

## APPENDIX 4D

### PLANT SERVICES (NEW FACILITY ONLY)

#### 1. DEFINITIONS

In this Appendix, in addition to the definitions set out in Schedule 1 of the Agreement:

**“Building and System Maintenance”** and **“Building Maintenance”** means the services generally described in Section 2.4 of this Appendix, which will include planned, preventive and remedial upkeep of the New Facility, including all building elements, components and systems (for greater certainty including the Select Campus-wide Systems), including HVAC, electrical, mechanical, plumbing, elevators, carpentry and painting, and including Preventive Maintenance and New Facility Demand Maintenance, and any reference to “maintenance” or “maintain” or “maintaining” or similar terms in respect of any of the services described in Section 2.4 will be deemed to be a reference to all of Building and System Maintenance;

**“Campus-Wide Fire Management Plan”** means the policy by that name as developed by Project Co;

**“CSB Defects Correction Work”** has the meaning set out in Section 2.21(b) of this Appendix;

**“CSB Handover Latent Defect”** means a failure of the CSB to meet the CSB Handover Condition, which failure: (a) was not observable as of the CSB Handover Date, (b) was not a failure of which Project Co, the Design-Builder or the Service Provider Has Knowledge as at the CSB Handover Date, and (c) was discovered before the 10th anniversary of the CSB Handover Date, and for greater certainty includes a CSB Service Commencement Latent Defect where the relevant CSB Defects Correction Work is to be performed after the CSB Handover Date;

**“CSB Handover Condition”** means the condition of the CSB as at the CSB Handover Date which will be the CSB Service Commencement Condition as modified by the CSB Defects Correction Work (whether performed prior to the CSB Handover Date or to be performed after) and by wear and tear, and subject to Project Co performing the Services during the CSB Handover Period in accordance with the requirements of this Agreement;

**“CSB Handover Date”** means the date that is 18 months after the CSB Service Commencement Date;

**“CSB Handover Period”** means the period beginning on the CSB Service Commencement Date and ending on the CSB Handover Date;

**“CSB Service Commencement Condition”** is the assumed condition of the CSB at the CSB Service Commencement Date as set out in the following documents

- (a) as-built drawings;
- (b) commissioning report;
- (c) demand maintenance records; and
- (d) deficiency list,

receipt of which is acknowledged by Project Co and the Authority;

**“CSB Service Commencement Latent Defect”** means a failure of the CSB to meet the CSB Service Commencement Condition and which failure (a) was not observable as of the Effective Date and (b) was not a failure of which Project Co, the Design-Builder or the Service Provider Has Knowledge as at the Effective Date;

**“Elevator Uptime”** has the meaning set out in Section 2.10(e) of this Appendix;

**“Equipment Maintenance”** means the services generally described in Section 2.5 of this Appendix, which will include planned, preventive and remedial upkeep, including all elements, components and systems, and including Preventive Maintenance and New Facility Demand Maintenance, and any reference to “maintenance” or “maintain” or “maintaining” or similar terms in respect of any of the services described in Section 2.5 will be deemed to be a reference to all of Equipment Maintenance;

**“Helicopter Certificate”** means the certificate referred to in the Canadian Aviation Regulations, Part III, Subpart 5 - Helicopters;

**“Helicopter Operations Manual”** means the manual referred to in the Canadian Aviation Regulations, Part III, Subpart 5 - Helicopters;

**“Independent Handover Consultant”** has the meaning set out in Section 2.21(b) of this Appendix;

**“Maintained Equipment”** means all Category 1 Equipment, Category 5 Equipment and Category 6 Equipment, but does not include Category 2 Equipment, Category 3 Equipment or Category 4 Equipment;

**“New Facility Demand Maintenance”** means all ad hoc maintenance, repairs, testing or servicing, including all elements, components and systems within the New Facility other than Preventive Maintenance or Scheduled Maintenance;

**“Plant Services Information Management”** means those plant services information management services to be carried out pursuant to this Appendix;

**“Preventive Maintenance”** means all care and servicing of equipment and facilities to prevent faults and failures from occurring, including Scheduled Maintenance;

**“Scheduled Maintenance”** means any commissioning, testing, servicing or maintenance including all elements, components and systems, maintenance planned for a scheduled time;

**“Select Campus-wide Systems”** has the meaning set out in Section 2.4(c) of this Appendix; and

**“Technical Requirements”** means the Design and Construction Specifications indicated in Schedule 3.

## **2. PLANT SERVICES**

### **2.1 General Requirements**

- (a) Project Co will perform the Plant Services in compliance with this Appendix and all other requirements of this Agreement. Project Co is responsible for the costs of meeting all such requirements for the Plant Services except where any costs are clearly identified as being Authority costs. The parties acknowledge and agree that Project Co’s obligations under this Appendix only relate to the New Facility.
- (b) Project Co will continuously perform the Plant Services throughout the Operating Period, and is responsible for such Services with onsite staffing 24-hours per day 365(6) days per year. For greater certainty, a minimum of two staff are expected to be onsite at all times to support the performance of the Services.
- (c) There may be services or tasks to be performed that are not expressly described in this Agreement, but in performing the Services in this Appendix, Project Co will perform all such tasks as are required by Good Industry Practice.
- (d) This Appendix includes a table that references Performance Indicators applicable to Plant Services. The Performance Indicators include all provisions of the relevant section of this Appendix referenced in the table and all other Services required or reasonably inferred to be required to perform the relevant Performance Indicator. The Performance Indicators identified will not limit the scope of the Plant Services to be performed.

- (e) Without limiting the requirements of the Agreement, including the other provisions or this Appendix, Project Co will:
- (1) provide high quality, efficient, innovative and flexible Plant Services at all times;
  - (2) provide sufficient number of qualified, trained and competent personnel on site (which in all cases includes employees or other personnel of Project Co or the Service Providers and subject to the limitations on the use of Sub-Contractors set out in Section 2.11 of this Appendix, employees or other personnel of Sub-Contractors) with the skills necessary to perform the Services;
  - (3) meet all requirements of applicable Law, Building Code, applicable collective agreement(s) and Authority Policies. Where there are conflicts between Project Co policies and the Authority Policies, Authority Policies will prevail;
  - (4) research and develop new service delivery methods and apprise the Authority of their benefits;
  - (5) manage matters and marshal resources as required to participate in emergency responses and to provide a high level of customer care;
  - (6) keep the Authority informed in such detail as the Authority may reasonably require of the progress of any negotiations regarding employees;
  - (7) provide Services that are integrated and coordinated with the delivery of other services by the Authority and/or its contractors other than Project Co and the Service Providers and Sub-Contractors;
  - (8) ensure a collaborative working relationship with the Authority, its employees and contractors;
  - (9) exercise competent supervision of the Services at all times;
  - (10) administer all insurance claims in connection with the provision of the Services at the New Facility, which will be done at cost by Project Co without mark-up;
  - (11) provide all quality assurance and quality monitoring relevant to the Plant Services;
  - (12) administer and, subject to the consent of the Authority (acting reasonably), make claims under all applicable warranties;
  - (13) deliver the Plant Services having regard for and without limiting the requirements set out in Section 3.2 of Schedule 4 [Services Protocols and Specifications]:
    - (A) CAN/CSA-Z317.1 Special Requirements for Plumbing Installations in Health Care Facilities;
    - (B) CAN/CSA-Z317.10 Handling of Waste Materials in Health Care Facilities;
    - (C) CAN/CSA-Z317.11 Area Measurement for Health Care Facilities;
    - (D) CAN/CSA Z317.2-10 Special Requirements for Heating, Ventilation, and Air Conditioning (HVAC) Systems in Health Care Facilities;
    - (E) CAN/CSA-Z317.5 Illumination Systems in Health Care Facilities;
    - (F) CAN/CSA-Z317.13 Infection Control during Construction or Renovation of Health Care Facilities;

- (G) CAN/CSA-Z318.0 Commissioning of Health Care Facilities;
  - (H) CAN/CSA-Z323.5 Mechanical/Electromechanical Lifting Devices for Persons;
  - (I) CAN/CSA-Z7396.1 Medical Gas Pipeline Systems;
  - (J) CAN/CSA-B44 Safety code for Elevators and Escalators;
  - (K) CAN/CSA-C282-00 Emergency Electrical Supply for Buildings;
  - (L) CAN/CSA-Z32 Electrical Safety and Essential Electrical Systems in Health Care Facilities; and
  - (M) Canadian Counsel of Health Services Accreditation, Environmental Standards, 2007; and
- (14) deliver the Plant Services in accordance with principles consistent with the initially applicable LEED™ Gold certification points for the New Facility;

## 2.2 Scope of Service

- (a) For convenience of reference, the Plant Services are separated into the following elements, as further described in Sections 2.3 to 2.20:
- (1) Statutory Testing and Permission to Work;
  - (2) Building and System Maintenance;
  - (3) Equipment Maintenance;
  - (4) Life Cycle Replacement and Refurbishment;
  - (5) Internal and External Site and Facility Condition/Environment;
  - (6) Building Management System (BMS) Reporting Requirements;
  - (7) Fire Management;
  - (8) Elevators and Vertical Transportation Services;
  - (9) Sub-Contractor Management;
  - (10) Plant Services Information Management;
  - (11) Miscellaneous Occupant Request Services;
  - (12) Grounds and Gardens Maintenance Services;
  - (13) Quality Monitoring;
  - (14) Emergency Preparedness;
  - (15) Medical Gases;
  - (16) Heliport Maintenance and Management;
  - (17) Pest Control Services; and
  - (18) System Maintenance, Updating and Replacement.

- (b) The intention of Appendix 4D and Appendix 4E is that Project Co will provide Plant Services in respect of the whole of the Facility.

### 2.3 Statutory Testing and Permission to Work

Project Co will:

- (a) develop and implement appropriate operational policies, procedures and practices, relative to statutory testing and permission to work, including with respect to the sections that follow;
- (b) attend upon and undertake, where appropriate, insurance, statutory and regulatory tests which may be required by applicable Law, Authority Policy or the Authority's insurers and maintain records of all such statutory and regulatory tests including:
  - (1) preparing boilers, elevators, etc. for regulatory and insurance company inspections;
  - (2) providing routine/regular testing of standby generators, standby domestic pumps, fire alarms, emergency lighting systems and exit signs and electrical distribution systems, medical gas systems, demineralized water system for heating plant, etc. in accordance with recommended manufacturers guidance and Good Industry Practice;
  - (3) providing testing and servicing of hand fire appliances;
  - (4) testing for Legionella; and
  - (5) providing testing, labelling and recording of all portable appliances and equipment, as required under applicable Law with test results stored electronically and made available to the Authority on reasonable request. This shall include the following tasks:
    - (A) testing and certifying all portable test equipment, pressure gauges and recording equipment;
    - (B) testing and certifying all fixed instrumentation and taking any necessary action to repair, replace and adjust such devices, as required; or
    - (C) ensuring that all test equipment is itself tested and carrying the necessary valid certification;
- (c) provide reports on a monthly basis to the Authority that provide the status and results of all testing and any Rectification requirements and actions taken to ensure compliance is achieved;
- (d) commission all new plant operations, systems and equipment, installed or provided by Project Co, including those replaced under the Life Cycle Requirements, subject to prior review of all commissioning procedures by the Authority;
- (e) conduct an annual review of maintenance manuals and concurrently update any changes or notifications by manufactures/suppliers and report to the Authority on such changes annually and review Project Co's Preventive Maintenance program and update Scheduled Maintenance plans included in the Annual Service Plan accordingly;
- (f) provide the Services in a manner which actively reduces the risk of disruption to the Authority Activities. Project Co will apply to the Authority with at least ten days advance notice, for permission to work where any scheduled work may affect the Authority Activities or the operations of other Facility Users in a substantive way. Where

disruptions are determined by Project Co to be minimal, shorter requests for permission may be made. In the event that a unit/department is in use by the Authority or another Facility User, the Authority may inform Project Co that Plant Services will not be carried out in order to avoid disruption to the Authority Activities or operations of the other Facility User. Project Co will agree with the Authority upon an alternative time to carry out the Service. Where Project Co subsequently carries out the Service at the agreed alternative time, Project Co will be deemed to have complied with carrying out the Service and the Response Time and Rectification Period for such Service will be adjusted accordingly.

