I would therefore recommend that greater use is made of modern fire detection systems.**

9.17 I have already confirmed that such a system is now being installed in Parliament Buildings. I have no doubt that had such a system been in operation at the time of the fire much earlier detection would have resulted.

9.18 **It is recommended that consideration be given to the use of active fire detection systems such as sprinklers or gas flood systems in specific high value or high risk installations.** It is a value judgement for management to balance and decide between cost of installation and the value of a building and contents to be protected.

9.19 **It is recommended that in relation to valuable artefacts, documents or archive material salvage arrangements should be drawn up for particular buildings.**

9.20 **It is recommended that any contractual work in buildings should be closely supervised to ensure that any fire risk created by the contract is controlled.**

10

Observations on Present Fire Precautions Arrangements

10.1 There appears to be doubt about how many of the 1,100 Crown buildings in Northern Ireland require a Fire Certificate. As far as I can establish no definitive list identifying buildings requiring certification exists.

10.2 **It is recommended that a comprehensive and definitive list of all Crown buildings requiring certification be compiled and held in an appropriate central office.**

10.3 I am informed that 128 Crown buildings have a Fire Certificate. Of these, 106 were issued under the Office and Shop Premises Act (NI) 1966 and 22 have been issued under the Fire Services (NI) Order 1984. It is probable that many of these are no longer valid due to alterations to the buildings, changes in staff numbers, etc.

10.4 I have spoken to inspecting officers in the H&S Fire Section of DED and they estimate that with current resources ie two or three inspection staff, it will take approximately four years to clear the backlog of buildings to be inspected. **Looked at in the context of the rate of certification suggested in paragraph 10.3 I believe there is a serious resource problem.**

10.5 As I mentioned in the preceding chapter a Fire Certificate is an important document. Apart from setting out fundamental requirements relating to means of escape, security of means of escape, means for fighting fire ie extinguishers, etc and fire warning a Fire Certificate may impose specific requirements for each building relating to maintaining escape routes, fire drills and training, limits on numbers of persons in the premises, etc.

10.6 **It is recommended that priority be given to working towards every certifiable Crown building having a Fire Certificate.**

10.7 **I do however strongly support the continuation of the programme of routine re-inspections carried out by DOE Fire Section.**

10.8 It is apparent from the three preceding chapters which set out the respective roles of the DED, H&S Fire Section, the DOE Fire Section and the DOE Risk Assessment Unit that there is a considerable amount of overlap in the duties of the three sections. This was also evident from a number of files which I examined from the two Fire Sections relating to buildings which both had inspected. It would appear that in some instances Premises Officers had work carried out in accordance with recommendations from DOE Fire Section and subsequently, following an inspection for certification purposes by H&S Fire Section, were asked to carry out additional or different work. It is possible that the work of the Risk Assessment Unit may compound confusion in this area.

10.9 It is obviously desirable that a consistent standard and approach is applied.

10.10 It is perhaps worth noting that the background training of these three units differs considerably, ie DOE Fire Section - predominantly ex-Fire Brigade personnel trained as inspection officers in the Fire Services College in GB, DED H&S Fire Section - mainly personnel with building control background supplemented by attendance at fire courses and the Risk Assessment Unit personnel who I understand have an engineering background.

Each of these disciplines has an essential contribution to make towards the safety of a building and I consider that in relation to recruitment and training the balance of skills available should be maintained.

10.11 However where it comes to actual certification it should be borne in mind that the prime concern is evacuating people quickly and safely from the building. In this particular context therefore it is my opinion that officers with a Fire Service background should play the lead role.

10.12 In view of the number of buildings still to be certified and the obvious resource problem mentioned at paragraph 10.4 management may wish to consider the potential benefit of the increased capacity of experienced officers trained for certification of buildings, which would be brought about by an amalgamation and blending of skills of the DOE and DED Fire Sections. Bearing in mind the need for the continuation of routine

inspections and the number of buildings to be inspected for certification it will be for management to decide whether such a redistribution of resources can achieve acceptable progress.

10.13 The position in relation to certification of Crown Buildings in Northern Ireland is exacerbated by the much higher proportion of buildings here which are Crown compared to GB. In GB many of the services and utilities which remain within central government in Northern Ireland, eg Water Service, have been agentised or privatised and now fall for inspection to the Fire Brigade. **It is my opinion that in view of the numbers of buildings involved a radical change in the approach to inspection and certification is required.**

10.14 This suggests consideration of a second option. As I have said the Fire Brigade provide this function and service for the private sector. I believe there would be merit in looking at the possibility of the Fire Brigade taking on the responsibility of also inspecting Crown buildings for certification. A totally consistent standard would then be applied to all buildings both private sector and Crown. Under the 1984 Fire Services Order the Department of Economic Development has the power to delegate this role to the Fire Brigade. DED Health and Safety would remain the authority who actually issue the certificates for Crown buildings on receipt of recommendation for certification from the Fire Brigade.

11

General Comments

11.1 Looked at collectively the accumulation of events contributing to the promotion of the fire appear almost too numerous to be believable.

11.2 We have the fire starting directly under the Speaker's Chair, located in the heart of the building; this probably went undetected for some 8 hours; the fire occurred in the largest single Chamber in the building with no external windows, thereby having the greatest chance of unrestricted and unobserved progress. The patrol omitted the most likely area of detection; because it was a holiday no staff were about to notice early signs. Detection equipment was in the process of being installed but was not connected. New external fire fighting facilities were also being installed but the fire occurred at the critical time, almost the critical moment, when the old live system appeared to be out of action and the new system had not been connected. In any event the water supply to the old system and the internal hosereels had been shut down by the closing of the valves. The first fire appliances approached the building by the main gates which again, because it was a public holiday, were locked.

11.3 However, having examined each element of the circumstances in isolation, I am in no doubt that the fire and the circumstances surrounding it were the result of an accumulation of quite separate though associated events, each of which in hindsight could have been prevented.

11.4 In my opinion the common denominator to all the factors was the need in the past for a higher profile to have been given by management to fire safety precautions.

