

SECTION 4
SPECIFICATIONS

CAMBRIDGE HOUSING SOCIETY

LIFTS & HOISTS

SPECIFICATION OF MAINTENANCE WORKS

INTRODUCTION

It is the Cambridge Housing Society Ltd's intention to appoint contractors for the service (hereafter referred to as 'maintenance') of existing systems.

PREAMBLE

The designation of a Lift includes the entire installation including access to the equipment in roof areas etc.

OBJECTIVE

All of the installed lifts need to be provided with Planned Preventative Maintenance (PPM) on a designated intervals basis, and a Reactive Repair (RR) facility. This is to ensure the efficient and effective operation of all installed equipment for the benefit of the users within the building.

There may also be the need to upgrade and replace equipment where appropriate.

TECHNICAL AND ADMINISTRATIVE REQUIREMENTS

TECHNICAL

There are a wide range of types of equipment installed, and it is a requirement that the contractor has an in depth understanding of all systems, to unit, PC board, software and, often, component level.

It WILL NOT be acceptable for contractors to seek to replace systems at additional cost on the basis of lack of knowledge, skills, or access to materials necessary to maintain or repair any existing systems.

The types of lifts currently in use are as detailed in the "Asset Register"
- SECTION 3 of the Tender Document.

The contractor will be required to have an in-depth knowledge and capability to undertake repairs, replacement maintenance and installation of all types of lift equipment detailed in the schedule of works.

Mechanical and electric hoists are covered by the following regulations:

- SAFed Guidelines on the Lifting Operations & Lifting Equipment Regulations 1998 (LOLER) Regulation 9
- SAFed Guidelines on the Supplementary Test of 'In-service' Lifts
- HSE: Thorough examination and testing of lifts Simple Guidance for Lift Owners pages 1 to 15 – <http://www.hse.gov.uk/punns/indg339.pdf>

The contractor will be responsible for managing and maintaining appropriate licences, hardware and software, plus providing ongoing training and support to their own operatives.

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ADMINISTRATION

The contractor will:

Manage the process in accordance with the procedures and provide support and assistance as is necessary.

Continuous monitoring of contractor performance is an essential element of this Maintenance contract, and contractors are required to provide the following information:

- (A) Performance data as required in Appendix B of this Section of the Tender Document. This is to be provided weekly.
- (B) A list of completed jobs for each week. This list is to be provided by Tuesday of the following week.

Comply with all requirements of the Data Protection Act – see “SECTION 2” Clause A20/Annex 1.

Contractor employees are required to gain access to the properties, and as such it is essential that the appropriate and adequate checks are undertaken in accordance with approved codes of practice and guidelines.

In order to ensure continuous availability of all services essential to Cambridge Housing Society Ltd , the contractor is to ensure that office based key staff are available on a 08:00-17:30 MONDAY – FRIDAY basis and every nominated Bank Holiday.

Access and availability of emergency response staff is to be made available 24 hours a day, 365 days a year.

Access to contractors emergency service is to be by human intervention and job handling.

Answerphone responses will not be acceptable.

Contractors are required to attend monthly, and any essential meetings necessary with Cambridge Housing Society Ltd for the effective and efficient performance of this contract.

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Appendix A

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1. **New Procedures**

An improved process for recording and completing Lift repairs and maintenance has been identified.

One of the main changes will be the shared use of information between Cambridge Housing Society Ltd and the Lift maintenance contractors to improve the service to residents, improve performance management, the speed of post-inspection and the availability of job progress information for staff and residents.

As a result of these changes, procedures for recording repair requests, job progress information, monitoring variation orders and conducting post-inspection have been identified. The procedures will be put in place in line with the move to the shared use of information between Cambridge Housing Society Ltd and the Lift contractors.

2. **Repair Reporting**

Residents and Housing staff, will report repair requests to Cambridge Housing Society Ltd. Cambridge Housing Society Ltd will forward to the Lift maintenance contractor full details of the person reporting the repair and the premises concerned.