## 2.4 Building and System Maintenance

Project Co will:

- (a) develop and implement operational policies, procedures and practices relative to Building and System Maintenance, including with respect to the sections that follow;
- (b) maintain, including repairing, updating (including renewal and replacement and providing life cycle services unless indicated in this Agreement, including in Appendix 2E [Equipment and Furniture], not to be life cycled by Project Co), all elements, components and systems in the New Facility, including Maintained Equipment in the New Facility and the Select Campus-wide Systems, in accordance with this Appendix: Project Co will also provide all Equipment Maintenance for the Maintained Equipment and all Life Cycle Requirements for all Maintained Equipment included in the Life Cycle Components;
- (c) in accordance with the requirements of this Agreement, including Section 2.20 of this Appendix and Appendix 3F [Systems Responsibility Matrix], maintain, including repairing and updating (including renewal and replacement and providing life cycle services) the following systems and all components of such systems, including user devices, across the whole Facility (the “**Select Campus-wide Systems**”):
  - (1) Clock System;
  - (2) Nurse Call and Annunciation;
  - (3) Public Address;
  - (4) Fire Alarm System and Annunciation;
  - (5) Access Control;
  - (6) Panic Duress;
  - (7) Video Surveillance/Security;
  - (8) Patient Wandering System;
  - (9) Pneumatic Tube;
  - (10) Infant Abduction System; and
  - (11) Building Management System (BMS), but for greater certainty, the BMS with respect to Select Campus-wide Systems in the CSB and Other Site Facilities includes only the head end unit and software but not the controllers.

For greater certainty, for the purposes of the Services the entirety of the Select Campus-wide Systems will be deemed to be a part of the New Facility and following the Service Commencement Date will be maintained and life cycled by Project Co in accordance with this Appendix. From the Other Site Service Commencement Date until the Service Commencement Date those parts of the Select Campus-wide Systems, including all

components and user devices, that are in the Other Site Facilities will be maintained by Project Co to the relevant standards set out in Table 4: Systems of this Appendix 4D and the Life Cycle Requirements will apply.

- (d) provide, purchase and install, unless otherwise stated, all requisite plant, equipment, apparatus and consumable items (including lightbulbs, chemicals, PPE, hardware, lubricants, shop supplies, filters, belts, paint, adhesives, batteries, etc.) required for the proper execution of all work which Project Co is required to carry out under this Appendix; including scaffolding, cramage, tackle, machinery, tools or other appliances and everything else necessary for the work, and will be responsible for their conveyance, use, subsequent removal, making good and cleaning;
- (e) provide a comprehensive and effective Preventive Maintenance program in accordance with Section 4.2(g) of Schedule 4 [Services Protocols and Specifications]. Preventive Maintenance will include maintaining building elements, components and systems so as to prevent faults and ensure functionality, including by testing, repairing, installing parts and consumables and disposing of replaced parts or consumables and emptying storage tanks;
- (f) provide comprehensive and effective New Facility Demand Maintenance initiated by the Authority by a Demand Requisition to the Help Desk. Project Co will perform such New Facility Demand Maintenance within the Response Times and Rectification Periods set out in Table 1 (Response Times and Rectification Periods), and in accordance with this Appendix and all other requirements of this Agreement;
- (g) provide Preventive Maintenance and New Facility Demand Maintenance that will regularly maintain, repair and replace, where necessary, all fire prevention/detection equipment, including fire safety systems and equipment, automatic fire detection and alarm systems, portable and fixed fire-fighting systems and equipment, at the Facility as may be required from time to time to maintain all fire equipment in compliance with applicable Law including ULC standards S536 Inspection and Testing of Fire Alarm Systems. Where any such equipment requires replacement, Project Co will replace such equipment with equipment of equivalent or higher standard;
- (h) establish and maintain suitable systems and procedures to ensure that all fire equipment is examined and tested and keep records of all tests and the dates thereof in an accurate and sufficiently detailed manner;
- (i) whenever possible, avoid the need for service diversions. Where diversions are necessary, Project Co will (other than in an Emergency) contact the Authority and gain approval to divert service as required. Project Co will carry out the work with the minimum of interference to existing installations and to the normal operation of the Facility;
- (j) maintain at its cost an inventory of basic and specialty parts for all building elements, components and systems related to the repair and maintenance of the New Facility, as recommended by the manufacturer and sufficient to achieve Rectification within the Rectification Period;
- (k) provide the following Services in relation to Building and System Maintenance:
  - (1) Site utility services (connections and on-site infrastructure, including inspection and maintenance of sanitary sewers, storm drainage systems, water supply systems and appurtenances);
  - (2) properly and safely maintain the interior and exterior fabric of the Facility so that they are and remain functional, safe, operationally sound and of good appearance;

- (3) properly and safely maintain mechanical and electrical, communications and data network cabling, including heating, ventilation and air conditioning systems, hot and cold water system, pure water system, sanitary waste and storm water systems, fire alarm system, medical gases, vacuum and anaesthetic scavenging systems, electrical and cabling systems, such that they are and remain functional, safe and operational; and
- (4) maintain and carry out on going testing verification and calibration to ensure the building systems continue to perform as intended (e.g., of indoor air quality, space pressurization, etc., including by independent testing agencies);
- (l) commission, inspect, test and monitor building fabric and utilities, and all mechanical and electrical services to ensure they are fully operational and compliant with applicable Law, and Good Industry Practice;
- (m) produce such reports as required by applicable Law and other regulations, informing the Authority which statutory reports have been completed and making available to the Authority copies of such reports;
- (n) maintain an inventory listing, or other relevant listing, of all elements for which it is responsible under this Section 2.4, including the date of adding to service of any new elements and the date of disposal or removal from service for any elements and be responsible for all such disposal or removal; and
- (o) cooperate with and assist the Authority and all Authority Persons and cause the Service Provider and any Sub-Contractors to extend similar cooperation and assistance, in the performance of the Authority FM Services. Project Co will not materially interfere with, obstruct, impede or delay the performance of the Authority FM Services, provided that Project Co will not be required to act in breach of its obligations under this Agreement.

Refer to Section 2.5(d) of this Appendix for the relationship between maintenance for Equipment under Section 2.4 and Section 2.5.

## **2.5 Equipment Maintenance**

- (a) Project Co will:
  - (1) develop and implement appropriate operational policies, procedures and practices relative to Equipment Maintenance including with respect to the sections that follow;
  - (2) maintain, including repairing and updating (including renewal and replacement), all Maintained Equipment in accordance with this Appendix and manufacturers' recommendations, unless otherwise agreed by the Authority;
  - (3) provide Equipment Maintenance within the Response Times and Rectification Periods stated in Table 1 (Response Times and Rectification Periods);
  - (4) provide Preventive Maintenance. Project Co will ensure that Preventive Maintenance will be performed by Project Co personnel with operator level training;
  - (5) provide New Facility Demand Maintenance. Project Co will ensure that New Facility Demand Maintenance will be performed or supervised by Project Co personnel with specialized training and who must also be familiar with the operations of applicable Equipment;

- (6) maintain at its cost an inventory of basic and specialty parts for all elements, related to the repair and maintenance of Equipment, as recommended by the manufacturer and sufficient to achieve Rectification within the Rectification Period;
- (7) compile and maintain the following information in respect of Equipment and maintenance service records and activities:
  - (A) number of requests on CMMS by type as defined in Table 2 (Building and Equipment) of this Appendix;
  - (B) description of Equipment (including a unique numerical equipment identifier (such as the tagging identifier that is in place on all Authority transferable Equipment), category, condition/age and Equipment item number and the number of Demand Requisitions on that Equipment for each Payment Period);
  - (C) description of maintenance provided and time to Respond and time spent to Rectify;
  - (D) who performed the maintenance (i.e., Project Co, third party provider, or manufacturer's service representative under warranty);
  - (E) direct cost of maintenance, including parts, or third party provider's invoiced cost; and
  - (F) Project Co commentary on how the maintenance could be better handled in the future (e.g., if the maintenance were done by a third party provider, could it have been done by Project Co personnel if they had received additional training, parts or personnel);
- (b) Within a reasonable time after each anniversary of the Service Commencement Date, the parties will meet and review the information referred to in Section 2.5(a)(7) above. The parties will consider as part of their review issues such as personnel, training, parts, third party provision of maintenance and any other matters pertaining to equipment.
- (c) Project Co will maintain an inventory listing of Equipment for which it is responsible under this Section 2.5, including the date of adding to service of any new elements and the date of disposal or removal from service and Project Co will dispose of and remove from service any such Equipment for which it is responsible and provide notice to the Authority of such disposal and removal.
- (d) The intention of Sections 2.4 and 2.5 is that all Maintained Equipment will be maintained, repaired and updated by Project Co in accordance with the responsibilities set out in Appendix 2E [Equipment and Furniture] and in accordance with the relevant standards set out in Tables 2 to 6 of this Appendix.
- (e) Project Co's responsibilities for maintaining, repairing and updating Category 1 Equipment will be subject to:
  - (1) reimbursement of Other Site Maintenance Variable Costs in accordance with Schedule 8 [Payments] for the portion of New Facility Demand Maintenance solely applicable to Category 1 Equipment; and
  - (2) the provisions for Other Site Lifecycle Repair/Replacement set out in Section 2.4(g) of Appendix 4E [Plant Services (Other Site Facilities Only)] and Category 1 Equipment will be deemed to be part of the Other Site Facilities for the sole purpose of inclusion in Other Site Lifecycle Repair/Replacement.

- (f) Project Co will dispose of all consumables (including belts, lights, filters, batteries, etc.) and other materials used during the course of providing the Plant Services.
- (g) Project Co will respond to Demand Requisitions in respect of all Equipment. If the Equipment which is the subject of the Demand Requisition is not Equipment to be maintained by Project Co, Project Co will determine whether the problem relates to the Equipment itself or to a component of the Equipment. If:
  - (1) the problem relates to a component of the Equipment to be maintained by Project Co, Project Co will rectify the problem in accordance with this Appendix; or
  - (2) the problem does not relate to a component of the Equipment to be maintained by Project Co, Project Co will promptly give notice of the problem to the Authority together with a summary of the results of the investigation into the problem conducted by Project Co.

