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## Estates Department Fire Update August 2014

### 1 Introduction

This update report gives an overview of all fire related works being carried out by St Georges NHS Trust estates department since December 2014, following several fire enforcement notices for trust buildings and internal audit reports findings. The aim of this report is to raise awareness of the fire related works already completed and the future planned works within estates.

### 2 Current Fire Enforcement and Deficiencies Notices

	Building	Date	Summary of Notice
1	Grosvenor Wing	11 <sup>th</sup> February 2013	Compartmentation incomplete Lack of Fire Risk assessments Effective planning and controls Fire Doors and exit routes Inadequate Competent Persons Staff information and Training Fire Training
2	Lanesborough Wing	11 <sup>th</sup> February 2013	Compartmentation incomplete Lack of Fire Risk assessments Effective planning and controls Fire Alarm Maintenance Fire Doors and exit routes Inadequate Competent Persons Staff information and Training Fire Training
3	Knightsbridge Wing (This is a Deficiencies notice and not an Enforcement Notice)	19 <sup>th</sup> June 2014	Fire Risk Assessments Effective planning and controls Maintenance levels and equipment Staff Training Fire Compartmentation Fire Alarm

The above notices are from buildings that have been inspected and notices are yet to be closed.

**Estates Department Fire Update August 2014****3 Internal Audit Report**

The review of the 2013 internal audit is not due for publication until after the production of this document.

Fire risk assessment position:

150 completed

70 issued

90 – 110 Outstanding

Due for completion end of August 2014

**4 Helipad**

With the introduction of the Helipad to St Georges NHS Trust the Estates fire team have been providing supervisor duties and training to the Helipad fire response teams in addition to their normal workload. This involves providing a fire supervisor 13 hours a day for 7 days per week. This has been required to provide levels of assurance until site Fire response team meet the required training standards.

**5 Fire Team Staffing Levels**

The current estates fire team consists of 1 x Fire Manager, 1 x Trainer (Interim) and 1 x Fire Advisor (Interim). This has been increased with 3 interim fire advisors to act on audit requirements and fire notice improvements. In addition to this Estates will be interviewing in September 2014 for an additional permanent fire officer and increasing administration support.

**6 Knightsbridge Wing Improvements**

Following the fire and subsequent notice of deficiency in Knightsbridge wing, estates have implemented the following improvement works.

1. All repairs relating to the plant-room fire have been completed and repairs agreed with the fire authority.
2. All fire risk assessments completed for Knightsbridge Wing.

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3. 100K Improvement scheme for the fire doors and fire Compartmentation has been tendered and due to start beginning of September 2014, the works include the following:

The scope of the project is to improve the fire containment and fire escape routes for the Knightsbridge wing at St Georges NHS Health Care Trust.

Fire containment (To create three separate zones)

Two walls/areas have been identified as suitable for utilising as fire containment walls. These walls will be upgraded by applying fire stopping to all penetrations and replacing fire doors sets which pass through them to FD60. (As per attached floor plan)

### Fire Doors

Fire doors have been surveyed and will either be upgraded to current standards or replaced with new FD60 fire door sets.

### Escape routes

Two additional fire escape routes have been identified and these are on the north elevation of the building and are located in the Nurses rest room and dialysis ward. The identified routes will require various works including the creation of new openings to the outside, new FD60 fire door sets and one new fire escape ramp.

All works to be carried out to current HTM, HBN, Building codes, BS and TRADA standards:

1. New fire door sets
  - To be Timber with Yeoman Shield door edge protection with Intumescent strips and brush type smoke seals
  - FD60 and installed to current TRADA and BS/EN standards
  - New doors to be to DDA standards
  - New door furniture, handles, push bars, hinges and intumescent packers, closers, Signage and decorations
  - All making good and redecoration to areas damaged/disturbed
  - Smoke seals to be brush type( NOT Rubber)
  - Replace Fire door asset labels (where already fitted)
  - Fire door documentation and O&M
2. External Fire door set room K10.81 (Nurse rest room)
  - New complete fire door set with Leaf and a half with both door rebated to provide improved weather seal
  - To be FD60 to current TRADA and BS/EN standards
  - All builders work to create opening
  - Remove Radiator running across new door opening
  - All making good and redecoration to areas damaged/disturbed