A job will be allocated a job ordering code.
Full details of the job will be passed to the Lift contractor.

Each job will be assigned a target completion time based on the target timescale laid out in the contract (1 hours for emergencies, 4 hours for all others).

3. **Out of Hours Reporting and Logging**

During normal working hours, Monday-Friday 09.00 - 17.00, calls will be reported and handled by Cambridge Housing Society Ltd

Emergencies are to be reported by to the contractor by telephone.

4. **Job Progress Information**

To enable Cambridge Housing Society Ltd to keep track of the progress of Lift repairs, the Contractor shall record any relevant job progress information. The procedure for recording progress information once the site has been attended is as follows:-

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If the contractor discovers after attending site that the repair cannot be completed within the target time, they must report to Cambridge Housing Society Ltd the expected time for the repair to be carried out and the reason that the repair cannot be completed (e.g. parts on order).

If repair completion will be delayed for more than 1 day after the job has been logged, the contractor must telephone Cambridge Housing Society Ltd so that they can decide on remedial action.

5. **Variation Orders (for reactive repairs)**

Repairs are reported to Cambridge Housing Society Ltd and logged with a job ordering code. When the contractor attends site the repair may exceed the contractor's financial liability limit (CFLL). Therefore a variation order should be requested. The procedure for requesting a variation order is described below:

- The contractors will log variation requests and an associated SOR code where reactive repairs exceed the contractor's financial liability limit (CFLL). This request must be logged within target time for attendance on site. (The target time for all variation requests is 24 hours).
- Where an immediate decision to undertake work is required, the contractor will telephone Cambridge Housing Society Ltd for authorisation.
- Cambridge Housing Society Ltd will decide whether the contractor should undertake the work by the next working day after the request is made, possibly following a pre-inspection visit.

6. **Performance**

In order to manage the effectiveness of Lift repairs and the performance of the contractor, industry and Cambridge Housing Society Ltd specific KPIs will be established.

7. **Post Inspection**

Post inspection is carried out for 10% of reactive and planned maintenance work to monitor contractor performance. The procedure for carrying out post-inspection of Lift maintenance is described below:

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- The Inspector will schedule a slot in his/her diary to inspect the job on the next working day after the job has been notified as complete by the contractor.
- Once the inspection is complete, the Inspector will record the next working day that the job has been successfully carried out.
- Where the Inspector identifies jobs that have not been completed successfully through post-inspection, the Inspector will record that the job has not been completed successfully.
- Once the contractor has rectified the fault, they will notify the Electrical Inspector.
- The Inspector will then re-schedule the job for post-inspection and then record successful completion.
- A failed post inspection report will be printed on a monthly basis, and this will be reviewed with the contractors.

8. **Customer Satisfaction**

- Cambridge Housing Society Ltd's administration will check on a daily basis, and selects 50% of the previous days closed calls.
- The originator of the 'fault' call is to be telephoned by Cambridge Housing Society Ltd's administration and asked a range of customer satisfaction questions based on the industry KPI's.
- Cambridge Housing Society Ltd's administration enters the responses to show that a survey has been undertaken on that call.
- Where negative responses are received on the survey, Cambridge Housing Society Ltd's administration notify the Inspector by e-mail and provide a copy of the survey report.
- Electrical Inspector to investigate and action accordingly.

9. **Customer Satisfaction - Monthly report**

- Cambridge Housing Society Ltd's administration will provide monthly reports to the Inspector and all appropriate recipients detailing the contractor performance and customer satisfaction.
- These reports will be reviewed and actioned accordingly.

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Appendix B

Performance Data

Date From	To	
Performance Indicator Measures	Target	Actual
Number of jobs received	N/A	
Percentage of jobs completed within programmed timescales	95	
Percentage of jobs completed right first time	90	
Percentage of faults attended within 4 hours	90	

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PERFORMANCE SPECIFICATION

SCOPE OF WORKS

This Specification covers the routine inspection of electric traction and hydraulic passenger lifts, stair lifts and hoists.