## **2.6 Life Cycle Replacement and Refurbishment**

- (a) Project Co will ensure the long-term integrity and ongoing operational serviceability of the New Facility by complying with the Life Cycle Requirements, which define design life, specific replacement/refurbishment strategies, key assumptions, and annual cost provisions for all types of plant and equipment for which Project Co is responsible. The Life Cycle Requirements are categorized by major elements such as substructure, structure, enclosure, interior dividing, vertical, finishes, fittings and equipment, mechanical, electrical, life safety, communications, Select Campus-wide Systems and Site. Project Co will renew the New Facility, as required, such that, at termination or expiry of the Agreement, the New Facility is fully functional to the standard specified in Appendix 4C (Handback Requirements).
- (b) Project Co will:
  - (1) develop and implement appropriate operational policies, procedures and practices, relative to life cycle including with respect to the sections that follow;
  - (2) perform life cycle replacement or refurbishment services throughout the term in accordance with the Life Cycle Requirements and Handback Requirements;
  - (3) develop, manage and operate a comprehensive electronic inventory control system, the asset register (based on the initial Asset Register established under Appendix 2E [Equipment and Furniture] and as updated), that provides up-to-date records for all aspects of the New Facility including building architectural, mechanical and electrical elements and systems. All assets will be tagged with bar codes that will allow for remote device reading of asset history and details, as well as entry of details on work performed;
  - (4) ensure that life cycle replacement and renewal services minimize disruption to the Authority Activities;
  - (5) cooperate and coordinate with the Authority for life cycle replacement and renewal of integrated systems and equipment and maintain the interface with other such Authority systems and equipment throughout the performance of such life cycle replacement;
  - (6) initiate an emergency procurement procedure to enable timely replacement in the event of unexpected elements failure;

- (7) provide advice, guidance and recommendations on life cycle replacement and/or refurbishment of out-of-scope additions to the New Facility subsequent to commissioning;
  - (8) comply with the reporting and quality monitoring requirements of this Appendix and with all other reporting and quality monitoring requirements of this Agreement;
  - (9) perform an annual facility condition assessment prior to the development of the Annual Service Plan to record and update the condition of the New Facility and all elements of the New Facility; and
  - (10) without limiting the foregoing, with respect the Category 5 Equipment and Category 6 Equipment the following will apply:
    - (A) the parties will jointly establish a selection committee that includes clinical representation from the Authority;
    - (B) the Equipment must meet or exceed the specifications, performance and reliability of the Equipment that is replaced;
    - (C) the timeline for replacement will be consistent with Good Industry Practice metrics to determine when a replacement is required, which may consider the suitability for clinical use, the repair record and risk of service disruption; and
    - (D) Project Co will not procure replacement Equipment without the prior consent of the Authority, acting reasonably;
- (c) Replacement of elements, Equipment and systems by Project Co must be consistent with the following principles:
- (1) at the Expiry Date, each element of the New Facility, the listed assets and the Site will have a remaining life cycle consistent with the Handback Requirements;
  - (2) the standard of replacement or refurbishment of specific elements in accordance with the Life Cycle Requirements will meet or exceed the requirements of this Appendix and all other requirements of this Agreement. Where elements are no longer available or those elements cannot be reproduced then elements may be replaced with elements of similar or equivalent form, substance and quality that meet or exceed the requirements of this Appendix and all other requirements of this Agreement;
  - (3) where new or alternative building and site equipment or systems are provided by the Authority, life cycle replacement will be the responsibility of the Authority. However, Project Co will be responsible for providing advice and recommendations on such renewal and/or replacement;
  - (4) where new or alternative building and site equipment or systems are provided by the Authority, Project Co will report on the impact of such additions or alternatives on existing systems or operational costs; and
  - (5) Project Co shall make available to the Authority a full audit trail of life cycle activity and adherence to agreed standards.
- (d) Project Co will provide periodic management reports to the Authority such as:
- (1) monthly reporting on the asset register updates;

- (2) advice on systems and equipment that are out-of scope; and
- (3) ad hoc and other reports as agreed upon by Project Co and the Authority.

## **2.7 Internal and External Site and Facility Condition/Environment**

Project Co will:

- (a) deliver the Plant Services to the standard identified in this Appendix having regard to the Site and the internal and external environment of the New Facility, including with respect to the sections that follow;
- (b) maintain the Site and Facility;
- (c) ensure that the heating, air conditioning, humidity and mechanical ventilation systems (including fume cupboards and other local ventilation systems) function as required by Schedule 3 (Design and Construction Specifications) with the correct circulation rates and air filters installed and maintained as set out in Schedule 3;
- (d) comply with, or exceed, the baseline measurements for the number of air exchanges required to be maintained in specific rooms as per Schedule 3;
- (e) keep the Functional Units at the temperatures as per Schedule 3;
- (f) meet the standards for heating, ventilation, air conditioning, lighting, pressurization, sound and vibration as described in Schedule 3;
- (g) comply with or exceed the baseline measurements for the acoustic performance of the New Facility as per Schedule 3;
- (h) comply with or exceed the baseline measurements for the vibration level performance as per Schedule 3;
- (i) ensure all lighting systems remain fully functional, safe, and are maintained to provide illumination levels based on benchmark levels established at Service Commencement and set out in Schedule 3;
- (j) ensure the public address system operates as designed; and
- (k) where applicable, ensure all work carried out in the performance of the Services is carried out in compliance with the latest revision of CSA standards, work with Infection Control Practitioners to ensure notification of the work areas and that the area is contained correctly, and sign off the required documents for all Level 1 and 2 work according to the CSA standards.

## **2.8 Building Management System (BMS) Reporting Requirements**

Project Co will:

- (a) develop and implement appropriate operational policies, procedures and practices, relative to the Building Management System, including with respect to the sections that follow;
- (b) maintain the BMS and ensure the BMS is functional and available to the Authority;
- (c) ensure that upon the occurrence of any event nominated by the Authority, any event reported by the BMS, any other event required by the Authority or as specified in Schedule 3 (Design and Construction Specifications), the BMS will automatically and

immediately notify the nominated Authority staff of the incident particulars. Such incidents may include:

- (1) changes in the temperature of a clinical fridge;
  - (2) where an alarm is triggered in accordance with an event covered by the fire system;
  - (3) other installed alarms as required by the Authority from time-to-time including food freezers/fridges, IMIT server rooms, medical gases;
  - (4) where hardware is in place, provide alarms as notified by the Authority including generators and generator rooms; and
  - (5) HVAC alarms, including room pressurization;
- (d) link the occurrence of a nominated event to the paging system when requested by the Authority. The Authority may nominate any number of Authority staff to be notified, via the paging system, of the occurrence of a nominated event;
- (e) provide the Authority direct access to the following BMS reports on a continuous basis:
- (1) critical incident failures;
  - (2) daily, weekly, periodic status reports;
  - (3) exception report by element status;
  - (4) time of occurrence, time for Response and time for Rectification; and
  - (5) any other requirement of Project Co or the Authority to ensure that all systems are functioning effectively;
- (f) provide the Authority with read only system access to Project Co systems, including the BMS and CMMS for running of any desired ad hoc reports and ensure that any such reports will be capable of being exported by the Authority into Microsoft Excel format. Project Co will provide training to the Authority on generating and downloading reports from the CMMS via the internet-based portal;
- (g) without limiting any requirement of Schedule 3 [Design and Construction Specifications], connect all Equipment to the BMS that can be reasonably be connected; and
- (h) maintain integration between the BMS and the CMMS to allow for automated reporting and trend logging.

Project Co will transition from the Authority's building management system to Project Co's BMS no later than the Service Commencement Date, and in such transition, Project Co will ensure in the roll out and commissioning that the BMS will be fully functional with zero tolerance for loss of data and system functionality.

After the Service Commencement Date, Project Co will not change the BMS in the New Facility without the prior agreement of the Authority, acting reasonably, and taking into account the effect on the BMS System in the Other Site Facilities.

For greater certainty, the BMS with respect to Select Campus-wide Systems in the CSB and Other Site Facilities includes only the head end unit and software but not the controllers.

## **2.9 Fire Management**

Project Co will:

- (a) be the fire marshal for the New Facility and as such will develop and implement appropriate policies, procedures and practices relative to fire management, including with respect to the sections that follow;
- (b) prepare and implement a comprehensive Campus-Wide Fire Management Plan and in preparing such Plan, Project Co will:
  - (1) collaborate with the Authority within timelines set out by applicable national and provincial codes and/or other applicable Law, or where these are not stated within reasonable periods of time, to agree to all emergency procedures and contingency plans as these shall relate to the provision of the Services and Project Co's responsibilities as set out in this Agreement;
  - (2) based on communications with and approval by the Authority, establish and implement procedures for fire drills on all work shifts in liaison with the Fire Authority, or as required by applicable Law in relation to the Facility. Project Co's nominated fire officer (a management employee) will liaise with the Authority in respect of procedures for the evacuation of buildings in the event of fire. Project Co will ensure that fire drills are carried out as agreed with the Fire Authority or as may be directed by the Authority;
  - (3) develop recovery policies that reflect the Authority's approach to contingency and disaster recovery, and that are linked to security policies, both addressing basic defence requirements to ensure the stability and continuity of the Authority Activities;
  - (4) develop evacuation policies which comply with and are integrated into Authority policy that respond to a variety of emergencies, including fire, explosions, floods, earthquakes, hurricanes, tornadoes, toxic material releases, radiological and biological accidents, civil disturbances and workplace violence, and that include the following and are compliant with and integrated with the existing Authority plans:
    - (A) conditions under which an evacuation would be necessary;
    - (B) conditions under which it may be better to shelter-in-place;
    - (C) a clear chain of command and designation of the individual authorized to order an evacuation or shutdown;
    - (D) specific evacuation procedures, including routes and exits;

- (E) specific evacuation procedures for high-rise buildings;
  - (F) procedures for employers;
  - (G) procedures for employees;
  - (H) procedures for assisting visitors and employees to evacuate, particularly those with disabilities or who do not speak English;
  - (I) designation of what, if any, employees will remain after the evacuation alarm to shut down critical operations or perform other duties before evacuating;
  - (J) a means of accounting for employees after an evacuation;
  - (K) special equipment for employees; and
  - (L) appropriate respirators;
- (5) ensure that Project Co staff will, and ensure that Authority staff are aware that they should, if at any time they believe that any matter constitutes a fire risk, report this immediately to Project Co's nominated fire officer and Project Co will take such remedial action as may be necessary;
  - (6) ensure that all Project Co staff are given fire safety instruction/education in compliance with applicable Law. Project Co will review its staff training plans with the Authority to allow for collaboration in training as appropriate;
  - (7) save where agreed with the Authority or the relevant fire department, ensure that its performance of the Services does not prevent emergency vehicles from having access to the Facility and to the faces of the buildings. Project Co will ensure all fire access is agreed with the Authority and the fire department, and is in accordance with applicable Law;
  - (8) Fire department access-routes will be clearly sign-posted;
  - (9) attend and provide whatever assistance is necessary to all reports of fire in any areas of the Facility in support of the Authority, the fire response team, and/or the automated electronic paging system. This will include:
    - (A) responding to a fire alarm;
    - (B) reporting blocked fire access routes to the Help Desk;
    - (C) assisting portering staff in limiting unauthorized access to the scene of the fire;
    - (D) assisting in the evacuation of the affected areas in the event of fire; or
    - (E) liaising with external agencies, including the fire department, as part of its response in relation to an incident; and
  - (10) prepare an annual written report for the Authority providing the following information on the Site:
    - (A) confirmation whether the New Facility, including fire compartmentalization design, provision of escape routes and provision of fire-fighting equipment and systems, complies with the requirements of applicable Law relating to fire safety;

- (B) confirmation that procedures for which Project Co is responsible, including emergency procedures and contingency plans, as these relate to the Fire Management Plan, comply with the requirements of applicable Law relating to fire safety;
- (C) current status of fire alarm system certification; and
- (D) all circumstances where Project Co believes, using due skill and care, the Authority is conducting its activities in a way where there are non-compliances with applicable Law relating to fire safety.

For the avoidance of doubt Project Co will have the sole obligation to maintain in readiness and implement where necessary, contingency plans should any of the fire safety systems in the Facility fail to function as intended.