11.5 As it so happened the lack of water at the building was not a significant issue due to the prompt action of the Brigade. Had the fire broken out of the Chamber earlier, however, and I believe that it was within minutes of this

happening, the need for an adequate water supply from the hydrants at the building would have been crucial.

11.6 The main gates at the Upper Newtownards Road being closed was of little consequence as less than a minute was taken to remove the chain.

11.7.1 A recurring situation in a number of the buildings which I visited was the postponement of identified fire precautions work until such time as it would be carried out as part of a refurbishment scheme which was in the pipeline.

11.7.2 I would hope again that through the mechanism proposed in paragraph 9.12 arrangements with appropriate authority will exist to ensure that delays in carrying out work recommended under a Notice of Steps are minimised.

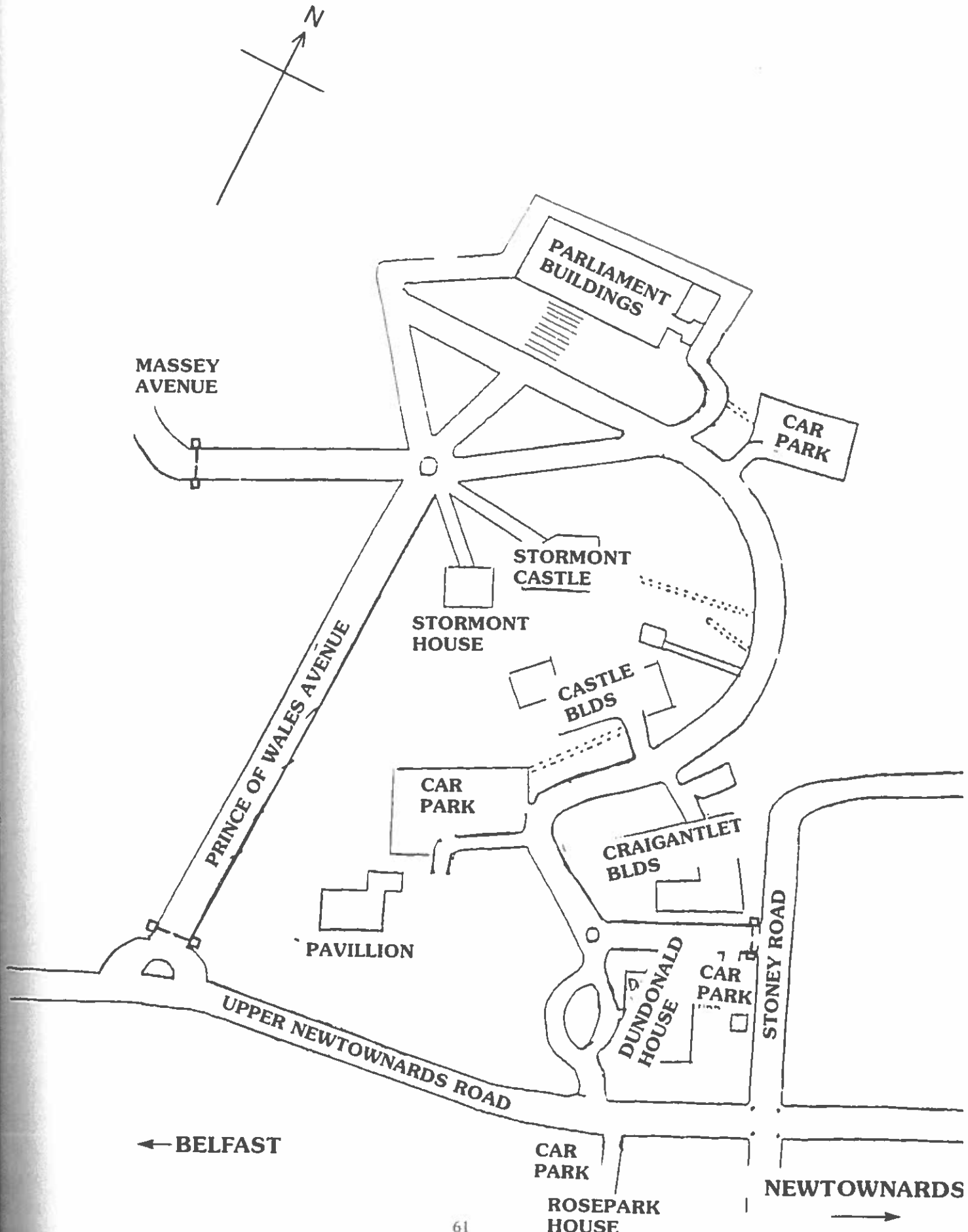
11.7.3 Unless the refurbishment scheme is realistically imminent fire safety work should not be allowed to wait even if it subsequently appears that some nugatory expenditure resulted. If the fire safety work currently under way at Parliament Buildings had been carried out when first identified as being necessary some nugatory expenditure may have occurred as a result of subsequent general refurbishment but the Chamber and the cost of its replacement could have been saved.

11.8.1 Turning to the question of Crown immunity, Sir Alan Bailey in his report on the Windsor Castle fire indicated that a review of the Fire Precautions Act 1971, the GB equivalent of the Fire Services Order 1984, announced by the Home Secretary, would include consideration of this issue.