The total number of units included at the commencement of the contract is indicated in SECTION 3 – 'Scope of Works' but Cambridge Housing Society Ltd reserves the right to add or delete units from the contract at any time by giving one month's written notice of its intention to do so.

Additional lifts, stair lifts and hoists may be added to this Contract from time to time at the rates entered by the Contractor against the Schedule, if none of the rates so entered are applicable to the type or lifts concerned, then at rates to be agreed between the Contractor and Cambridge Housing Society Ltd, or failing agreement, to be fixed by Cambridge Housing Society Ltd.

To ensure safe working Codes of Practice, in accordance with the Health and Safety at Work Act 1974, two person working shall be required at all times on all works relating to this Contract. Any deviation from this may be deemed to be in breach of contract.

A lift motor room log card shall be provided by the Contractor and it shall be returned to Cambridge Housing Society Ltd on completion of 12 monthly visits. Any visit/repair not entered on the log may be deemed to be in breach of contract.

The Contractor shall have a suitable ladder available at all times for lift motor room access. The Contractor may, at any time or times during the currency of this Contract, be called upon to carry out additional to that detailed in the Specification but no such work shall, except in cases of emergency, be put in hand without the written authority of Cambridge Housing Society Ltd.

The Contractor may be required to furnish estimates of the cost of any work proposed, but Cambridge Housing Society Ltd does not bind itself to accept any estimate submitted. Verbal quotes should be confirmed in writing within three working days.

NUMBER OF VISITS REQUIRED PER ANNUM

Each lift shall have maintenance visits at intervals shown below

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PROGRAMME OF WORKS

The Contractor shall submit for approval by Cambridge Housing Society Ltd with his tender return, a method statement and accompanying bar chart, showing in months and week numbers the method to be employed to achieve the regular maintenance and servicing.

In addition details shall be given on the number of staff to be employed on the above works.

SITE RECORD CARDS

A record (LOG) card shall be displayed in each machine room, one for each lift, by the Contractor.

These cards shall record each attendance to site and the reason for it by the Contractor albeit for maintenance, breakdown, repair or other reason. If site attendance is for a breakdown a description of the fault shall be entered.

The Electrical Inspector or his representative will also utilise this log card to record their visits/inspections of the lift installation.

A valid test certificate for each LG inspection shall be attached to each log card.

EXTENT OF MAINTENANCE WORK

The work required to be carried out under this Contract is as follows:-

- a) Each lift shall be inspected by a qualified lift engineer at the specified intervals and a written report shall be submitted to Cambridge Housing Society Ltd, in respect of inspection.
- b) At each inspection all parts of the lift equipment shall be cleaned, oiled and greased and adjusted as necessary to ensure the satisfactory and safe operation of the lift in accordance with the maintenance performance specification Section 5 below.

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- c) The lift pit, motor room and all areas of the floor and walls adjacent to the lift equipment shall be kept clean and clear of oil, grease and rubbish.
- e) The Contractor shall provide all the labour, tools and materials including all types of oil, grease, and lubricants as necessary, to maintain each lift in full working order.
- f) The Contractor shall as and when necessary, carry out the renewal of all contacts, contact springs and brushes and braids, lamps/fluorescent tubes (motor room and shaft), indicators and LED's which at the time of the inspection need renewal; including the supply of all necessary labour and materials. All to be charged in accordance with the Schedule of Rates.
- g) At the conclusion of each and every inspection, the lift shall be left in a safe and satisfactory working condition. In the event of the lift being withdrawn from service by the Contractor for any reason, Cambridge Housing Society Ltd shall be notified within a period not to exceed four hours.

SPECIFIC MAINTENANCE SERVICE WORK

PRIOR TO COMMENCEMENT OF THE CONTRACT WORKS THE CONTRACTOR SHALL PROVIDE CAMBRIDGE HOUSING SOCIETY LTD. WITH A DETAILED SCHEDULE OF HIS PROPOSED SITE VISITS FOR APPROVAL.