## 2.10 Elevators and Vertical Transportation Services

Project Co will:

- (a) develop and implement appropriate operational policies, procedures and practices, relative to elevators and vertical transportation services, including with respect to:
  - (1) passenger and service elevators;
  - (2) associated elevators motor rooms;
  - (3) dumbwaiters; and
  - (4) escalators (if any);
- (b) immediately respond (within 5 minutes) to all elevator alarms or telephone calls from an elevator and initiate the required action to Rectify faults and release occupants;
- (c) have personnel on Site to immediately attend to minor elevator faults;
- (d) in the event of mechanical failure, ensure that elevator occupants are released from the elevator as soon as practicable and in any event within a half hour if the failure occurs or subsists during the period from 8:00 a.m. to 5:00 p.m. and within one hour otherwise;
- (e) maintain each elevator so as to comply with the requirements of this Appendix including as to Elevator Uptime and to comply with all other requirements of this Agreement, including Schedule 3 (Design and Construction Specifications) For these purposes, Elevator Uptime is defined in respect of each elevator in the New Facility as such elevator being available for normal use by being:

### ***Operational, adequately ventilated, licensed, and safe.***

Elevator Uptime means the amount of time that each such elevator was available for normal use during a measured period expressed as a percentage and calculated, as follows:

$$(\text{Total Time} - \text{Down Time}) \times 100 / \text{Total Time}$$

Where:

**Down Time** is the number of hours that such elevator was unavailable for normal use; and

**Total Time** is the total number of hours during the measured period;

- (f) in no case allow:
- (1) Scheduled Maintenance or non-Scheduled Maintenance, excluding for greater certainty maintenance required by applicable Law, scheduled modernisation or Scheduled Maintenance as identified and agreed to in the Annual Service Plan; or
  - (2) elevator failure,
- to result in Elevator Uptime of less than 98.5% in each calendar month.

## **2.11 Sub-Contractor Management**

Project Co may retain Sub-Contractors as required to deliver certain aspects of the Plant Services identified within this Appendix. In selecting and hiring its Sub-Contractors, Project Co will:

- (a) ensure the Sub-Contractor selection process is cost effective and competitive in nature utilizing an open, fair and transparent tendering and selection process that encourages the participation of local businesses and suppliers;
- (b) establish policies, procedures and sub-contract documentation that ensure that selected Sub-Contractors are properly screened, licensed and insured as required under any applicable Law and in accordance with the requirements of this Appendix;
- (c) be responsible for the performance of Sub-Contractors (including Project Co providing supervision) in the delivery of the Services;
- (d) be responsible for the payment of all sub-contracted goods and services; and
- (e) ensure that Sub-Contractors acknowledge that the Authority retains the right to request termination and/or refuse access to the Site of any Sub-Contractor or its employees that it reasonably determines to be unacceptable.

For greater certainty, Project Co acknowledges that Project Co is responsible for the costs of Sub-Contractors for the Plant Services identified within this Appendix (excluding for greater certainty the Other Site Lifecycle Repair/Replacement performed as provided in Section 2.4(g) of Appendix 4E).

## **2.12 Plant Services Information Management**

Project Co is responsible for all aspects of the management of information related to the Services, including the provision, installation, maintenance, configuration, upgrading of software, for at a minimum the following systems:

- (a) BMS;
- (b) CMMS;
- (c) Help Desk information management system; and
- (d) Asset management and planning system.

Project Co will:

- (e) develop and implement appropriate operational policies, procedures and practices, relative to Plant Services Information Management, including with respect to the sections that follow;
- (f) provide a comprehensive, computerized Plant Services Information Management system that includes:

- (1) maintaining Plant Services records and information;
  - (2) providing Plant Services information to authorized Persons or Governmental Authorities;
  - (3) administrating Plant Services information and business;
  - (4) providing hardware and software to run relevant systems meeting the Authority's interfacing standards;
  - (5) ensuring that with any upgrade of software, Project Co's system is compatible with the Authority's systems and, if not, paying for the upgrade of the Authority's systems to meet the requirements. Conversely, the Authority will be required to pay for the upgrade of Project Co's systems should the Authority upgrade or change systems and create incompatibilities with Project Co's software or systems;
  - (6) ensuring that all Project Co staff or users of specific software or systems are trained and competent to meet the requirements for use of such software or systems; and
  - (7) ensuring backup and storage in safe custody of data, materials and documents in accordance with Good Industry Practices and with processes/procedures to be defined by Project Co. Such backup and storage processes/procedures are subject to review by the Authority;
- (g) collect, manage and update all Plant Services records and information on behalf of the Authority. This will include information regarding:
- (1) the physical characteristics of the plant and Equipment including:
    - (A) the description and address of the Facility;
    - (B) all area and buildings volume data;
    - (C) condition surveys;
    - (D) all location plans, boundaries and titles relating to the Site; and
    - (E) up-to-date CAD drawings for both the Site and New Facility and the Services, which are to be linked to the Authority systems to current CAD standards. Project Co will ensure that all systems provided are compatible with the Authority's systems and allow for access to information by the Authority;
- (h) ensure all CAD and As Built Drawings are kept up to date and a new set of drawings is provided to the Authority in the format requested semi-annually, where changes have occurred. Otherwise Project Co will advise the Authority that no changes have occurred and that the drawings remain current for the forthcoming period;
- (i) maintain records and details of specific license requirements where Project Co is responsible for obtaining any licenses. Where the Authority is responsible for obtaining such licenses, Project Co will only be obliged to maintain records that have been provided to it by the Authority;
- (j) ensure test certificates and appropriate documentation and records (in particular those relating to any aspects of safety or statutory compliance) are maintained accurately and are updated appropriately and are available for inspection by the Authority or any other relevant party;

- (k) use data and communications systems, which are compatible with the Authority's systems at all times;
- (l) ensure all information and records are complete, precise and clearly identifiable. Project Co will make all such information available for inspection at the reasonable request of the Authority;
- (m) maintain hazard notices and safety signs including those issued by the Authority and maintain a record of all such hazard notices and safety signs and put in place procedures to ensure such notices and signs are located and displayed correctly, and are fully serviceable;
- (n) prepare and supply all information reasonably required by any Person, to whom the Authority is obliged to present information at any time in relation to the performance of the Plant Services; and
- (o) keep any and all Facility Users who issue a request informed of the status of all Demand Requisitions and Miscellaneous Occupant Request Services and inform all such Facility Users when that work order has been completed.

### **2.13 Miscellaneous Occupant Request Services**

Project Co will provide the Miscellaneous Occupant Request Services in accordance with Section 8 of Schedule 4 [Services Protocols and Specifications].

### **2.14 Grounds and Gardens Maintenance Services**

Project Co will:

- (a) develop and implement appropriate operational policies, procedures and practises relative to grounds and gardens maintenance, including with respect to the sections that follow;
- (b) provide snow and ice removal from roads, heliports, paths, parking areas and entrances to the Facility, including:
  - (1) provision for snow plowing, clearing, sanding and application of ice melting and anti-skid products to all paved and concrete areas including without limitation roadways, heliports, sidewalks, emergency routes and parking areas;
  - (2) snow plowing and clearing will be performed on an on-going basis as required to reduce the risk of injury, accidents and maintain clear lines of sight and access to the Facility at all times. Maximum depths of snow accumulation for various areas of the Facility will be proposed by Project Co and approved by the Authority, acting reasonably;
  - (3) provision for reasonable snow accumulation/dumping on-site as long as it does not present safety hazards, block visibility of traffic lanes or affect availability of heliports or parking areas, otherwise must be removed from the Site;
  - (4) identification of ongoing actions to be taken in the event of significant weather events to ensure safety and acceptable site conditions throughout the day;
  - (5) protection of all existing and new plants, site services, curbs, paving, structures, finishes and any other features during the course of providing the Services;
  - (6) establishment of call-out provisions through the Help Desk for immediate response, removal of snow or ice accumulation etc.; and

- (7) clean up of any excessive anti-skid or ice melting products;
- (c) provide scheduled and New Facility Demand Maintenance for the grounds and gardens based on a periodic maintenance program. Project Co will provide the periodic maintenance program to the Authority for review as part of the Annual Service Plan, including the schedule for all preventative work, the nature of the work and the affected area(s) all in a format agreed with the Authority. The program will also highlight areas where the Authority's cooperation is required before work can be started, for example where car parking areas may need to be temporarily closed;
- (d) comply with the current British Columbia Landscape Standard, as published by the B.C. Society of Landscape Architects and Nursery Trades including:
  - (1) obtaining a Pesticide Service License for the application of pesticides/herbicides on the Site. Project Co will submit the required Pesticide Management Plans to the Pesticide Branch as required by the BC Integrated Pest Management Act; and
  - (2) complying with Authority Policy on the application of pesticides and herbicides;
- (e) provide a full horticulture service across the New Facility in accordance with Table 6 (Horticulture), including:
  - (1) tree maintenance/surgery, including pruning and limb removal;
  - (2) lawn care, including mowing and edging;
  - (3) flower bed maintenance;
  - (4) weeding;
  - (5) planting, including shrubs, tree, flower beds; and
  - (6) effective, but economical, irrigation procedures;
- (f) ensure all external areas of the New Facility are sound, safe, tidy, aesthetically pleasing and maintained in accordance with Table 5 (Grounds and Gardens Maintenance) and with Response Times and Rectification Periods set out in Table 1 (Response Times and Rectification Periods);
- (g) in complying with Table 5 (Grounds and Gardens Maintenance):
  - (1) protect from damage, all existing and new plants, site services, curbs, paving, structures, finishes and any other features, during the course of providing Services;
  - (2) state in advance all products intended for use (provided that such products are permitted by applicable Laws and by Authority Policies) including:
    - (A) type of herbicides and pesticides;
    - (B) type of lawn and shrub fertilizers; and
    - (C) type of lime;
  - (3) remove garbage, biohazardous waste, litter, cigarette butts and human waste from the grounds and from Car Parking Areas;

- (4) ensure all roads, pathways and parking lots have clear and complete paint and markings and curbing; and
- (5) provide power sweeping of roadways to remove loose debris;
- (h) maintain all records, showing areas occupied, status, materials used, activities carried out, date of activity and conduct inspections to ensure that all areas are in good order; and
- (i) develop, document and maintain procedures required for the effective operation of roads and paths to ensure availability of access to all essential areas for all of the Services and for all Authority Activities.

### **2.15 Quality Monitoring**

Project Co will conduct a customer satisfaction survey annually or on a frequency to be agreed between the parties. The questions contained in such survey are subject to review by the Authority. Within 30 Business Days following completion of any such survey, Project Co will provide the Authority with a summary of the results, which summary will include average scores per question, a historical trend, surveyor comments, areas for improvement and a strategy for the upcoming period to address any such areas for improvement.

### **2.16 Emergency Preparedness**

During emergency situations when external phone communications are no longer available Project Co will work with the local HAM radio operators to establish and maintain contact with the rest of the world for as long as the phone system is inoperable.

This work includes the setup and regular testing of this form of communication to ensure this type of communication is operable.

### **2.17 Medical Gases**

Project Co will perform all maintenance required to maintain a continuous flow of medical gases in the Facility, including:

- (a) monitoring and controlling the centralized duplex bottle manifold medical gas supply system;
- (b) responding to all alarms related to the centralized duplex manifold medical gas supply system and the medical gas bottle storage room;
- (c) metering and trending the consumption of medical gases in the New Facility;
- (d) monitoring the available inventory of bottled medical gases and notifying the Authority if replacement inventory is required; and
- (e) swapping out empty medical gas bottles as necessary.