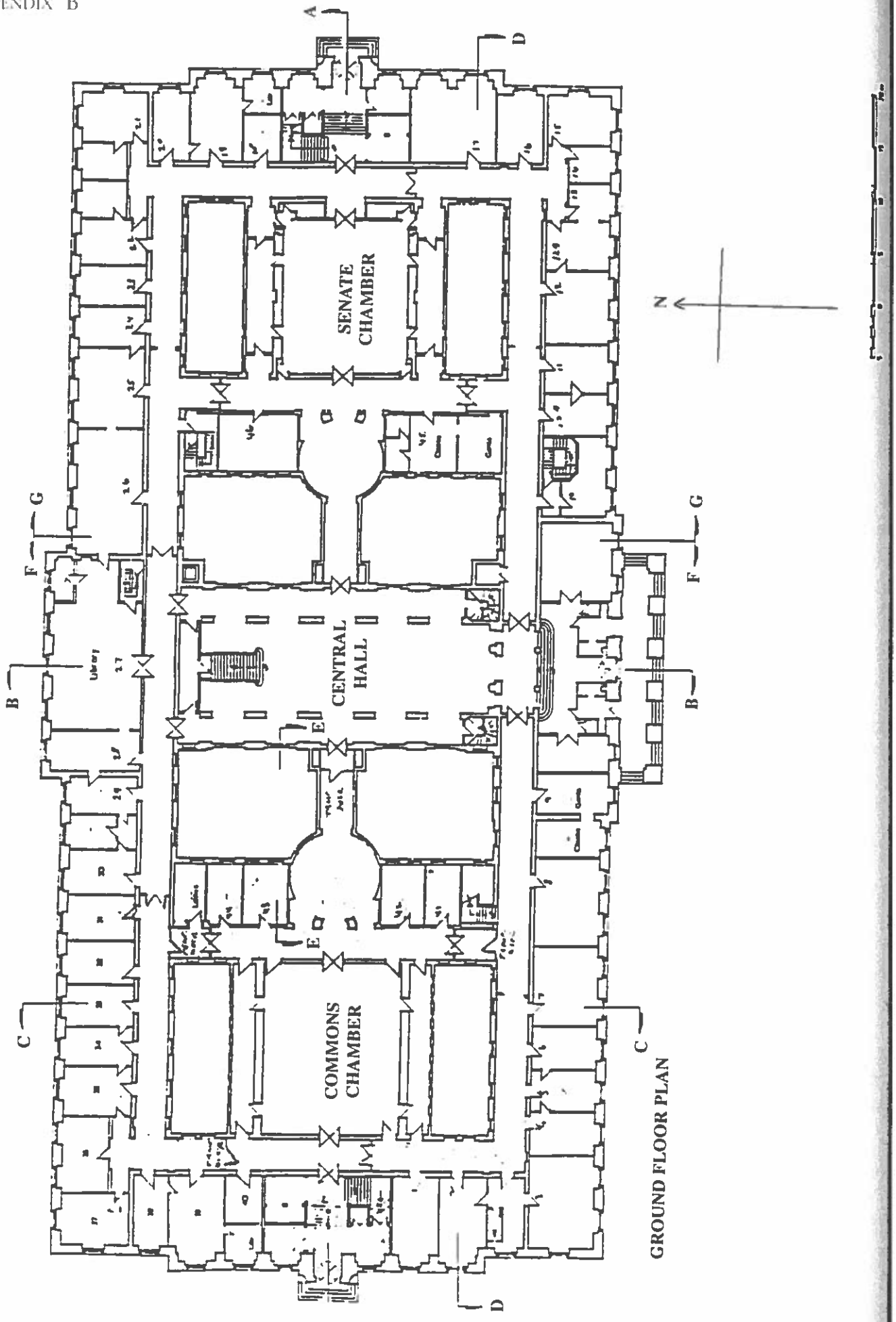
11.8.2 The review by the Home Office of the Fire Precautions Act and the inter-Departmental review of fire safety legislation and enforcement which followed it recommended that Crown immunity should be removed, except in special circumstances, reflecting the Citizens Charter principle that public bodies should not be shielded by special privileges and immunities. However, the inter-Departmental Scrutiny considered that it would not be appropriate or even possible to apply the same legal sanctions to the Crown as applied to non-Crown premises. No further decision has been taken.

11.8.3 It is for this reason that I have recommended action to ensure by Administrative Order or Departmental Policy that the spirit of the legislation is fully applied to Crown buildings through the acceptance and use of the Fire Precautions Guide and particularly in the seeking of certification for all designated buildings.

Appendices


N
PARLIAMENT BUILDINGS
MASSEY AVENUE
CAR PARK
STORMONT CASTLE
STORMONT HOUSE
CASTLE BLDS
PRINCE OF WALES AVENUE
CAR PARK
CRAIGANTLET BLDS
PAVILLION
STONEY ROAD
DUNDONALD HOUSE
CAR PARK
UPPER NEWTOWNARDS ROAD
BELFAST
CAR PARK
ROSEPARK HOUSE
NEWTOWNARDS