THIS SCHEDULE SHALL INDICATE THE LOCATION, THE DATE AND DETAILS OF THE PROPOSED SERVICE I.E. BI-MONTHLY, 6 MONTHLY AND 12 MONTHLY.

THE CONTRACTOR SHALL INFORM, IN WRITING, CAMBRIDGE HOUSING SOCIETY LTD. OF ANY AMENDMENTS TO THE APPROVED SCHEDULE.

On each Maintenance/Service visit, as indicated below, the following works/inspections shall be carried out by the Contractor

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| <u>MOTOR</u> | (1) | Check electrical connections for tightness. Check lubrication of bearings. Clean |
| <u>CONTROLLER</u> | (2) | Check alignment and air gaps (where fitted) of overloads. Check braids and all contacts with fixed tails, where applicable, for wear and fixings. Replace faulty fuses with correctly rated fuses. Clean.

Ensure all doors are left securely closed. |
| <u>TRACTION SHEAVES</u>
<u>(Traction only)</u> | (3) | Observe if sheaves are tight. Inspect for cracks. Check for apparent wear and rope slip. Clean. Replace guards. |
| <u>DIVERTER SHEAVES</u> | (4) | Observe fixings. Inspect for cracks and wear. Lubricate and clean. Replace guards. |
| <u>MAIN ROPES</u> | (6) | Check condition of ropes. Report number of splinter/breaks in 8 diameters where necessary. Check rope tensions are equal. Measure rope slip. Check number and security of fixings. |
| <u>GOVERNOR</u> | (8) | Check and lubricate governor. Check electrical connections for security. Check governor tension weight and switch for correct operation. Check cover securely fixed. Clean. |
| <u>HANDWINDING GEAR</u> | (9) | Check correct hand-winding equipment installed in the lift motor room. Check floor level indicator/sounder operation. Check that ropes are painted to indicate the correct floor levels. Check presence of hand-winding instructions. Clean. |
| <u>MOTOR ROOM LIGHTING</u> | (10) | Ensure all lamps are operational, replace where necessary. Check operation of emergency luminaires, replace lamps where necessary. |
| <u>GUIDE RAILS AND</u>
<u>FIXINGS - SHAFT/PIT</u> | (11) | Check all fixings. Brush down backs of guides and brackets. Remove debris. Clean shaft and pit area. Remove all oil and debris. Replenish with fresh oil absorbent granules where necessary. |
| <u>GUIDE SHOES</u> | (12) | Check for wear, and adjust where necessary. Lubricate. Clean off excess lubricants. Check fixings. |

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CAR ENCLOSURE (13) Check car station panel and kicking panel for security. Check all panels for security/damage/corrosion. Check car flooring for cracks/damage/corrosion.

CAR LIGHT (14) Check for correct operation. Check condition of diffuser. Replace defective lamps where necessary. Clean.

Ditto for car emergency luminaires, where fitted.

FLOOR SELECTOR AND LEVELS (15) Check tolerance of all moving parts. Check contacts for wear. Check braids for wear and fixings. Check lubrication requirements. Check chain tension. Check levelling switch operation. Adjust parts as necessary. Check floor levelling and adjust to correct tolerances. Clean.

SHAFT SWITCHES (16) Check rollers for wear and free operation. Ensure all connections for tightness. Check alignment of switches and cams. Lubricate as necessary. Check for correct operation. Clean. Ensure correct covers are fitted.

OVERTRAVEL LIMITS (17) Check rollers for wear and free operation. Ensure all connections for tightness. Check alignment of switches and cams. Lubricate as necessary. Check for correct operation. Clean. Ensure correct covers are fitted.

BUFFERS (18) Check fixings. Check buffer switches for operation. Check counterweight overrun, and report with lift at top floor when the gap between the bottom of the counterweight and the top of the buffer becomes less than 150mm or as specified by the manufacturer. Clean.