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- External fire doors to have drip strip fitted to prevent water ingress into building
  - Intumescent strips and brush type smoke seals, signage, decoration and all door furniture
  - Signage and decorations
  - NOTE: Warded area to have plastic sheeting housing built over entire works area to prevent dust/dirt entering ward (as per drawing)
3. External Fire door set room K10.57 Ward area
- New complete fire door set with Leaf and a half with both door rebated to provide improved weather seal
  - To be FD60 to current TRADA and BS/EN standards
  - All builders work to create opening
  - Relocate RO Water service (please employ the trusts preferred Contractor, Capital Water
  - All making good and redecoration to areas damaged/disturbed
  - External fire doors to have drip strip fitted to prevent water ingress into building
  - Intumescent strips and brush type smoke seals, signage, decoration and all door furniture
  - Signage and decorations
  - NOTE: Warded area to have plastic sheeting housing built over entire works area to prevent dust/dirt entering ward (as per drawing)
4. New Fire doors (not including frame)
- To be Timber with Yeoman Shield door edge protection with Intumescent strips and brush type smoke seals
  - FD60 and installed to current TRADA BS/EN standards
  - New doors to be to DDA standards
  - New door furniture, handles, push bars, hinges and intumescent packers, closers, Signage and decorations
  - Smoke seals to be brush type( NOT Rubber)
  - Replace Fire door asset labels (where already fitted)
  - Fire door documentation and O&M
5. Fire stopping to the two containment walls (as per drawing including new fire door sets)
- All penetration's/holes to be sealed with fire proof slab material to meet current BS
  - Intumescent collars/seals around all pipes to meet current BS
  - Fire stopping inside trunking to meet current BS
  - Documentation for the fire stopping and penetration sealing systems.
  - Certificate of conformity to be issued.
6. Upgrade 3 x glazed units to Pilkington Pyroclear fire rated glass (Ward K10.27)

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7. Nurses restroom wall demolition (room K10.81)
  - Isolate and remove power and make off into approved Junction box Fixed onto wall above suspended ceiling
  - Isolate and remove lighting and join circuit to corridor lighting circuit
  - Carefully remove wall
  - Isolate and remove radiator
  - Ceiling: Build bulkhead to take up ceiling grid height differences between corridor and nurses rest room
  - Make good walls, fill cracks/imperfections and paint entire room with two coats of Dulux matt emulsion (Colour TBA)
  - Flooring supply and fit new vinyl flooring to closely match existing
  
8. New Ramp (new exit from K10.57 Ward area see drawing)
  - Relocate 2 x way finding signage including power for lighting to edge of pavement area (see drawing)
  - Widen paving into grassed area to allow pedestrians passage past new ramp
  - Supply and fit new metal ramp painted with silver rustproof paint (Gradient TBA)
  - Turning area for beds to be 2.5mtr wide
  - Galvanised grid flooring
  - Concrete slab between end of ramp and pathway
  - Keyklamp barrier at foot of ramp to prevent beds running onto road
  
9. Upgrade of existing concrete ramp with GRP non slip sheeting
  
10. Upgrade of existing metal ramp
  - Raise end of ramp by 14" and add additional metal ramp turning area 2.4mtr (see drawing)
  - GRP non slip sheeting (Colour TBA)
  - Concrete slab between end of ramp and pathway
  - Keyklamp barrier at foot of ramp to prevent beds running onto road

Knightsbridge Wing Planned works

# Local FIRE Emergency Evacuation Plan



**Estates Department Fire Update August 2014****7 Lanesborough Wing Fire Notice Improvements**

Following completion of all Fire risk assessments for Lanesborough Wing, estates team have drawn up an improvement scheme for Lanesborough wing 2<sup>nd</sup> floor (Plant Room) as this was highlighted as a significant risk within the fire audit regarding Compartmentation, fire doors and alarms.