### **2.18 Heliport Maintenance and Management**

Project Co will:

- (a) fulfill all obligations for operation of the heliport under CAR 305 and 325 including the development, regular maintenance and update of the Heliport Operations Manual or any other document that Transport Canada may require for the use and operation of heliports/helipads;

- (b) ensure that Project Co staff conduct daily inspections and attend all helicopter takeoffs and landings;
- (c) appoint a Heliport Manager and at least one designate to act in the Heliport Manager's role when the Heliport Manager is not available on site or on call;
- (d) train the Heliport Manager, designates, and all maintenance staff in accordance with CAR 325.49 and in the requirements in filling the respective roles;
- (e) train Project Co staff in accordance with the requirements of CAR 325.49 including:
  - (1) operation for the heliport;
  - (2) safety around helicopters;
  - (3) communications;
  - (4) emergency response plan; and
  - (5) use of firefighting equipment;
- (f) operate the heliport 24 hours per day, 365(6) days per year under a PPR (Pilot Prior Request) requirement to use the heliport;
- (g) perform all required maintenance and life cycle work in coordination with the Authority to minimize disruption to heliport operations; and
- (h) develop in conjunction with the Authority a joint services protocol for the heliport operations including roles and responsibilities in accordance with the following responsibility matrix:

#### HELIPORT RESPONSIBILITY MATRIX DURING OPERATING PERIOD

Requirement	Responsible Party
Ownership & accountable executive	Authority
Designated certificate holder	Authority
Heliport manager	Project Co
Training of Authority staff and security subcontractors	Project Co
Maintenance and life cycle of all heliport elements including coordination of maintenance staff and activities	Project Co
Development and maintenance of Heliport Operations Manual	Project Co
Receipt of notifications (helicopter take-off and landing requests)	Project Co
Activation of landing lights	Project Co or BC Air Ambulance (if done by pilots)
Pre-helicopter usage inspection (confirmation that the heliport is clear)	Project Co
Re-set heliport systems after usage	Project Co
Daily heliport inspection	Project Co
Notification of air transport	BC Air Ambulance
Notification of ground ambulance requirement	BC Air Ambulance
Development and periodic review of joint services protocols for heliport operations	Authority/Project Co

## 2.19 Pest Control Services

Project Co will:

- (a) provide a comprehensive preventative, reactive and on-call pest control service for all pests, including insects, rodents and birds, using personnel who are fully trained, qualified and able to provide high quality professional and practical advice;
- (b) notify the Authority immediately of any pest/vermin infestation; and
- (c) undertake all work in a safe manner with minimal interference with the Authority's operations and with minimal risk in terms of safety, food hygiene, infection control and damage to the Facility.

## 2.20 System Maintenance, Updating and Replacement

(a) Project Co will:

- (1) provide a full-time IMIT System Lead who will be responsible for performing planned and unplanned maintenance on the systems to be maintained by Project Co pursuant to Appendix 3F [Systems Responsibility Matrix] (and including for greater certainty the Select Campus-wide Systems) as well as co-ordinating with the Authority to ensure that all interfaces are maintained;
- (2) co-ordinate and collaborate with the Authority in advance of life cycle or replacement of any systems or components, including user devices, to ensure that all interfaces are maintained;
- (3) test and verify in coordination with the Authority the functionality and interoperability of the systems, equipment and infrastructure with all Facility systems and interconnections with Authority IMIT equipment and systems; and
- (4) provide continuous system monitoring through the BMS and Help Desk with 24/7 onsite response to all IMIT issues in accordance with the applicable Response Time(s) including alert notification to designated Authority staff of failures.

(b) Project Co will:

- (1) be responsible for ensuring that appropriate versions of firmware and software are in place to ensure serviceability of the all systems as per the manufacturer as well as ensuring integration of the systems with systems managed by the Authority;
- (2) notify the Authority no less than 30 days prior to any planned updates to the systems;
- (3) provide a backup and restore plan prior to commencing any such updates to the systems to address potential interface and integration issues to other systems;
- (4) restore the system to its previous version if the update is unsuccessful or integration issues cannot be rectified; and
- (5) be responsible for resolving any such issues and then implementing the updates to firmware and software.

(c) With respect to replacement of the systems and/or components of the systems, including user devices:

- (1) the Authority acknowledges that manufacturers of such systems and components, frequently release new or upgraded systems and components;
- (2) the Authority acknowledges that Project Co will not be automatically required to replace such systems and components solely as a result of the release of new and upgraded systems and components; and
- (3) Project Co will be required to replace such systems or components when manufacturer (or a qualified third party approved by the Authority, acting reasonably) software or other manufacturers-provided (or qualified third-party provided approved by the Authority, acting reasonably) support (either by way of active service contracts or by warranty terms and conditions) is withdrawn for such systems or components. Project Co may propose to delay the replacement of a system or component by submitting a plan to the Authority setting out the proposed delay and the means by which Project Co will provide seamless and continuous services and integration of such system or component without risk to the Services and to the Authority Activities and provides for the conditions for the future replacement of such system or component. If the Authority in its discretion accepts such plan, Project Co may delay replacement of the system or component provided Project Co complies with the plan.

## 2.21 CSB Handover

- (a) During the CSB Handover Period, Project Co will provide Services to the CSB on the basis of the Other Site Services as set out in Appendix 4E [Plant Services (Other Site Facilities Only)], except that as provided in Section 2.4(b) of Appendix 4E [Plant Services (Other Site Facilities Only)], the Other Site Facilities Life Cycle Report in Section 2.6 of that Appendix, the definition of “Obsolete” and Section 2.4(f) of that Appendix will not apply to the CSB.
- (b) During the CSB Handover Period:
  - (1) The parties will cooperate to jointly appoint a consultant (the “**Independent Handover Consultant**”), who is:
    - (A) qualified and experienced with respect to the design, construction and condition assessment of buildings in British Columbia similar to the CSB, and
    - (B) independent from both the Authority and Project Co (and who will be impartial to the parties),

to provide services for the benefit of the parties as required by this Section 2.21. The parties will enter into an agreement on the terms generally as set out in Appendix 2A [Independent Certifier Agreement] and with such changes as are required to reflect the scope of services of the Independent Handover Consultant. The provisions of Section 3.2 of Schedule 2 [Design and Construction Protocols] will apply in respect of the appointment or replacement of the Independent Handover Consultant, with such modifications as are required to apply to the Independent Handover Consultant and this Section 2.21.
  - (2) The Authority will pay the first \$40,000 in fees and costs of the Independent Handover Consultant, with such fees and costs to be paid through a cash allowance as provided in Schedule 8 [Payments], and the parties will share equally any fees and costs for the Independent Handover Consultant in excess of such \$40,000.

- (3) The parties will, with the Independent Handover Consultant, develop a program for quarterly review of CSB Service Commencement Latent Defects that may be identified by either of the parties and prepare a final report of identification and resolution of CSB Service Commencement Latent Defects and identification of any work that has been deferred pursuant to Section 2.21(b)(4) below.
  - (4) If any CSB Service Commencement Latent Defects are identified, Project Co will either perform the work to correct such defect (the “**CSB Defects Correction Work**”) or will, at the request of the Authority, defer the performance of such CSB Defects Correction Work.
  - (5) The CSB Defects Correction Work will be paid from a cash allowance of \$1,350,000 as provided in Schedule 8 [Payments], which cash allowance will be applied at the time the CSB Defects Correction Work is performed (including if after the CSB Handover Period for deferred CSB Defects Correction Work). There is no sharing by Project Co of any amount above or below such cash allowance. If Project Co or any Project Contractor performs any CSB Defects Correction Work, neither Project Co nor such Project Contractor will apply any mark-up to such costs that are covered by the cash allowance. All labour costs of Project Co or any Project Contractor will not exceed the Minor Works Rates less 5%. Notwithstanding the foregoing, any CSB Defects Correction Work above such cash allowance will be subject to the applicable markups under Schedule 6 [Changes, Minor Works and Innovation Proposals].
  - (6) The parties agree that the CSB Defects Correction Work is not a Change. The parties will endeavour to agree to an expedited process for authorizing and proceeding with the CSB Defects Correction Work. If the parties fail to agree to such expedited process within 30 days, the parties will apply the provisions of Section 2 of Schedule 6 [Changes, Minor Works and Innovation Proposals], modified as necessary to reflect this Section 2.21.
- (c) From and after the CSB Handover Date, Project Co will provide the Services to the CSB as part of the New Facility, except that:
- (1) in the event of an Excusing Event in paragraph (l) of the definition of Excusing Event, Project Co will take all reasonable measures required to keep the CSB operational and take temporary and permanent corrective action to remedy the CSB Handover Latent Defect that is the subject of such Excusing Event, and
  - (2) if the total repair cost of the CSB Handover Latent Defect that is the subject of such Excusing Event exceeds \$25,000 (Index Linked), Project Co will be entitled to a Change in accordance with Schedule 6 [Changes, Minor Works and Innovation Proposals] for any such repair cost, provided however that Project Co’s entitlement to such repair cost will be calculated without application of any markup for overhead or profit and will be calculated as the reasonable out-of-pocket cost and the internal costs of the Service Provider, with the Service Provider using reasonable efforts to mitigate the cost.
- (d) The Authority will for the benefit of Project Co, with respect to CSB Handover Latent Defects less than \$25,000 (Index Linked) use commercially reasonable efforts to pursue claims, if any, as are available to the Authority against any contractor, subcontractor or supplier who provided work or services to the Authority in respect of the CSB.

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**Table 1: Response Times and Rectification Periods**

	Category	Definition	Response Time	Rectification Period if Not Linked to Availability	Service Failure Level
1	Emergency	Service required immediately and is considered a serious emergency, including: <ul style="list-style-type: none"> <li>• issues having an immediate negative impact on patient care;</li> <li>• safety problems exposing Facility Users to danger;</li> <li>• emergency repairs to prevent further damage (i.e. burst pipe);</li> <li>• equipment failure or operating difficulties which could result in the loss of critical utilities including heat, water, electricity, emergency power and medical gases; and</li> <li>• any Event that is a life safety issue or serious enough to cause significant operational disruption, economic or environmental damage.</li> </ul>	15 minutes	4 hours	High
2	Urgent	Service required as soon as possible: <ul style="list-style-type: none"> <li>• to address problems not presenting an immediate danger; and</li> <li>• to address problems having the potential to have a negative impact on patient care or operations.</li> </ul>	30 minutes	24 hours	Medium
3	Routine	Maintenance and repairs required for non-emergencies not having an immediate effect on patient care which may include leaking taps, faulty doors and windows or equipment breakdowns or work not requiring immediate attention which may include repairs to damaged walls, furniture or fixture installations.	2 hours	7 Days	Low

The following tables outline some general items to be maintained and they are not meant to be inclusive of all the inspections that are required by an effective maintenance program. Project Co will ensure that all elements meet or exceed the standards set out in Tables 2 to 6 below.