CAR TOP CONTROL (19) Check for security and correct operation including associated over-travel switches. Check stop switch. Check car top light. Report if guard is missing. Check door operation. Clean control unit and car top.

SAFETY GEAR (20) Check safety link arms and moving parts attached to car for lubrication and freedom of movement. Lubricate where necessary. Check connections of electrical switches for security.

LANDING (21) Check doors for security. Lubricate tracks where appropriate

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DOORS/CLOSERS/ TRACKS

and ensure presence of lubrication strips. Check and adjust stabilising rollers where necessary. Check correct operation of door closers. Check door shoes for security. Check condition of hangers and hanger rollers. Check and adjust where necessary lock release mechanisms. Check running clearances and adjust where necessary. Check astragal and holder for security. Check bottom tracks for wear and corrosion. Clean out bottom tracks.

CAR DOOR/TRACKS

- (22) Check doors for security. Lubricate tracks where appropriate. Check and adjust kicking rollers where necessary. Check door shoes for security. Check condition of hangers and hanger rollers. Check and adjust where necessary door locking devices. Check running clearance and adjust where necessary. Check bottom tracks for wear and corrosion. Clean out bottom tracks.

DOOR OPERATOR

- (23) Check and adjust where necessary the clutch tension. Check all fixing bolts for security. Check for any slackness in linkages and chains. Check smoothness of operation opening and closing, including slow and fast speeds, adjust where necessary. Check drive block assemblies/couplers where fitted for security and wear. Adjust as necessary. Check pick-up assemblies where fitted for security and wear. Check door gear for oil leaks and check lubrication requirements; lubricate as appropriate. Check door open and door close contacts for wear. Check door open and door close buffers. Check retiring ramp contacts for wear and correct operation, check all linkages. Check mechanical door locking devices and adjust as necessary.

VISION PANELS

- (24) Check fixings for security. Check glass for safety, including finger traps. Check glass/perspex for condition and visibility

LOCKS

- (25) Check all lock contacts and bases for condition and follow up. Check and adjust where necessary lock latching mechanisms. Check fixings for security. Check lock arms and rollers for correct operation, lubricate and clean.

SAFETY EDGES

- (26) Check safety edge for consistent operation over the full closing of the door. Check fixings for security. Check for excessive bounce. Lubricate where appropriate. Check operation of various heights. Check condition of flexes. Check where fitted for correct operation of nudging switch, adjust as appropriate

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| <u>PUSHES – CAR AND LANDING</u> | (27) | Check pushes and push plates for security. Check for correct operation. Check call acceptance indicators where appropriate. |
| <u>INDICATORS/SIGNALS/SPEECH SYNTHESIZERS</u> | (28) | Check that all lamps/LED's are securely fitted. Check for correct sequence operation. Check bulbs/LEDs, and replace where necessary. Check correct operation of speech synthesizers where fitted. |
| <u>MAIN SWITCH AND CIRCUIT BREAKERS</u> | (29) | Check for correct operation, and security, ensure correct fuses are fitted. |
| <u>SHAFT LIGHTING</u> | (30) | Check for correct operation. Change lamps/tubes where appropriate. Clean units. Check correct covers are securely fitted. |
| <u>FLEXES</u> | (31) | Check for wear. Make sure they cannot snag anywhere. Check all are hanging correctly and ensure anchorages are secure. |
| <u>ALARM SYSTEM</u> | (32) | Check for correct operation at various levels. Check alarm bell audibility. Check battery back-up where fitted and check batteries for corrosion. |
| <u>OIL LEVELS (Hydraulic System only)</u> | (33) | Check with lift car at top floor that hydraulic pump and motor are fully submersed. Replenish where appropriate. |
| <u>RAM SEALS (Hydraulic System only)</u> | (34) | Check for leaks. |
| <u>CYLINDER HEAD (Hydraulic System only)</u> | (35) | Check cylinder head for security. |
| <u>OIL CONDITION</u> | (36) | Check oil condition for contamination. Check colour of oil to original specification. |

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SPEEDS

(37) Check correct acceleration and deceleration to and from all floors, adjust as necessary.