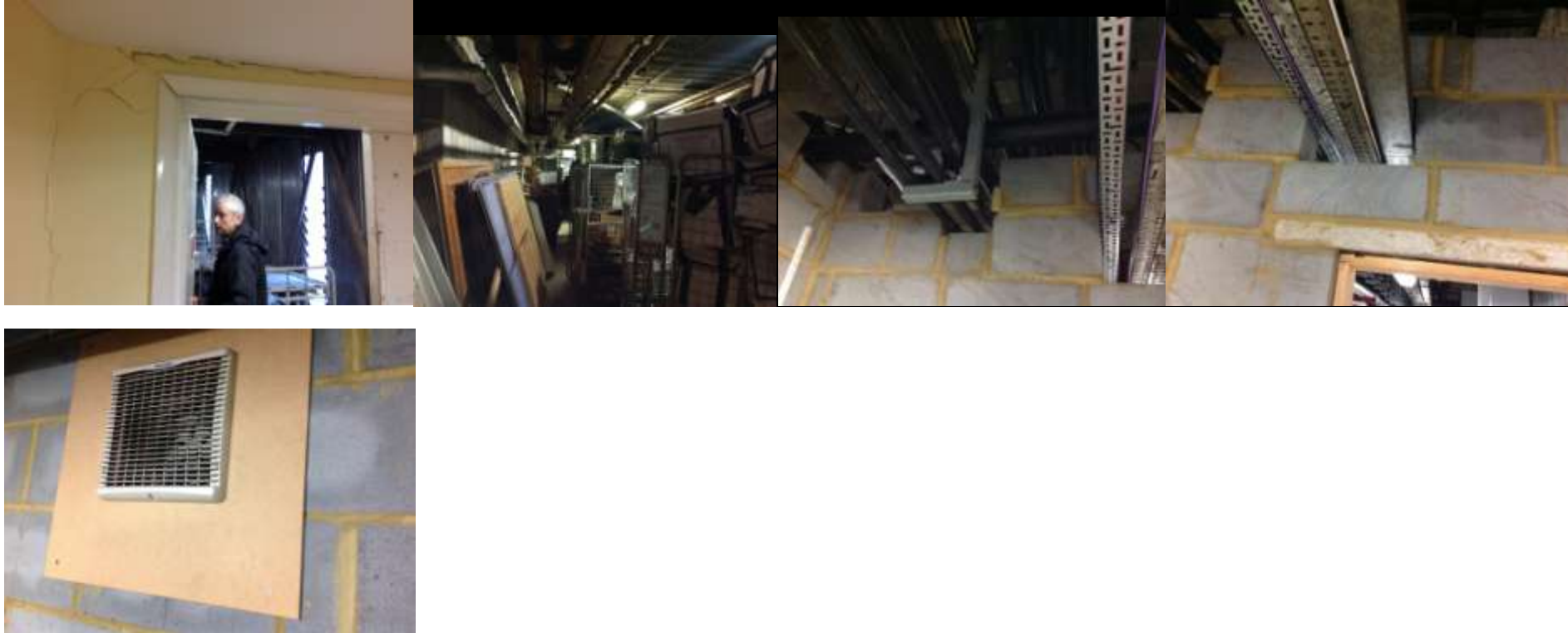
Estates procured and started a 1.3million project in March 2014 to complete a full refurbishment of the 2<sup>nd</sup> floor plant room which included the following works:

1. Full fire Compartmentation and fire stopping repairs
2. Replace all fire doors with correct fire rated doors
3. Install new fire alarm in unprotected areas
4. Install new low level emergency lighting (lite4life)
5. Paint plant room walls
6. Paint and seal plant room floor
7. Apply photo luminescent way-finding system to floors
8. Install Fire Directional Signage
9. Install Intumescent grills
10. Install new partitions

**Pictures below highlight breaches in fire Compartmentation, unsafe storage of flammable items, damaged and unsuitable fire doors, poor and incorrect repairs**



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The following pictures show the new compliant fire separation, fire doors and emergency lighting from completed works in Lanesborough Wing

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The current scheme for the 2<sup>nd</sup> floor will be completed by the end of September 2014; a similar scheme will be required across all floors of Lanesborough Wing to close the Fire enforcement notice.

**8 Grosvenor Wing**

Estates have carried out a full audit of the fire doors within the building and project has currently been drawn up for replacement of all defective doors on all fire escape routes and stairways.

**9 Clare House**

Estates have tendered and procured and installed a new L1 fire alarm system in Clare House for 80K. This was completed in August 2014. This building will be inspected by the fire authority in September 2014. Fire doors and emergency lighting still require attention.

**10 Fire Door Survey**

Estates commissioned a site wide fire door survey in April 2014, checking condition and correct installations. We have completed all of Knightsbridge Wing and ¾ of Lanesborough Wing. Expected review completion October 2014.

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### 11 Emergency Lighting

Full review of emergency lighting within 2<sup>nd</sup> floor Lanesborough Wing has been completed. All emergency lights have been replaced within plant room with a new compliant system.