APPENDIX B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COMMONS CHAMBER
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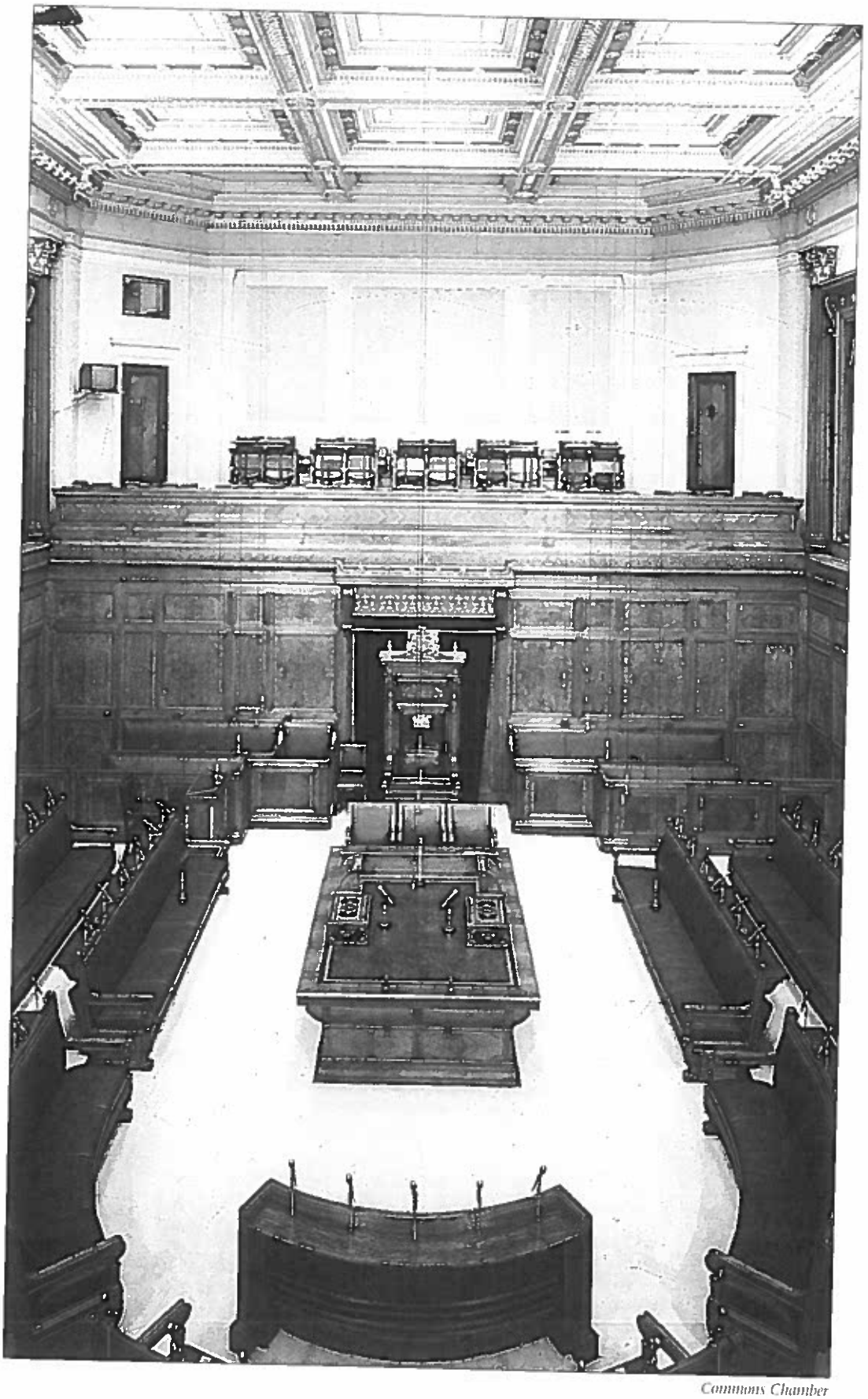
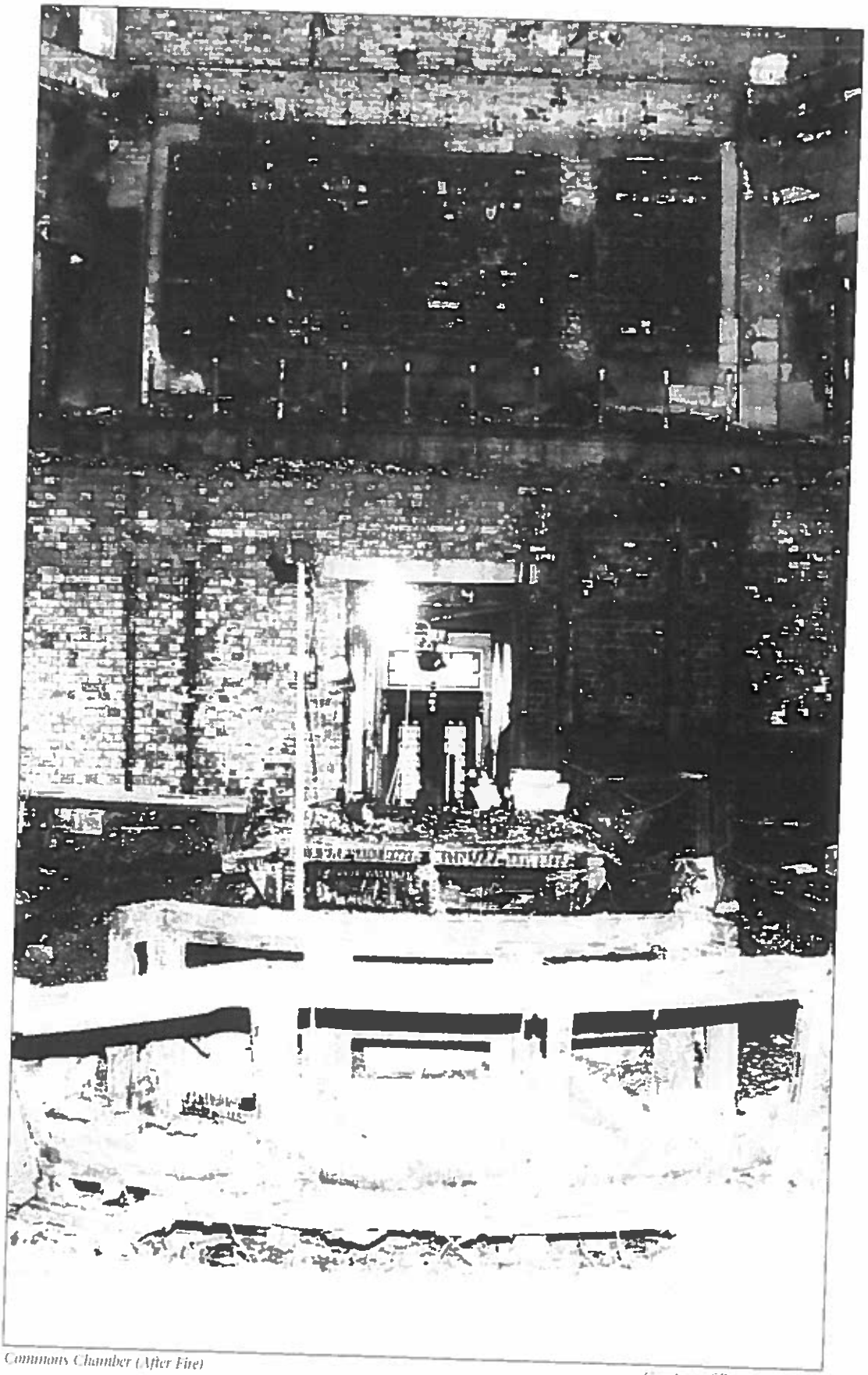
GROUND FLOOR PLAN



Commons Chamber

Appendix D



Commons Chamber (After Fire)

Courtesy of Pacemaker Press

7.3 System Description

7.3.1 External Fire Fighting

The existing pumped underground ring main serving fire hydrants around the perimeter of the building shall be replaced together with a section of the 9" gravity fire main running from the "Beck Water" reservoir, to the rear of the estate, to the double gravity hydrant located to the east of the building.

