

The Newcastle upon Tyne Hospitals NHS Foundation Trust

Job Description

Job Details

Job Title: Specialist Engineering Manager (Electrical)

Band: 7

Specialist Areas: Estates

Base: Trust-wide

Job Purpose

- Responsible for the operational management of specific areas of complex engineering infrastructure to ensure the effective performance of all building services, plant, equipment, structures and fabric to meet the Trust's strategic goals including Trust Board Assurance.
- Responsible for the management of planned maintenance and emergency response for, plant, equipment and complex infrastructure.
- Act as Coordinating/Senior Authorised Person, as defined by Health Technical Memorandum's, for the Low Voltage Distribution Systems across the Estate in addition to one other engineering discipline as required.
- Responsible for the appointment and training of Competent Persons within delegated compliance areas.
- Day to day management of software and hardware systems used by the maintenance compliance function.
- Supporting the Senior Specialist Engineer and Head of Estates Operations (Higher Level) with the performance monitoring of hard FM contracts and internal workforce.
- Participation in the Estates Operational on-call rota, where the frequencies of on-call may change from time to time including on site attendance as required to provide emergency cover for the maintenance out of hours shift rota.
- To be responsible as Project Manager and/or specialist technical support for Capital and revenue projects as required by the Deputy Director of Estates and deliver on time, on budget and as specified.
- To provide Estates and Capital support to other organisations when required
- Effective day to day management of the maintenance budgets working with the Head of Estates Operations (Higher Level) to work efficiently within budget settings.
- Lead, manage and motivate maintenance teams & contractors to fulfil works within time constraints & budget.
- Ensure there are robust systems and processes embedded within area of responsibility, that are efficient, have sufficient governance in place and where possible are standardised in line with overall Estates systems and processes.
- Ensuring timely and accurate reports are produced and submitted as requested by the Head of Estates Operations (Higher Level)
- Developing and assisting to monitor the performance of the maintenance teams, identifying performance targets and providing regular reports on performance

which recommend any required improvements.

- Providing regular highlight reports for compliance areas as required and from these establish and prioritise an annual work plan for areas of responsibility
- Identify and deliver cost improvement opportunities and service efficiencies that may improve the organisation's operations.
- Ensure that all risks and issues are identified, addressed and mitigated or notified appropriately.

Dimension

- Act as Coordinating/Senior Authorised Person, as defined by Health Technical Memorandum's, for the Low Voltage Distribution Systems across the Estate in addition to one other engineering discipline as required.
- Support the Deputy Director of Estates in the management of the Trust Estate by ensuring that their areas of responsibility are maintained in a safe condition at all times, where works are required to ensure that this is the case that these works are carried out in line with legislation and all Approved Codes of Practice with the works managed to minimise the impact on the Operation of the site.
- Manage teams of technical craftspersons in the maintenance of, and emergency response to, complex life critical engineering services, such as Medical Gases, Specialist Ventilation, etc.
- Act as the Authorised/Deputy Responsible Person, as defined within Health Technical Memorandum, for the Electrical Distribution (LV) system as well as a minimum of 1 of the following areas:
 - Fire Alarm / Emergency Lighting Systems
 - Medical Gas
 - Lifting Equipment
- Operate ensure that all activities are carried out in line with budgetary best practice and Trust Standing Financial Instructions.
- Participation in the Estates Operational on-call rota, where the frequencies of on-call may change from time to time including on site attendance as required to provide emergency cover for the maintenance out of hours shift rota.
- Carry out all duties, observing and using safe working procedures in accordance with all Estates operational procedures.
- Liaise with clinical staff to ensure that the safety and dignity of patients is not negatively affected by works for which they are responsible.
- Provide specific technical advice to healthcare professionals on the impact of the engineering infrastructure on patient care.
- Be responsible for equipment maintenance and specialist clinical and Estates services, carrying out inspections and audits as an ongoing responsibility.