### 12 Estates Compliance Works

As part of the fire improvements works the estates department have implemented Standard Operating Procedures to enable tighter controls for all staff or contractors working at St Georges NHS Trust. The following is the latest index for SOP's already in place. The items highlighted in red are fire related.

OP No.	CONTENTS
<b>01.01</b>	<b>Fire Detection &amp; Fire System Maintenance</b>
<b>01.02</b>	<b>Fire Fighting Equipment Maintenance</b>
<b>01.03</b>	<b>Fire Door Test and Inspection</b>
<b>01.04</b>	<b>Fire Stopping During and After Installation/Maintenance Works</b>
<b>01.05</b>	<b>Response to Fire alarm</b>
02.01	Steam, MTHW, LTHW Boiler Maintenance
02.01	Commercial Cooker Maintenance
02.03	Domestic Boiler Maintenance
03.01	Management of Contractors
<b>03.04</b>	<b>Safety Rules and Guidance for Contractors</b>
<b>03.05</b>	<b>Contractor Inductions</b>
<b>03.06</b>	<b>Permit To Work</b>
03.07	Issue of Keys to Contractors
03.08	Permit to Site a Refuse Disposal Skip
04.01	High Voltage House Rules
04.02	Maintenance of HV Substations and Equipment
04.03	CHP HV Mains Incomer VCB Alarm and Reclosure Procedure
05.01	Maintenance of LV Distribution Systems
05.02	Maintenance of Electrical Installation and Wiring

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05.03	Electrical Safety
06.01	General Maintenance
06.02	Emergency Lighting Testing
06.03	Portable Appliance Testing
06.04	Lightning Protection System Testing
06.05	UPS Maintenance
06.06	Monthly Generator Testing
07.01	Management and Communication
07.02	Written Scheme - BMS Management
07.02	Written Scheme - Information & Training of employees and Contractors
07.02	Written Scheme - Managing Positive LP results & Suspected Outbreaks of Legionnaires Disease
07.02	Written Scheme - Monitoring and Maintenance Matrix
07.02	Written Scheme - Correct and Safe Operation
07.02	Written Scheme - Water Sampling
07.03	Document and Record Control
07.04	Permit to Work (Domestic Water Systems)
07.05	Notification of Non-Conformities
07.06	Management of Low Use Outlets
07.07	Thermal Disinfection of Optitherm Taps.
07.08	Flushing of Optitherm Taps.
07.09	Decommissioning or Water Systems in Closed Wards and Buildings
08.01	Maintenance of Medical Gas Pipeline Equipment
08.02	Maintenance of Pathology Laboratory Gas system
08.03	Decontamination of Medical Vacuum Systems
08.04	Oxygen Deficiency Monitoring Equipment
08.05	Maintenance of AGSS Equipment
09.01	Maintenance of Air Handling Units
09.02	Maintenance of Fan coil Units

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09.03	Local Exhaust Ventilation Systems
09.04	Safety Cabinets including Isolators/Fume Cupboards
09.05	Maintenance of Ultra clean Ventilation Canopies
09.06	Maintenance of Kitchen Extract Canopies
09.07	Maintenance of Ventilation Ductwork
09.08	Maintenance of Specialist Ventilation Suites
09.09	Monitoring of Pressure rooms
09.10	Theatre Planned Maintenance
09.11	Mechanical Plant and Equipment (Including PUWER)
10.01	Maintenance of Air Tube Transport System
11.01	Maintenance of Pressure Systems
11.02	Inspection and Testing of Pressure Systems
11.03	Non-Destructive Testing
12.01	Air Conditioning Equipment Maintenance
12.02	Chiller Maintenance
12.03	Blood Bank Fridge Maintenance
12.04	IT Room Air Conditioning
12.05	Split A/C Unit Provision and Maintenance
13.01	Lift Maintenance
13.02	Lift Maintenance - Passenger, Goods and Hoists
13.03	Lift Release
13.04	Lifting Beams in Lift Motor Rooms
13.05	Patient Hoists
14.01	Testing, Inspection and Use of Latchway Systems
14.02	Testing, Inspection and Use of Anchor Points, Harnesses and Fall Arrest Equipment
14.03	Testing, Inspection and Use of Ladders, Mobile Scaffolds and Platforms
15.01	Nurse Call System Maintenance
15.02	CCTV Maintenance