RELEVELLING/ANTI-CREEP DEVICES (Hydraulic System only)

(38) Check re-levelling for correct operation at all floor levels. Check anti-creep devices (power off) for security where fitted. With ball shut-off valve closed, check that pressure does not decrease more than 4-6 bars in 5 minutes.

MANUAL LOWERING (Hydraulic System only)

(39) Check for correct operation. Check valve block for leaks. Clean valve block and tank unit.

WORKING PRESSURE (Hydraulic System only)

(40) Check correct working pressures are being maintained. Check filters for wear/obstructions.

SLACK ROPE SWITCH

(41) Check for correct operation.

HEALTH AND SAFETY

(42) Lift motor room access, check for security of ladder, trap doors, motor room doors. Check for correct operation of motor room lighting. Check controller rubber mat is properly fitted. Check machine guards for security, and painted yellow. Check that correct notices are fitted: Danger, Electric Shock, Hand Winding. Check for security of shaft dividing screens where fitted. Check toe guards and aprons for security: pit ladders where fitted. Ensure presence of restricted headroom signs and safety measures, where appropriate.

BREAKDOWN AND CALL-OUT ATTENDANCE

The Contractor shall be required to attend site in the event of lift breakdown within the specified timescale after receipt of an instruction by the Company (either by the Appropriate Officer, Engineer or Authorised Representative).

Said timescale shall be maintained during working hours, defined as Monday to Friday 08.00 to 18.00 and also outside normal working hours, defined as periods 18.00 to 08.00 Monday to Friday, all day Saturday, Sunday and Public Holidays.

The Contractor shall be available to respond to calls 24 hours each day on 365 days of the year and shall provide the telephone number to be used for such calls.

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EXTENT OF WORK - REPAIRS AND BREAKDOWNS

The categories of additional work which may be required under this part of the Specification as follows:

- (a) Repairs and renewals of parts of lift machinery, other than as defined in Clause 3.6 above, shall be carried in accordance with the Schedule of Rates for repairs and call-outs.
- (b) On completion of each visit to site the Contractor shall prepare a summary of the works carried out and return completed sheet to the Engineer, not later than 10 (ten) working days after the date of the inspection.
- (c) Faulty micro-processor parts shall be returned to the Engineer within three working days of replacement.
- (d) The Contractor shall retain on site for inspection by the Engineer defective components which have been renewed. The Contractor shall remove such components from the site immediately on instruction from the Engineer. All redundant ropes, oil and landing or car doors shall be removed from site immediately upon completion of the repair works.

ROPES

Where the renewal of suspension ropes is ordered, the replacement ropes shall be of steel construction of a design and manufacture approved by the Engineer and shall, unless otherwise instructed, be attached to lift cars and counterweights by approved bulldog grips and thimbles and conical sockets.

All replacement ropes shall be tested at the maker's works, or elsewhere subject to the agreement of the Engineer. Each rope shall be tested for torsion and tensile and breaking loads in accordance with BS 302: Parts 1 & 4:1987 and, after testing, shall be placed on a reel for delivery to the site.

Test certificates for the ropes shall be submitted by the Contractor to the Engineer for his approval. No ropes shall be delivered to the site until such approval has been given, duplicate copies shall be attached to the log card.

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The Contractor should note that lift cars must be supported independently of the safety gear during re-roping.

Following a running-in period, the Contractor shall return to site and shorten ropes as necessary.

RENEWAL OF CAR FLOOR COVERING

The renewal of car floor covering shall include cutting out and removing the worn car floor covering, cleaning and painting with bitumen solution, the metal work to which the flooring will be laid; and laying down a new floor covering formulated from approved epoxy resin products or other equal material. The material is to be submitted for approval before use. the floor covering shall be at least 6mm thick and shall be suitably keyed to the steel or wooden platform.