The new pumped fire fighting installation shall comprise a new underground ring main with new hydrants installed around the perimeter of the building and fed from a new package fire pump located in a new pumphouse sited in the main car park. The new pump set shall include diesel and electric main pumps and an electric jockey pump and shall draw its supply from a new underground concrete storage tank of 205m3 capacity provided by the main building contractor and located in the grassed area to the rear of the car park. All tank fittings including ball valves, vents, overflows and level switches shall be provided under the Mechanical Services Sub-Contract.

A section of the existing 3" mains water supply to the Beck Water reservoir shall also be replaced.

The new storage tank shall be divided into two equal compartments and each compartment shall be provided with two water supplies, one from the new section of gravity fire main and one from the new section of mains water supply pipework. The mains water supplies shall be fitted with delayed action type ball valves with extended operating arms to provide a type A air gap as required by the Water Bye-Laws. The tank will be provided with a raised ball-valve chamber to facilitate these connections. Conventional equilibrium type ball valves shall be installed on the supplies from the gravity fire main.

The existing pumped fire hydrants which are fed from a single electric pump-set adjacent to Stormont Castle shall be maintained in operation throughout the works until such time as the new hydrants and internal fire mains become operational and have been fully commissioned and demonstrated. The existing pipework shall be disconnected and left in position. The existing pump and associated pipework shall be removed.

The Contractor's attention is drawn to the requirement to maintain vehicular access to the building during the course of the works. Refer to the Contract Preliminaries for details of programming restrictions.

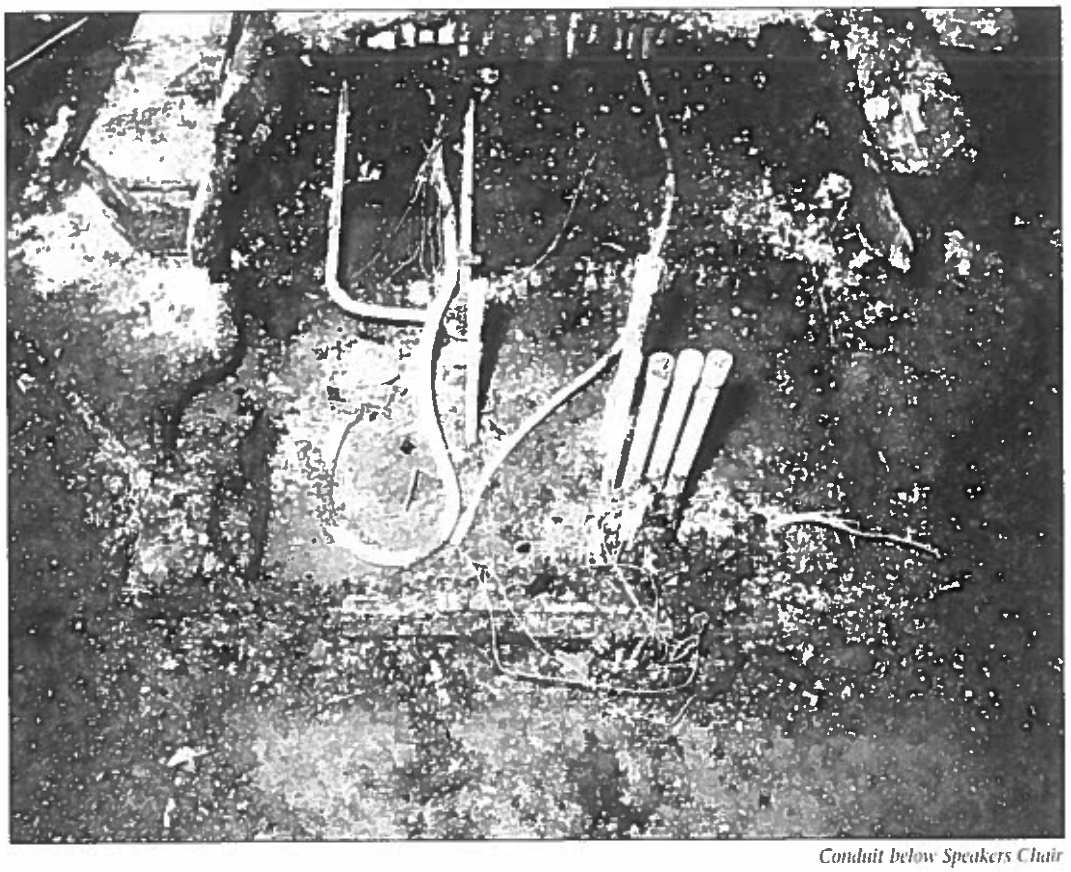
The existing gravity fire main from the "Beck Water" reservoir which supplies hydrants around Stormont Castle shall also be maintained in operation until completion and testing of the new section of pipework Disruption of the existing supply shall be limited to that necessary to make connections between the new and existing systems and shall not exceed 8 hours. The Contractor shall include for carrying out such connections outside normal working hours and shall give five working days notice of the intention to disrupt the supply to the SO.

All new underground pipework shall be medium density polyethylene.
Pipework within valve chambers and hydrant pits shall be cast iron.
Pipework within the new pump room shall be heavy grade steel to BS1387, galvanised.

All trenching, backfilling, hydrant pits, etc., shall be provided by the Main Building Contractor.