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15.03	Baby Tagging System Maintenance
15.04	Panic Alarm System Maintenance
16.01	Personal Protective Equipment
16.02	Close Call and Positive Intervention Reporting
16.03	Hazardous Substances (Including COSHH and Asbestos References)
16.04	PPE/RPE
16.07	Hazard and Operability Assessment
17.01	Management of Capital Project Works
17.02	Management of Water Services during Project Fit Outs
18.01	Management of Small Works
18.02	Management of Contractors' Behaviour
18.03	Specification for Domestic Water Services
19.01	Maintenance of Priorclave Equipment
19.02	Maintenance of Dekomed Equipment
20.01	Working on St James's Wing Roof
20.02	Maintenance Process
20.03	Emergency Maintenance Process
20.04	Escalation Process Out Of Hours
20.05	Performance Reporting
21.01	Contract Correspondence
22.01	Out of Hours On-Call Manager's Responsibilities
23.01	Management of Life Cycle Works
23.02	Management of Planned Maintenance Schedule
23.03	Management of Condition Surveys and Reports
23.05	Management of Compliance
23.06	Management of Defects
24.01	Energy and Utilities Reporting
25.01	Training Records
26.02	Maintenance Records

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26.03	Contractor Log Book Audit
27.01	Appointment of Authorised and Competent Persons
28.01	Furniture and Equipment
29.01	Safe Access and Egress (Including Working at Heights and Confined Space Working)
29.02	Risk Assessment
29.03	Health and Safety Training
29.04	Working On Roofs
29.05	Working at Heights
29.06	Working in Ceiling Voids
29.07	Access to 2nd Floor Mezzanine Plantroom St James's Wing
29.08	Access to 6th Floor Plantrooms St James's Wing
29.09	Working in Areas With Possible or Known Asbestos Content
30.01	Planet Enterprise - Accessibility
30.02	Planet Enterprise - Quality Assurance
30.03	Planet Enterprise - Use of PDA's
30.04	Planet Enterprise – Work Flow Reactive Tasks
30.05	Planet Enterprise – Work Flow Planned Maintenance
30.06	SLA/KPI Monthly Meeting
31.01	Purchase Requisition Procedure
31.02	Estates Office Working Practices 1
31.03	Estates Office Working Practices 2



**Estates Department Fire Update August 2014**

The following is an extract from the Standard Operating Procedure for Fire Stopping within the Trust

PROJECT	ST GEORGE'S HEALTHCARE NHS TRUST		
SITE	ST GEORGE'S CAMPUS	PROCEDURE REF	OP 01-04
		VERSION	1.0
AUTHOR	M SULLIVAN	ISSUE DATE	05/06/14
TECHNICAL REVIEW		SIGN OFF DATE	
APPROVED	P ALESBURY	REVIEW DATE	24 MONTHS

PROCEDURE SCOPE	This procedure is to define, as far as is reasonably practicable, the requirements of the Estates Department with regard to the <b>Fire Stopping During and After Installation and/or Maintenance Works</b> at St George's Hospital, Tooting.		
SPECIFIC EXCLUSIONS			
PRIMARY STANDARD			

ASSOCIATED DOCUMENTS	Health & Safety at Work Act 1974 Management of Health & Safety at Work Regulations 1999 HTM 05 Approved Document B for Non Dwelling Houses.		
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PERMIT TO WORK SYSTEM	No	
MAINTENANCE SCHEDULE	No	

**Estates Department Fire Update August 2014****1.0 Purpose**

1.1 The purpose of this Procedure is to ensure Fire Safety for patients, staff and anyone visiting the hospital during and after installation and/or maintenance works.

**2.0 Applicability**

2.1 This Procedure applies to all of the activities carried out either directly by, or under contract for the Capital Projects, IT Department and the Estates Department of the St George's Hospital NHS Healthcare Trust.

**3.0 Responsibility**

3.1 It is the responsibility of the Capital Projects, the IT Department, the Estates Management and Maintenance team to ensure this Procedure is implemented.

3.2 All personnel as defined within Section 2 of this document 'Applicability' must adhere to the requirements of this Procedure

**4.0 Roles and Responsibilities****4.1 Estates Department**

4.1.1 The Estates Department will require that Risk Assessments and Method Statements (RAMS) will be required to be supplied by any contractor for either maintenance or installation works for approval, with a minimum notice period of 96 hours prior to commencement of the works.

**4.2 Capital Projects**

4.2.1 The Capital Projects Department will require that RAMS will be required to be supplied by any contractor for either maintenance or installation works for with a minimum notice period of 96 hours prior to commencement of the works. These RAMS must then be passed on to the Estates Department for approval.