<b>Table 2: Building &amp; Equipment</b>	
Element	Standard
General	<ul style="list-style-type: none"> <li>• In general, all elements of building fabric, fixtures and</li> </ul>

Table 2: Building & Equipment Element	Standard
	fittings, floor and floor coverings, and furniture and Equipment will at all times be functional, operational and satisfy the same performance requirements as required for Service Commencement, subject to reasonable wear and tear, which is in turn subject to refurbishment obligations.
<b>Building Fabric, External</b> Including: <ul style="list-style-type: none"> <li>• External walls, doors and roof access, screens, canopies, glazing and windows</li> <li>• Roof</li> <li>• Fire escapes</li> <li>• Walkways</li> <li>• Safety barriers</li> <li>• Balconies</li> <li>• Eaves, soffits, fascia</li> <li>• Rendering</li> <li>• Chimneys/flues</li> <li>• Lightning Protection</li> </ul>	<ul style="list-style-type: none"> <li>• Sound secure and weatherproof where appropriate.</li> <li>• Free from damp penetration or spalling.</li> <li>• Claddings, copings and parapets, soffits/fascia are structurally sound and secure.</li> <li>• Free from vermin and/or pest infestation.</li> <li>• Chimney stacks/flues are structurally sound and secure and flue is free from blockages/excess soot.</li> <li>• Substantially free from debris, moss growth and bird droppings.</li> <li>• Free from vandalism.</li> <li>• Free from dirt and dust buildup.</li> <li>• Substantially free from undue damage and of reasonable appearance for location.</li> </ul>
<b>Building Fabric, Internal</b> Including: <ul style="list-style-type: none"> <li>• Internal walls</li> <li>• Doors, glazing, screens, cabinetry</li> <li>• Partitions</li> <li>• Ceilings</li> <li>• Elevators, escalators, dumbwaiters</li> <li>• Pneumatic tube</li> <li>• Floors</li> </ul>	<ul style="list-style-type: none"> <li>• Substantially free from structural cracks and/or deflection.</li> <li>• Substantially free from damp.</li> <li>• Free from vermin and/or pest infestation.</li> <li>• Substantially free from undue damage and of reasonable appearance for location.</li> <li>• Free from asbestos and other hazardous materials.</li> <li>• Free from deleterious materials used in works undertaken by Project Co.</li> <li>• Free from vandalism.</li> </ul>
<b>Fixtures and Fittings</b> Including: <ul style="list-style-type: none"> <li>• Doors (external, internal and fire)</li> <li>• Glazing, screens, cabinetry</li> <li>• Windows and sills</li> <li>• Hatches</li> <li>• Vents</li> <li>• Shelving</li> <li>• Cupboards</li> <li>• Railings</li> <li>• Racking</li> <li>• Notice boards</li> <li>• Mirrors</li> <li>• Balustrades</li> <li>• Magnetic door holders</li> <li>• Roll-shut screens</li> <li>• Motorized and non-motorized blinds</li> </ul>	<ul style="list-style-type: none"> <li>• Operate as intended, in a safe way, without making undue noise and without including observable stains on hinges, locks, catches and handles, &amp; without binding, rubbing or catching in any way. Reset after tripping, if required.</li> <li>• Function as intended, and shall be free from all but minor surface blemishes and wear and tear.</li> <li>• Luminescent strips, signs, notices, warning signs where appropriate are intact, legible and illuminated where appropriate.</li> <li>• Substantially free from corrosion and rust.</li> </ul>
<b>Floor and Floor Coverings</b>	<ul style="list-style-type: none"> <li>• The floor coverings are complete, in accordance with the Technical Requirements.</li> <li>• The floor covering fully fixed to the floor so as not to cause health &amp; safety hazard.</li> <li>• The floor/floor covering is substantially free from tears, scoring, cracks or any other damage that is unsightly.</li> </ul>

<b>Table 2: Building &amp; Equipment</b>	
<b>Element</b>	<b>Standard</b>
	<ul style="list-style-type: none"> <li>The floor/floor covering is free from tears, scoring, cracks or any other damage that could cause a health and safety hazard.</li> <li>Floor coverings/surfaces are maintained in such a way as to provide a suitable uniform surface (taking into account the pre-existing sub-surface), with minimal resistance, for wheeled beds trolleys, wheel chairs and any other wheeled vehicle in use in the Facility.</li> <li>The floor/floor covering allows adequate drainage where required for planned use.</li> <li>Substantially free from undue damage and of reasonable appearance for location.</li> </ul>
<b>Decorative Finishes</b> Including: <ul style="list-style-type: none"> <li>Paintwork</li> <li>Fabric</li> <li>Special finishes applied to walls, ceilings, woodwork, metalwork, pipe work and other visible elements)</li> </ul>	<ul style="list-style-type: none"> <li>Decorative finishes are substantially complete according to their specification.</li> <li>Free from all but minor surface blemishes or undue wear and tear.</li> <li>Free from cracks, or any other surface degradation inconsistent with a building maintained in accordance with Good Industry Practice.</li> </ul>
<b>Equipment &amp; Furniture</b>	<ul style="list-style-type: none"> <li>Substantially free from splits, cracks, and other defects (including squeaks) and free from all but minor surface blemishes.</li> <li>Maintained in accordance with applicable Law.</li> <li>Maintained in accordance with manufacturer's requirements.</li> </ul>
<b>Artwork/Sculpture</b>	<ul style="list-style-type: none"> <li>Appropriately secured to discourage theft or vandalism.</li> </ul>
<b>Heliport</b>	<ul style="list-style-type: none"> <li>Maintained in accordance with Transport Canada requirements to maintain certification.</li> <li>Sound safe and even surface with no potholes or sinkings.</li> <li>Substantially free from standing water, ice, snow.</li> <li>Substantially free from fallen leaves, moss algae or interstitial weeds.</li> <li>Substantially free from debris and litter.</li> <li>Free from fallen trees.</li> <li>Ventilated such that aircraft fumes do not adversely affect RIH or the Facility.</li> <li>Lightning and safety equipment functional in accordance with all applicable Laws and standards.</li> <li>All signage and painting visible and properly maintained.</li> <li>Windsock maintained and functioning.</li> </ul>

<b>Table 3: Systems</b>	
<b>Element</b>	<b>Standard</b>
<b>General</b>	<ul style="list-style-type: none"> <li>In general, all elements of building systems, including the elements outlined below, will at all times be functional, operational and satisfy the reviewed Design and the Technical Requirements as required for Service Commencement.</li> </ul>
<b>Emergency Power Supply System</b>	<ul style="list-style-type: none"> <li>Standby power supply shall be operational, secure and tested regularly in compliance with standards CSA Z32.4, CSA C282 and CSA Z32.2.</li> <li>Batteries shall be adequately ventilated, free from acid leakage; batteries shall be maintained in accordance with Good Industry Practice; batteries shall be free from dust;</li> </ul>

<b>Table 3: Systems</b>	
	<ul style="list-style-type: none"> <li>and batteries shall be topped up and fully charged.</li> <li>• Backup fuel tanks will be maintained in accordance with CSA requirements.</li> </ul>
<p><b>LV Distribution System</b> Including:</p> <ul style="list-style-type: none"> <li>• Distribution equipment and protective devices fuse switches</li> <li>• Isolators</li> <li>• Distribution boards</li> <li>• Fuses</li> <li>• MCB's, ACB, ELCB's and RCE's</li> <li>• Exposed distribution cables</li> <li>• Breakers</li> <li>• Transformers</li> <li>• Grounding System</li> </ul>	<ul style="list-style-type: none"> <li>• All system components and enclosures will be operated and maintained in accordance with Good Industry Practice.</li> <li>• Ratings will be clearly marked.</li> <li>• Fuse elements or circuit breaker mechanisms in working order.</li> <li>• Contacts and connections clean and mechanically tight.</li> <li>• No overheating during normal operating loads.</li> <li>• Secure to authorized access only. Recording instruments operational where necessary.</li> <li>• Torque all bus connectors to manufacturer recommendations.</li> <li>• Provide lock out procedure.</li> <li>• Mega test all cables.</li> <li>• Balance all loads on each phase.</li> <li>• Coordinate all protective relaying to ensure lower-rated breakers trip first.</li> <li>• Regularly test all breakers and transformers.</li> <li>• Regularly clean all switchgear and transformers.</li> <li>• Do injection testing.</li> <li>• Test all alarm functions.</li> <li>• Identification notices where necessary.</li> </ul>
<p><b>HV Distribution Systems</b> Including:</p> <ul style="list-style-type: none"> <li>• Distribution equipment</li> <li>• Isolators</li> <li>• Distribution units</li> <li>• VCBs, ACBs and ELCBs</li> <li>• Outdoor Substation</li> <li>• Ground grid and grounding system</li> </ul>	<ul style="list-style-type: none"> <li>• All system components and enclosures will be operated and maintained in accordance with Good Industry Practice.</li> <li>• Ratings will be clearly marked.</li> <li>• Fuse elements or circuit breaker mechanisms in working order.</li> <li>• Contacts and connections clean and mechanically tight.</li> <li>• No overheating during normal operating loads.</li> <li>• Secure to authorized access only.</li> <li>• Recording instruments operational where necessary.</li> <li>• Transformers are maintained as per manufacturer's recommendations.</li> <li>• Protective coatings are intact.</li> <li>• No signs of excessive heating.</li> <li>• Provide lock out procedure.</li> <li>• Balance loads.</li> <li>• Test all protective relaying including injection testing.</li> <li>• Provide coordination study after initial installation and after every significant change or at minimum every 10 years.</li> <li>• Indicate fault levels.</li> <li>• Check electronic operation of all breakers and that power source is battery operated.</li> <li>• Provide DC Hipot test after initial installation.</li> <li>• Torque all bolted connections.</li> <li>• Identify all current transformer and potential transformer ratios.</li> <li>• Provide ground fault relaying as needed.</li> <li>• Marker and covering notices where necessary.</li> </ul>
<p><b>Hot &amp; Cold Water Systems</b></p>	<ul style="list-style-type: none"> <li>• Deliver water at the temperatures (43°C - 48°C for patient / public use outlets and 43°C - 60°C for general use outlets) and flow rates as required to serve the Facility needs without undue noise and vibration.</li> </ul>

<b>Table 3: Systems</b>	
	<ul style="list-style-type: none"> <li>• Taps, valves and other related fittings and fixtures function as intended and are free from rust.</li> <li>• Pipe work and fittings shall be fastened securely to their intended points of anchorage.</li> <li>• There shall be no drips or leaks of water from pipe work, taps, valves and/or fittings.</li> <li>• Water filtration systems, such as softeners and RO water will be maintained in accordance with manufacturers' recommendations.</li> </ul>
<b>Table 4: Systems Element</b>	<b>Standard</b>
<p><b>Heating, Ventilation and Air Conditioning Systems</b> Including:</p> <ul style="list-style-type: none"> <li>• Fume hoods</li> <li>• Humidifiers</li> <li>• Heaters</li> <li>• Ductwork</li> <li>• Heat recovery wheels</li> <li>• Mixing boxes and dampers</li> <li>• Coolers</li> <li>• Inlet/outlet grilles</li> <li>• Refrigeration plant</li> <li>• Cooling towers (and other local ventilation systems)</li> <li>• Boilers</li> <li>• Fans</li> <li>• Air handling units</li> <li>• Vents and grills</li> </ul>	<ul style="list-style-type: none"> <li>• All ventilation systems shall function as intended without undue noise or vibration.</li> <li>• Air changes and ventilation levels as required, fully in accordance with the reviewed Design and the Technical Requirements.</li> <li>• Ductwork, fittings and pipe work shall be securely fastened to their intended points of anchorage.</li> <li>• There shall be no persistent or unreasonable leakages of water (or other heating/cooling medium) or air from ventilation systems.</li> <li>• Cleanliness verification with technology utilized and frequency applied to be specified by Project Co and agreed to by the Authority.</li> <li>• Secure to authorized access only.</li> <li>• Substantially free from corrosion, erosion and organic growth.</li> <li>• Free from dirt and dust buildup.</li> <li>• Filters are free from substantial debris and fit for use.</li> </ul>
<b>Conveying Systems</b>	<ul style="list-style-type: none"> <li>• Elevators/dumbwaiters operate to the manufacturer's design.</li> </ul>
<p><b>Sanitary and Other Drainage Systems</b> Including:</p> <ul style="list-style-type: none"> <li>• all sanitary ware and associated fittings)</li> <li>• above and below ground storage tanks, such as acid holding, neutralizing and decontamination tanks</li> </ul>	<ul style="list-style-type: none"> <li>• Shall function as intended, without undue noise and vibration.</li> <li>• Shall ensure the storm water management system is maintained to provide the required quality of water entering adjoining streams and municipal drainage systems.</li> <li>• All pipe work and fittings fastened securely to their intended points of anchorage.</li> <li>• Within the buildings, there shall be no leakage of waste and/or foul water and/or rainwater.</li> <li>• Outside the buildings, there shall be substantially no leakage of waste and/or foul water and/or rainwater.</li> <li>• Tanks are maintained to ensure sufficient capacity.</li> </ul>
<b>Medical Gas Systems</b>	<ul style="list-style-type: none"> <li>• Medical gas systems shall be maintained in accordance with all relevant codes and standards.</li> </ul>
<p><b>Communications Systems</b></p> <ul style="list-style-type: none"> <li>• All infrastructure cabling, including telecommunications and data cabling</li> <li>• Intercom, paging, call systems</li> <li>• Cellular infrastructure and services</li> </ul>	<ul style="list-style-type: none"> <li>• The communications systems shall be maintained in accordance with all relevant codes and standards.</li> <li>• Fully operational within manufacturer's recommendations. Shall function as intended.</li> </ul>
<p><b>Electrical Systems</b> Including:</p>	<ul style="list-style-type: none"> <li>• All system components and enclosures will be operated and maintained in accordance with Good Industry Practice.</li> </ul>