Organisation

Accountable: Head of Estates Operations (Higher Level)

Responsible: Senior Specialist Engineer

Knowledge Training and Experience

- Be qualified to Degree or equivalent qualification or demonstrate equivalent knowledge gained through experience, in an electrical engineering or related building services subject with significant relevant post qualification experience

- Masters or equivalent level specialist knowledge of complex engineering services in a healthcare environment
- Have comprehensive knowledge and experience to Post Graduate level in the service, maintenance, and repair of all building services. This includes an in-depth knowledge of:
 - Legislation covering a range of specialist technical areas including:
 - Health and Safety legislation and risk assessments
 - Pressure regulations - steam, air, medical gases and water systems
 - Provision of User of Work Equipment
 - The Electricity at Work Regulations
 - Legionella and water management legislation
 - Asbestos and hazardous / general waste regulations
 - Health Technical Memorandum and Health Building Notes
- Have a thorough working knowledge of the role of Authorised Persons and Authorising Engineers with regard to engineering services within a healthcare environment
- In depth experience and knowledge of hospital building services acquired over a period of time
- Must have a detailed understanding of the application of contracts with regard to the execution of both major and minor capital schemes and Trust standing financial instructions.
- The post holder is required to maintain a programme of continual professional development (CPD) to ensure current best practice is achieved.

Skills

Communication and Relationship

- Be capable of discussing the impact of highly complex maintenance issues with a variety NHS staff, suppliers, contractors and partners.
- Be skilled at the presentation of highly complex information to other maintenance staff within the Trust.
- Impart specialist technical advice where there may be barriers to understanding to clinical staff
- Have the ability to motivate a wide range of technical staff to achieve co-operation and support in the meeting of statutory legal demands.
- Be effective at maintaining two way communications with all staff, irrespective of working pattern, and that staff involvement in decision making is positively encouraged.
- Have the skills required to negotiate with specialists and non-specialists, utility companies, contractors, agencies on contracts for service provision.
- Have an expert knowledge of the application of technical specialist principles and policies, and their relevance to practical situations across all Trust premises.
- Be capable of producing detailed written technical reports, specifications, drawings to an appropriate professional standard as required, and in compliance with legislative and NHS guidelines.

Analytical and Judgemental

- Have the ability to interpret technical drawings and specifications and translate that information into an understandable / workable format for both other Estates staff and clinical/nursing staff.
- Be able to exercise judgement across a range of specialist Estates issues which may have conflicting demands - such as systems failure, complex fault finding,

commissioning and testing?

- Have the knowledge to design and produce technical assessments and solution options for a range of engineering/Estates related issues. To carry out engineering / technical work as an Authorised Person as appointed under the Trust's operational policies including the issue of permit and supervision of work on complex, life critical, engineering systems such as Electrical Distribution (LV).
- Be capable of assessing and determining appropriate action when faced with highly complex or conflicting technical demands or requirements, such as the interpretation of technical results to make recommendations on the ongoing safe operation of equipment to meet its given purpose..
- Be able to assess and determine appropriate action required, including in urgent and emergency situations without direct supervision when attending site as part of the technical building and engineering "on-call" system.
- Know how to undertake appropriate risk assessments and risk analysis for specialist services.
- Recognise potentially hazardous situations and be able to take appropriate corrective action.
- A developed understanding of professional and NHS relevant codes of conduct.
- Applies a structured approach in relation to the scope of the maintenance management for the Trust and demonstrates a proactive and enthusiastic approach to embedding this in practice within the maintenance department.

Planning and Organisational

- Have the ability to manage themselves and teams across multiple work streams in the delivery of planned maintenance and emergency response across a wide range of complex engineering disciplines.
- Be capable of planning and delivering complex planned maintenance plans across a range of complex engineering disciplines ensuring that all options are fully analysed, assessed and risks are understood and accepted by all involved parties.
- Have the ability to alter plans at short notice as new information becomes available whilst minimising the disruption caused by these changes.
- Be able to identify areas for improvement in terms of compliance and efficiencies within the maintenance function and develop implementation plans.
- Have an understanding of Standing Financial Instructions, budgetary control and resource allocation procedures to ensure that the maintenance management function are scoped, planned, implemented and financially evaluated.
- Be capable of acting as project manager for engineering & Estates work issuing instructions and delegating work to other professional Estates staff and contractors as required. Be able to adjust and change plans according to changed priorities.
- Plans will include the planning for installation, commissioning and testing of plant and equipment on a regular basis.
- Manage a range of recurring inspection and testing programmes, including the
- Co-ordination of external auditors and legislative inspections.
- Be capable of leading in the service planning for the development of areas of the engineering infrastructure, including long-term strategic plans to support the changes requirements of the Trust.
- Will have an in depth knowledge, and experienced in the chairing of relevant technical, and non-technical, meetings.