**Estates Department Fire Update August 2014****4.3 IT Department**

4.3.1 The IT Department will require that RAMS will be required to be supplied by any contractor for either maintenance or installation works for with a minimum notice period of 96 hours prior to commencement of the works. These RAMS must then be passed on to the Estates Department for approval.

**4.4 Installation Contractors**

4.4.1 All installation contractors will be required to provide job and site specific Risk Assessments and Method Statements (RAMS) for every aspect of their job at least 96 hours before the intended works commence. In that, they must indicate what procedure they will be following with respect to fire Compartmentation penetrations.

4.4.2 All installation contractors whether for IT cabling, electrical services, ventilation ductwork and any other services that are required to penetrate the fire Compartmentation will be required to work to Approved Document B.

4.4.3 All contractors will also require to be accredited by the Building Research Establishment (BRE) or Loss Prevention Certification Board (LPCB)

**5.0 Perforation of Fire Breaks**

Prior to any works being carried out, the Estates Department must be provided with RAMS. The Estates Department Fire Team must be provided with drawings displaying the route and positions of any proposed works that may interfere with any fire Compartmentation. This will allow the Estates Department to have prior knowledge of and to comment on any proposed installations or alterations.

Services or cabling routes will be walked with the Estates Department person responsible for any given project to ensure the all breaks in the fire protection can be documented and if necessary photographed.

If holes that are to be cut in any fire breaks are to be left open for a period, temporary fire stopping of an approved type will be positioned to conserve the integrity of the fire Compartmentation to the correct rating.

Where services or cabling penetrate the fire Compartmentation it is required that a similar rated fire stopping is applied around and within the penetration it if is trunking and a suitably rated fire damper if the penetration is air ductwork.

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### 6.0 Installation of Services at High Level

All services and cabling installed at high level including those suspended from the structural ceiling and/or installed above suspended ceiling must be fixed to the structural ceiling.

In the cases of the installation of cabling either for IT services or electrical services, this cabling must be either installed in or on containment and will be fire stopped whenever or wherever it passes through any fire Compartmentation

### 13 Permit to Work System

Estates have installed a new permit to work system in May 2014. This will enable estates to control all contractors who work at St Georges NHS Trust. The permits require risk assessments and method statements to be provided before work commences and these are required to be signed off and agreed by a trust estates managers. This enables estates to strictly control all works relating to fire within the trust and prevent contractors damaging fire related infrastructure.

### 14 Fire Training

A significant part of fire management is the training of all staff working on site. The following information is the current situation with staff fire training at St Georges NHS Trust

Face-to-face Fire Safety training is on-going for the weekly Trust Corporate Induction.

The 30 minutes for each of the Corporate and Medical Induction sessions is still less than the 1 hour minimum required to include all aspects of the specified syllabus; however, the Joint Director of Estates & Facilities has recently instructed that one hour should be included on *all* Corporate Induction programmes for Fire Safety.

#### **Fire Warden (Annual)**

Despite the introduction of a 3-year cycle (Years 2 & 3 = shorter refresher sessions), the attendance at Fire warden training remains consistently low. It is estimated that approximately **850** trained Fire Wardens are required in the Trust in order to ensure that *one* is available for each shift. Currently, the number of trained and 'in-date' Fire Wardens is approximately **200**.

#### **Fire Safety Refresher (Annual *or* according to TNA)**

Fire Safety Refresher face-to-face training, by a 'Competent Person' in Healthcare Fire Safety is required annually, particularly for *all* staff in clinical/patient areas. To date, from January – August 2014, only approximately **350** staff have received this training, usually as part of MAST 'Team Days' at the request of departmental managers.

**Estates Department Fire Update August 2014****Drop-In Training**

The Drop-In Refresher and Fire Warden training sessions, designed to promote the availability of statutory training have had a mixed reception. Few have taken advantage of the basic Fire Safety Refresher session although more have attended the Fire Warden Refresher training. A new programme of Drop-In training will begin in September, once room allocations have become available and these sessions will be the subject of heavier 'marketing' via the Intranet and eG communications.

**Fire Safety Training Location**

The availability of a permanent location for Fire Safety Training would provide huge benefits, convenience and encouragement for the training, together with the ability to acquire specialised equipment for fire extinguisher training. As yet, no location has been identified.