RENEWAL OF DOOR SHOES

Where the renewal of door shoes is specified the new shoes shall be of the correct type and be of such dimension as to ensure that the total amount of movement of the bottom of the door (measured in the direction to or from car interior) shall be limited to 3.2mm (1/8") and the shoes shall be fitted as to maintain the correct running clearance of 6mm (1/4") between the door and its return. The shoes shall be securely fitted with bolts.

MATERIALS TO BE SUPPLIED BY CONTRACTOR

The Contractor shall supply the following materials which must be included in the Tender Sum.

- (i) Oil/grease
- (ii) Cleaning equipment and materials.
- (iii) Minor items covered in fixed rate call-out charge.

ARRIVAL/DEPARTURE FROM SITE

On arrival on site the contractor shall inform the authorised person(s) on site of his arrival and shall give notification when works are complete; on leaving site a signature shall be obtained from the authorised person(s). Where available, the Contractor shall sign "in" and "out" on the Visitors Book. The duration of site attendance shall be detailed on the report sheet and a copy left with the authorised person(s) on site. The Contractor shall always ensure plant is left in safe working order and shall obtain the signature of the authorised person(s) on the work sheet/report.

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HOURS OF WORK

The Contractor shall be permitted access to site for the purpose of maintenance duties during normal working hours. These are defined as 08.00 to 18.00 Monday to Friday.

PLANT AND EQUIPMENT MODIFICATIONS

The Engineer reserves the right to add or delete plant from the maintenance schedules during the currency of the contract. In addition, plant may be installed, modified or renewed during the contract period.

Any such alterations may result in the amendment of the maintenance schedule(s) and the price(s) may vary if appropriate in each instance.

STOCK OF SPARES

The Contractor shall hold sufficient quantities of spare parts and components for the range and type of equipment owned by the Engineers, and shall maintain stock levels as may be reasonably expected to ensure that repair and maintenance/replacement works, which may be necessary, shall be carried out as quickly and efficiently as possible.

REINSTATEMENT

Any existing equipment or work, damaged by the Contractor during the execution of the works, shall be made good or reinstated at her/his own expense. Any areas of existing decoration that may be damaged shall be redecorated to the full extent necessary to the entire satisfaction of the Engineer.

REMOVAL OF RUBBISH

The Contractor shall, on completion of each visit to site remove all waste materials, redundant parts and components subject to the requirements of Clause 3.9(d) and all other rubbish connected with the works from site and shall leave equipment, plant and all adjoining areas in a clean and tidy condition.

CONTRACT SUPERVISION

Site inspections by the Contractor's supervisory staff shall be made at least twice annually at not more than six monthly intervals to check the quality and standards of the maintenance being carried out by the Contractor's employees. The next log sheet submitted after such inspections shall be countersigned by the supervisor if satisfactory maintenance has been carried out. Any defects noted at the supervisor inspection and not included in the previous report shall be notified to the Engineer.

INSPECTION REPORTS

Each inspection report by the Contractor shall be submitted not later than 10 working days after the date of the last inspection to which the report relates. It shall relate only to one lift and be submitted monthly. Only the original top copy, duly signed by a responsible person, will be accepted.

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It shall clearly state the work carried out, adjustments made and state the condition of the ropes, locks, machinery, electrical wiring, car and indicator lamps and all other equipment. It shall clearly identify any unsatisfactory items and any further work which may be considered necessary, and certify that the lift is or is not in a satisfactory and serviceable condition.

Insurance report items which fall within routine maintenance specification are to be returned, completed, signed and dated within one month to the Engineer.

When an order has been issued to carry out any work indicated as necessary on a Contractor's report and that work has not been completed when any subsequent report is issued, the job number of the work ordered shall be indicated by the Contractor against any item.

When on a routine maintenance visit or call out, defects of an urgent nature are identified, the Engineer shall be contacted by telephone immediately, stating action taken and the exact nature of defects, and an interim report shall be submitted to the Engineer within 3 working days.