Physical Skills

- Be experienced in the use of all necessary tools and test equipment in

compliance with Trust policies, procedures, and industry best practice. The post holder will be required to use tools/test equipment on a regular basis to test/commission and audit installations such as ventilation, water, sterilisation, medical gases and electrical installations.

- Have an expert knowledge of the use of ICT equipment and specific software Computer Aided Facilities Management, "AutoCAD", and other design software systems.

Key Result Areas

Responsibilities for Patient/Client Care

- Incidental Contact with Patients

Responsibility for Policy/Service Development

- Identify areas for the improvement/development of the Trust engineering infrastructure in their specialist areas of engineering responsibility and provide detailed technical proposals as required which will impact across the whole Trust.
- Identify the need for, develop, implement and manage suitable Safe Systems of Work for their areas of responsibility in line with best practice.
- Author specific specialist technical policies, procedures and Standard Operating Procedures as required.
- To utilise, contribute, and develop Estates generated risk assessments appertaining to all work tasks.
- To take a proactive approach to the identification and assessment of all work activities and risks not covered by existing standards / documentation, and where necessary propose changes to existing working practices for the improvement of the Estates service.
- Provide continual professional development training for Estates related specialist activities including; electrical distribution/isolation, Fire Safety Systems, supervisory management, specialist services, health and safety, etc.

Financial and Physical Resources

- Ensure that all works are managed in line with Trust Standing Financial Instructions and budgetary best practice.
- Manage delegated budgets for the provision of maintenance and repairs to the Trust Estates.
- Manage and procure specialised contracts and services for the provision of maintenance and emergency response across the Estate for those areas for which they have responsibility, for example the servicing and maintenance of IPS/UPS systems.
- Assist in the development / setting of the Department annual budget through the forecasting of costs associated with specific areas of responsibility.
- Responsible for the identification, calculation and setting of project budgets and expenditure profiles, including monitoring and reporting progress on all projects to the Estates Project management group.
- Recommend and select specialist contractors.
- Responsible for order authorisation and invoice authorisation within pre-approved limits.
- Develop annual backlog investment and planned preventative maintenance programmes.
- Identify and agree priorities in connection with maintenance activities.

Human Resources

- Manage Estates staff, technicians and contractors on day-to-day technical and HR issues (i.e. holiday requests and co-ordination, sickness absence and return to work interviews).
- Provide technical management of technicians giving advice, training and instructions in specialist areas, services and equipment.
- Induct and manage contractors and visitors including the issue of permits to work inspection of risk assessments and method statements, and site operational rules and policies.
- Demonstrate / train new starters, other clinical and Estates staff and apprentices in specific/specialist engineering maintenance activities and duties. Act as a mentor to apprentices and other estates staff for specialised information.

Information Resources

- Complete and manage of statutory and ACOP documentation, in accordance with the Estates operational procedures; including condition surveys, asbestos records.
- To record and manage accurate work information as required for the operation of the Estates management systems, PPM, LMS, and all other relevant data management systems. To develop and maintain the estates planned preventative maintenance systems including the monitoring and reporting of maintenance efficiency and performance
- Responsible for the design and development of specialist information including drawings, programmes of work and plans utilising the department's software systems.
- Maintain suitable records for the evidencing of performance against Key Performance Indicators and as required as evidence for audit purposes

Research and Development

- Participate in internal and Trust staff surveys and audits as required.
- The post holder will undertake specialist technical surveys, audits and evaluations of all specialised Estates installations to ensure safe operation, improvement and infrastructure development.
- The post holder will regularly conduct condition surveys and audits of specialised installations to ensure compliance.

Freedom to Act

- Has the freedom to take action with own interpretation on a broad range of specialist engineering tasks.
- The ability to work under pressure to tight deadlines, especially during emergency / critical estates breakdowns and situations.
- Is able to undertake emergency repairs as and when necessary to ensure the ongoing safety of the site.
- Will work unsupervised and is able to take and justify decisions when required to do so ensure that all work is guided by the Estates operational procedures and working practices
- Report all untoward incidents or observations to the relevant senior Estates Management as appropriate.
- Will act as the Lead specialist in their specified areas of responsibility .