				£	p
	ALTERATIONS	CONTINUED			
	Gravity Fire Mains	Continued			
	Excavate to locate and expose existing strainer chamber; breaking into existing concrete wall; removing existing pipe 9" diameter, not exceeding 2000 mm long; building in new 250 diameter MDPE pipe; backfilling with fill and granular material; disposal of surplus spoil by removing from site; making good all work disturbed; all work in connection				
A	1500 mm deep	1	No.		
	Pumped Fire Mains				
	Removing existing surface boxes and frames complete with any bedding, haunching or the like; materials to be stored for re-use				
B	overall size approximately 600 mm x 600 mm	7	No.		
	Removing existing hydrant pits; breaking up concrete; breaking up brickwork; materials to be disposed of off-site; backfilling with hardcore; compacting; re-instating asphalt roadway and hardcore base to match existing; all work in connection; making good all work disturbed				
C	overall size 1200 mm x 800 mm; depth not exceeding 2 M deep	7	No.		

Appendix I.1

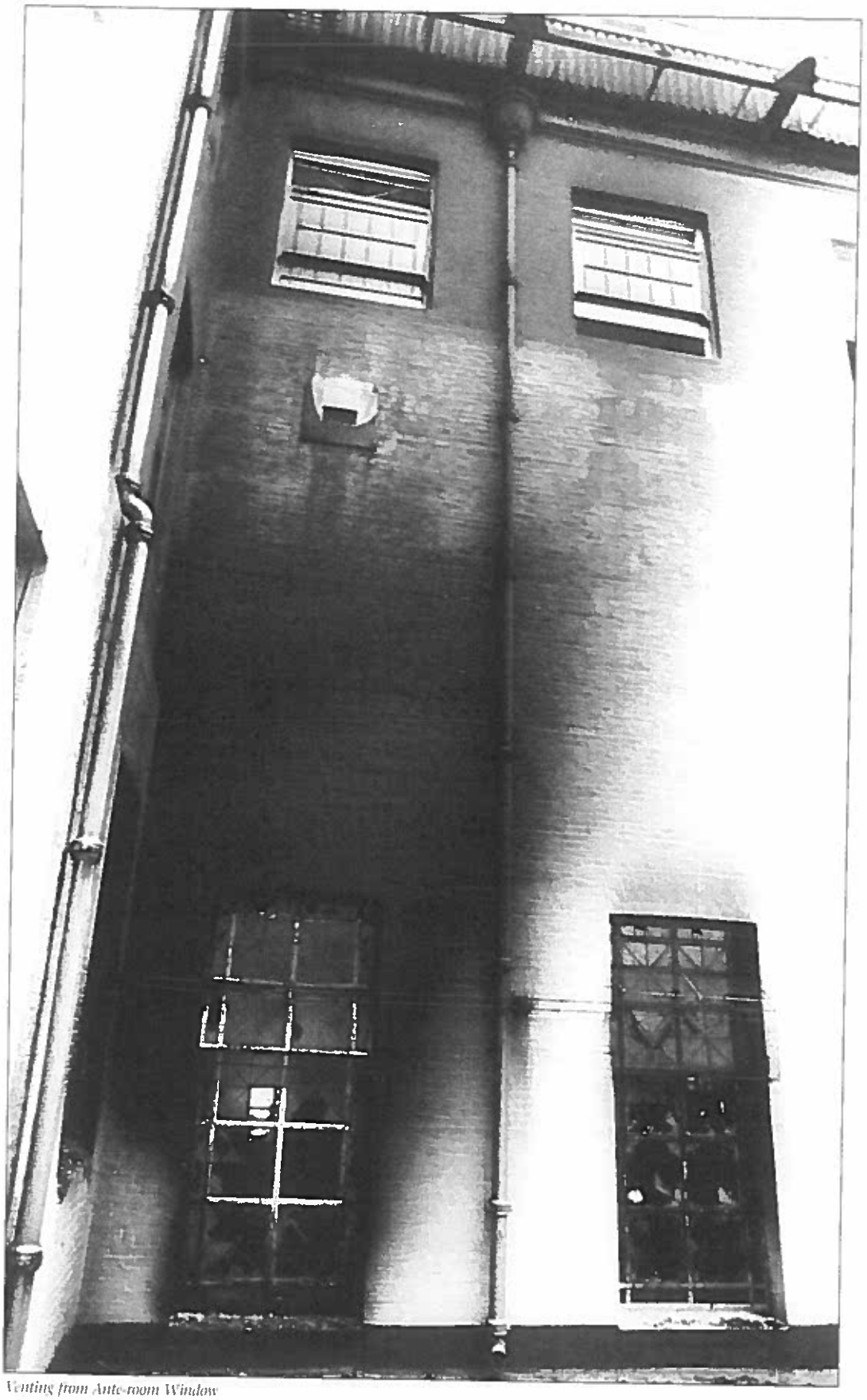


Conduit below Speakers Chair

Appendix I.2

Open Joint in Conduit

Spalled Brickwork



Venting from Ante-room Window

Lobby Entrance to Chamber – Outside

Lobby Entrance to Chamber – Inside

APPENDIX L.3

Division Lobby Door- Outside

APPENDIX L.4

Division Lobby Door- Inside

Northern Ireland
Government Office Buildings

1. **BUILDINGS WITH OVER 250 STAFF**

		STAFF NOS
Dundonald House, Stormont Estate	(DANI, DHSS, NIO)	1100
Castle Buildings, Stormont Estate	(DHSS, SSA, DANI)	950
Clarence Court, Belfast	(DOE)	850
Parliament Buildings, Stormont Estate	(DFP)	750
* Ballymena County Hall	(DOE, NHSSB, NEELB)	700
* Marlborough House, Craigavon	(DOE, DED, DFP, NIHE, IR)	600
Rathgael House, Bangor	(DENI, DOE)	500
IDB House, Belfast	(IDB, DED, HMSO, DOE)	400
Netherleigh, Belfast	(DED)	400
Hydebank, Belfast	(DOE, DANI)	370
Churchill House, Belfast	(DOE)	350
Clarendon House, Belfast	(T&EA, DOE)	300
Rosepark House, Belfast	(DFP)	280
Commonwealth House, Belfast	(SSA, DOE)	280
Coleraine County Hall	(DOE)	260