<b>Table 4: Systems</b>	
<ul style="list-style-type: none"> <li>• IT/data</li> <li>• Lighting, including fixtures</li> <li>• Communications</li> <li>• Safety</li> <li>• Alarm systems</li> </ul>	<ul style="list-style-type: none"> <li>• Weatherproof where appropriate.</li> <li>• Function as intended without undue noise or vibration; wiring, fittings, fixtures, controls and safety devices will be properly housed and fastened securely to their intended point of anchorage and labelled.</li> <li>• Lightning conductor should be complete, isolated and comply with CSA Standards.</li> <li>• MICC cable protective coatings intact.</li> <li>• Light emittance at the design Lux levels as specified in Schedule 3 [Design and Construction Specifications].</li> <li>• Light fixtures free of bugs and dirt/dust.</li> </ul>
<b>Integrated Automation Building Management System (BMS)</b>	<ul style="list-style-type: none"> <li>• Ensure accessibility to the system for the Authority.</li> <li>• All alarms and notifications operate as per requirements in Schedule 3.</li> <li>• Collects, stores and trends all data required as per Schedule 3.</li> <li>• Alarms are directed to emails and pagers.</li> <li>• Each system will have up to date, detailed narrative descriptions of sequences.</li> </ul>
<b>Clock System</b>	<ul style="list-style-type: none"> <li>• Maintain a synchronized wireless clock system to ensure accurate, consistent time across the Facility.</li> </ul>
<b>Nurse Call System and Annunciation</b>	<ul style="list-style-type: none"> <li>• Zone lights are operational and linked to alarms.</li> <li>• Alarms and annunciation are clear and easily heard.</li> <li>• Two way communication is maintained through staff user devices.</li> <li>• Appropriate cascading of calls.</li> </ul>
<b>Public Address</b>	<ul style="list-style-type: none"> <li>• Maintain interface and consistency across the New Facility and the Other Site Facilities.</li> <li>• Annunciation is clear and easily heard.</li> <li>• Backup microphone is operational and functions across the New Facility and the Other Site Facilities.</li> <li>• No longer than 1 second delay between phone access and ability to transmit page.</li> </ul>
<b>Clinical Camera</b>	<ul style="list-style-type: none"> <li>• Ensure cameras are positioned to provide a clear and unobstructed picture.</li> <li>• High resolution and colour picture is provided.</li> <li>• Audio monitoring and controls are maintained.</li> <li>• Real time viewing will be maintained with low to no latency.</li> <li>• System is not recorded or viewable by security system and staff.</li> </ul>
<b>Intercommunication System</b>	<ul style="list-style-type: none"> <li>• Remote door unlocking is maintained.</li> <li>• Unit is free from damage and vandalism.</li> <li>• Video intercoms ensure full visibility including beside and behind individual requesting access.</li> </ul>
<b>Fire Alarm System and Annunciation</b> Including: <ul style="list-style-type: none"> <li>• Firefighting equipment</li> </ul>	<ul style="list-style-type: none"> <li>• Comply with all code requirements, including perform all statutory testing and requirements.</li> <li>• Maintain interface and consistency across the New Facility and the Other Site Facilities.</li> <li>• Alarms and annunciation are clear and easily heard.</li> <li>• Building controls are interfaced with the fire alarm system.</li> <li>• Fire doors operate as intended.</li> <li>• Alarm announcements annunciate location of alarm.</li> <li>• Sensitivity of all smoke detectors and sprinkler maintained.</li> <li>• Smoke evacuation system operates when fires are detected.</li> </ul>

<b>Table 4: Systems</b>	
	<ul style="list-style-type: none"> <li>• Appropriate sequencing and homing of elevators on first stage alarm.</li> <li>• Fire extinguishers and other firefighting equipment shall be maintained in accordance with relevant codes and standards.</li> <li>• Sound, secure and fixed to their intended point of anchorage.</li> <li>• Fully operational within manufacturer's recommendations.</li> <li>• Hydrants, sprinklers &amp; hoses will be at correct operating pressure &amp; capacity.</li> <li>• Pipework will be free from corrosion, leaks and drips.</li> <li>• Be of suitable type and quantity for the hazards present within their vicinity.</li> <li>• Sprinklers shall be free from dirt and dust buildup.</li> </ul>
<b>Access Control</b>	<ul style="list-style-type: none"> <li>• Interface to all electronically controlled doors for remote lock and unlock is maintained.</li> <li>• Security alarms are logged for a minimum of 1 year.</li> <li>• Alarms are annunciated in Security office, and on Security 2 way pagers and radios.</li> <li>• Entry procedure signage is maintained and up to date.</li> </ul>
<b>Panic Duress</b>	<ul style="list-style-type: none"> <li>• Interface to security 2-way radios , pagers and alarm system is maintained.</li> <li>• Alarms are addressable and accurately identify source location.</li> <li>• Alarms are annunciated in Security office, and on Security 2 way pagers and radios.</li> <li>• Video monitoring, strobe light, horns and pre-recorded digital message function as intended when alarm is activated.</li> <li>• Labelling and signage clearly indicates use for security emergencies.</li> <li>• Alarms are addressable and accurately identify source location.</li> </ul>
<b>Intrusion Detection</b>	<ul style="list-style-type: none"> <li>• Interface to local alarm controllers is maintained.</li> <li>• Alarms are addressable and accurately identify source location.</li> <li>• Alarms are annunciated in Security office, and on Security 2 way pagers and radios.</li> </ul>
<b>Video Surveillance/Security</b>	<ul style="list-style-type: none"> <li>• Cameras are positioned to provide a clear and unobstructed picture.</li> <li>• Audio monitoring and controls are maintained.</li> <li>• Minimum video storage capacity is maintained for 30 days at 30 frames per second.</li> <li>• All related signage is maintained and visible to the public.</li> <li>• Video quality is sufficient to be used in court as evidence.</li> <li>• 360 degree rotation is maintained at less than 3 seconds.</li> <li>• Cameras are weatherproof and free from frost, precipitation, dirt and dust.</li> </ul>
<b>Patient Wandering System</b>	<ul style="list-style-type: none"> <li>• Lockdown doors operate as intended.</li> <li>• Interface to all systems is maintained including to elevators and wireless staff communication devices.</li> </ul>
<b>Pneumatic Tube</b>	<ul style="list-style-type: none"> <li>• Pneumatic tube system operates to the manufacturer's design.</li> <li>• Sufficient number of carriers are located at each station.</li> <li>• All system components are free of alarm.</li> </ul>

<b>Table 4: Systems</b>	
<b>Infant Abduction System</b>	<ul style="list-style-type: none"> <li>• Disinfection following spills in the conveying systems.</li> <li>• The systems capability to identify an infant by name, room and tag I.D. number, log events, archive activities, and create reports must be maintained. All reports to be held for 1 year.</li> <li>• The systems capability of self-supervision and the ability to visually identify any problems with the system through trouble alarms must be maintained.</li> <li>• System interface with electromagnetic locks, elevators and paging systems, various nurses' stations, Video Surveillance/Security, and other devices that may be activated by an output must be maintained and operate as intended through design and install.</li> <li>• System will operate a 12 hour full battery backup in the case of a power failure.</li> <li>• System should have the capability to connect to Security 2-way radios for alarm annunciation.</li> </ul>

<b>Table 5: Grounds &amp; Gardens Maintenance</b>	
<b>Element</b>	<b>Standard</b>
<b>Site Circulation Routes</b> Including: <ul style="list-style-type: none"> <li>• Courtyards</li> <li>• Paving's</li> <li>• Paths</li> <li>• Driveways</li> <li>• Roads</li> <li>• Car Parking Areas</li> <li>• Hard standings</li> <li>• Facility entrances</li> <li>• External staircases</li> <li>• External fire escapes</li> <li>• Signage</li> <li>• Lighting</li> <li>• Panic stations</li> </ul>	<ul style="list-style-type: none"> <li>• Sound, safe and even surface with substantially no potholes or sinking's.</li> <li>• Curbs and edgings are sound.</li> <li>• No loose curbs or paving stones.</li> <li>• Road markings and parking stripings, including numbering, are clear and complete.</li> <li>• Substantially free from graffiti and/or vandalism.</li> <li>• Provides for disabled access as required by applicable Law.</li> <li>• Ensure reasonable protection of all vehicles from chemical sprays during any applications.</li> <li>• Substantially clear of snow and ice and buildup of snow/ice removal products.</li> <li>• Clear of snow and ice that could cause a health and safety hazard.</li> <li>• Free from waste, including garbage, cigarette butts and biological waste.</li> <li>• Substantially free from gas and oil marks.</li> <li>• Substantially free from undue damage and of reasonable appearance for location.</li> </ul>
<b>External Furniture and Structures</b> Including: <ul style="list-style-type: none"> <li>• Street lights</li> <li>• Guard rails</li> <li>• Copings</li> <li>• Statues or ornamental objects</li> <li>• Bollards</li> <li>• Bus stops</li> <li>• Bicycle racks/benches/furniture</li> </ul>	<ul style="list-style-type: none"> <li>• Sound, secure, safe and substantially free from damage.</li> <li>• Substantially free from moss algae and/or interstitial weeds.</li> <li>• Substantially free from graffiti and/or vandalism.</li> <li>• Painting maintained and free from rust.</li> </ul>
<b>Boundaries</b> Including: <ul style="list-style-type: none"> <li>• Fences/walls</li> <li>• Gates</li> </ul>	<ul style="list-style-type: none"> <li>• Intact, safe, sound and secure.</li> <li>• Locks are operational.</li> <li>• Substantially free from graffiti and/or vandalism.</li> <li>• Painting maintained and free from rust.</li> <li>• Substantially free from undue damage and of reasonable appearance for location.</li> </ul>
<b>External Play/Recreational Areas</b>	<ul style="list-style-type: none"> <li>• Safe and secure.</li> </ul>

**Table 5: Grounds & Gardens Maintenance**

Including: <ul style="list-style-type: none"> <li>• Courtyards</li> <li>• Patios</li> </ul>	<ul style="list-style-type: none"> <li>• Maintained for disabled and elderly access.</li> <li>• Maintained as accessible and free of obstructions to observation.</li> <li>• Substantially free from graffiti and/or vandalism.</li> <li>• Substantially clear of snow and ice and buildup of snow/ice removal products.</li> </ul>
<b>External Sign Posting (including lighting)</b>	<ul style="list-style-type: none"> <li>• Maintain in accordance with Good Industry Practice.</li> <li>• Compliant with the “Signage &amp; Wayfinding” requirements in Schedule 3 [Design &amp; Construction Specifications].</li> <li>• Secure and sound.</li> <li>• Not hinder visibility to car and pedestrians at junctions.</li> <li>• Be in appropriate locations.</li> <li>• Highly visible, both day and night.</li> <li>• Offer clear and concise information.</li> <li>• Free from graffiti and/or vandalism.</li> <li>• Replacement of light elements.</li> </ul>
<b>Gutters and Drains and CSB living roof</b>	<ul style="list-style-type: none"> <li>• Substantially free from litter, leaves, weeds and extraneous material.</li> </ul>
<b>Facility</b>	<ul style="list-style-type: none"> <li>• External areas are substantially free from litter, including cigarette ends and chewing gum residue.</li> <li>• Garbage bins shall be emptied regularly and substantially free from malodour.</li> </ul>
<b>Parkade</b>	<ul style="list-style-type: none"> <li>• Road and parking markings, including numbering, are clear and complete.</li> <li>• Railings are free from rust.</li> <li>• Substantially free from dust and dirt buildup.</li> <li>• Substantially free from oil and gas buildup.</li> <li>• Area is well lit.</li> <li>• Sound secure and weatherproof where appropriate.</li> <li>• Free from damp penetration or spalling.</li> <li>• Claddings, copings and parapets, soffits/fascia are structurally sound and secure.</li> <li>• Free from vermin and/or pest infestation.</li> <li>• Substantially free from debris, moss growth and bird droppings.</li> <li>• Free from graffiti and/or vandalism.</li> <li>• Substantially free from undue damage and of reasonable appearance for location.</li> <li>• Substantially clear of snow and ice and buildup of snow/ice removal products.</li> <li>• Free from waste, including garbage, cigarette butts and biological waste.</li> </ul>

**Table 6: Horticulture Element**

<b>Element</b>	<b>Standard</b>
<b>Trees, Shrubs &amp; Hedges</b>	<ul style="list-style-type: none"> <li>• Trimmed, pruned and/or cut to maintain healthy growth and so as to minimize:               <ul style="list-style-type: none"> <li>– the risk of crime and/or vandalism</li> <li>– the opportunity for storm wind damage</li> <li>– risk of fire</li> <li>– the obstruction of roadways, pathways, car parks, street lighting, etc.</li> </ul> </li> <li>• Are secure and safe.</li> <li>• Substantially free from dead or dying branches.</li> </ul>

	<ul style="list-style-type: none"> <li>• Substantially free from litter.</li> <li>• Substantially free from disease and/or aphid infestation.</li> <li>• Replaced as and when necessary to maintain appearance.</li> <li>• Irrigated.</li> </ul>
<b>Grassed Areas</b>	<ul style="list-style-type: none"> <li>• Uniform appearance with no patches.</li> <li>• Edges trimmed.</li> <li>• Free from mole, rabbit or other vermin infestation.</li> <li>• Substantially free from fallen leaves, weeds and litter, excrement.</li> <li>• Maintained to a uniform length between 25 and 50 mm.</li> <li>• Irrigated.</li> <li>• Grassy areas used for snow storage will be re-sodded in the spring.</li> </ul>
<b>Flower Beds</b>	<ul style="list-style-type: none"> <li>• Fully stocked with an appropriate mix of annual, perennial and display plants to provide aesthetically pleasing beds throughout the year, which are non-allergenic to patients and staff.</li> <li>• Substantially free from fallen leaves, weeds and litter.</li> <li>• Substantially free from disease and/or aphid infestation.</li> <li>• Irrigated.</li> <li>• Proper handling of debris from roof gardens and interior gardens.</li> <li>• Damaged flower beds will be replanted.</li> </ul>

**3. PERFORMANCE INDICATORS**

Note: In the following table, a Performance Indicator applies, and a Service Failure occurs, either:

- (a) Per Event (PE), meaning that the Performance Indicator applies, and a Service Failure occurs and is recorded, for each separate occurrence of a breach of the Performance Indicator within the applicable reporting period indicated in the “Frequency Reported” column, for an aggregate total of Service Failures recorded for that period and a corresponding Deduction for each of the Service Failures (calculated pursuant to Schedule 8 [Payments]); or
- (b) Per Period (PP), meaning that the Performance Indicator applies, and a Service Failure occurs, only once for each applicable reporting period, with a corresponding Deduction for the Service Failure (calculated pursuant to Schedule 8 [Payments]).

If not clearly indicated to the contrary in the “Performance Indicator” column, the Performance Indicator applies on a PE basis.

A Service Failure that is on a PE basis may also be the subject of a Service Failure on a PP basis, and will be taken into account for both.

PI No.	Appendix Reference (unless otherwise indicated)	PERFORMANCE INDICATOR (Note: Refer to the note above the table for the meaning of PE and PP. If not clearly indicated to the contrary, the reference is PE.)	INFORMATION SOURCE	FREQUENCY REPORTED	SERVICE FAILURE LEVEL (Note: Refer to Schedule 8 (Payments) for Service Failure Level applicable to Response Time)
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PI No.	Appendix Reference (unless otherwise indicated)	PERFORMANCE INDICATOR (Note: Refer to the note above the table for the meaning of PE and PP. If not clearly indicated to the contrary, the reference is PE.)	INFORMATION SOURCE	FREQUENCY REPORTED	SERVICE FAILURE LEVEL (Note: Refer to Schedule 8 (Payments) for Service Failure Level applicable to Response Time)
				PR = Per Request PO =Per Occurrence D =Daily W =Weekly MO = Monthly Q = Quarterly S = Semi-Annually (i.e every 6 months) A = Annually R = Randomly, At Any Moment in Time	L = Low Service Failure  M = Medium Service Failure  H = High Service Failure
4D1	2.3(b)	PE - Statutory Testing and Permission to Work - Performance of all insurance, statutory and regulatory tests as required by applicable Law, Authority Policy or Authority Insurers	CMMS Preventative Maintenance Schedule	MO	H
4D2	2.3(c)	PP - Statutory Testing and Permission to Work - Monthly reporting of all insurance, statutory and regulatory tests, including Rectification requirements and actions, as required by applicable Law, Authority Policy or Authority Insurers	CMMS Preventative Maintenance Schedule	MO	H
4D3	2.4(e)	PE - Building and System Maintenance - Scheduled Maintenance is completed in each Functional Unit and anywhere else in the New Facility that is the responsibility of Project Co in accordance with the Preventive Maintenance Plan included as part of the Annual Service Plan and Associated CMMS Records are available for review	CMMS Preventative Maintenance Schedule	MO	H
4D4	2.4(f)	PE - Building and System Maintenance - New Facility Demand Maintenance carried out in accordance with this Appendix 4D	Performance Monitoring Report	MO	Per Table 1: Response Times and Rectification Periods
4D5	2.4	PE – Building and System Maintenance – All Building and System Maintenance for all elements to be maintained is performed in accordance with this Appendix 4D	Performance Monitoring Report	MO	M
4D6	2.5(a)(4)	PE - Equipment Maintenance - Scheduled Maintenance is completed in each Functional Unit and anywhere else in the New Facility that is the responsibility of Project Co in accordance with the Preventive Maintenance Plan included as part of the Annual Service Plan and Associated CMMS Records are available for review	CMMS Preventative Maintenance Schedule	MO	H

PI No.	Appendix Reference (unless otherwise indicated)	PERFORMANCE INDICATOR (Note: Refer to the note above the table for the meaning of PE and PP. If not clearly indicated to the contrary, the reference is PE.)	INFORMATION SOURCE	FREQUENCY REPORTED	SERVICE FAILURE LEVEL (Note: Refer to Schedule 8 (Payments) for Service Failure Level applicable to Response Time)
4D7	2.5(a)(5)	PE - Equipment Maintenance - New Facility Demand Maintenance carried out in accordance with this Appendix 4D	Performance Monitoring Report	MO	Per Table 1: Response Times and Rectification Periods
4D8	2.5	PE – Equipment Maintenance – All Equipment Maintenance for all elements to be maintained is performed in accordance with this Appendix 4D	Performance Monitoring Report	MO	M
4D9	2.8(b) and 2.8(c)	PE - Building Management System - All building management systems are functional and available to the authority in accordance with Schedule 3 (Design and Construction Specifications) and all alarms in the BMS function as intended and the Authority is notified of any specified event	BMS Report	MO	H
4D10	2.9(b)(2) and 2.9(b)(10)	PP – Fire Management – Carry out fire drills as agreed with the Fire Authority or in accordance with the policy of the Authority and annual written report provided to the Authority	BMS Report	MO	H
4D11	2.10(e)	Per Elevator, PP - Elevators and Vertical Transportation Devices - Each elevator and vertical transportation device is maintained to comply with the requirements for Elevator Uptime and all other requirements of this Agreement, including Schedule 3 (Design and Construction Specifications)	BMS Report	MO	H
4D12	2.10(b) and 2.10(d)	PE - Elevators and Vertical Transportation Devices - Elevator alarms or telephone calls from an elevator are responded to within 5 minutes and individuals trapped in elevators are extracted/released within the times set out in this Appendix	BMS Report	MO	H Response Time is 5 minutes Rectification Period is 30 minutes during the period from 8:00 am to 5:00 pm and one hour at all other times.
4D13	2.12(m)	PE – All hazard notices and signs are maintained, recorded, located and displayed correctly, and fully serviceable	Performance Monitoring Report	MO	M
4D14	2.13	PP – Miscellaneous Occupant Request Services - 95% of requests completed within 30 days of being requested as required by this Agreement	Performance Monitoring Report	MO	M
4D15	2.13	PE - Miscellaneous Occupant Request Services - any uncompleted requests completed within the following 30 days	Performance Monitoring Report	MO	M

PI No.	Appendix Reference (unless otherwise indicated)	PERFORMANCE INDICATOR (Note: Refer to the note above the table for the meaning of PE and PP. If not clearly indicated to the contrary, the reference is PE.)	INFORMATION SOURCE	FREQUENCY REPORTED	SERVICE FAILURE LEVEL (Note: Refer to Schedule 8 (Payments) for Service Failure Level applicable to Response Time)
4D16	2.14(b)	PE – Snow and ice removal from the external areas of the Facility and each related requirement in accordance with this Appendix.		MO	M
4D17	2.14(c)	PE - Grounds and Garden Maintenance - scheduled periodic maintenance is completed and with associated CMMS records are available for review		MO	H
4D18	2.15	PE - Quality Monitoring - customer satisfaction survey is conducted annually	Survey	A	M
4D19	2.17	PE - Medical Gases - Project Co performs maintenance in accordance with this Appendix	Performance Monitoring Report	MO	H
4D20	2.18	PE - Heliport - The heliport is operated and maintained in accordance with the Annual Service Plan and this Appendix	Performance Monitoring Report	MO	H
4D21	2.20(b)	PE - firmware/software version allows for serviceability and integration with Authority-managed systems		PO	H
4D22	2.20(b)	PE - notification of planned updates and provision of backup and restore plan		PO	H
4D23	This Appendix and Schedule 14 [Records and Reports]	PE - Records and information obtained and accessible to the Authority, in accordance with Schedule 14, including access to the Performance Monitoring Program, the BMS, the CMMS and all Help Desk records	Annual Report	PR	M
4D24		Boiler Efficiencies - All gas boilers to be maintained at a combustion efficiency rating level from base level (to be determined in accordance with Good Industry Practice from commissioning data): a) 98% or greater during years 1 to 5 following Service Commencement and years 1 to 5 following replacement or major refurbishment of the boilers (b) 96% or greater during years 6 to 10 following Service Commencement and years 6 to 10 following replacement or major refurbishment of the boilers (c) 93% or greater after year 10 following Service Commencement or after year 10 following replacement or major refurbishment of the boilers			