BREAKDOWN REPORTS

Engineer Breakdown Reports are to be submitted not later than ten working days after the date of the last inspection to which the report relates and are to have clear assessment of faults and action taken.

INVOICING

The Contractor shall submit invoices for lift maintenance monthly in arrears.

It should be noted that regular and prompt receipt of reports as described above is a condition of this contract.

Invoices must include the information required in accordance with the relevant clause in the Special Conditions of Contract.

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Maintenance Schedule Brief Description	Item No.		Bi-Monthly	6 Monthly	12 Monthly
Hoists - generally				✓	
Lifts – as follows:					
Motor Room - Check Condition			✓		
Motor (Traction) - Check electrical connections for tightness.	1		✓		
Lift Controller - Check Contacts, Fuses and Condition	2		✓		
Sheaves (Traction) - Check wear and condition	3		✓		
Divertors (Traction) - Check wear and condition	4		✓		
Brake and Coupling (Traction) - Check wear and condition	5		✓		
Main Ropes (Traction) - Check wear and condition	6		✓		
Governor/Safety Gear Rope (Traction) - Check wear and condition	7		✓		
Overspeed Governor - Check wear and condition	8		✓		
Overspeed Governor - Check operation	8				✓

CAMBRIDGE HOUSING SOCIETY

LIFTS & HOISTS

SPECIFICATION OF MAINTENANCE WORKS

Maintenance Schedule Brief Description	Item No.		Bi-Monthly	6 Monthly	12 Monthly
Hand Operation Equipment - Check wear and condition	9		✓		
Motor Room Lighting - Check operation and condition	10		✓		
Guide Rails and Fixings - Check wear and condition	11		✓		
Guide Shoes - Check wear and condition	12		✓		
Car Enclosure - Check wear and condition	13		✓		
Car Lighting - Check operation and condition	14		✓		
Floor Selection and Levelling - Check operation and condition	15		✓		
Shaft Switches - Check operation and condition	16		✓		
Overtravel Limits - Check operation and condition	17		✓		
Pit Buffers - Check wear and condition	18		✓		
Car Top Control Unit - Check operation and condition	19		✓		
Safety Gear - Check condition	20		✓		

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SPECIFICATION OF MAINTENANCE WORKS

Maintenance Schedule Brief Description	Item No.		Bi-Monthly	6 Monthly	12 Monthly
Safety Gear - Check Operation	20				✓
Landing Doors/Closers/Tracks - Check operation, wear and condition	21		✓		
Car Door/Tracks - Check operation, wear and condition	22		✓		
Door Operator - Check operation, wear and condition	23		✓		
Vision Panels - Check condition	24		✓		
Landing Door Locks - Check operation, wear and condition	25		✓		
Safety Edges - Check operation, wear and condition	26		✓		
Push Units - Check operation, wear and condition	27		✓		
Indicators/Signals/Speech Synthesizers - Check operation and condition	28		✓		
Main Switch Gear and Circuit Breakers - Check operation, wear and condition	29		✓		
Shaft Lighting - Check operation and condition	30		✓		
Trailing Flexes	31		✓		

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SPECIFICATION OF MAINTENANCE WORKS

Maintenance Schedule Brief Description	Item No.		Bi-Monthly	6 Monthly	12 Monthly
Alarm System	32		✓		
Oil Levels (Hydraulic Systems only)	33		✓		
Ram Seals (Hydraulic Systems only)	34		✓		
Cylinder Head (Hydraulic Systems only)	35		✓		
Oil Condition (Hydraulic Systems only)	36		✓		
Operating Speed	37		✓		
Re-leveling/Anti creep (Hydraulic Systems only)	38		✓		
Manual Operation (Hydraulic Systems only)	39		✓		
Working Pressure (Hydraulic Systems only)	40		✓		
Slack Rope Switch	41		✓		
Health and Safety	42		✓		