2. BUILDINGS WITH BETWEEN 100-250 STAFF

Lincoln Buildings, Belfast	(DOE)
Waterside House, Londonderry	(DOE, DHSS, DENI, DFP, T&EA)
Rathkeltair House, Downpatrick	(DOE, T&EA, DANI)
Gloucester House, Belfast	(DED)
River House, Belfast	(DOE)
Newry Crown Building	(SSA, DANI, DED)
Orchard House, Londonderry	(DOE, DANI, DFP)
*Foyle Crown Building, Londonderry	(SSA, DANI, DED, NIO)
Londonderry House, Belfast	(DOE, DHSS, DFP)
34 College Street, Belfast	(DOE)
Craigantlet Buidings, Stormont Estate	(DFP NIO)
Coleraine Crown Building	(SSA, DOE, DANI, DED)
Omagh County Hall	(DOE)
Knockbreda Crown Building, Belfast	(SSA, DANI)
Magnet House, Belfast	(DANI)
RAC House, Belfast	(DHSS)
Calvert House, Belfast	(DOE)
ESD Stoney Road, Stormont Estate	(DHSS)
*Dungannon Crown Building	(SSA, DANI, NIO)
Northland House, Belfast	(DOE)
Antrim Crown Building	(SSA, DOE, DANI)
Bow House, Lisburn	(SSA, DOE, T&EA)
Holywood Road, Belfast	(SSA, DANI, DOE)
Queens Court, Belfast	(DFP)
Armagh Crown Building	(SSA, DANI, DED)
Academy House, Ballymena	(DOE, DED)
Bangor Crown Building	(SSA, DOE, DFP)
Stormont Castle, Stormont Estate	(NIO)

3. **BUILDINGS WITH BETWEEN 50-100 STAFF**

Water Office Londonderry	(DOE)
Sperrin House, Omagh	(DANI)
Enniskillen Crown Building	(SSA, DED)
Conor Building, Belfast	(SSA)
Larne Crown Building	(SSA, DANI)
Newtownabbey Crown Buildings, Belfast	(SSA, DOE)
Iniskeen House, Enniskillen	(DANI)
Ladas Drive, Belfast	(DED)
Swinson House, Belfast	(T&EA)
Arches Centre, Belfast	(NIO, DANI)
Victoria Hall, Belfast	(DFP)
Mark Royal House, Belfast	(DFP)
Lancashire House, Belfast	(DHSS, DOE)
Bedford House, Belfast	(DOE)
State Building, Belfast	(DHSS)
Oxford House, Belfast	(DOE)
Kilpatrick House, Ballymena	(DANI)
Lindsay House, Belfast	(DED)
Ballymoney Crown Building	(SSA, DANI)
Lisnagelvin, Londonderry	(SSA, DOE)
5-33 Hill Street, Belfast	(DOE)
Rosepark Workshops, Belfast	(DOE)
Hampden House, Belfast	(DOE)

4. BUILDINGS WITH BETWEEN 20-50 STAFF

Brookmount Buildings, Belfast	(DOE)
Robert Street Newtownards	(DANI)
20-24 Donegall Street, Belfast	(DOE)
Ferguson House, Belfast	(DHSS)
Northern House, Belfast	(DOE)
Bankmore House, Belfast	(DOE, DFP)
208-224 Cambrai Street, Belfast	(DOE)
Longbridge House, Belfast	(DED)
Frances House, Belfast	(NIO, DOE)
Castle Barracks, Enniskillen	(DOE)
Roads Office, Omagh	(DOE)
Kilkeel Crown Building	(SSA, T&EA, DED)
The Sidings, Lisburn	(DFP)
Ballymena Crown Building	(DFP, SSA, NHSSB)
Enniskillen County Building	(DOE)
Ballynahinch Crown Building	(SSA, DANI)
DLCO Coleraine County Hall	(DOE)
Roads Londonderry	(DOE)
Waterloo Place, Londonderry	(T&EA)
Marcus Street, Newry	(T&EA)
Newry Street, Banbridge	(T&EA)
Bridge Street, Ballymena	(T&EA)
Newry Road, Armagh	(DANI)
High Street, Omagh	(SSA)
Magowan Buildings, Portadown	(T&EA, DANI)
Armagh House, Belfast	(EU, DOE)
Canada House, Belfast	(DED)

5. BUILDINGS WITH BETWEEN 10-20 STAFF

Cawood House, Belfast	(DOE)
Royston House, Belfast	(DOE)
LGA City Hall, Belfast	(DOE)
Falls Road, Belfast	(T&EA)
Market Place, Carrickfergus	(DFP)
Ann Street, Belfast	(DED)
High Street, Bangor	(T&EA)
Park House, Belfast	(DOE)
Duniris, Belfast	(DANI)
7/9 Conway Square, Newtownards	(T&EA)
Progressive House, Belfast	(DOE, DFP)
Bulloch House, Belfast	(DOE)
West Street, Carrickfergus	(T&EA)
26 Linenhall Street, Belfast	(DOE)
20 College Gardens, Belfast	(DED)
The Design Centre, Belfast	(DFP)
Franklin House, Belfast	(DOE)
Main Street, Larne	(T&EA)
Chamber of Commerce House, Belfast	(DFP)
Thomas Street, Dungannon	(T&EA)
Paget Square, Enniskillen	(T&EA)
Church Street, Coleraine	(T&EA)
Church Street, Antrim	(T&EA)
High Street, Omagh	(T&EA)
Scotch Street, Armagh	(T&EA)
Market Street, Strabane	(T&EA)
High Street, Lurgan	(T&EA)
Queens Avenue, Magherafelt (Annex)	(T&EA)
High Street, Omagh	(DOE)
Stone Row, Coleraine	(DOE)
Killane Road, Limavady	(DANI)
Rainey Street, Magherafelt	(DANI)
Bachelor's Walk, Lisburn	(P/T)(DANI)
High Street, Omagh	(DFP)
Townhall Street, Enniskillen	(DFP)
Molesworth Street, Cookstown	(DFP)
James Street, Cookstown	(DOE)
Edward Street, Portadown	(DOE)
Townhall, Newry	(DOE)
Roads Strabane	(DOE)
Roads Cookstown	(DOE)
Roads Limavady	(DOE)
Works Service Omagh	(DOE)

6. BUILDINGS WITH BETWEEN 1-10 STAFF

Shankill Road, Belfast	(T&EA)
The Square, Ballyclare (P/T)	(DANI)
Exchange Road, Larne	(DOE)
Portaferry Road, Newtownards	(DANI)
Governors Place, Carrickfergus	(DOE)
Dalriada House, Ballycastle	(DOE)
Permanent House, Belfast	(DFP)
Units 3/8 Mallusk Park, Belfast	(DOE)
Telfair Street, Belfast	(DOE)
Grugan's Garage, Omagh	(DOE)
Units 7/8 Trench Road, Belfast	(SSA)
Balloo Road Store, Bangor	(DOE, DHSS, SSA, DENI, DFP, NIO, DED, DANI, IDB, T&EA)
Fermanagh House, Belfast	(Vacant)
Oldtown Street, Cookstown	(T&EA)
Main Street, Ballymoney	(T&EA)
Market Street, Limavady	(T&EA)
Main Street, Newcastle	(T&EA)
High Street, Ballynahinch	(T&EA)
Queens Street, Magherafelt	(T&EA)
Scarva Street, Banbridge	(DANI)
Church Street, Ballygawley (P/T)	(DANI)
Melmont Road, Strabane	(DANI)
Gola Road, Lisnaskea (P/T)	(DANI)
Fairhill Road, Cookstown (P/T)	(DANI)
Main Street, Newcastle (P/T)	(DANI)
Caddells Lane, Rathfriland (P/T)	(DANI)
Cornmarket St, Tandragee (P/T)	(DANI)
Coleraine Road, Maghera (P/T)	(DANI)
Main Street, Trillick (P/T)	(DANI)
Ferguson Crescent, Castlederg (P/T)	(DANI)
Kinelowan Street, Keady (P/T)	(DANI)
Armagh St, Newtownhamilton P/T)	(DANI)
Bridge Street, Kilkeel (P/T)	(DANI)
Market Street, Ballycastle (P/T)	(DANI)
Main Street, Claudy (P/T)	(DANI)
Main Street, Garvagh (P/T)	(DANI)
Drumbane, Kesh (P/T)	(DANI)
Derbrough Road, Plumbridge (P/T)	(DANI)

Main Street, Dungiven (P/T)	(DANI)
Main Street, Sixmilecross (P/T)	(DANI)
The Green Room, Crossmaglen (P/T)	(DANI)
Newry Street, Banbridge	(DOE)
High Street, Ballymoney	(DOE)
VLCO, Armagh	(DOE)
Tower Centre, Ballymena	(DOE, DANI)
Strulebank House, Omagh	(DOE)
Lands Office, Omagh	(DOE)
Government Offices, Newry	(DOE)
Kings Street, Magherafelt	(NHSSB)

TOTAL 185

* Figures include non-NICS staff eg Inland Revenue, NIHE

P/T Buildings occupied on a part-time basis.

Specialised Buildings*

		NUMBER OF BUILDINGS
1.	NORTHERN IRELAND DEPARTMENTS - MISCELLANEOUS	
i.	Social Security Agency Offices	33
ii.	Belfast Action Team Offices	5
iii.	Ordnance Survey Premises	2
iv.	Public Record Office	1
v.	Northern Ireland Audit Office	1
vi.	Houses	13
vii.	Workshops, Stores	8
viii.	Sports Pavilion, Stormont	1
ix.	Fuel Farm, Stormont	1
2.	DEPARTMENT OF THE ENVIRONMENT	
i.	**Roads Service**	
a.	Section Offices/Depots/Workshops	46
b.	Stores and other buildings	52
ii.	**Water Executive**	
a.	District Offices/Depots/Workshops	60
b.	Other Buildings, Establishments, etc	193
iii.	**Historic Monuments & Buildings Branch**	
a.	Depots	7
b.	Caretakers, Monuments	10
iv.	**Countryside & Wildlife Branch**	
a.	Parks & Nature Reserves, etc	9
b.	Other Buildings	49
v.	**Vehicle Inspection & Driving Test Centres**	15
3.	DEPARTMENT OF AGRICULTURE	
i.	Forestry Centres	
a.	Offices	26
b.	Workshops	3
c.	Training School	1
d.	#Other Buildings	177

APPENDIX N (contd.)

		NUMBER OF BUILDINGS
ii.	Greenmount Agricultural College	
	a. Main Building	1
	b. Hostels	3
	c. Hill Farm Establishment	1
	d. Houses	17
	e. Hill Farm Houses	3
	f. Freshwater Biological Investigation Unit	1
iii.	Loughry Agricultural College	
	a. Main Buildings	8
	b. Hostels	2
	c. Other Buildings	10
iv.	Enniskillen Agricultural College	
	a. Main Building	1
	b. Houses	5
	c. Other Buildings	10
v.	Loughgall Research Centre	
	a. Various Buildings	30
vi.	Veterinary Research Stations	2
vii.	Plant Testing Stations	1
viii.	Nematology Laboratory	1
ix.	Newforge, Faculty of Agriculture	
	a. Main Buildings	5
	b. Other Buildings	21
x.	Portal Inspection etc Offices	11
xi.	Drainage Depots	7

Mostly very small buildings, many of which are let or used only occasionally.

4.	DEPARTMENT OF ECONOMIC DEVELOPMENT	
i.	Government Training Centres	11
ii.	Trading Standards Branch	1
5.	DEPARTMENT OF EDUCATION - STRANMILLIS TRAINING COLLEGE	
i.	Main Building	1
ii.	Hostels	6
iii.	Other Buildings	4
	TOTAL	876

* see paragraph 4.1.3

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