Effort and Environment

Physical Effort

- Undertake frequent long periods of sitting or standing at a desk / work station inputting / designing / drawing via a keyboard or producing technical reports
- Occasional need to access and inspect under floor ducts, roof spaces, etc using ladders and access equipment involving manual handling.
- Will be involved in commissioning new plant and services - on-site conditions.

Mental Effort

- Must be able to take and assess technical complex information including; legal technical assessments, engineering inspections, condition surveys. Frequent concentration required on detailed technical documents, test results, commissioning information and specifications.
- Due to the nature of the work (emergency responses to plant failures and alarms) the work pattern is frequently disturbed requiring a flexible and adaptable approach, i.e. loss of power to wards or departments.

Emotional Effort

- Undertake work in patient environments.
- Will action and investigate incidents and complaints where necessary communicating with patients and staff.

Working Conditions

- Occasional need to work in hazardous situations, particularly in connection with emergency incidents. Occasional need to work in plant rooms and service areas while overseeing tests, commissioning and installing.
- Exposure to hazardous and highly unpleasant substances including high temperature, humidity, environments, heights, confined spaces and waste management incidents.
- Occasional need to work outside in inclement weather.

Signed:
(Post holder)

Date:

Signed:
(Directorate Manager or equivalent)

Date:

The Newcastle upon Tyne Hospitals NHS Foundation Trust

Person Specification

JOB TITLE: Specialist Engineering Manager (Electrical)

BAND: 7

DIRECTORATE: Estates

<u>REQUIREMENT</u>	<u>ESSENTIAL</u> Requirements necessary for safe and effective performance of the job	<u>DESIRABLE</u> Where available, elements that contribute to improved/immediate performance in the job	<u>ASSESSMENT</u>
Qualifications & Education	<ul style="list-style-type: none"> Be qualified to Degree or equivalent qualification or demonstrate equivalent knowledge gained through experience, in an electrical engineering or related building services subject with significant relevant post qualification experience. Masters or equivalent level specialist knowledge and experience of complex engineering services in a healthcare environment 	<ul style="list-style-type: none"> Registered as an Incorporated or Chartered Engineer with the UK Engineering Council. A member of a Professional Engineering Institution 	
Knowledge & Experience	<ul style="list-style-type: none"> Have comprehensive knowledge and experience to Post Graduate level in the service, maintenance, and repair of all building services. This includes an in-depth knowledge of: <ul style="list-style-type: none"> Legislation covering a range of specialist technical areas including: <ul style="list-style-type: none"> Health and Safety legislation and risk assessments Pressure regulations - steam, air, medical gases and water systems Provision of User of Work Equipment The Electricity at Work Regulations Legionella and water management legislation Asbestos and hazardous / general waste regulations Health Technical Memorandum and Health Building Notes Have a thorough working knowledge of the role of Authorised Persons and Authorising Engineers with regard to engineering services within a healthcare environment In depth experience and knowledge of hospital building services acquired over a period of time Must have a detailed understanding of the application of contracts with regard to the execution of both major and minor capital schemes and Trust standing financial instructions. 	<ul style="list-style-type: none"> In depth knowledge of contractual procedures and Trust SFIs relating to major and minor capital projects, maintenance & service contracts. Understanding of the requirements for Health Technical Memorandum Authorised Person Electrical Distribution Systems (HV). Management of Capital minor/major works projects under recognised forms of contract. 	
Skills & Abilities	<ul style="list-style-type: none"> Ability to communicate highly technical information to technical and non-technical individuals including, clinical staff and external agencies 		
Values / Behavioural / Attitudes	<ul style="list-style-type: none"> The post holder is required to maintain a programme of continual professional development (CPD) to ensure current best practice is achieved. 		
Core Behaviours	<ul style="list-style-type: none"> Alignment to Trust Values and Core Behaviours 		

CANDIDATE:

REFERENCE NO:

SIGNED BY:

DATE:

DESIGNATION: