APPENDIX B – Project Agreement Schedule 3 Analysis

JPH CONSULTING

	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
2.1 Project Overview						
2.1.1 The Facility will include:						
2.1.1.1 the Main Building;	Yes	Yes				
2.1.1.2 the Community Reintegration Units;	Yes	Yes				
2.1.1.3 Regional Administration, which may be included within the Main Building or in a separate building;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
2.1.1.4 an Energy Centre, which may be included within the Main Building or in a separate building;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
2.1.1.5 outdoor recreation therapy and garden therapy spaces, including a Greenhouse;	Yes	Yes				
2.1.1.6 the Sweat Lodge	Yes	Yes				
2.1.1.7 surface parking; and	Yes	Yes				
2.1.1.8 associated works.	No					
2.2 Clinical Specifications						
2.2.1 Clinical Specifications for the Facility are set out in Appendix 3A [Clinical Specifications] (the						
2.2.2 Project Co will design and construct the Facility:						
2.2.2.1 so that it accommodates all of the spaces, activities, functions, design features and adjacencies described in the Clinical Specifications; and	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
2.2.2.2 in accordance with the requirements of the Clinical Specifications, subject to any adjustments or refinements made in accordance with Appendix 2B	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
2.3 Main Building						
2.3.1 The Main Building will include all of the functional components, rooms and spaces described						
2.3.1.1 the Energy Centre, Regional Administration (D4) and Building and Grounds (D1) may be included within the Main Building or may be located in separate buildings;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
2.3.1.2 the following will not be included in the Main Building: Outdoor Spaces and	Yes	Yes				
2.4 Community Reintegration Units (CRUs)						
2.4.1 The Community Reintegration Units will be designed and constructed as a stand-alone building or buildings within the Site.	Yes	Yes				
2.5 Regional Administration						
2.5.1 Regional Administration may be designed and constructed either as an integrated component within the Building or as a stand-alone building.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
2.6 Energy Centre						
2.6.1 "**Energy Centre**" means the collection of rooms and exterior spaces housing the mechanical-HVAC, power distribution,						
2.6.1.1 will be the location where all energy required by the Facility is either generated or distributed from utilities to the Facility;	Yes	Yes				
2.6.1.2 may be designed as a stand-alone building or integrated into the Main Building; and	Yes	Yes				
2.6.1.3 will provide energy capacity for the Facility, as well as provision to easily service the expansion of the Facility as described in Section 4.1.3 without disruption to ongoing operations.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
2.7 Greenhouse						
2.7.1 The Greenhouse will be designed as a stand-alone building outside the Threat Perimeter	Yes	Yes				
2.7.2 Design and construct the Greenhouse building structure, services and systems only. Furnishings, tools, gravel pathways,	Yes	Yes				
2.8 Sweat Lodge						
2.8.1 Project Co will design and construct the Sweat Lodge as a stand-alone building within the	Yes	Yes				
2.8.2 Project Co will not be responsible for the design and construction of the ceremonial area within the Sweat Lodge. The	No					
2.9 Additional Rooms and Spaces						
2.9.1 Notwithstanding anything in the Clinical Specifications, Project Co will design and construct the Facility to include all rooms and spaces as required to comply with the terms of this Agreement, including sufficient rooms and spaces as necessary for the operation and	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
2.10 Standards						
2.10.1 Project Co will undertake the Design and Construction:						
2.10.1.1 in accordance with the standards set out in this Schedule;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
2.10.1.2 in accordance with the National Building Code of Canada, and all applicable Laws;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
2.10.1.3 having regard for the concerns, needs and interests of:						
2.10.1.3(1) all persons who will be Facility Users;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
2.10.1.3(2) all Governmental Authorities; and	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
2.10.1.3(3) the community;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
2.10.1.4 in accordance with Good Industry Practice; and	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
2.10.1.5 to the same standard that an experienced, prudent and knowledgeable long term owner of a high quality mental health care facility in North	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
2.10.2 If more than one of the above standards is applicable, the highest such standard will apply.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
2.10.3 If Project Co wishes to make reference to a code or standard from a jurisdiction outside of Canada, then Project Co will demonstrate to the Authority's satisfaction that such code or standard meets or exceeds the requirements of this Schedule.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
2.10.4 Without limiting Section 2.10.1 of this Schedule, Project Co will undertake the Design and Construction in compliance with all applicable standards, including the standards listed in Appendix 3B [Standards].	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
2.10.5 CSA Z8000-11: Canadian Health Care Facilities						
2.10.5.1 CSA Z8000-11 complements the standards and codes specified in Schedule 3 by providing overarching design principles and referencing specific standards and codes that are appropriate for healthcare Facility design.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
2.10.5.2 Project Co will:						
2.10.5.2(1) refer to CSA Z8000-11 for design guidance to resolve issues not otherwise addressed in Schedule 3; and	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
2.10.5.2(2) use as a guideline with:						
2.10.5.2(2)(a) any minimum standards and codes referenced in CSA Z8000-11 (except for any minimum space requirements that may be required by those standards and codes); and	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
2.10.5.2(2)(b) section 7.8.8 (Accommodation of Bariatric Persons) of CSA Z8000-11.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
2.11 Indicative Design						
2.11.1 The Authority's architectural and engineering consultants undertook an indicative design for the Facility (the "**Indicative Design**"). The Indicative Design was based on a preliminary draft of the Clinical Specifications and also reflects preliminary	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
2.11.2 Project Co may use the Indicative Design as a basis for its design, but the Authority makes no representation as to the accuracy or completeness of any aspect of the Indicative Design.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
2.11.3 Project Co will be completely responsible for all aspects of the Design and Construction whether or not it uses all or any part of the Indicative Design, and Project Co will independently verify the accuracy of any information contained in or inferred from the	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
PART 3. DESIGN GUIDELINES AND PRINCIPLES						
3.1 Project Design Principles						
3.1.1 Project Co will apply the design principles described in this Part 3 and the guiding principles as set out in the Clinical Specifications (collectively, the "**Project Design Principles**") in undertaking the Design.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.1.2 In addition to the descriptions of these principles in this Part 3, specific requirements related to these principles are included in Parts 4 – 9 of this Schedule.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.1.3 The Project Design Principles are integrated principles and Project Co will apply them on an integrated basis throughout the Design and Construction.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.2 Master Planning						
3.2.1 Project Co will design the Facility to:						
3.2.1.1 have a strong presence and a distinctive architectural character, reflecting the Authority's values and for health objectives in the community;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.2.1.2 support community access and include a visible main entry and lobby for the Main Building; and	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.2.1.3 reflect logical planning principles and demonstrate clarity of circulation systems.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.2.2 Project Co will ensure all design decisions enhance the Site and its context.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.3 Evidence Based Design						
3.3.1 Project Co will apply Evidence Based Design methodologies in undertaking the Design.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.3.2 "**Evidence Based Design**" means that decisions about the design of the Facility will be based on credible research, information derived from comparable projects, and information about Authority operations, in order to achieve the best possible	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.4 Lean Design						
3.4.1 Project Co will design the Facility:						
3.4.1.1 to facilitate the delivery of efficient and effective workflow and processes;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.4.1.2 to eliminate waste, within both clinical and non-clinical service delivery processes;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.4.1.3 to recognize the value to the Authority of Lean healthcare (or equivalent methodologies) in supporting the delivery of Authority activities, and accordingly allow the findings from such methodologies to play a key role in influencing design decisions;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.4.1.4 to include ergonomic design features throughout all spaces that specifically facilitate the physical activities of staff and Clients, including, for example, appropriate millwork, lighting, lift devices, and Client assist or equipment manoeuvring space; and	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.4.1.5 to support innovative and collaborative methods of working, to help incorporate the Authority's new and emerging technologies, to respond to diverse work styles (such as hoteling and job-sharing), and to optimize flexibility and space utilization. A key	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.4.1.5(1) include standardized spaces, systems furniture and casework where appropriate;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.4.1.5(2) provide floor lay-outs that accommodate teams as well as individuals, and that support mobile employees who require flexibility and use portable technology; and	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.4.1.5(3) include co-location options, space saving strategies, and lay-outs and furniture that facilitate change.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.5 Healing Environment						
3.5.1 Project Co will design the Facility:						
3.5.1.1 to promote a healing and wellness environment for Clients and their families. The environment will be welcoming for the community of users and provide non-clinical spaces to relax and de-stress;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.5.1.2 to promote and enhance Patient Centred Care. "**Patient Centred Care**" is a standard of care that emphasizes the individual needs of each Client and treats them with respect and dignity, enabling them to participate integrally in their own care process within an	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.5.1.3 to provide an environment that supports excellence and innovation in the delivery of safe, high quality healthcare and where employees, physicians and others will be working together collaboratively in promoting health and wellness;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.5.1.4 to include elements that have been proven to create a therapeutic and low stress environment;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.5.1.5 to create a comfortable, functional environment for employees, physicians, Clients, Clients' families and others, by including, as tools for creating an environment that will support Clients of all ages and their families:	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.5.1.5(1) design elements that minimize noise, maximize natural light while providing light control, and use natural materials, colours and lighting colour ranges that are therapeutic;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.5.1.5(2) design elements that maximize connection to the outdoors, views of the exterior environment in all Private Client rooms, meeting rooms, staff lounges and similar locations;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.5.1.5(3) design elements that allow for maximum family interaction;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.5.1.5(4) design features such as sound and music, color, pattern, air quality, nature;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.5.1.5(5) design features such as spaces and locations to display art that reflect First Nations and Métis cultures of Saskatchewan, community history and values, and incorporate the work of local	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.5.1.5(6) design features that are sensitive to regional population diversity including First Nations and Métis cultures;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.5.1.6 to utilize views to create a visually pleasing environment, including:	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.5.1.6(1) maintaining existing views and encouraging new views where possible through the use of view corridors , the terracing of Building forms and the creation of appropriate public spaces;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.5.1.6(2) situating buildings to utilize "near views" of public spaces, natural and landscaped areas on-Site and off-Site as well as Site specific views; and	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.5.1.6(3) minimizing negative visuals such as blocking views and creating unwanted sun shadows.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.6 Elderly Friendly						
3.6.1 Project Co will design the Facility to create an elderly friendly environment. Project Co will comply with "Code Plus: Physical Design Components for an Elder Friendly Hospital, 2009", which identifies design components that are known to create	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.7 Standardization						
3.7.1 Project Co will design the Facility:						
3.7.1.1 to, wherever appropriate, apply standardization to reduce errors and improve quality of service delivery (for example to assist caregivers in quickly accessing rooms and equipment, Client treatment modules will contain a number of standard room types and room	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.7.1.2 so that rooms in the Facility that have the same function will be designed and constructed to be as similar as possible, subject to any different requirements set out in the Clinical Specifications.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			

	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
3.8 Sustainability						
3.8.1 In addition to the requirement to achieve LEED Silver Certification in accordance with the provisions in Schedule 2 [Design and Construction Protocols], Project Co will:	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.8.1.1 design the Facility using design methods, building materials, operational practices, energy and life cycle considerations that promote environmental quality, social benefits and economic vitality throughout the Construction and Operating Periods, including by	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.8.1.2 design the Facility:	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.8.1.2(1) to give priority to efficient use of resources, protection of health and indoor environmental quality;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.8.1.2(2) to take advantage of efficiencies and innovations that may be possible through integration of systems to minimize operational costs for the Authority (for example in relation to utilities);	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.8.1.2(3) to take advantage of alternative sources of energy such as passive solar, and on site power generation and opportunities for recovering	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.8.1.2(4) to apply a total systems approach to minimize energy consumption and incorporate energy consumption management techniques that	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.8.2 Use the following standards and guidelines as references in undertaking the sustainable						
3.8.2.1 LEED Canada Reference Guide for Green Building Design and Construction:	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.8.2.2 The Green Guide for Health Care;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.8.2.3 Green Globes – Environment Assessment for New Buildings;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.8.2.4 BOMA (Building Owners and Managers Association) Go Green Program;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.8.2.5 ASHRAE Green Healthcare Construction Guidance Statement;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.8.2.6 Sustainable Healthcare Architecture – by Robin Guenther and Gail Vittori;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.8.2.7 Canadian Building Green Hospitals Checklist – Canadian Coalition for Green Healthcare;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.8.2.8 Natural Resources Canada Energy Innovators Initiative;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.8.2.9 Building Materials for the Environmental Hypersensitive, CMHC; and	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.8.2.10 SITES – Sustainable Site Initiative.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.9 Technology						
3.9.1 Project Co will design the Facility so that it utilizes technology to improve cost effectiveness, integrates services and achieves better health and security outcomes.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.10 Adaptability, Flexibility and Expansion						
3.10.1 Project Co will design the Facility:						
3.10.1.1 to meet the needs of Clients, visitors, employees, physicians, volunteers, learners, researchers and teachers now and into the future;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.10.1.2 to accommodate the rapid cycle of innovation and change to support development and implementation of new clinical and non-clinical work processes and technological changes;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.10.1.3 to accommodate program, service, work and equipment changes with minimized utility infrastructure and Facility impacts, including down time;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.10.1.4 to support future expansion of components, and capacity as a whole, including planning zones for growth, loose fit design to optimize	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.10.1.5 with an infrastructure that incorporates excess systems capacity and includes systems and components that support future expansion with minimized disruption and allows for upgrades in Authority technology or	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.10.1.6 utilizing open planning principles to create flexible soft zones responsive to rapid change and growth by use of modular fit out.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.11 Accessible Design						
3.11.1 Project Co will incorporate the following philosophies in the Design to address barriers to equitable access to healthcare such as cultural diversity, physical capability and gender:	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.11.1.1 Equitable use – the Design will be easy to use by people with diverse abilities;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.11.1.2 Flexibility in use – the Design will accommodate a wide range of individual preferences and abilities;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.11.1.3 Simple and intuitive – the Design will be easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.11.1.4 Perceptible information – the Design will communicate necessary information effectively to the user, regardless of ambient conditions or the	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.11.1.5 Tolerance for error – the Design will minimize hazards and the adverse consequences of accidental or unintended actions;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.11.1.6 Low physical effort – the Design is capable of being used efficiently and comfortably and with a minimum of fatigue; and	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.11.1.7 Size and space for approach and use – the Design will provide appropriate size and space for approach, reach, manipulation, and use regardless of user's body size, posture or mobility.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.11.2 Respect for First Nations and Métis Cultural Values						
3.11.2.1 Project Co will demonstrate respect for cultural values represented by First Nations and Métis groups of Saskatchewan throughout the development and design of the Facility.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.11.2.2 Project Co will incorporate visible representations of First Nations and Métis cultures into the design of the Facility and Site.	Yes	No	no or minimal elements supporting this requirement apparent	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
3.11.2.3 Site landscaping will incorporate cultural elements such as wood sculptures, wood poles, and indigenous plants used for traditional healing.	Yes	No	no elements supporting this requirement apparent	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
3.11.2.4 Interior programmatic spaces will be sized and placed appropriately to allow for cultural activities as indicated in the Clinical Specifications.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.11.3 Reference to Local History and Heritage						
3.11.3.1 Project Co will design the Facility:						
3.11.3.1(1) in a manner that demonstrates respect for the local history and heritage, as applicable; and	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
3.11.3.1(2) to include design elements and display opportunities that will identify, reinforce and educate visitors to the Facility of the unique history and heritage of the community.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
PART 4. SITE DEVELOPMENT REQUIREMENTS						
4.1 Master Site Plan						
4.1.1 Project Co will develop and submit to the Authority a master site plan ("**Master Site Plan**") for the Site, based on the master planning principles described in Section 3.2 and the Site development requirements described in this Section 4.1.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
4.1.2 The Master Site Plan will illustrate the Site context and development opportunities to validate the Facility siting.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
4.1.3 The Master Site Plan will contemplate future expansion at the Site. Project Co will locate the						
4.1.3.1 a minimum of 1380 m² (footprint size) building space expansion at the Site (plus all required parking for the expansion);	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
4.1.3.2 a minimum of 25% floor area expansion of the Energy Centre. This volume expansion will be contiguous to the Energy Centre.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
4.1.4 The Master Site Plan will:						
4.1.4.1 ensure that each component of the Facility as described in Section 2.1 is an integrated part of the Site, facilitating the delivery of clinical and non- clinical support services (for example though efficient physical links and service connections between	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
4.1.4.2 indicate the access provisions needed for replacing major components required for the Facility, as well as for adding major components at a future date;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
4.1.4.3 provide a Site servicing, parking and traffic master plan to accommodate the expansion capacity described in Section 4.1.3;	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
4.1.4.4 indicate the expansion areas described in Section 4.1.3; and	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
4.1.4.5 indicate the Threat Perimeter, Threat Perimeter Zone and Area of Interest Zone.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
4.1.5 The Master Site Plan for the Facility will:						
4.1.5.1 include direct and logical pedestrian connections between the interface pathways and the main buildings' entries.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
4.2 Design and Site Development						
4.2.1 General						
4.2.1.1 Minimize the impact of Site development and Facility placement on adjacent neighbours and land uses. Preserve visual privacy and sunlight	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
4.2.1.2 Retain as many existing trees on the Site as possible to reduce the impact of the Facility on its neighbourhood context and to contribute to the natural healing environment for Clients, visitors and staff.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
4.2.1.3 Minimize the adverse micro-climatic effects arising from the location and configuration of parking, walkways and buildings, including effects of entrance orientation on Client, staff and visitor comfort and safety. Provide smooth transitions between green space	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
4.2.1.4 Reinforce the physical relation of the structures with the major streets and create a legible site layout and pattern to foster a strong sense of place and identity and to ease increased vehicular and pedestrian movement into the Site.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
4.2.1.5 Design for maximum access to the Facility. Provide separate and distinct passenger-side drop-off areas at each of the entrances to the Main Building and the CRU building(s).	No		"Maximun access" is a subjective term, snow obscured possible road markings designating passanger drop off areas			
4.2.1.6 Cover passenger-side drop-off areas at each of the entrances to the Main Building.	Yes	No	no covered drop off areas apparent	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
4.2.1.7 Mitigate the nearby noise from adjacent roadways through the use of exterior glazing and other acoustic screening.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
4.2.1.8 Create meaningful open spaces for the benefit of Clients, visitors and staff which provide opportunities for recreation and contribute to a cohesive, healthy community; capitalize on opportunities for outdoor areas of respite and repose to aid in providing a	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
4.2.1.9 Design landscape and circulation routes to have clear unobstructed views of surrounding areas for safety surveillance.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
4.2.1.10 Common facilities and/or areas must be grouped so that each facility or area be automatically monitored by the constant presence of users of the facility.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
4.2.1.11 Provide easy access to garbage and recycling bins, and contained such	Yes	Yes				
4.2.1.12 Site the Facility to mitigate any possibility of security breaches, observation compromises, or contraband transfer.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
4.2.2 Pedestrian and Vehicular						
4.2.2.1 Create a high-quality, vibrant, pedestrian-friendly environment, including by tying the sidewalks and pathways to existing sidewalks and pathways adjacent to the Site.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
4.2.2.2 Design for the functional separation of uninterrupted routes for emergency vehicles, visitors, staff and service vehicles, and to minimize public and service vehicle traffic interference with emergency vehicle access to the Site.	No		in depth review of routes with building operator input required			
4.2.2.3 Integrate vehicular circulation with layout of pedestrian and bicycle zones throughout the Site to provide visible connections,	Yes	No	reference: 4.2.2.8,9, 10 & 11			
4.2.2.4 Provide safe pedestrian crossings that are clearly designated using pavement markings and signage. In areas where a high volume of pedestrian crossings is expected, provide for changes in surface material (such as from asphalt to Portland cement, for example).	Yes	No	no pavement markings or change in materials at main entry are apparent	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
4.2.2.5 Create access for the mobility impaired (including people with baby strollers) by providing paths of travel with a minimum clear width of 1.5 m connecting all open space areas.	Yes	No	all open spaces are not connected by pathways; all pathways are a minimum of 1.5m wide	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
4.2.2.6 Provide pedestrian routes that are fully accessible by the disabled community. The primary pedestrian systems, public open space, walkways and entrances to the Facility must be universally accessible to the physically challenged and be elderly friendly. Design features which segregate circulation / areas / uses for people with disabilities from typical public usage are discouraged, except where required due to reasons of safety or due to space limitations.	Yes	No	pathway from southeastern most parking lot lacks pedestrian ramp to facilitate barrier-free movement from this parking lot	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
4.2.2.7 Provide curb-cuts or curb let-downs in appropriate locations to facilitate convenient and direct access from the parking	No		define appropriate locations, confirm after snow melt			confirm after snow melt
4.2.2.8 Provide clear, direct pedestrian routes that are unimpeded by parked or moving vehicles.	Yes	No	pathways from CRU to parking are not clear and direct; lack of pad at one building entry and its adjacency to downspout appears to have lead to erosion of granular material There is no direct pedestrian connection from parking lot at secure side of facility to staff entry; this connection is impeded by planting bed	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
4.2.2.9 Use traffic calming measures (e.g. curb bulges) to minimize roadway pavement width at pedestrian crosswalks.	Yes	No	no traffic calming measures have been provided	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
4.2.2.10 Pedestrian routes within and to/from parking facilities must be clearly delineated and logical in terms of directness.	Yes	No	pedestrian routes not always clearly delineated; pavement markings at some crossings are missing; pedestrian ramps are missing at walkway out of southeastern most parking lot	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co

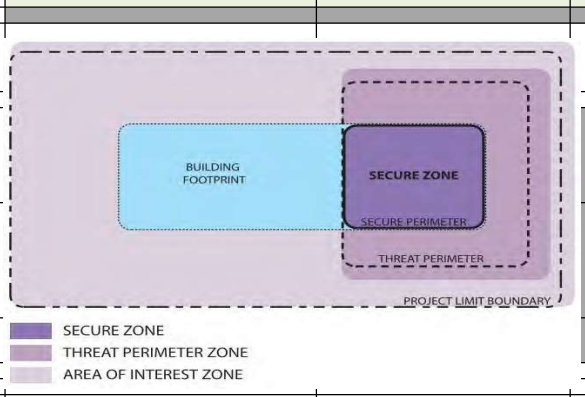
	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
4.2.2.11 Provide paving and landscape treatments to further identify and enhance the pedestrian movement.	Yes	No	no special treatment was provided to asphalt pathways that "enhance" pedestrian routes; asphalt pathways are frequently poorly formed at edges, leading to irregular, inconsistent edges	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
4.2.2.12 The pathway system will incorporate landscape treatments with trees and benches, lighting, and distinct paving where appropriate. The pathway system must also be wide enough for wheelchairs / scooters and will include a tactile strip for the visually impaired wherever possible.	Yes	No	tactile markings were not provided	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
4.2.2.13 All walkways and other paved areas must have positive drainage to shed rain water quickly.	Yes	No	ponding is apparent on walks and landscape areas next to walks	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
4.2.2.14 Minor walkways must be at least 1.5 m wide.	Yes	Yes	clause appears to be complied with			
4.2.2.15 Major walkways must be wide enough to allow for two people walking side	Yes	Yes	clause appears to be complied with			
4.2.2.16 Provide lighting on all pathways, including pedestrian-scale lighting.	Yes	Yes	clause appears to be complied with, with the exception of pathways that only serve an emergency exit purpose.			
4.2.2.17 Provide a community bus stop near the front entry of the Main Building. The community bus stop will:	Yes	Yes	bus shelter is approximately 150 meters from main entrance (a 2-3 minute walk for a person at a moderate pace)			
4.2.2.17(1) be a shelter constructed of wood that provides protection from inclement weather coming from any direction, while providing visibility to discourage security issues and to allow	Yes	No	wood construction not evident during review, shop drawings required	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
4.2.2.17(2) include an opening in structure to ensure universal access;	Yes	TBD	Structure ay differ from what was intended			confirm with building operator
4.2.2.17(3) include seating inside the shelter; and	Yes	TBD	Seating provision may differ from what was intended			confirm with building operator
4.2.2.17(4) comply with local transit requirements.	No					
4.2.3 Public Realm and Open Space						
4.2.3.1 Design and construct the Facility ensuring the legibility, quality and consistency of the overall treatment of the public realm, including public open space, pedestrian corridors and streets, to achieve the design objective for a unified and attractive built environment.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
4.2.3.2 Provide a hierarchy of open spaces as follows:						
4.2.3.2(1) public open spaces;	No		requirement is unclear			
4.2.3.2(2) private open spaces; and	No		requirement is unclear			
4.2.3.2(3) secure open spaces.	No		requirement is unclear			
4.2.3.3 Achieve segregation between different open spaces through landscape barriers such as hedges and planting.	No					
4.2.3.4 Situate buildings so that they maximize the availability of sunlight in exterior and open spaces and areas of high pedestrian use. Maximize sunlight exposure for private and secure open spaces.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
4.2.3.5 Provide an open area for Non-Secure Clients and Secure Clients with						
4.2.3.5(1) be large enough to accommodate up to 500 people;	Yes	Yes				
4.2.3.5(2) have a slope range of 2 – 4% to allow for quick drainage;	No					
4.2.3.5(3) have clear access from parking areas for people and event booths as necessary; and	Yes	Yes				
4.2.3.5(4) accommodate seating for eating, carriage rides, and float preparation for a parade.	Yes	Yes				
4.2.4 Community Noise Protection						
4.2.4.1 Orientate all buildings on the Site so that the noise impact of emergency and service vehicles, and new traffic routes will be minimized.	No					
4.2.4.2 Strategically locate and / or silence mechanical and electrical equipment, outside air intake and discharge openings and emergency generators' engine exhausts.	Yes	Yes	appears to comply			
4.2.4.3 Ensure that electrical and mechanical noise levels in outdoor Client areas and public sidewalks do not exceed 60 dBA.	Yes	Yes				
4.2.5 Site Wayfinding and Exterior Signage						
4.2.5.1 Provide Site wayfinding and exterior signage in accordance with Appendix 3E [Wayfinding and Signage]	Yes	No	minimal site wayfinding was noticed	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
4.2.5.2 Provide a signage master-plan for approval by the Authority.	No					
4.2.5.3 Arrange pedestrian pathways to ease wayfinding and create an amenable environment for pedestrians through the use of coordinated methods of wayfinding which inform people of routes through the Site to specific Buildings and entries or to the major street and transit nodes. Encourage pedestrians to avoid unsafe vehicle roads by providing well-signed alternative pedestrian routes. Utilize paving patterns which will easily be differentiated from vehicular paving by pedestrians where they cross vehicular traffic to access the emergency department and main entrance.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
4.2.5.4 Provide visually connected pathways and integrated plazas to facilitate wayfinding.	No		detailed review and consensus and or agreed interpretation to be achieved prior to commenting on this clause			
4.2.5.5 Provide external directional signage that:						
4.2.5.5(1) clearly identifies the Facility and its components including the main entry, secure entry, Visitor Centre entry, Acute Client Care Services admissions entry, service entry, main entry drop off area, and public and staff parking;	Yes	No	minimal site wayfinding was noticed	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
4.2.5.5(2) clearly indicates points of access for the public, parking areas and restrictions for various vehicle types and restrictions to 'after-hours' access; is well illuminated, backlit, reflective or high contrast and easily visible at night; and	Yes	No	minimal site wayfinding was noticed	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
4.2.5.5(3) minimizes light spillage.	No					
4.2.5.6 Wayfinding must start at the Site property line with freestanding illuminated exterior signage located at each prominent Site entry location.	Yes	No	Freestanding exterior signage at entry to site is not illuminated nor protected from weather	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
4.2.5.7 Not used.						
4.2.5.8 Overall site parking signage is required to follow consistent design intent for the Site.	Yes	Yes				
4.2.5.9 Provide all necessary exterior illuminated signage to direct traffic from the access streets. Design and construct such signage so that it is visible for drivers of vehicles to identify at a far enough distance so that they will safely slow down and follow the signage to enter the Facility and the parking areas.	No		define necessary			define necessary
4.2.6 Site Lighting						
4.2.6.1 Provide lighting for public outdoor spaces and the adjacent private property to create an unobtrusive, human scale lighting concept, with a hierarchy of fixture types designed according to functional and security needs (including CPTED), and reflecting the hierarchy of pedestrian corridors.	Yes	Yes	Limited to observable conditions			
4.2.6.2 Provide site lighting, primarily from the perspective of deterrence and safety rather than surveillance. Sufficient perimeter lighting will be required to support the detection/identification and recording capabilities of the selected security camera system(s).Luminaires within 5 metres of grade will be vandal resistant.	Yes	Yes	Limited to observable conditions			
4.2.6.3 Lighting on pedestrian paths will illuminate not just the path but also the surrounding area adjacent to the path particularly en route to transit connections.	Yes	Yes	Limited to observable conditions			
4.2.6.4 To assist surveillance and monitoring by staff glare from lighting will be reduced by locating light sources where they do not shine directly at staff posts and monitoring areas.	Yes	Yes	Limited to observable conditions			
4.2.6.5 Provide lighting to facilitate ease and safety of pedestrian access to public transit.	No		too general a statement to assess via a review on site			
4.2.6.6 Lighting will be strategically placed as to not disrupt Client sleep.	No		too general a statement to assess via a review on site			
4.2.7 Landscape						
4.2.7.1 Provide landscape for the complete Site that contributes to a liveable, healthy and responsive community.	No		too general a statement to assess via a review on site			
4.2.7.2 Provide elements including secure outdoor and central courtyards, exterior rehabilitation areas, areas of refuge including covered seating, handrails along pathways and landscape features for the enjoyment of staff and visitors.	Yes	No	clause appears to be complied with, except for the prevalence of handrails. One portion of handrail is provide at courtyard entries.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
4.2.7.3 Provide streetscape treatments (e.g. street trees, boulevards and sidewalks) to the guidelines and standards for the municipality having jurisdiction (as a	No		are municipal requirements part of the information submitted to us?			
4.2.7.4 Provide landscape site plans for the complete Site. Landscape plans to be prepared by a SALA (Saskatchewan Association of Landscape Architects) registered landscape architect.	No					
4.2.7.5 Installation of the landscape to be supervised and approved by a SALA registered landscape architect.	No					
4.2.7.6 If a landscape irrigation system is provided:						
4.2.7.6(1) the design must be supervised and approved by a SALA registered landscape architect;	No					
4.2.7.6(2) the system must be reviewed by a certified irrigation designer and auditor; and	No					
4.2.7.6(3) the system must be installed by a certified irrigation contractor.	No		certified by whom?			
4.2.7.7 Maximize the amount of landscape areas on the Site and minimize the amount of impervious surfaces to increase the natural	No		review of drawings. Do we need to do calculations?			
4.2.7.8 Refer also to Section 8.2.						
4.2.8 Site Safety Through Design						
4.2.8.1 Public spaces will be distinguishable from private spaces. Design and locate symbolic barriers throughout the Site. Symbolic barriers will include landscaping (such as changes in paving, vegetation or grade) and/or architectural features (such as low walls, bollards and raised planters) rather than continuous solid fences or walls.	Yes	No	Private spaces are provided via at-grade and second story patios, which are separated via solid walls and fences. It is not clear that there are any public spaces except at main building entry.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
4.2.8.2 Design the exterior of the Site so that there are opportunities for people to easily view what is happening around them during the course of their everyday activities.	No					
4.2.8.3 Eliminate entrapment spots. Incorporate barriers that permit visual access without loss of privacy such as glazing in lobby doors and stairwells.	No					
4.2.8.4 Promote the "eyes on the street" concept by using windows, doors and activity generators such as seating or fountains. Windows will be visible from the exterior and not hidden by vegetation or other items to the extent possible,except in those locations as indicated in Appendix 3A [Clinical Specifications].	No					
4.2.8.5 Incorporate CPTED principles in the design of all exterior areas of the Site.	No					
4.3 Parking						
4.3.1 Parking Stall Requirements						
4.3.1.1 Project Co will provide 400 vehicle parking stalls in accordance with the	Yes	Yes				
4.3.1.1(1) 28 parking stalls for visitors to the non-secure side of the Facility;	Yes	Yes				
4.3.1.1(2) 20 parking stalls for visitors to the secure side of the Facility;	Yes	Yes				
4.3.1.1(3) 50 parking stalls for staff for Regional Administration;	Yes	Yes				
4.3.1.1(4) 125 parking stalls for non-secure clinical staff;	Yes	Yes				
4.3.1.1(5) 75 parking stalls for support staff;	Yes	Yes				
4.3.1.1(6) 100 parking stalls for secure clinical/security staff; and	Yes	Yes				
4.3.1.1(7) 2 parking stalls for visitors to the Community Reintegration Units.	Yes	Yes				
4.3.1.2 At least 12 of the 400 parking stalls will be for disabled persons.	Yes	Yes				
4.3.1.3 Locate parking stalls conveniently at entry points to the Facility that relate to the staff/visitor mix identified. Parking stalls dedicated for the Community Reintegration Units will be located within 30 meters of the Community Reintegration Units.	Yes	Yes				
4.3.1.4 Provide all parking stalls with vehicle engine block heater electrical receptacles on a control system with cyclic timed receptacle zones to minimize associated electrical demand loading while maintaining engine starting temperatures.	Yes	Yes				
4.3.1.5 In addition to the 400 parking stalls required above, provide dedicated areas for snow piling and snow removal.	Yes	Yes				
4.3.2 Parking Stall Sizes						
4.3.2.1 Parking stalls will comply with the following:						
4.3.2.1(1) minimum parking stall dimensions will be 6.0 m x 2.8 m, provided	Yes	Yes				
4.3.2.1(1)(a) pick up and drop off areas, minimum stall dimensions will be 6.0 m x 3.5 m; and	Yes	Yes				
4.3.2.1(1)(b) minimum dimensions for handicap stalls will be 6.0m x 3.5m with a 1.5m access aisle beside each stall that is directly connected to an accessible path of travel (two stalls may share one access aisle); and	Yes	Yes				
4.3.2.1(2) minimum drive aisle widths will be 7.6 m.	Yes	Yes				
4.3.3 Parking Design Principles						
4.3.3.1 The design and operation of surface parking will create convenient and	No					
4.3.3.2 Design and construct the surface parking in accordance with the following:						
4.3.3.2(1) provide adequate provision for ingress and egress to all parking spaces to ensure ease of mobility, ample manoeuvring clearances, and safety of vehicles and pedestrians;	Yes	Yes				
4.3.3.2(2) apply CPTED principles and the following principles:	Yes		are the relevant CPTED principles provided in the submission?			
4.3.3.2(2)(a) where surface parking is situated between a building and	Yes	Yes				
4.3.3.2(3) clearly mark all parking spaces as directed by the Authority;	No					

	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
4.3.3.2(4) set parking lot layouts in an orderly and logical design to minimize confusion and excessive internal circulation;	Yes	Yes				
4.3.3.2(5) employee parking must not be located in visually remote areas of parking lots, behind blank walls, or within service or loading areas; and	Yes	Yes				
4.3.3.3 Provide all parking lots with the following landscape requirements:						
4.3.3.3(1) screen surface parking by plant material, and where surface parking is behind buildings, screen such surface parking from adjacent properties with landscape planting;	Yes	Yes				
4.3.3.3(2) incorporate safety and security measures into the landscape	Yes	Yes				
4.3.3.3(3) surface parking must contribute to the continuity of the street landscaping edge without compromising the safety and security of the public inside the lot and on the public street;	Yes	Yes				
4.3.3.3(4) reduce the visual impacts of large surface parking lot areas by dividing the parking area into smaller parking lots defined at the boundaries by drive aisles, sidewalks, trees and landscape planting; plant shrubs and small trees to define circulation routes for pedestrians and vehicles; and	Yes	Yes				
4.3.3.3(5) multiple surface parking lots must provide a direct pedestrian pathway system through the parking area to provide convenient and safe pedestrian access between building entrances, parked cars.	Yes	Yes				
4.3.4 Bicycle Parking						
4.3.4.1 Provide bicycle parking facilities that are at-grade, have uniform lighting and are safe and secure.	Yes	Yes				
4.3.4.2 Provide at least 50 secured, long term bicycle parking stalls for employees. Such bicycle parking may be integrated into the Main Building located close to Main Building access points.	Yes	Yes				
4.3.4.3 Provide a minimum of 5 unsecured, short-term bicycle parking spots in the form of bicycle racks located within 15 m of each principal entry to the Main Building. Such bicycle parking must be situated in well-lit locations, clearly visible from principal building entries and/or public roads.	Yes	Yes				
4.3.4.4 Bicycle racks must be made of sturdy, theft-resistant material and be secured to the floor or ground. Design the bicycle racks so that they secure the bicycle frame, not the wheels, and allow both the frame and front wheel to be locked to the rack with a U-style lock.	Yes	Yes				
4.4 Site Infrastructure						
4.4.1 Project Co will provide, as necessary, adequate and reliable infrastructure and necessary						
4.4.1.1 General						
4.4.1.1(1) All works required for excavation, exposing, backfill and surface restoration of all proposed water and sanitary sewer, as	No					
4.4.1.1(2) All works required for the design and construction of all storm	No					
4.4.1.2 Potable Water – Off-Site						
4.4.1.2(1) The Facility requires two separate water system connections, including metering and backflow prevention.	Yes	Yes				
4.4.1.2(2) Not used.						
4.4.1.2(3) The extent to which provision for on-Site pumping from the primary and secondary water connections will be required (to suit either domestic demand or fire-fighting demand, or both) and will be determined, in part, by the final building floor area and building height.	No					
4.4.1.2(4) The City has provided flow test data for nearby fire hydrants, which flow test data has been made available to Project Co.	No					
4.4.1.2(5) The primary connection point for municipal water will be an existing 18-inch PVC City water main running through the Site.	No					
4.4.1.2(6) The secondary connection point will be a new connection at the project limit boundary near the intersection of Canola Avenue and Aberdeen Street. The Authority will install a connection from the City water main to the project limit boundary. Project Co will connect to this service at the project limit boundary. The Authority will provide Project Co with design drawings for the Authority's work, as well as as-built drawings upon completion of the Authority's work.	No					
4.4.1.2(7) Project Co will ensure that City access to municipal fire hydrants is not encumbered at any time. All existing hydrants must remain active during the Construction. Temporary construction water will be provided by a new connection to the City's water system that is approved by the City.	No					
4.4.1.3 Sanitary Sewer – Off- Site						
4.4.1.3(1) The connection point for the sanitary sewer will be a force main to the existing municipal sewer. The Authority will install a connection from the existing municipal sewer near the intersection of Canola Avenue and Aberdeen Street up to the project limit boundary. Project Co will connect to this service at the project limit boundary. The Authority will provide Project Co with design drawings for the Authority's work, as well as as-built drawings upon completion of the Authority's work.	No					
4.4.1.3(2) Not used.						
4.4.1.3(3) Sanitary sewer video surveillance inspections will be required upon installation.	No					
4.4.1.4 Storm Drainage – Off- Site						
4.4.1.4(1) Project Co must employ On-Site storm water management strategies which result in no net increase in peak storm water discharge rates up to the 1:100 year recurrence interval event. Project Co will design the Site so that expected drainage flow capacity and direction meet Provincial requirements.	No					
4.4.1.4(2) Storm Sewer video surveillance inspections will be required upon installation.	No					
4.4.2 On-Site Services Infrastructure						
4.4.2.1 General						
4.4.2.1(1) Design and construct all on-Site servicing to meet or exceed the design and quality requirements for the corresponding municipal off-Site services, and to meet the needs of the Facility.	No					
4.4.2.2 Sanitary Sewers – On-Site						
4.4.2.2(1) Provide sanitary sewers of a diameter, grade and depth to safely convey all effluent from the Facility.	No					
4.4.2.2(2) Provide one or more lift stations, consisting of redundant grinder pumps, which discharge sanitary drainage from the Facility to the municipal sewer system via force main.	Yes	Yes				
4.4.2.2(2)(a) The lift stations may be located within the Main Building or constructed in a separate building. If a separate building is constructed, then the building will be in the same architectural character as the rest of the Facility.	Yes	Yes				
4.4.2.2(2)(b) The lift stations will be heated and ventilated according to applicable codes and standards.	No					
4.4.2.2(3) The sanitary sewer system will include the pipes, manholes and all other required appurtenances to comply with applicable municipal and provincial standards.	No					
4.4.2.2(3)(a) Provincial standards are outlined in "The Guidelines of Sewage Works Design", as published by the Water Security Agency.	No					
4.4.2.2(4) Sanitary sewer video surveillance inspections will be required upon installation.	No					
4.4.2.3 Storm Sewers and Drainage – On-Site						
4.4.2.3(1) Provide storm sewers, storm sewer management strategies and drainage network (minor and major):						
4.4.2.3(1)(a) where "minor system" refers to a piped storm conveyance system and "major system" refers to the combination of piped systems, channels, retention or detention basins, roadways and overland flow routes;	No					
4.4.2.3(1)(b) which, at a minimum, satisfy "The Guidelines for Sewage Works Design", as published by the Water Security Agency;	No					
4.4.2.3(1)(c) of a size, grade and depth to safely manage and convey all storm water on-Site to the receiving system;	No					
4.4.2.3(1)(d) which, at minimum, maintain the pre-Construction discharge rates after Service Commencement;	No					
4.4.2.3(1)(e) which, at a minimum, are capable of managing the difference in pre-Construction vs. post-Construction discharge rates and volumes;	No					
4.4.2.3(1)(f) which include storm water/oil and grit separation devices or other water quality treatment devices as required, capturing and treating runoff from all road and parking area surfaces;	No					
4.4.2.3(1)(g) which provide receive grit separation treatment for roof water run-off before it enters the piped on-Site conveyance network. Oil/water separation is not required for roof water; and	No					
4.4.2.3(1)(h) where storm sewer video surveillance inspections will be required upon installation.	No					
4.4.2.3(2) Storm water quality: Comply with the "Guidelines for Sewage Works Design", as published by the Water Security Agency.	No					
4.4.2.3(3) Project Co will ensure that neighbouring properties are protected from flooding and nuisance runoff issues and existing municipal system capacities are not exceeded.	No					
4.4.2.3(4) Provide adequately sized water quality/sediment control components (i.e. bioswales) for the surface parking lots, before discharging to the on-Site retention systems, groundwater recharge facilities or the off-Site drainage system.	No					
4.4.2.4 Watermain and Appurtenances – On-Site						
4.4.2.4(1) Provide a water system of diameter, grade, and depth to safely meet demand and fire flow requirements.	No					
4.4.2.4(2) The water system will include the pipes, valves, hydrants, fittings and all other required appurtenances to comply with applicable municipal and provincial standards. Applicable provincial standards are outlined in "A Guide to Waterworks Design", as published by the Water Security Agency.	No					
4.4.2.4(3) Provide two separate watermain systems at the Site (watermain and ancillary components) from the municipal/regional systems, each system capable of providing all required commercial/institutional demands and firefighting capacity and redundancy for the Facility. The extent to which provision for on- site pumping, from both primary and secondary offsite connection points, will be required (to suit either domestic demand or fire- fighting demand, or both) will be determined, in part, by the available system pressures, the final building floor area and building height.	No					
4.4.2.4(4) Firefighting volumetric demands are to be calculated using the Fire Underwriters Survey (FUS) method, unless alternates are otherwise approved by the applicable Governmental Authorities.	No					
4.4.2.4(5) If required to meet the FUS fire flow demands, Project Co will provide back-up, permanent fire-fighting equipment.	No					
4.4.2.4(6) The watermain systems will include approved backflow preventers necessary to protect the municipal system and on-Site facilities from contaminants based on the hazard level of the Facility.	No					
4.4.2.4(7) Provide a looped on-Site connection for the watermain.	No					
4.4.2.4(8) Each water main service, from separate off-Site connection points, will cross-connect on-Site and enter the Main Building in mechanical rooms on opposite ends of the building, wherein metering and splitting off of domestic and fire suppression flows will occur.	No					
4.4.2.5 Road Works – On-Site						
4.4.2.5(1) All on-Site road works will meet the requirements of the standards	No					
4.4.2.5(2) Design and construct on-Site roadways, including the pavement, curbs and gutters, sidewalks, walkways, signage, pavement markings, and traffic calming devices, that are accessible to handicapped persons and accommodate wheel-chairs, and provide safe passage between parking areas, loading areas, emergency vehicle areas and drop off areas without requiring the driver to enter the municipal roadway. The minimum roadway surface width will be 7.5 metres.	Yes	No	One instance of an accessible curb missing in parking lot	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
4.4.2.5(3) Design and construct permanent access to the Existing Hospital from the north through the existing roadway (Jersey Street) once the Facility is completed. Such permanent roadway must also reconnect to the south portion of the same existing roadway (Jersey Street).	Yes	Yes				
4.4.2.5(4) Pavement structure will meet recommendations by a geotechnical engineer.	No					
4.4.2.5(5) All roadways will accommodate fire truck access in accordance with the requirements of the respective municipality's fire department or by municipal bylaw requirements.	No					
4.4.2.5(6) Design vehicle for loading access to be WB20. All other internal roadways must safely accommodate the typical fire truck in use by the respective municipal authorities.	No					

	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
4.4.2.5(7) Internal site truck movements will be designed such that loading bays are easily accessible, limiting the requirement for truck manoeuvring into and out of loading bay areas.	No					
4.4.2.5(8) Use site surfacing materials which will meet intended use and minimize the 'heat island' effect, where possible.	No					
4.4.2.5(9) Provisions for on-Site roadways may be required to account for snow removal machinery and methods in winter snowfall months.	No					
4.4.2.6 Street Lighting – On-Site						
4.4.2.6(1) Provide lighting for on-Site roadways, walkways and parking areas to ensure safe vehicle and pedestrian traffic with respect to collisions, personal safety, and building access/egress. Provide lighting sympathetic to any existing or future buildings at the Site, as well as all neighbouring properties.	Yes	Yes	Limited to observable conditions			
4.4.2.6(2) Detailed on-Site lighting specifications are carried elsewhere, under electrical specifications section.	No		not applicable			
4.4.2.7 Electrical, Telecommunications, Gas Services						
4.4.2.7(1) Provide adequate electrical, telecommunication and natural gas services to the Facility.	Yes	Yes	Limited to observable conditions			
4.4.2.7(2) Provide two separate electrical services at the Site from the municipal/regional systems, each service capable of providing all required electrical demands and providing service redundancy for the Main Building and Energy Centre.	Yes	Yes	Limited to observable conditions			
PART 5. DESIGN REQUIREMENTS						
5.1 Adaptability and Flexibility						
5.1.1 Project Co will:						
5.1.1.1 locate permanent building elements, such as stairs, elevators and duct shafts, to minimize constraints which inhibit changes to the Facility;	No					
5.1.1.2 minimize interior columns for ease of planning and re-planning of care areas;	Yes	Yes				
5.1.1.3 avoid interior shear walls whenever possible;	Yes	Yes				
5.1.1.4 accommodate the vertical and horizontal distribution of electrical and mechanical services to allow maintenance and changes to occur with the least disruption to clinical service delivery;						
5.1.1.5 provide access points to the Facility service systems in critical locations so that service disruption will be minimized; and	No					
5.1.1.6 avoid cabling in the concrete slab. Provide a system or strategy to support equipment where cabling is imbedded into the slab, to allow for easy servicing to security stations and control rooms and medical equipment. Do not provide raised access flooring.	Yes	Yes				
5.2 Expandability						
5.2.1 Project Co will:						
5.2.1.1 locate primary circulation corridors to allow for expansion without increasing the complexity of the circulation system as a whole; and	Yes	Yes				
5.2.1.2 provide floor zoning that allows for expansion of programs or services, for example by locating administrative and other non-clinical 'soft' functions adjacent to clinical areas that are likely to need to expand.	No					
5.3 Post Disaster Requirements						
5.3.1 In undertaking the Design, Project Co will protect the life and safety of all Facility occupants and the need for continuing services following catastrophic events such as earthquakes, severe weather, epidemics, chemical spill, disruption to service utilities and internal events such as fire. Particular attention will be paid to the Main Building, generators, transformers and utility service connections.	No					
5.3.2 For the Main Building (and Energy Centre, if an independent building) design and construct the building, their generators, transformers and service connection structures, structural components, non-structural components, anchorages, and equipment to post disaster standards in accordance with the National Building Code of Canada.	No					
5.3.3 Design and construct essential services servicing the Facility including the electrical system, heating and cooling systems and distribution, and domestic water, to post disaster standards as defined in the National Building Code of Canada. Locate these services in utilities enclosures that meet post disaster standards as defined in the National Building Code of Canada.	No					
5.3.4 Design and construct the Main Building and the Energy Centre (if designed as a separate building) so that each is capable of meeting its functional requirements (lights, power, water, sewer, communication systems, security systems, alarm and signal systems and HVAC) for	No					
5.3.5 Provide operable windows for the Facility to allow for natural ventilation during shoulder seasons (Fall/Spring) and in the event of mechanical ventilation failure during a post disaster event. Operable windows will be in accordance with Section 6.9.2.7(1)(c)..	No					
5.3.6 See Section 5.11.9 for mechanical post disaster requirements.	No					
5.3.7 See Sections 5.12.1.1(2), and 5.12.1.2(11) for electrical post disaster requirements.	No					
5.3.8 Design and construct the Facility to support an Authority supplied and installed roof-top emergency communications antennae tower (the "**Communications Tower**"). Project Co will supply and install all structural supports and fasteners, all electrical, lighting, and lightning grounding requirements, and all enclosures, entrances, ducting, and pathways, between the Communications Tower and the nearest Telecommunication Room. Provide support designed to resist local forces, including wind and seismic forces, in accordance with applicable building codes and to support a future Communications Tower of up to 180 kg. Ensure there is a clearance of 5 metres above the support structures on the roof with a clear line of sight. Provide an attachment that will resist design loads and anchor the future Communications Tower to the support. Stub four 25mm conduits through the roof and cap for future cabling. Extend conduits to the nearest Telecommunication Room.	No					
5.3.9 Project Co will design and construct the Facility so that it includes space that will be used as an emergency operations centre ("**EOC**") during an emergency and a backup operations security centre ("**BOSC**").						
5.3.10 The EOC will:						
5.3.10.1 be located in a post-disaster structure;	No					
5.3.10.2 be connected to vital power, with 30% of EOC lighting and power outlets connected to UPS power, have telecommunication outlets supplied from two separate network rooms and have two separate dedicated SaskTel telephone (not through the VoIP telephone system) feeds that will support at least 12 SaskTel phone communications, as described below. These requirements also apply to any rooms adjacent to the EOC that may be used in the event of an emergency or disaster;	Yes	Yes	partial - separate network room feeds not possible to review during audit. Functionality of feeds not possible; presence of connected power may be possible if labelling present			
5.3.10.3 include a communication area with a minimum of 10 seats, a locked supply storage area (complete with power and network capability), a communication equipment room capable of supporting the communications systems and equipment, a food preparation/storage area and at least two bathrooms, each with a shower;	No		not viewable during audit			
5.3.10.4 Not used.						
5.3.10.4(1) include storage room for amateur radio equipment;	Yes	No	Not observed	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
5.3.10.4(2) include 2 power outlets and a telecommunications outlet in the radio room;	Yes	Yes	Limited to observable conditions			
5.3.10.4(3) in addition to the 5 specialized satellite antennae, the following antennae are required (specific locations for these antennae will require consultation with communication specialists):						
5.3.10.4(3)(a) 1 commercial antenna;	Yes	Yes	Limited to observable conditions			
5.3.10.4(3)(b) 2 VHF antennae, consisting of 1 digital antenna and 1 voice antenna; and	Yes	Yes	Limited to observable conditions			
5.3.10.4(3)(c) 2 HF antennae, consisting of 1 digital antenna and 1 voice antenna;	Yes	Yes	Limited to observable conditions			
5.3.10.5 be capable of supporting the emergency communication systems in the EOC and BOSC including all required cabling,	No		not viewable during audit			
5.3.10.6 have six operator station areas, and each station will have:						
5.3.10.6(1) 2 telecommunication outlets;	Yes	Yes	Limited to observable conditions			
5.3.10.6(2) 2 SaskTel dedicated phone lines;	Yes	Yes	Limited to observable conditions			
5.3.10.6(3) satellite phone capability for each of the SaskTel dedicated phone lines, including the infrastructure for specialized	No		not viewable during audit			
5.3.10.6(4) 2 power outlets;	Yes	Yes	Limited to observable conditions			
5.3.10.7 have a multifunction printer/scanner/fax that has:	No		not viewable during audit			
5.3.10.7(1) a telecommunication outlet, with electrical outlet on vital power; and	Yes	Yes	Limited to observable conditions			
5.3.10.7(2) 2 fax lines (one for outgoing messages and one for incoming	No		functionality not viewable			
5.3.10.8 have throughout the EOC an additional 24 telecommunication outlets, 16 power outlets on vital power and 8 power outlets on UPS power (all of which are in addition to the telecommunication and power outlets described in Section 5.3.10.6); and	No		not possible to view during audit			
5.3.10.9 have teleconferencing and videoconferencing capability.	Yes	Yes	Limited to observable conditions			
5.3.11 The BOSC will:						
5.3.11.1 be located in a post-disaster structure;	No					
5.3.11.2 be designed and constructed to the same standards as the OSC, and to have all of the same features and functionality as the OSC, except that the BOSC will have only one security workstation (as compared to the OSC, which will have two security workstations).	No					
5.3.12 The design of the Facility will provide means of securely evacuating Clients, staff, visitors and contractors, while maintaining security and public safety.	No					
5.3.13 Emergency Evacuation Plan – Provide an emergency evacuation plan for the Facility (an "**Emergency Evacuation Plan**"),	No					
5.3.13.1 establish evacuation routes acceptable to the Authority, acting reasonably, for all areas within the Facility;	No					
5.3.13.2 require that evacuation routes are posted in a location where all persons can view them;	No					
5.3.13.3 provide both primary and secondary evacuation routes for all areas that house Clients;	No					
5.3.13.4 ensure that all primary and secondary evacuation routes for Secure Clients remain within the Secure Perimeter at all times;	No					
5.3.13.5 ensure all primary and secondary evacuation routes lead Clients into a Client outdoor courtyard or other secure area; and	No					
5.3.13.6 ensure that primary evacuation routes maintain a degree of Client separation which is sufficient to ensure that there is no cross mix of Clients from Secure Client Care Services (B.1.2) with clients from Forensic Client Care Services (B.1.1) or with Non-Secure Clients.	No					
5.3.14 No evacuation route (primary or secondary) will cross or enter into the Threat Perimeter Zone.	No					
5.5 The Energy Centre						
5.5.1 If the Energy Centre is proposed to be designed as a stand-alone structure on the Site:						
5.5.1.1 locate it away from any existing residential areas surrounding the Site;	Yes	Yes				
5.5.1.2 design and construct it to post disaster standards as described in Section 5.3;	No					
5.5.1.3 blend it into the Site landscaping;	Yes					
5.5.1.4 use non-combustible, robust cladding materials including concrete or concrete masonry units, but design the Energy Centre building in a manner which is consistent with the shape, materials and colors used for the main hospital building;	No					
5.5.1.5 secure it against unauthorized access and design it in a manner which will prevent acts of vandalism and theft.	Yes	Yes				
5.5.2 The Energy Centre will be located and configured to optimize operational continuity and avoid threats resulting from fire, flood, snow, windfall, seismic events and traffic.	No					
5.5.3 Provide vehicular access for maintenance and delivery of alternative fuel source.	No					
5.5.4 Configure the Energy Centre to enable a quick removal and replacement of critical equipment.	No					
5.5.5 Minimize the exhaust from the Energy Centre, and locate and design the exhaust system (including with regard for prevailing winds) so that exhaust is not a nuisance to users of the Facility or to residents of off-Site properties.	No					
5.5.6 Orient the intake louvers of the Energy Centre to face away from residential areas and other noise sensitive locations.	No					
5.5.7 The exhaust noise from the diesel generators will have silencers and be directed upwards through an acoustically lined plenum space for discharge at roof level. The noise level immediately outside of the intake louver will not exceed 92 dBA.	No					
5.6 Community Reintegration Units						
5.6.1 General						
5.6.1.1 The CRUs will be included in one or more stand-alone buildings within the Site.	Yes	Yes	appears to comply			
5.6.1.2 Design the CRU(s) exterior appearance to be "residential" in character.	Yes	Yes	appears to comply			
5.6.1.3 The CRU(s) will be highly articulated to break down its (their) scale, utilizing such components as pitched roofs, glazing, canopy and shading systems.	Yes	Yes	appears to comply			
5.6.1.4 As applicable, roof top mechanical/electrical equipment will be screened and incorporated in architectural elements.	Yes	Yes	appears to comply			
5.6.1.5 Where retaining walls are necessary, they will be consistent in materials and quality to that of the whole Facility.	Yes	Yes	appears to comply			
5.6.1.6 Design the CRUs to be compatible with the exterior finishes, colours and character of the other buildings that comprise the Facility.	Yes	Yes	appears to comply			

	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
5.6.1.7 The CRUs will be of non-combustible construction and will include sprinkler systems throughout.	Yes	Yes				
5.6.2 Exterior Design Features						
5.6.2.1 Roof Design						
5.6.2.1(1) Flat roofs are not permitted.	Yes	Yes	appears to comply			
5.6.2.1(1)(a) The eave overhang should not be less than 450 mm. Overhangs above clerestory windows are not a requirement.	No		Access to the eaves is required to confirm as-built dimensions			
5.6.2.1(2) Chimneys and furnace flue pipes in prominent locations will be enclosed with siding or other feature materials. Decorative	Yes	Yes	appears to comply			
5.6.3 Exterior Building Materials and Colour						
5.6.3.1 Exterior materials will include high quality finish materials with colour to reinforce entry areas, vertical circulation elements or significant areas in the CRUs.	Yes	Yes	appears to comply			
5.6.3.2 Exterior materials will be high quality and durable. Exterior materials may include cement board, stone, or metal cladding, architectural concrete, clear glass and brick masonry. Red brick, similar to that used in the Existing Hospital, will not be permitted.	Yes	Yes	appears to comply			
5.6.3.3 The front face of all CRUs will have a minimum of two different exterior cladding materials, one of which is an accent. Accent materials should be used to highlight entrances or as larger accent panels with or without windows.	Yes	Yes	appears to comply			
5.6.3.4 When posts or columns are used, they will be built as an aesthetic feature in good proportions relative to the whole elevation.	Yes	Yes	appears to comply			
5.6.3.5 Facade transparency and views into CRU activity areas will be provided, especially at grade levels; accordingly, use of mirrored or highly reflective glass will not be permitted. Views into CRU Client bedrooms from the exterior will not be permitted.	Yes	Yes	appears to comply			
5.6.3.6 All gutters and downspouts will match or compliment the fascia, wall or trim colour.	Yes	Yes	appears to comply			
5.6.3.7 Colour schemes will be consistent with all other buildings in the Facility. All materials will be considered, including the exterior finish, trim, roof, doors, windows and fencing.	Yes	Yes	appears to comply			
5.6.4 Quality of Space/Interior Design						
5.6.4.1 Maximize opportunities for the Clients to have a connection between indoor spaces and the outdoors through the introduction of natural light and views.	Yes	Yes	Focus on client wings, little access to light and views from other parts of the building			
5.6.4.2 Maximize opportunities for resident empowerment through control of lighting, sound, décor (personalization) and daylight.	Yes	No	Little personalization opportunities witnessed. Control of daylight through blinds within the glazing is provided.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
5.6.4.3 Employ materials and detail surfaces to absorb and minimize sound transmission.	Yes	No	Several locations where acoustic concerns were observed	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Acoustic review of the facility is required
5.6.4.4 Create a 'residential' feel by using elements such as colours, textures, design features, and proportions familiar to the common perception of residential environments.	Yes	Yes	Subjective, palette is very minimal			
5.6.4.5 All CRUs will have a minimum ceiling height of 2700mm above the finished floor and a minimum clear corridor width of 1500mm.	Yes	Yes	As perceived			
5.7 Regional Administration	No					
5.7.1 If Regional Administration is designed as a stand-alone building it will:	No					
5.7.1.1 be compatible with the exterior finishes, colours and character of the other buildings that comprise the Facility;	No					
5.7.1.2 be designed and constructed with the same applicable specifications as the Main Building as described throughout this Schedule; and	No					
5.7.1.3 be of non-combustible construction and include sprinkler system throughout.	No					
5.13 Food Services						
Project Co will design and construct the Main Building, including with sufficient space, equipment and infrastructure to accommodate the	No		Article is subjective and requires feedback from the owner			
5.14 Security Requirements						
5.14.1 The Client population of the Facility ranges from low risk to high risk and consists of both	No					
5.14.2 Even though the Client population of the Facility ranges from low risk to high risk, all Clients in this Facility will require	No					
5.14.3 Because the Facility's primary purpose is therapeutic, Project Co will design and construct						
5.14.3.1 to be unobtrusive, not interfere with the therapeutic processes and environment, and emphasize human interaction and effective operations as the primary means of control rather than physical control and reaction, while ensuring proper security and safety for all;	Yes	TBD	Subjective in nature, clinicians will need to provide feedback			
5.14.3.2 to provide a level of security that is appropriate for both parts of the Facility – Secure and Non-Secure Client accommodations -- without compromising the therapeutic and healing aspects of the Site and Facility;	Yes	TBD	Subjective in nature, clinicians will need to provide feedback			
5.14.3.3 within the limits of the appropriate protocols and rules for the Non-Secure Clients, provide freedom of movement and allow full use of the amenities throughout the grounds without perceived monitoring by minimizing the visual presence of security elements. However, freedom of movement will not be allowed for any Client within the Threat Perimeter;	Yes	TBD	Subjective in nature, clinicians will need to provide feedback			
5.14.3.4 to create an inclusive and dignifying environment throughout the Facility and Site, while maintaining the safety for Clients, staff and visitors, meeting the requirements of the applicable Laws including the Mental Health Act and the Corrections Act;	No					
5.14.3.5 to ensure the scope of visual surveillance around buildings is maximized and the provision of small alcoves (where Clients could conceal themselves) is minimized;	Yes	No	The secure elevator 3 alcove provides a point of concern. Additionally, where fire doors are narrower than the hallway, niches are created on both sides of the hall.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
5.14.3.6 to comply with the following dynamic security criteria:						
5.14.3.6(1) Secure Client Care Services units will feature Nurse Stations, which include functional provisions for both security staff and nursing staff. The security provisions of the Nurse Station will be unobtrusive, while maintaining visibility to the Client room doors and Client activity spaces.	Yes	TBD	Can not view down all corridors from one location within the nursing station, but while in the nursing station you can view down all corridors from different locations. Interpretation of this is required.			
5.14.3.6(2) in Secure Client Care Services units, the IPCRs will require a separate vestibule staffed by a registered psychiatric nurse.	No					
5.14.3.6(3) therapeutic programs will occur both within the Secure Client Care Services units, managed by case management staff, as well as in centralized program facilities, some of which will be shared with the Non-Secure Client programs (see Therapy Mall in (A2) and Therapy Mall-Shared (C3) sections of the Clinical Specifications);	No					
5.14.3.6(4) Clients will be assessed at admission and a care plan will be developed for them, taking into account that Client's will be required to participate in the creation of their own care and activities plans;	No					
5.14.3.6(5) both clinical staff and security staff will be knowledgeable about each Client's assessment, and any factors that may impact their behavior;	No					
5.14.3.6(6) both clinical staff and security staff will work closely with Clients to engage them in constructive and responsible behavior, observing and assessing behaviors that are critical to maintaining a safe and therapeutic environment, documenting and sharing behavioral information with other staff and report any behavior that may jeopardize the safety or therapeutic advancement of any one within or outside of the Facility;	No					
5.14.3.6(7) periodically, members of the security staff may escort Clients to programs taking places in the Shared Therapeutic areas of the building that are equipped with Security devices that allow for a flexible perimeter. These locations will be provided with access devices that allow the therapeutic spaces to be used separately by the non-secure and secure Clients and maintain the security of the flexible Perimeter Areas;	No					
5.14.3.6(8) all circulation routes within the building must be secure and will be monitored by the Operations Security Centre using ESS systems (see Section 7.9.3).	No					
5.14.3.7 include no ligature attachment points, no opportunity to hide contraband and no opportunity to disassemble building components to create weapons within Client accessible areas;	Yes	No	Several anti-ligature concerns were observed including door closers that were not concealed, suspended gantry systems, elevator handrails, ant ligature hardware and toilets but regular lavatories, and hardware mistakes. (#642, #641, #437, #290, #266, #88) Additionally, electrical devices such as horn strobes and wall sconces may prevent ligature concerns unless they have been specifically designed to be breakaway.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	A thorough ant ligature review should be conducted across the whole facility.
5.14.3.8 except as indicated otherwise in this Schedule, provide building assemblies, materials, and design details in each room or	Yes	Yes	Limited to what was observable			
5.14.3.9 to address, through the application of Crime Prevention Through Environmental Design (CPTED) principles of site planning, physical safety and security way-finding and legible connections between functional components;	Yes	No	Difficult wayfinding was observed	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Wayfinding review should be conducted
5.14.3.10 support the application of innovative and emerging technologies relating to communications, security control and access, systems control and monitoring, and information storage and retrieval:						
5.14.3.10(1) systems infrastructure will be flexible with enough bandwidth to support new and evolving technologies as they gain acceptance. In all cases, state of the art technology will be required;	No					
5.14.3.10(2) technologies such as biometric identification and body scanning technologies may be employed in the future. Infrastructure will be designed in a manner that allows for this possibility;	No					
5.14.3.10(3) all external perimeter control, door controls, security and alarm systems for the Site and Facility as a whole will be monitored by staff stationed in the Operations Security Centre; and	No					
5.14.3.10(4) all internal door controls, security and alarm systems for the Main Building and Ancillary Buildings will be monitored by staff stationed in the Operations Security Centre.	No					
5.14.4 The Facility will include progressive zones of security as described in this Schedule. Security levels will increase as persons or vehicles move closer to the Secure Perimeter.	No					
5.15 Site Security Perimeter and Zones						
5.15.1 The Facility must have a secure perimeter to ensure public safety. Perimeter systems must appear as unobtrusive as possible, normalizing the environment and supporting the perception of the Facility as a proactive component of the wider community; and minimize impacts on the natural environment of this Site.	No					
5.15.2 Site security for Secure Clients will be comprised of 2 boundaries (or layers) and 3 zones (or areas) as described in this Section. The Facility will be designed and constructed so that persons will not bypass a controlled point as they travel between boundaries and zones.	No					
5.15.3 Provide the following security boundaries within the Site:						
5.15.3.1 a secure perimeter (the "**Secure Perimeter**") formed by the outer wall of the Secure Client portion of the Main Building and the internal walls separating the Secure Client and Non-Secure Client areas within the Main Building, as described in Section 5.15.6; and	No					
5.15.3.2 a threat perimeter (the "**Threat Perimeter**") defined by a soft boundary located a minimum of 9 metres and a maximum of 18 metres from the Secure Perimeter. This distance is to mitigate the potential for an individual to throw contraband into the Main Building.	No					
5.15.4 The following zones will be defined by the Secure Perimeter and/or the Threat Perimeter:						
5.15.4.1 The area contained within the Secure Perimeter is the "**Secure Zone**".	No					
5.15.4.2 The area between the Secure Perimeter and the Threat Perimeter is the "**Threat Perimeter Zone**". The Threat Perimeter Zone is a zone within which unauthorized presence represents an active threat to operational and/or Facility security. This zone will be monitored by motion sensors and video cameras.	No					
5.15.4.3 The area of the Site that is outside the Threat Perimeter Zone is the "**Area of Interest Zone**". This is a large zone, where the Authority has an interest in detecting any unauthorized movement, objects and other activities that are associated with a potential threat to the Facility and/or operations. The area of interest will be monitored from the OSC with video cameras	No					
5.15.5 To achieve the required degree of security:						
5.15.5.1 the Security Perimeter must provide:						
5.15.5.1(1) protection of the Clients and staff against intrusion from the exterior;	No					
5.15.5.1(2) detection of attempted breeches of the perimeter;	No					
5.15.5.1(3) identification and record of the source and location of attempted breeches; and	No					
5.15.5.1(4) integration of the Client care units and other component areas within the Secure Perimeter, with appropriate separation as required by Client type; and	No					
5.15.5.2 the Threat Perimeter must provide:						
5.15.5.2(1) a recognizable demarcation of the boundaries of the Facility, and Site, provided through unobtrusive natural barrier system;	No					
5.15.5.2(2) protection of the Clients and staff against intrusion from the exterior;	No					
5.15.5.2(3) detection of attempted breeches of the perimeter;	No					

	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
5.15.5.2(4) identification and record of the source and location of attempted breeches;	No					
5.15.5.2(5) minimization of the number of false alarms; and	No					
5.15.5.2(6) proximity sensors, cameras, and site lighting which will be monitored by the Operations Security Centre.	No					
5.15.6 The Secure Perimeter						
5.15.6.1 The Secure Perimeter will be formed by the outer wall of the Secure Client portion of the Main Building and the internal walls separating the Secure Client and the Non-Secure Client areas within the Main Building. The line of the Secure Perimeter will be both continuous and whole, both in plan and section. All walls, glazing and doors are of a type required for SLC 1 and SLC 2. While there is electronic security monitoring, detection and notification systems associated with this perimeter; its primary function is physical security through design and construction rather than one of detection. The Secure Perimeter is to be monitored, controlled and managed by the OSC in accordance with the requirements of Section 5.18 of this Schedule. Some functional areas that are used by escorted Secure Clients are shared functional areas with the Clients from the Non-secure zones and, therefore, are required to be within the Flexible Perimeter, including the following: C-6 Health Care Clinic and C-3 Therapy Mall Shared.	No					
5.15.6.2 During the normal operation of the Facility, Secure Clients have no cause to be outside of the Secure Perimeter, other than by the legitimate admissions and discharge processes and excepting certain Clients who have been classified as open custody Clients. Open custody Clients will be permitted to enter and exit the Secure Perimeter under Secure staff supervision through a controlled client programs Sally Port. Clients who require services from the Therapy-Mall-Shared will be escorted by Secure Client staff to those activity areas.	No					
5.15.6.3 To maintain control and integrity of the Facility security, the number of access points through the Secure Perimeter is highly controlled and restricted to the following:	No					
5.15.6.3(1) admissions and discharge Sally Port (Client entry/exit);	No					
5.15.6.3(2) services vestibule (supplies, materials entry/exit);	No					
5.15.6.3(3) main visitor Secure Vestibule (single point of entry/exit for staff, visitors);	No					
5.15.6.3(4) Client programs Sally Port (open custody Client and staff entry/exit);	No					
5.15.6.3(5) services/emergency vehicle Sally Port (provides vehicle access through the Secure Perimeter); and	No					
5.15.6.3(6) Project Co may provide additional access points through the Secure Perimeter subject to review by the Authority in accordance with Appendix 2B [User Consultation and Design Review].	No					
5.15.6.4 All controlled doors along the Secure Perimeter will be controlled by the OSC. Both sides of the doors will have:	Yes	Yes				
5.15.6.4(1) electronic visual identification confirmation (via video surveillance cameras); and	Yes	Yes				
5.15.6.4(2) 2-way audio communication (via intercom stations).	Yes	Yes				
5.15.6.5 Additionally, the Client programs Sally Port will have a person trap system as described in Section 7.9.3 of this Schedule that will use electronic card identification, cameras and interlocks.	Yes	Yes				
5.15.6.6 Enabling Technologies & Site Security	No					
5.15.7 Perimeter detection devices and methodology differ by type, location and intention in accordance with their proximity to the Secure Perimeter. These systems will be sophisticated so as to provide little margin for error. The detection systems at this Facility will be highly specific, video surveillance and electronic detection interfaced and defaulted to human rather than automated response. Refer to Section 7.9.3 of this Schedule.	No					
5.15.8 The Threat Perimeter						
5.15.8.1 The Threat Perimeter will be defined by an encircling soft boundary. The boundary need not be of maximum security construction or type, as its primary function is to provide a demarcation line and keep persons a reasonable distance away from the Secure Perimeter. Persons on the exterior of the Building will not be able to approach or otherwise access any part of the Secure Perimeter without being detected by the perimeter intrusion detection system described in Section 7.9.3 of this Schedule.	No					
5.15.8.2 The Threat Perimeter is to be equipped with a perimeter security system (sensors and cameras) as described in Section 7.9.3 of this Schedule, to ensure 100% coverage for surveillance, monitoring, detection, and notification from the Secure Perimeter extending outward to at least 2m beyond the Threat Perimeter (i.e. 2m into the Area of Interest Zone) and in accordance with the Facility Threat and Risk Assessment. The perimeter security system will aid the OSC staff to monitor and survey the Threat Perimeter Zone through electronic detection and notification; video surveillance; and lighting type, level and control.	No					
5.15.8.3 Refer to the following indicative diagram showing the Secure Perimeter, Threat Perimeter and Security Zones.	No					
5.16 Building Security						
5.16.1 Security Level Classification (SLC)						
5.16.1.1 Design and construct all rooms and spaces included in the Facility in accordance with the Security Level Classification (SLC) applicable to that room or space as set out in Appendix 3A [Clinical Specifications]. Refer to Section 5.14.3.8 of this Schedule.	No					
5.16.2 Staffing						
5.16.2.1 Refer to Attachment 1 [Staffing Model] to Appendix 3A [Clinical Specifications].	No					
5.16.3 Electronic Security Systems						
5.16.3.1 Include electronic security systems as described in Section 7.9.3 to assist staff in the supervision, control, and monitoring of Client and staff movement and activity within a high risk therapeutic environment. The electronic security system will be designed as a secondary system which supports the primary passive or structural security elements; and	No		System not in operation			
5.16.3.2 use static security systems that will be responsive to the Security Level Classifications indicated for each room in the Clinical Specifications and will include:	Yes	Yes	Limited to what was viewable			
5.16.3.2(1) perimeter detection and recording systems;	No		System not in operation			
5.16.3.2(1)(a) video surveillance;	Yes	Yes	Limited to what was viewable			
5.16.3.2(1)(b) door and window alarms;	Yes	Yes	Limited to what was viewable			
5.16.3.2(2) a combination of alarms and radios for staff;	Yes	Yes	Limited to observable conditions			
5.16.3.2(3) access control (through a programmable key-card system for staff);	Yes	Yes	Limited to observable conditions			
5.16.3.2(4) video imaging and identification;	No		System not in operation			
5.16.3.2(5) remote control locking/unlocking systems for doors;	Yes	Yes	Limited to observable conditions			
5.16.3.2(6) Client tracking and counts; and	No		System not in operation			
5.16.3.2(7) unobtrusive security measures to the extent possible.	No		System not in operation			
5.16.4 Adjacencies						
5.16.4.1 In the Secure Zone, where two or more rooms or spaces are required to be						
5.16.4.1(1)(a) by a common wall with access through a common doorway or common corridor; or	Yes	Yes				
5.16.4.1(1)(b) by any combination of connected corridor(s), stairway(s) and elevator(s), provided that the aggregate walking distance between the entry doors of the respective rooms or spaces will not exceed 15m. For the purpose of this Section, the vertical travel distance of an elevator will be included in any calculation of "walking distance".	Yes	Yes	As observable on site, no measurements were taken.			
5.16.5 Building Construction Systems						
5.16.5.1 Static security measures will include security construction, barriers and monitoring devices.	No					
5.16.5.2 Secure construction systems include the provision of walls, windows, doors, floors, roofs, and ceilings that resist penetration by physical force.	No					
5.16.5.3 To enhance monitoring of clients, corridors without 2 directions and 2 means of exit will be avoided.	Yes	Yes				
5.16.5.3(1) Window Systems						
5.16.5.3(1)(a) Security windows will be required in SLC1, SLC1A, SLC2, SLC3 and the Secure Perimeter. Refer to Section 6.9.2.7 of this Schedule.	No					
5.16.5.3(1)(b) In Non-Secure Client units, windows will have a maximum operable window opening in accordance with Section 6.9.2.7(1)(c).	Yes	Yes				
5.16.5.3(1)(c) At the Secure Client units operable windows will not be used.	Yes	Yes				
5.16.5.3(1)(d) Not used.						
5.16.5.3(2) Exterior windows in Private Client rooms will have a minimum area of 2.5 square meters and a minimum short dimension	Yes	Yes	As observable, no dimensions were taken			
5.16.5.3(2)(a) Anti-ligature, tamper resistant security hardware will be consistent throughout the Facility for the Security Level Classifications and as indicated in Section 5.14.3.8 of this Schedule.	Yes	No	Several anti-ligature concerns were observed including door closers that were not concealed, suspended gantry systems, elevator handrails, ant ligature hardware and toilets but regular lavatories, and hardware mistakes. (#642, #641, #437, #290, #266, #88) Additionally, electrical devices such as horn strobes and wall sconces may prevent ligature concerns unless they have been specifically designed to be breakaway.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	A thorough ant ligature review should be conducted across the whole facility.
5.16.5.3(2)(b) Detection features, such as alarms on doors, will monitor unauthorized entry and egress on all Facility entry and exit	Yes	Yes	Limited to observable conditions			
5.16.5.3(2)(c) Subject to applicable Law and the requirements of the applicable Governmental Authority, door operations will follow Appendix 3D(v) [Door Operation Matrix].	No	No	Main Entry missing remote release from the OSC and the Reception Desk.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
5.16.5.3(2)(d) Within the Client care units Client room doorways and other doors of rooms used by Clients will be directly visible from the nurse's station.	Yes	No	Both wings can not easily be viewed from one location in the nurses station.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	It is not clear if this meets the operators needs and should be reviewed further.
5.16.5.4 Security system cameras will be provided on both sides of Sally Port doors, Security Vestibule doors, ingress and egress doors and double egress doors, in addition to those referred to in 5.15.6.4.	Yes	Yes	Limited to observable conditions			
5.17 Security Operations and Control						
5.17.1 The Main Building will include the following centralized operations security functions:						
5.17.1.1 the Operations Security Centre (OSC);	Yes	Yes				
5.17.1.2 the Emergency Operations Centre (EOC); and	Yes	Yes				
5.17.1.3 the Backup Operations Security Centre (BOSC).	Yes	Yes				
5.17.2 The following are the requirements for these centralized operations security control posts:						
5.17.2.1 Operations Security Centre (OSC) — functional component B.3.1 of the						
5.17.2.1(1) Authority staff in the OSC will control and monitor the Site including	Yes	Yes				
5.17.2.1(2) The OSC will be equipped to allow the monitoring of alarms	Yes	Yes				
5.17.2.1(3) The OSC will have control of all:						
5.17.2.1(3)(a) Secure Perimeter doors;	Yes	Yes				
5.17.2.1(3)(b) Sally Ports and Secure Vestibules; and	Yes	Yes				
5.17.2.1(3)(c) interior doors.	Yes	Yes				
5.17.2.1(4) Authority staff in the OSC will manage identification confirmation of all persons entering or exiting through all doors to the Main Building, except for the main entrance during regular business hours.	Yes	Yes				
5.17.2.1(5) The OSC will include ESS displays and peripheral devices.	Yes	Yes				
5.17.2.1(6) Authority staff in the OSC, through the use of the ESS, will be able to identify and record all persons entering and exiting the Facility.	Yes	Yes				
5.17.2.1(7) Locate the OSC between the Non-Secure Zone and the Secure Zone at the Secure Perimeter. The perimeter (partitions,	Yes	Yes				
5.17.2.2 Emergency Operations Centre (EOC)						
5.17.2.2(1) The EOC will be activated during emergency events and crisis situations. Security staff, with the use of ESS equipment as described in Section 7.9.3 of this Schedule, will monitor, assess and manage the situation, and control access throughout the Facility.	No					
5.17.2.2(2) The EOC will facilitate incident command post functions and will be located in the Muster Room of the Staff Resources/ERT (Emergency Response Team) as described in the Section C-7 of the Clinical Specifications.	No					
5.17.2.2(3) The EOC will be equipped with two(2) 55" screens that will be capable of displaying information as described in Section 7.9.3 of this Schedule.	Yes	Yes	Limited to observable conditions			
5.17.2.2(4) Enabling technologies within the EOC will provide the ability to:						
5.17.2.2(4)(a) display any video surveillance camera or group of cameras;	No		functionality not viewable			
5.17.2.2(4)(b) display cable television; view security alarm monitoring;	No		functionality not viewable			
5.17.2.2(4)(c) voice communication (telephony and radio).	No		functionality not viewable			
5.17.2.2(5) A dedicated computer will be provided to manage the operations of the video wall.	No		functionality not viewable			



	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
5.17.2.2(6) The EOC will be equipped with laptop computer stations, white boards, clocks and telephones, so as to permit authorized security staff to effectively manage and monitor emergency incidents in all areas within the Facility.	Yes	Yes	Limited to observable conditions			
5.17.2.2(7) Upon activation of the EOC the Muster Room will become the EOC. Security will be enhanced to limit access into the EOC through the use of the ESS.	No		functionality not viewable			
5.17.2.3 Backup Operations Security Centre (BOSC)						
5.17.2.3(1) The BOSC will be immediately adjacent to the EOC in the Muster Room.	Yes	Yes	Limited to observable conditions			
5.17.2.3(2) The BOSC will be a highly secure room, requiring at least two levels of verification and authentication in order to gain access to this room	Yes	Yes	Limited to observable conditions			
5.17.2.4 The BOSC will be a scaled-down version of the Operations Security Centre and will include the following provisions:	Yes	Yes	Limited to observable conditions			
5.17.2.4(1) The BOSC is the Backup Operations Security Centre which duplicates functions of the OSC. The BOSC will only be activated by the EOC and may be necessary to effectively manage major incidents that have compromised the security or functionality of the OSC.	Yes	Yes	Limited to observable conditions			
5.17.2.4(2) Enabling technologies within the BOSC will provide access to all Client, staff and contractor data stored on the Authority's network.	No					
5.17.2.5 In addition to the Operations Security Centre functions stated above, the operations of the Secure Client care areas are controlled by the Nurse Stations.	No					
5.17.2.5(1) One Nurse Station will be centrally located within each Client care unit and will provide direct oversight of Client areas within the Client care unit and control all movement within the Units.	No					
5.17.2.5(2) Door access controls at the Security Vestibules in the Non-Secure and Secure Client care units will be managed by the Nurse Stations and the OSC.	Yes	Yes	Limited to observable conditions			
5.17.2.6 ESS functionality will also be provided in the following areas and as further described in Section 7.9.3 of this Schedule:	No					
5.17.2.6(1) Visitor Centre;	Yes	Yes	Limited to observable conditions			
5.17.2.6(2) Admissions and Discharge;	Yes	Yes	Limited to observable conditions			
5.17.2.6(3) Health Care Clinic;	Yes	Yes	Limited to observable conditions			
5.17.2.6(4) Non-Secure and Secure Client care units;	Yes	Yes	Limited to observable conditions			
5.17.2.6(5) Client private rooms;	Yes	Yes	Limited to observable conditions			
5.17.2.6(6) outdoor activity and recreation areas;	Yes	Yes	Limited to observable conditions			
5.17.2.6(7) corridors;	Yes	Yes	Limited to observable conditions			
5.17.2.6(8) Client therapy and activity areas;	Yes	Yes	Limited to observable conditions			
5.17.2.6(9) Secure Perimeter;	Yes	Yes	Limited to observable conditions			
5.17.2.6(10) Threat Perimeter; and	Yes	Yes	Limited to observable conditions			
5.17.2.6(11) Sally Ports, Secure Vestibules, and secure access points.	No					
5.17.2.7 The Reception Counter in the Visitor Centre will:	No					
5.17.2.7(1) provide security measures and systems in an unobtrusive way in order that Reception be perceived as inviting, welcoming and non- threatening;	No					
5.17.2.7(2) provide the staff with the ability to manage and screen all visitors,	No					
5.17.2.7(3) act as the single point of entry and exit to the Facility for visitors;	No					
5.17.2.7(4) be supported and electronically supervised and controlled by the OSC;	No					
5.17.2.7(5) manage identification technology;	No					
5.17.2.7(6) provide communications routing and monitoring;	No					
5.17.2.7(7) monitor video surveillance in reception and visits areas; and	No					
5.17.2.7(8) schedule professional and video visit station.	No					
5.17.2.8 The Visitor Staff Station will:	No					
5.17.2.8(1) be equipped with a video visitation work station; and	No					
5.17.2.8(2) support monitoring of the visitation area and video visits between	No					
5.17.2.9 Admissions and Discharge (A&D) Booking/Video Capture Station will be equipped with:	No					
5.17.2.9(1) mobile and fixed ESS functions that enable the staff control of the movement of Clients within the area and between A&D and other adjacent areas within the Facility; and	No					
5.17.2.9(2) large format video surveillance displays have access to the ESS including DVMS, video surveillance, door control of all Secure Client room door and doors within A&D, Client information and communications.	No					
5.17.2.10 Admissions and Discharge (A&D) Security Post:	No					
5.17.2.10(1) The A&D security post will include two touchdown stations to provide places for mobile security staff within the A&D to	No					
5.17.2.11 Health Care Clinic office work station will:	No					
5.17.2.11(1) control Client movement within the Health Care Clinic including holding area and holding rooms during the hours that Clients attend the Clinic for consultations, treatments and health education;	No					
5.17.2.11(2) be a small open workstation. The functionality of the post is similar to that of the A&D security post and will require similar fixed ESS functionality such as door control for exam and treatment rooms within the Health Care Clinic, DVMS for cameras within the Health Care Clinic and Client data; and	No					
5.17.2.11(3) Control of doors in and out of the Health Care Clinic will be managed from a designated Nurse Station and the OSC through the use of the ESS.	No					
5.17.2.12 Security work station on Secure Client care unit will:	No					
5.17.2.12(1) be located within each Secure Client care unit; and	No					
5.17.2.12(2) be in proximity to the nurse station.	No					
5.18 Facility Access Control						
5.18.1 The Facility will support the following access control procedures for staff, visitors, contractors and volunteers, and will be integrated with the ESS.						
5.18.1.1 Access control will include Sally Ports, Secure Vestibules, secure access doors to Client care units and activity & therapeutic spaces & Client's private room doors as follows:						
5.18.1.1(1) "**Sally Ports**" are spaces controlled by two or more secured doors to control movement through the Secure Perimeter. All Sally Ports will be controlled by the OSC utilizing the OSC (utilizing ESS). Sally Ports will be provided for all pedestrian movements and vehicular movements through the Secure Perimeter. Sally Ports will be the only entry / exit points through the Secure Perimeter; and	Yes	Yes	Limited to observable conditions			
5.18.1.1(2) "**Secure Vestibules**" are spaces controlled by two or more secured doors used to control movement between operational areas within the Secure Zone and will be controlled by the ESS. Stairs may be incorporated into Secure Vestibules but may not be incorporated into Sally Ports.	Yes	Yes				
5.18.1.2 Visitor Access						
5.18.1.2(1) To gain access into the Facility all Secure Client visitors and Facility contractors will be required to enter via the Secure Visitor Centre lobby and will be processed in accordance with the Facility's security policies and protocols.	Yes	Yes				
5.18.1.2(2) Major Deliveries – All major deliveries report to the controlled delivery loading areas in a non-secure area of the Facility. Deliveries for the secure portion of the building will be received by security staff. This area is outside the Secure Perimeter and will be	Yes	Yes				
5.19 Movement Control						
5.19.1 Project Co will provide direct and legible circulation systems as they are essential for the effective and secure movement of visitors, Client, staff and materials. Primary elements of the circulation systems include:						
5.19.1.1 visitor circulation with a direct route, monitored from the parking to the Visitor's Centre;	Yes	Yes				
5.19.1.2 materials/service circulation allowing for efficient and secure movement of equipment, supplies, food, food carts, (accompanied by maintenance and support staff); and	Yes	Yes				
5.19.1.3 staff & Client circulation: Sally Ports, Secure Vestibules, and secure access doors will utilize card access systems, escort protocols, and	Yes	Yes				
5.19.2 There will be no separate circulation routes dedicated to the movement of staff and/or Clients in Secure Client areas unless	Yes	Yes				
5.19.3 Circulation systems will encourage positive interaction between people, with communal interaction spaces allowing for both formal and informal interaction to encourage pro-social	Yes	Yes	clause is subjective and comment should be provided by operator and users			
5.19.4 Circulation in some specific areas after defined hours in operational zones will not normally be permitted. Refer to the Clinical Specifications.	No					
5.19.5 All access points will be monitored after hours by the OSC to control unauthorized movements.	Yes	Yes				
5.19.6 RTLS system will be required to monitor Clients, staff, and access into authorized and non-authorized areas within the Main Building.	Yes	Yes				
5.19.7 The circulation model for movement of Clients, visitors and staff between Client care units and other Functional Units will comply with the following:						
5.19.7.1 Circulation routes will be secure whenever they are used by Secure Clients;	Yes	Yes				
5.19.7.2 Circulation routes for Client movement will provide for continuous movement of Clients by minimizing wait times and opportunities for queuing and congestion..	Yes	Yes	Limited to observation			
5.19.7.3 The circulation model will be efficient in terms of:						
5.19.7.3(1) space utilization;	Yes	Yes				
5.19.7.3(2) contributing to reasonable speed of movement, particularly in the context of emergency responses by staff from one Client Care Unit to another; and	Yes	Yes				
5.19.7.3(3) the consequential level of staffing required in the surveillance and control of Client movement.	Yes	Yes				
5.19.7.4 Facility circulation routes will:						
5.19.7.4(1) be direct and avoid circuitous paths so as to enable rapid staff response and functionality; and	Yes	Yes				
5.19.7.4(2) be configured so as to provide uninterrupted sight lines	Yes	Yes				
5.19.7.5 Circulation corridors providing movement between the following components of the Facility will have access to natural light:						
5.19.7.5(1) Admitting and Discharge;	Yes	No	Very little exposure to the exterior	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
5.19.7.5(2) Visitor Centre	Yes	Yes				
5.19.7.5(3) Administration;	Yes	No	Only exterior offices have views to the exterior and access to natural light	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
5.19.7.5(4) Health Care Clinic;	Yes	No	Internalized programs	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
5.19.7.5(5) Central Programs; and	Yes	No	Internalized programs	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
5.19.7.5(6) Client care units;	Yes	Yes				
5.19.7.6 Where natural light is required in circulation corridors pursuant to this section such natural light will be provided as follows:						
5.19.7.6(1) where the walls of a circulation corridor form part of an exterior wall, glazing panels, each with a minimum size of 115mm x 1525mm, will be provided at a minimum of every 6 meters along the length of the circulation corridor; and	Yes	No	Very little exposure to the exterior though measurements were not taken	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
5.19.7.6(2) where the walls of a circulation corridor do not form part of an exterior wall, a non-artificial source of natural light with an intensity of at least 30 lux will be provided across an area of at least 5m2 at least once every 20 meters along the length of the circulation corridor.	No					
5.19.7.7 Entry and exit points from circulation corridors will be limited and structured to ensure positive identification.	No					
5.19.7.8 The circulation model for the Facility will:						
5.19.7.8(1) enable Client movements between authorized building components on an unescorted basis as allowed by Authority protocols and regulations, using technology for authentication and supervision;	Yes	Yes	limited to observation			
5.19.7.8(2) clearly identify and define all areas accessible to Clients;	Yes	No	This was not observed	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
5.19.7.8(3) provide internal layouts, circulation and links between authorized building components that are clearly defined for way finding and orientation;	Yes	No	Wayfinding was not clear or remarkable. Several staff members remarked to our review team that it was very difficult to navigate.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Should be reviewed further with operators and users
5.19.7.8(4) provide clear direct movement patterns;						
5.19.7.8(5) minimize the use of corridors. Circuitous, maze-like corridor patterns are not permitted;	Yes	Yes				
5.19.7.8(6) without compromising security needs, minimize the number of	Yes	Yes				

	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
5.19.7.8(7) reduce travel distance and time for emergency response; and	No					
5.19.7.9 The following areas will be accessible to disabled persons:						
5.19.7.9(1) all visitor areas of the Facility;	Yes	Yes				
5.19.7.9(2) all Non-Secure Client administration, central services, food services and staff areas, all Secure Client staff areas, Client therapy, activity and recreation areas; and	Yes	Yes				
5.19.7.9(3) areas indicated in Appendix 3A [Clinical Specifications].	Yes	Yes				
5.19.7.10 Not used.						
5.19.7.11 Provide elevators where necessary to ensure that areas are accessible to disabled persons to the greatest degree that is reasonable in the context of this type of facility. At a minimum provide one elevator within the Non- Secure Client area one in the Secure Client area and one in the entry area.	Yes	Yes				
5.19.7.12 Under no circumstances will a disabled person be required to pass through the Secure Perimeter and return back through it solely to use an elevator.	Yes	Yes				
5.19.8 Doors						
5.19.8.1 Doors will be designed to promote a therapeutic appearance & atmosphere without compromising the integrity or detention level of the door.	Yes	Yes	Visual review only, doors are wood when possible.			
5.19.8.2 Door placements will allow for a reasonable level of traffic flow without compromising containment security.	Yes	Yes				
5.19.8.3 Access to the main entrance door will be controlled by the OSC and the reception desk.	Yes	Yes				
5.19.8.4 Areas between doors must be able to accommodate emergency services (eg: stretcher/crash cart/multiple staff).	Yes	Yes				
5.19.8.5 Sally Port/trap doors will be required at all access points to the Secure Perimeter.	Yes	Yes				
5.19.8.6 Sally Port/trap doors will be required to access the OSC and the BOSC.	Yes	Yes				
5.19.8.7 Client room doors will have the capacity to be electronically controlled (locked/unlocked) either individually or in groups.	Yes	Yes	limited to observation, each door is card locked so it is expected they can be opened remotely			
5.19.8.8 Client room doors will have a breach design on the outside to allow access if the door is barricaded from the inside.	Yes	Yes	Two different approaches, to secure and non secure			
5.19.8.9 All freedom doors will be alarmed and or have Sally Port/trap function.	No					
5.19.8.10 Depending on the function of the door, either door position switches, or lock position switches, or both will be required.	No					
5.19.8.11 Depending on function, doors will have varying locking options including: electronically controlled, fob access, or key access.	No					
5.19.8.12 All doors independent of their primary operation and control function will have manual override and back up key access.	Yes	Yes	Limited to observation			
5.20 Sweat Lodge						
5.20.1 Project Co will design and construct the Sweat Lodge to:						
5.20.1.1 match the architectural form, character and exterior finishes of the Main Building;	Yes	Yes				
5.20.1.2 match the performance requirements, materials and finishes of an SLC 3 area of the Main Building;	Yes	Yes				
5.20.1.3 meet the following ceiling requirements for the Sweat Lodge:						
5.20.1.3(1) vaulted ceiling of 5250mm in height above finished floor in the centre from perimeter edge height of 3000mm above	Yes	Yes				
5.20.1.3(2) tongue and groove cedar ceilings;	Yes	Yes				
5.20.1.4 have the following ceiling requirements for the staff observation room and washroom:	Yes	Yes				
5.20.1.4(1) 3000mm in height above finished floor; and	Yes	Yes				
5.20.1.4(2) hard ceilings;	Yes	Yes				
5.20.1.5 have open to structure walls and ceiling in the storage room;	Yes	Yes				
5.20.1.6 have exposed concrete floors;	Yes	Yes				
5.20.1.7 provide an opening of 5500mm in diameter in the concrete floor slab in the centre of the Sweat Lodge. Location and size of the opening will be further coordinated with the Authority; and	Yes	Yes				
5.20.1.8 have tongue and groove cedar finish on the walls, except in the staff observation room, washroom and storage room.	Yes	Yes				

	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
5.4 Architecture						
5.4.1 Building Form and Character						
5.4.1.1 General						
5.4.1.1(1) To the extent possible, the Facility will harmonize with the existing topography and be conceived as an integral part of the natural environment.	Yes	Yes				
5.4.1.1(2) The Main Building will capitalize on the existing slope of the Site in order to stack the program while maximizing on-grade access and minimizing overall building footprint, without compromising the overall key functional relationships of the building.	Yes	No	as the site is located on a sloping site toward the North Saskatchewan River, the planning should have easily been able to accomplish better drainage. But instead, there are numerous locations where ponding and poor drainage are apparent.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review drinage issues with APP.
5.4.1.1(3) The Main Building will be orientated to maximize views to the river while responding appropriately to the environmental forces of sun, wind, and precipitation, taking into account the significant impact of prevailing winds during inclement weather events.	Yes	Yes	subjective and open to interpretation			
5.4.1.1(4) Daylighting and views will be provided throughout the design to assist way-finding and promote a therapeutic environment of well-being.	Yes	No	Wayfinding within the building was quite difficult with few moments available outside of the patient wings to use the environment to orient yourself.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review further with operator to determine if an improved approach to wayfinding within the facility is required
5.4.1.1(5) The campus environment created by the Main Building will not stop at its exterior walls, but rather will extend into the site itself, integrating with the site's infrastructure and landscape to create cohesive indoor/outdoor connectivity.	Yes	No	A variety of outdoor amenity spaces are provided for clients, however, the integrated "campus" feeling is not achieved because there is not one unifying, looping pathway that connects all spaces.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co.
5.4.1.1(6) The massing of the Main Building will be articulated to break down its scale creating the look and feel of a campus, rather than a massive singular building.	No					
5.4.1.1(7) While the overall disposition of the design will echo the linear spatiality of the prairie, the building will be articulated into distinct formal components.	No					
5.4.1.1(8) The Main Building will feature an architectural vocabulary that speaks to the evolving future of behavioral health which seeks to normalize and de-stigmatize mental health, while, at the same time, responding to the physical, environmental and cultural context of Saskatchewan.	No					
5.4.1.1(9) The pastoral quality of the site with the adjacent river and the vast horizon of the prairie will serve as visual cues that will inform the design aesthetic.	No					
5.4.1.1(10) Exterior lighting will be designed to create a warm and inviting atmosphere while promoting safety and security, without creating an institutional ambiance. Use warm colour temperature fixtures (between 2800K and 3400K) in lieu of cool colour temperature fixtures (between 3500K and 500K).	Yes	Yes				
5.4.1.1(11) Utilize glazing to optimize views and daylight penetration, and to reduce energy consumption. This will be done in a manner that maximizes access to daylight without compromising security or creating opportunities for elopement.	Yes	No	Few locations while inside the building where access to views and daylight are provided. In conflict with prioritizing daylighting in client spaces.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review further with operator. Access to views was likely prioritized for patient wings, leaving little access to lighting and views in the rest of the facility.
5.4.1.1(12) The design will be organized around multiple internal courtyards visually connected to major circulation spines, and partially covered or trellised to provide protection from adverse weather. However, the design of outdoor trellises or overhead covers will not create ligature risks for the Clients.	Yes	Yes	this requirement appears to be met			
5.4.1.1(13) Outdoor spaces around the perimeter of building will be thoughtfully designed and integrate with the Site to provide well defined outdoor rooms and gardens protected from the elements.	Yes	Yes	this requirement appears to be met			
5.4.1.1(14) If proposed, roof mounted mechanical / electrical equipment will be enclosed within a heated ventilated mechanical penthouse, and will be consistent in form, material, and detail with the rest of the Building.	Yes	Yes	this requirement appears to be complied with, as is to be expected some exterior mechanical units are installed to the exterior of the penthouse i.e. chiller etc.			
5.4.1.1(15) Design and construct the Main Building so that it:						
5.4.1.1(15)(a) has a maximum of four levels (including any basement level); and	Yes	Yes	this requirement appears to be complied with			
5.4.1.1(15)(b) is not classified as a "high building" as defined in the NBCC.	Yes	Yes	this requirement appears to be complied with,			
5.4.1.2 Exterior Building Materials and Colour						
5.4.1.2(1) Exterior building materials will be durable and climatically appropriate and integrated with the Facility's natural context. Regional stone or masonry, rendered in the soft warm tones of the prairie, will be the primary building cladding materials. This will be combined with accent materials such as metal panel to accentuate the articulation of the building forms.	Yes		We can only review and comment on what is visible. Underlying elements such as membrane and insulation can not be visually reviewed. Exploratory openings would be required to confirm underlying elements			
5.4.1.2(2) The following materials will not be used on the building exterior:						
5.4.1.2(2)(a) stucco;	Yes	Yes	No stucco was used on the building exterior			
5.4.1.2(2)(b) corrugated metal siding;	Yes	No	The term "corrugated" could be interpreted to imply certain metal panel profiles are excluded, the intent of this requirement should be clarified.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with owner if the siding selected fulfills their needs. Revise PA as required to clarify if profiled metal siding.
5.4.1.2(2)(c) wood; or	Yes	Yes	No wood cladding was used on the building exterior			
5.4.1.2(2)(d) red brick, similar to that used in the Existing Hospital.	Yes	Yes	No red brick was found on the building exterior			
5.4.1.2(3) Project Co will minimize the number of exterior cladding materials to reduce the number of envelope joint conditions.	Yes	Yes	this requirement appears to be complied with but more detail is required on the limitations of "minimize" as this term is subjective			
5.4.1.3 Roofs						
5.4.1.3(1) Roofs will be a combination of low-slope roof areas punctuated by distinct pitched roof forms that demark special interior spaces and provide opportunities to highlight entry points and circulation nodes while potentially introducing natural light through clerestory windows and light monitors.	Yes	Yes	Limited to what is visible.			
5.4.1.3(2) Incorporate landscaped roofs and other "green" treatments of roof areas as appropriate to provide accessible therapeutic outdoor activity courtyards. To minimize opportunities for elopement, or the introduction of contraband, ensure these spaces will not have direct access to grade. Outdoor activity spaces will comply with Section 5.4.8.	Yes	No	Limited to what is visible.no landscaped roof areas observed	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	There does not appear to be any approved changes to the PA to delete the landscaped roof areas. Operators to review and determine if this is still a requirement.
5.4.1.3(3) Where not landscaped, roof areas will be designed to be attractive when in view. 5.4.1.3(4) Provide stair access to all major roof areas larger than 100 m^2 . Ladder access will only be allowed to smaller roof areas only.	Yes	Yes				
5.4.1.3(5) Use of roof hatch accesses will be minimized.	Yes	Yes	this requirement appears to be complied with but			
5.4.1.3(6) If mechanical penthouses are used, provide elevator access to such penthouses.	Yes	Yes				
5.4.1.3(7) Provide high parapets or guardrails to minimize the need for fall arrest anchors for operational staff. Locate at main roofs and other roof areas needing regular access for maintenance.	Yes	No	Fall protection/arrest measures noted to be missing in isolated areas. Guardrails not located where required to approach within two meters of roof. See PlanGrid #258 and #260.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Recommend detailed facility is review for compliance with fall arrest/prevention
5.4.2 Building Configuration and Internal Circulation						
5.4.2.1 Building Entrances						
5.4.2.1(1) All direct entries into buildings from the exterior will be protected from snow and rain by canopies or building overhangs. Weather protection must be implemented where building entrances front a sidewalk or open space.	Yes	Yes				
5.4.2.1(2) Snow fences will be provided on sloping roofs to prevent snow slides that endanger staff, Clients, and visitors at building ingress and egress points.	Yes	Yes	this requirement appears to be complied with			
5.4.2.1(3) Ensure that areas protected from weather still receive daylight using appropriate measures such as increased height –to-depth proportions and the use of glass roof panels.	Yes	Yes				
5.4.2.1(4) Orient building entrances away from direct prevailing winds. Provide wind protection at building entrances exposed to prevailing winds. Orient buildings generally to minimize wind induced by buildings. Provide wind mitigating measures and areas that are protected from the wind so as to extend the seasonal duration of outdoor activities for activities, convalescing or socializing.	Yes	Yes				
5.4.2.1(5) Entrance vestibules will provide complete transparency from the exterior, from the interior immediately in front of the vestibule, and from inhabited spaces adjacent to at least one long side of the vestibule.	Yes	Yes				
5.4.2.1(6) Entrance vestibules will be configured and sized in order to preserve the airlock effect for climate control. Ensure a minimum 5 meter distance between the sets of doors to allow wheelchairs ample room for maneuvering into the vestibule. Provide a heated air curtain system over the exterior doors to control the temperature loss during winter months.	Yes	Yes				
5.4.2.1(7) Use sliding doors at the main public entrance, except that where sliding doors are not feasible, use swinging doors. Use doors that will be activated by handicapped accessible push-button controls located on the inside and outside of both sets of doors or revolving doors with a swing door. Doors will be configured for push-pull manual operation in addition to automatic operation.	Yes	Yes				
5.4.2.1(8) Entrance doors to Client care areas will be sufficiently wide to allow access for stretchers surrounded by medical staff.	Yes	Yes				
5.4.2.1(9) Pedestrian interest and comfort at entries will be provided through specifically designed seating, signage, lighting and features that enhance a feeling of invitation, acceptance, normality and de-stigmatization.	Yes	Yes				
5.4.2.1(10) Provide wheelchair alcoves visible and accessible to the main entry vestibules. Provide easy access to wheelchairs close to the main and visitor entrances.	Yes	Yes				
5.4.2.1(11) The main entrance in the Main Building will have an intimate, warm and welcoming character similar to that of the main entrance in the Existing Hospital. The space must be acoustically treated to control excessive noise or sound reverberation that would prevent effective communications in the space, allow the spread of noise to adjacent noise sensitive interior spaces or make spending time in the main entrance uncomfortable.	Yes	Yes				
5.4.2.1(12) Entryways and doors must be illuminated using light levels that are comfortable when entering and exiting.	Yes	Yes				
5.4.2.1(13) All entrances leading into the main lobby will have a vestibule.	Yes	No	The rear doors to the main entry arcade were observed to be used for access to a smoking area for patients and staff and no vestibule is provided though these doors are used frequently. (PlanGrid ID: 246)	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review the use of these doors with operators to determine if a vestibule should be created or if another set of doors should be used to access smoking areas.
5.4.2.2 Access						
5.4.2.2(1) Project Co will design and construct the Facility to ensure that all Client-occupied spaces are designed for disabled access and assistance by nursing staff.	Yes	Yes	Limited to our experience. Additional input from the building operators may differ.			
5.4.2.3 Exit Stairs						

	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
5.4.2.3(1) Locate exit stairs strategically for the convenience of staff moving	Yes	Yes				
5.4.2.3(2) Locate exit stairs conveniently accessible from circulation routes.	Yes	Yes				
5.4.2.3(3) Avoid stair locations that negatively impact future planning flexibility or constrain desirable views from Client care and staff work areas.	Yes	Yes	Require details on planned opportunities for future growth.			
5.4.2.3(4) Provide day lighting and views from stairwells for orientation and amenity, and provide adequate lighting into stairwells for staff security at night.	Yes	Yes	this requirement appears to be complied with			
5.4.2.4 Convenience Stairs						
5.4.2.4(1) Include convenience stairs where appropriate, located strategically to reduce dependence on elevator use.	Yes	No	Very few convenience stairs were observed to be an attractive alternative to using the elevator. The Project Co may have avoided the use of stairs due to over-riding concerns of supervision and security.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review further with operator to determine if convenience stairs were not deemed appropriate.
5.4.2.4(2) Provide convenience stairs, that may also function as required exit stairs, at all elevator locations. The maximum allowable distance between the convenience stair and the closest elevator is 10 meters. The convenience stair at the central core of the elevators will connect all floors from the main entry level to the last level above ground.	Yes	No	Very few convenience stairs were observed to be an attractive alternative to using the elevator. The Project Co may have avoided the use of stairs due to over-riding concerns of supervision and security.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review further with operator to determine if convenience stairs were not deemed appropriate.
5.4.2.5 Corridors						
5.4.2.5(1) Corridor widths will be a minimum of 2400 mm wide clear, except:	Yes	Yes	Limited to what is visible. Measurements were not taken			
5.4.2.5(1)(a) in office areas, corridors will be a minimum of 1500 mm wide; and	Yes	Yes	Limited to what is visible. Measurements were not taken			
5.4.2.5(1)(b) in major service supply corridors will be a minimum of 3000 mm wide.	Yes	Yes				
5.4.2.5(2) Provide convenient, but secure, service access to the ceiling mechanical and electrical plenum above corridors. If ceiling tiles are used, provide the ceiling tile layout such that access to the plenum requiring a hooded area in the corridor below will not reduce the clear corridor to less than half its original width.	Yes	Yes				
5.4.2.5(3) Not used.						
5.4.2.5(4) Corridors will have recessed rest areas for Clients to promote mobility and activity; however, recessed areas will not be included within the Secure Zone.	Yes	Yes	This project agreement clause is subjective and verification would require input from the building operator			
5.4.3 Building Envelope						
5.4.3.1 Utilize a building envelope professional (whose credentials as a building envelope professional are recognized by the Saskatchewan Association of Architects or the Association of Professional Engineers and Geoscientists of Saskatchewan) to review and certify building envelope design and construction.	No					
5.4.3.2 Complete the Design and Construction so as to prevent the accumulation and stagnation of rain, snow, ice and dirt on the horizontal and vertical surfaces of the building envelope(s) appropriate for the climate the Facility is situated in.	No					
5.4.3.3 Complete the Design and Construction so as to prevent both the ingress of exterior moisture and the trapping of condensation from infiltrating humid air within the envelope.	No					
5.4.3.4 Design exterior walls in accordance with the 'rain-screen principle'.	Yes	No	This was met on all areas except mechanical penthouse which has insulated metal sandwich panels	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review mechanical penthouse area with Envelope specialist to determine if this is required.
5.4.3.5 Ensure that materials and systems of the wall and roof assemblies contribute to reducing heat gains and losses with minimal	No					
5.4.3.6 Ensure continuity of the air barrier, vapour barrier, thermal barrier and rain barrier across the entire envelope. Continuity of these components will be maintained at all intersections, attachments, and appendices.	Yes	No	Document review and visual review will identify if design was met, but not verify its performance. Continuity of AVB was not met at all locations	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Recommend a detailed review by the building envelope consultant.
5.4.3.7 Design building envelope details to avoid thermal bridging.	Yes	No	Details do not avoid thermal bridging	No documented variance allowed by the	No documented variance allowed by the	Recommend a detailed review by the building
5.4.3.8 Design the building envelope so that the inside of private Client rooms exposed to noise from hospital related equipment, delivery / loading bays, emergency intake areas, and busy road traffic areas are exposed to noise levels less than:	No					
5.4.3.8(1) NC 35-40 from steady sources of noise such as HVAC equipment and transformers; and	No					
5.4.3.8(2) NC 45 for noises associated with brief intermittent events such as road traffic events. Extreme intermittent noise such as	No					
5.4.4 Interior Walls and Partitions						
5.4.4.1 Use interior walls and partition systems that provide acoustic separations as required for the specific functions to be carried out in the spaces affected, and in accordance with the requirements of Appendix 3C [Sound Transmission Ratings].	No					
5.4.4.2 Design and select interior walls and partitions in accordance with Section 5.14.3.8 of this Schedule.	Yes	Yes				
5.4.4.3 Provide fittings, attachments and internal bracing/backup as required to accommodate and support wall mounted equipment.	No					
5.4.4.4 Not used.						
5.4.4.5 Not used.						
5.4.4.6 As applicable, convenience stairs, upper floor balconies and corridors will be fitted with full height guardrails (to underside of structure above) for occupant safety.	Yes	Yes				
5.4.5 Ceilings						
5.4.5.1 Ceiling systems will comprise a major component of the acoustic or sound attenuation function as required in the spaces in which they are installed and will comply with the requirements of Appendix 3C [Sound Transmission Ratings]	No					
5.4.5.2 See Section 6.10.2.6.						
5.4.5.3 Clear ceiling height will not be less than 3000 mm above the finished floor in all areas of the Main Building and Ancillary Buildings except for the following:	Yes	Yes	limited to observation, measurements were not taken			
5.4.5.3(1) all Private Client rooms will have a minimum ceiling height of 2700 mm;	Yes	Yes	limited to observation, measurements were not taken			
5.4.5.3(2) ceilings in rooms with equipment requiring specific clear heights will be based on specific equipment requirements;	No					
5.4.5.3(3) ceilings in mechanical, electrical, plumbing, and telecommunication rooms and in Material Management will be open, unless required otherwise by code to meet fire ratings;	Yes	Yes				
5.4.5.3(4) the public lobby will have a minimum ceiling height of 3600 mm;	Yes	Yes	limited to observation, measurements were not			
5.4.5.3(5) the gymnasium will have a minimum ceiling height of 8000 mm;	Yes	Yes	limited to observation, measurements were not			
5.4.5.3(6) the following workshops will have a minimum ceiling height of 5000 mm;	Yes	Yes	limited to observation, measurements were not taken			
5.4.5.3(6)(a) room #.30 Vocational Therapy Area 1;	Yes	Yes	limited to observation, measurements were not			
5.4.5.3(6)(b) room #.31 Paint Room;	Yes	Yes	limited to observation, measurements were not			
5.4.5.3(6)(c) room #.35 Vocational Work Area;	Yes	Yes	limited to observation, measurements were not			
5.4.5.3(6)(d) room #.44 Vocational Therapy Area 3; and	Yes	Yes	limited to observation, measurements were not			
5.4.5.3(6)(e) room #.46 Workroom.	Yes	Yes	limited to observation, measurements were not			
5.4.5.3(7) Non-Secure Client care unit corridors will have a minimum height of 2700mm and will be constructed of a hard material as indicated in Section 6.10.2.4(5). If the ceiling height in this type of corridor is at a minimum of 3000mm the ceiling may be constructed of a hard material as indicated in 6.10.2.4(5) or of acoustic tile material as indicated in 6.10.2.4(4);	Yes	Yes	limited to observation, measurements were not taken			
5.4.5.3(8) Secure Client care unit corridors will have a minimum height of 2700mm and will be constructed of a hard material as indicated in 6.10.2.4(5); and	Yes	No	These were observed to be acoustic tile throughout.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Discuss further with operators to determine if the use of acoustic tile in these areas is problematic.
5.4.5.3(9) All offices will have a minimum ceiling height of 2700 mm.	Yes	Yes	limited to observation, measurements were not taken			
5.4.5.4 Client lift gantry and tracks will be flush with ceiling. Traversing track will be exposed but installed tight to the ceiling to avoid ligature risks to the extent possible.	Yes	No	These were mounted below ceiling. (PlanGrid ID: 398) throughout. Additional track leading to washrooms not installed in most locations. Not all	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Further review to note all potential ligature risks is suggested.
5.4.5.5 Suspended structure located for overhead equipment will be located above finished ceiling.	Yes	Yes				
5.4.5.6 Not used.						
5.4.5.7 Infection Control for Ceilings:						
5.4.5.7(1) Comply with CSA Z8000-11: Canadian Health Care Facilities.						
5.4.5.7(2) Provide smooth, solid surface, non-perforated and scrub-able ceilings in the following areas:						
5.4.5.7(2)(a) Health Care Clinic;	Yes	Yes	clause appears to be complied with			review submittals and on-site verification
5.4.5.7(2)(b) Pharmacy;	Yes	Yes	clause appears to be complied with			review submittals and on-site verification
5.4.5.7(2)(c) dispensary/medication;	Yes	Yes	clause appears to be complied with			review submittals and on-site verification
5.4.5.7(2)(d) tub rooms;	Yes	Yes	clause appears to be complied with			review submittals and on-site verification
5.4.5.7(2)(e) clean and soiled linen;	Yes	Yes	clause appears to be complied with			review submittals and on-site verification
5.4.5.7(2)(f) clean and soiled utility;	Yes	Yes	clause appears to be complied with			review submittals and on-site verification
5.4.5.7(2)(g) dietary;	Yes	Yes	clause appears to be complied with			review submittals and on-site verification
5.4.5.7(2)(h) servery; and	Yes	Yes	clause appears to be complied with			review submittals and on-site verification
5.4.5.7(2)(i) nutrition centre;	Yes	Yes	clause appears to be complied with			review submittals and on-site verification
5.4.5.7(2)(j) locker-rooms, washrooms and showers; and	Yes	Yes	clause appears to be complied with			review submittals and on-site verification
5.4.5.7(2)(k) holding rooms.	Yes	Yes	clause appears to be complied with			review submittals and on-site verification
5.4.6 Floor Finishes						
5.4.6.1 Project Co will provide flooring that is complementary and integral to the functional and aesthetic requirements of the interior space.	Yes	Yes	Various locations where VCT has been used - appropriate use to confirmed by GOS			
5.4.6.2 Project Co will select floor finishes to suit types and concentration of pedestrian and/or vehicular/wheel traffic to be anticipated.	Yes	Yes				
5.4.6.3 Project Co will design and select floor finishes that comply with the following criteria:						
5.4.6.3(1) ergonomic comfort, cleaning, maintenance and infection prevention and control including the frequency and quality of joints and also including ease of replacement if and when required;	Yes	Yes	some floor welds were noted to be failing, some inconsistent floor conditions were noted to the basement kitchen area, see PlanGrid #191.			
5.4.6.3(2) imperviousness to concentrations of moisture anticipated to be existing on the floors and for the duration of that moisture;	Yes	Yes				
5.4.6.3(3) permanence and durability and resistance to concentrated service traffic both pedestrian and vehicular;	Yes	Yes				
5.4.6.3(4) compatibility of patterns and textures with the requirements for pedestrian safety and elderly friendly design.	Yes	Yes				

	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
5.4.6.4 Non-slip flooring will be used in all wet areas including: entrance lobbies, food service areas, cleaning service areas, wash and change rooms, bathing areas, Client washrooms, laundry areas, Client laundry areas, clean utility room, soiled utility and housekeeping rooms.	Yes	Yes				
5.4.6.5 Client shower floors and floors in Tub rooms will slope to drain and be flush-walk-in without ridges for water retention.	Yes	No	Some locations were observed to pond outside the floor drain locations: namely in change rooms near the gymnasium. (PlanGrid #308)	No documented variance allowed by the Authority. There was a reduction of floor drains in the client shower floors, but ponding was not to occur.	No documented variance allowed by the Authority.	Contractor to remediate. It was discussed on site that some of this work is already scheduled to begin.
5.4.6.6 Infection Control for Floors:						
5.4.6.6(1) Floors in Client care areas must be washable and able to withstand routine low level hospital disinfection	Yes	Yes				
5.4.6.6(2) Penetrations must be properly sealed.	Yes	No	Several locations were observed where seams were incorrectly installed or transitions from flooring types were not included or properly sealed. (Plangrid#313, 256, 254, 200 etc.)	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Contractor to replace seams.
5.4.6.6(3) Floors in must be seamless, have homogeneous and heat welded seams.	Yes	No	Concern regarding quality of welded floor seams	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Replace poorly installed floor seams
5.4.7 Public Washrooms						
5.4.7.1 Provide public washrooms on each floor level of the Main Building that is accessible to the public. Allow for one woman's, one men's, and one family style (accessible by either sex) washroom, at a minimum, on each floor level or as required to meet all applicable codes.	Yes	No	Public universal washrooms were not observed. A review of the plans is necessary to confirm.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Recommend the owner reviews whether these are still required.
5.8 Interior Environment						
5.8.1 Infection Control						
5.8.1.1 General						
5.8.1.1(1) Design the Main Building in compliance with all applicable infection control standards.	Yes	No	Concerns were observed regarding the wood handrail in public areas. It has separated at some joint locations and as it experiences wear and tear will become a porous material that becomes difficult to clean. This will be noted in limited areas, a full review of infection control compliance would need a separate review and additional resources. see PlanGrid #627	NA, the wood handrails were requested by the PA	NA, the wood handrails were requested by the PA	Recommend the owner reviews this consideration regarding the wood handrails and determine if they should be changed.
5.8.1.1(2) Design the Main Building to mitigate and prevent, where possible, the spread of infection including via contaminated surfaces and airborne pathogens.	No					
5.8.1.1(3) Select appropriate materials and use simple detailing leading to quality workmanship and ease of accessibility for routine cleaning and maintenance.	no					
5.8.1.1(4) Design the Main Building to allow for ease of infection prevention	Yes	Yes				
5.8.1.2 Sinks and Hand Hygiene Stations						
5.8.1.2(1) Prepare a workflow pattern and risk assessment in collaboration with the Authority to address placement of hand wash sinks and alcohol-based hand rub dispensers.	No					
5.8.1.2(2) Provide hand hygiene stations:						
5.8.1.2(2)(a) at all entrances to the Main Building so that visitors stop, take notice, and access them (stations will have at least four antiseptic hand rub dispensers mounted for convenient access for visitors); and	Yes	Yes				
5.8.1.2(2)(b) other rooms or areas as indicated in the Clinical Specifications.	Yes	Yes				
5.8.1.3 Equipment & Storage						
5.8.1.3(1) Provide storage shelves that are:						
5.8.1.3(1)(a) cleanable with Authority approved detergents and disinfectants;	Yes	Yes				
5.8.1.3(1)(b) not located under sinks; and	Yes	Yes				
5.8.1.3(1)(c) minimum 200 mm above the floor to permit routine cleaning;	Yes	Yes				
5.8.1.3(2) If open shelving is provided for storage, the bottom shelf of such shelving will be a solid surface to prevent contamination from the floor.	Yes	Yes				
5.8.1.4 See Section 5.4.5.7 for infection control for ceilings.						
5.8.1.5 See Section 5.4.6.6 for infection control for floors.						
5.8.1.6 Psychiatric Areas						
5.8.1.6(1) Not used.						
5.8.1.6(2) Design all units to have a non-institutional feel and the ability to put a unit into lock-down (all doors are locked simultaneously and occupants movement is restricted) mode as necessary.	No					
5.8.1.6(3) Provide a secure direct horizontal (i.e. at the same level) access from the therapeutic area to an exterior courtyard that meets the requirements of Section 8.2.2.	Yes	No	These are not provided.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Recommend review with the owner to determine if these are still required.
5.8.1.7 Pharmacy Areas						
5.8.1.7(1) Design the Pharmacy areas in accordance with the requirements of USP 797 Guidebooks to Pharmaceutical Compounding – Sterile Preparations and the Canadian Society of Hospital Pharmacists Guidelines for the preparation of sterile products in pharmacies.	No					
5.8.2 Ergonomic Design						
5.8.2.1 Project Co will provide:						
5.8.2.1(1) detailed design features, which expressly facilitate the physical activities of the staff and Clients to increase their safety, efficiency and general well-being, and assist in eliminating ergonomic risk factors;	No					
5.8.2.1(2) ergonomic design, consistent with good industry practice, of all work spaces including millwork, furniture, lighting, and finishes to eliminate strain and injury to health care workers; and	Yes	No	Millwork slides are very stiff, combined with the minimal graspable areas of the hardware pulls they create drawers which appeared to be underused due to their difficulty of use. (Plangrid#98)	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review millwork submittals and discuss further with operator and users.
5.8.2.1(3) adjustable work surfaces and shelves to allow for flexibility of use in nursing stations.	Yes	Yes				
5.8.3 Colour						
5.8.3.1 Project Co will:						
5.8.3.1(1) select departmental color palettes appropriate for the emotional and psychological needs of Clients;	Yes	Yes				
5.8.3.1(2) select color palettes that contribute to the creation of a healing environment which enhances the therapeutic processes and the client's recovery;	Yes	Yes				
5.8.3.1(3) select distribution of ambient full-spectral color within typical staff and Client environments; and	Yes	No	There is no observable use of full-spectral color throughout the facility.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Discuss further with operator to determine if colour for use of wayfinding and space making
5.8.3.1(4) avoid glare-creating finishes.	Yes	Yes				
5.8.4 Art Works						
5.8.4.1 Project Co will design the Facility to allow for the display of art work described in Section 8.1.7.11.1 of Appendix 3A [Clinical Specifications] and other art work provided by the Authority as follows:						
5.8.4.1(1) in the interior provide display areas for art, including wall spaces for wall hung/mounted art;	Yes	Yes				
5.8.4.1(2) in the exterior allow for sculptures to be placed at grade (the locations of any sculptures will be identified by the Authority in the user consultation process as described in Appendix 2B [User Consultation and Design Review]);	Yes	Yes				
5.8.4.1(3) provide lighting to enhance the display of art works; and	Yes	Yes				
5.8.4.1(4) in the interior provide all necessary structural support, seismic restraint, vandal-proof mounting and other protective measures as required.	No					
5.8.4.2 Project Co will, in consultation with the Authority during the user consultation process as described in Appendix 2B [User Consultation and Design Review], install art works provided by the Authority.	No					
5.8.4.3 In all Secure Client areas art works will be fixed to the Facility with tamper-resistant screws.	Yes	Yes				
5.9 Wayfinding and Signage						
5.9.1 In addition to the provisions in Appendix 3E [Wayfinding and Signage], Project Co will:						
5.9.1.1 locate major destinations, such as department entrances, directly off of entry spaces and/or along primary circulation paths for easy access, make waiting areas as open as possible to circulation routes without requiring wayfinders to pass through waiting areas;	Yes	Yes				
5.9.1.2 provide significant recognizable, easily named and identified elements in key and easily found locations that will become 'meeting points' for Non- Secure Clients and visitors; and	Yes	Yes				
5.9.1.3 design public elevator and stair lobbies and public circulation routes to be distinct from service routes and other non-public routes.	Yes	No	Wayfinding via elevators was not distinct. Where two elevators were provided, one with additional capacity and rear entrances, there was no delineation of which elevator was to be used for the general public and both elevators were available to be called.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Discuss further with operator to determine if colour for use of wayfinding and space making would be desired.
5.9.2 Project Co will provide all signage required for the Facility including:						
5.9.2.1 elevator floor directories at all elevator lobbies. They will include floor level listing of departments;	Yes	Yes				
5.9.2.2 Administrative space signage with a pocket to insert specific information such as name of occupant. Room signage for utility rooms will be designed to be less evident than general room signage. Blade signs may be used to identify vending areas and waiting areas;	Yes	Yes				
5.9.2.3 small door tags for all door frames;	Yes	Yes				
5.9.2.4 in Non-Secure Client areas of the Main Building, private Client room signage and Client care department directories. Signs will incorporate art imagery, such as local scenery, to designate different departments and private Client rooms;	Yes	No	Printed paper was observed taped to doors. There was not permanent allocation for personalization of doors observed.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review further with operator to determine if this was desired.

	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
5.9.2.5 overhead directional signage, which must either be suspended from a ceiling or bulkhead or be mounted directly over doors. No directional signage will be incorporated into flooring; and	Yes	Yes				
5.9.2.6 Project Co will propose and develop the building room number system in collaboration with the Authority. The building room number system will have, as a minimum:						
5.9.2.6(1) the building identification letters first followed by four or five digits, beginning with the first digit: 0 for basement rooms, 1 for ground floor, 2 for second floor, etc. on up the Building floors. Five digits may be required in a large Building due to the number of rooms on the floor, and if this is the case, the five digits will extend to all floors;	Yes	Yes	As observable. The choice of naming conventions is consistent throughout the facility but not consistent with this description.			Review with operator to determine if these naming conventions were selected by them.
5.9.2.6(2) elevators will follow the sequence: Elevator 1, Elevator 2 and Elevator 3;	Yes	Yes				
5.9.2.6(3) each room and any space with walls and a door require a unique identifier number. In addition any space such as a Client cubicle, alcove or recess of significant size must be numbered as a room. This identifies spaces for labelling of fire alarm, electrical and data outlets and for ongoing maintenance purposes;	Yes	Yes				
5.9.2.6(4) rooms are numbered in a manner that reflects normal movement through the Facility;	Yes	Yes				
5.9.2.6(5) labelling anticipates a person attempting to follow numbering along corridors in sequence;	Yes	Yes	Though numbers without access of the corridor are skipped, creating some acceptable confusion.			
5.9.2.6(6) blocks of numbers are periodically skipped to allow for future expansion of the numbering system if rooms are added through renovations; and	Yes	Yes				
5.9.2.6(7) each room and space requires a unique number for service reasons. It is important that room numbers be determined early in design and maintained following occupancy. Follow the same numbering system on design and construction documentation for all disciplines (architectural, mechanical, electrical, etc.).	Yes	Yes				
5.9.2.7 Donor Walls						
5.9.2.7(1) Project Co will provide a space located in proximity to the main visitor entrance(s) of the Main Building where the Authority may construct a feature to recognize donors, and other supporters of the Facility.	Yes	Yes				
5.9.2.7(2) Donor Wall signage must be incorporated in the Main Building lobby. The design will allow for changes to donors and additional donors to be added in an economical and convenient way.	Yes	Yes				
6.3 Masonry (Division 4)						
6.3.1 Basic Requirements						
6.3.1.1 Project Co may use masonry construction for:						
6.3.1.1(1) exterior walls and walls systems where permanence of finishes, both visually and functionally, and ease of maintenance are primary considerations in the exterior fabric of the buildings.	Yes	Yes				
6.3.1.1(2) interior walls and wall systems when priorities include permanence and maintenance, sound transmission control, fire resistance and separation requirements and security.	Yes	Yes				
6.3.1.2 Ensure masonry wall assemblies are only installed by installers who are members in good standing with the Saskatchewan Masonry Institute.	No					
6.3.2 Concrete Masonry Units						
6.3.2.1 Project Co may use concrete unit masonry for;						
6.3.2.1(1) both independent exterior walls and in exterior wall systems as a structural backing to other finish materials or systems; and	No					
6.3.2.1(2) for interior applications as an integrally finished material, as a base for applied finish and as a structural backing to other finish systems.	No					
6.3.2.2 Do not use unpainted concrete unit masonry as an exposed finish in clinical or public areas.	Yes	Yes				
6.3.2.3 Where concrete unit masonry is used as the exposed finish, all exposed corners will have rounded or chamfered corners.	Yes	Yes				
6.3.2.4 Not used.						
6.3.2.5 Ensure masonry design and construction comply with Canadian Masonry Contractors Association (CMCA) Masonry Practices Manual and all applicable standards.	No					
6.3.2.6 In SLC 1 areas fill all concrete masonry units with grout to create a solid wall.	No					
6.3.3 Brick Masonry						
6.3.3.1 Exterior wall systems comprising brick masonry as a finish veneer to concrete, concrete masonry or metal framing will be a rain-screen or cavity wall system.	Yes	Yes	Limited to what is visible and details in documents.			
6.3.3.2 Brick masonry below grade for exterior applications is not permitted.	No					
6.3.3.3 Brick masonry in interior applications is to have integral finish and construction compatible with the Authority's infection prevention and control requirements.	No					
6.4 Stone Masonry	No					
6.4.1.1 Stone masonry may be used as a finish veneer to concrete walls or concrete masonry walls. Exterior wall systems in such applications will be a rain screen or cavity wall system.	Yes	Yes	Stone masonry not used			
6.4.1.2 Stone will be sound, hard and durable, well-seasoned and of uniform strength, colour and texture, and free of quarry sap, flaws, seams, sand holes, iron pyrites or other mineral or organic defects.	Yes	Yes	Stone masonry not used			
6.5 Metals (Division 5)						
6.5.1 Basic Requirements						
6.5.1.1 Structural steel, steel deck, and cold-formed steel stud design and construction that meets or exceeds current Canadian standards and practices, as set out in this section, may be used for building elements and systems, where appropriate.	No					
6.5.2 Performance Criteria						
6.5.2.1 Design structural steel, steel deck, and cold-formed steel stud systems to comply with the deflection and vibration criteria outlined in Section 5.9.	No					
6.5.2.2 Erection tolerances for steel construction will be in accordance with all applicable CAN/CSA standards.	No					
6.5.2.3 For steel floor and roof construction, design for the effects of deflection of steel beams, joists, and girders due to the wet weight of concrete topping slabs. Vary the topping slab thickness as required to maintain floor levelness tolerances. Consider the additional concrete ponding weight in the design of the structure.	No					
6.5.2.4 Design and construct concrete topping slabs on steel deck to control cracking and avoid random surface shrinkage cracking and radial cracking around re-entrant corners. Implement concrete construction and curing procedures to minimize cracking for concrete topping slabs on steel deck.	Yes	No	Although not observable throughout the occupied areas of the facility due to the finished floors, exit stairwells demonstrated cracks throughout the stair pans and landings which are indicative of poor curing. (PlanGrid #11)	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Raw concrete was not to be used, apply a finish material to the stairs that is compliant with the PA.
6.5.2.5 Provide wide rib profile steel floor/roof decking for ease of attachment of current and future services, equipment, and fixtures using drilled insert expansion anchors into the bottom of the deck ribs.	No					
6.5.2.6 Provide steel floor/roof decking plus the concrete topping slab thickness assemblies that satisfy the requirements of a ULC-rated assembly meeting the National Building Code of Canada fire rating requirements. Do not use spray on or applied fireproofing material to achieve required floor deck fire rating.	No					
6.5.2.7 Fire proof structural steel floor/roof framing and supporting members to meet the NATIONAL BUILDING CODE OF CANADA fire rating requirements.	No					
6.5.3 Structural Steel and Steel Joists						
6.5.3.1 Quality Requirements						
6.5.3.1(1) Use a CSA certified testing laboratory to provide quality assurance testing and monitoring of workmanship using testing procedures specified in the CAN/CSA standards listed in Section 2.1 of this Schedule to verify soundness of representative shop and field welds.	No					
6.5.3.1(2) All welding is to be performed by welders certified by the Canadian Welding bureau to the requirements of CAN/CSA W47.1. Project Co will provide certification that all welders comply with this requirement, if requested by Authority.	No					
6.5.3.1(3) Conform to the Master Painters Institute (MPI) Standards for preparation and painting of Structural Steel components.	No					
6.5.4 Load Bearing Steel Studs						
6.5.4.1 Overriding Principles						
6.5.4.1(1) Project Co may use load bearing steel studs as a component of the exterior wall systems to support exterior wall finishes and form an integral part of the perimeter envelope.	No					
6.5.4.1(2) Load bearing steel studs may be part of the structural framing or may be independent of the principal structural system.	No					
6.5.4.2 Quality Requirements						
6.5.4.2(1) Design, detail and construct load bearing steel stud design and construction to comply with all applicable CAN/CSA standards.	No					
6.5.4.2(2) Ensure all load bearing steel stud construction is designed by a professional engineer registered in the Province of Saskatchewan.	No					
6.5.4.2(3) Ensure the steel stud manufacturer is certified in accordance with CSSBI Standard 30M-06 and all applicable CAN/CSA standards.	No					
6.5.4.2(4) Conform to the Association of Wall and Ceiling Contractor's Specification Standards Manual (AWCC).	No					
6.5.4.3 Performance Requirements						
6.5.4.3(1) Limit maximum deflection under specified wind loads to L/360 (L/720 for masonry veneers), unless a smaller maximum deflection is specifically required due to wall finishes.	No					
6.5.4.3(2) Design components to accommodate erection tolerances of the structure.	No					
6.5.4.3(3) Design wind bearing stud end connections to accommodate floor/roof deflections and to ensure that studs are not loaded axially.	No					

	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
6.5.4.3(4) Design steel studs to take into account the anchorage of other materials being supported including sub-girts supporting metal cladding and composite panels, soffit finishes and the provision of lateral support at window heads.	No					
6.5.4.4 Corner Guards and Bumper Rails						
6.5.4.4(1) Provide stainless steel corner guards in infection control sensitive areas.	Yes	No	Stainless steel corner guards were not provided throughout. Acrovyn was used more regularly. PlanGrid #181	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review further with operator to determine if Acrovyn corner guards were preffered over stainless steel
6.5.4.4(2) Provide heavy duty steel corner guards and bumper rails in utility areas, including:						
6.5.4.4(2)(a) the material management storage, loading dock and marwilling areas;	Yes	Yes				
6.5.4.4(2)(b) utility corridors with heavy utility cart and pallet jack traffic; and	Yes	Yes				
6.5.4.4(2)(c) utility shop areas.	Yes	Yes				
6.5.4.5 Guardrails and Handrails						
6.5.4.5(1) Provide guardrails of minimum diameter 40 mm and capable of resisting design loads.	Yes	Yes				
6.5.4.5(2) Design all guardrails and handrails to their usage classification and per applicable codes.	No					
6.5.4.5(3) Provide a durable painted finish for steel guardrails.	Yes	Yes	Guardrails are galvanized			
6.5.4.5(4) Provide a manufactured pre-finish for stainless steel or aluminum guardrails.	Yes	Yes				
6.5.4.5(5) Provide safety glass for glazed decorative railings.	Yes	Yes				
6.6 Wood, Plastics and Composites (including Millwork) (Division 6)						
6.6.1 Basic Requirements						
6.6.1.1 Use of wood and plastic products within the limitations of combustible content restrictions of the National Building Code of Canada for the specific occupancy classification of the building.	No					
6.6.1.2 Do not use materials containing urea formaldehyde in the Facility.	No					
6.6.1.3 Provide rough carpentry, wood backing materials, backing boards for mechanical rooms and electrical/communication rooms, roof sheathing, copings, cant strips, finish carpentry and architectural woodwork, including exterior fascia, cabinets, casework, frames, paneling, ceiling battens, trim, installation of doors and hardware, and other wood-related products and applications as required:	No					
6.6.1.3(1) to support functionality as set out in the Clinical Specifications or as required for operation of the Facility; and	No					
6.6.1.3(2) for wood products exposed to view in finished interior and exterior installations.	No					
6.6.1.4 Provide solid polymer fabricated or stainless steel surfacing for:						
6.6.1.4(1) all counters that incorporate integral sinks; and	Yes	Yes				
6.6.1.4(2) other areas as required to create surfaces that provide antiseptic or clean characteristics, will endure special or regular maintenance, and are resistant to caustic action of chemicals or agents used by the Authority.	Yes	Yes				
6.6.1.5 Provide acrylic plastic products (or other products as requested by the Authority) for wall cladding, wall protection, corner protection, casework finishing, trims, ornamental elements, and other applications as required to achieve a quality of interior finish suitable for use by Clients and staff.	Yes	Yes				
6.6.1.6 Propose to the Authority the locations and types of all handrails, bumper guards and wall protection for review by the Authority in accordance with Appendix 2B [User Consultation and Design Review].	No					
6.6.1.7 Use pressure treated wood for any exterior exposed wood and wood in direct contact with concrete, masonry, and soil.						
6.6.2 Wall Guards and Corner Guards, Handrails, Wall Protection, Door Edge and Door Frame Protection						
6.6.2.1 General						
6.6.2.1(1) Use bumper guards, crash rails, handrails, and corner guards that:						
6.6.2.1(1)(a) are high impact-resistant extrusion conforming to ASTM D4226;	No					
6.6.2.1(1)(b) are stain-resistant to pen marks, paint and graffiti, able to withstand commercial cleaners without fading or staining and contain anti-microbial additives to retard mildew and bacterial growth.	Yes	No	Acrovyn partially meets the requirement, graffitti would be dfficult to remove.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review further with operator to determine if Acrovyn corner guards were preffered over stainless steel
6.6.2.2 Wall and corner guards						
6.6.2.2(1) Provide protection for walls and exposed wall corners at Client care areas, service areas, and other areas as required to prevent damage due to impact from traffic such as stretchers, equipment and service vehicles.	Yes	No	In the single-wing client areas, near eyewash stations and adjacent to nursing stations, no wall protection is provided and the walls have received excessive damage. #391, #54, #21	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Contractor to provide wall protection at these locations
6.6.2.2(2) Select materials appropriate to the amount and degree of impact anticipated.	Yes	Yes				
6.6.2.3 Handrails						
6.6.2.3(1) Provide handrails in all corridors and Client care areas of an appropriate type for Client support.	Yes	No	The use of wood handrails throughout the main circulation spaces of the unsecured areas may have been approved by the client. It presents a IPC and durability concern if not maintained. #635	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review further with building operator to determine if these were selected by them.
6.6.2.3(2) Select materials and shapes appropriate for Client support, with continuous uninterrupted supports.	Yes	Yes				
6.6.2.4 Wall protection						
6.6.2.4(1) Apply sheet wall protection to wall areas where the impact damage anticipated is of a larger area of wall than would be protected by bumper guards.	Yes	No	In the single-wing client areas, near eyewash stations and adjacent to nursing stations, no wall protection is provided and the walls have received excessive damage.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Contractor to provide wall protection at these locations
6.6.2.4(2) Provide wood wall bumper guards in the following high traffic pedestrian areas:						
6.6.2.4(2)(a) public corridors;	Yes	Yes				
6.6.2.4(2)(b) service corridors; and	Yes	Yes				
6.6.2.4(2)(c) Client Care Unit corridors.	Yes	Yes				
6.6.2.4(3) Provide wall splash back protection behind and surrounding hand sinks, scrub sinks and housekeeping sinks.	Yes	Yes	It appears that these have been corrected retroactively in the patient wings at handwash			
6.6.2.4(4) Apply sheet wall protection to faces of doors where impact damage is anticipated. Use sheet wall protection that complements the installation of door edge and frame protection.	Yes	No	Several doors were observed where damage was routinely above the door protection. It is not clear if the specific carts causing this damage were demonstrated to the project co however.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Note all locations where insufficient wall protection is provided and have the project co remediate
6.6.2.4(5) Secure wall and corner guards to reinforcing and backing in the walls, such backing to be sufficient to withstand expected impact loads. Wall protection will be high impact and stain-resistant.	No					
6.6.2.5 Door Edge and Door Frame Protection						
6.6.2.5(1) Protect door edges and door frames in Client care areas from damage such as impact caused by the regular movement of stretchers and other wheeled vehicles.	Yes	No	It was not apparent that effort was present in reducing impact to door frames and door edges. #35	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Contractor to provide this additional protection through high traffic areas which experience cart, chair, and stretcher traffic.
6.6.2.5(2) Protect door edges and door frames in clinical and service areas from damage such as impact caused by regular and non-regular service vehicles.	Yes	No	It was not apparent that effort was present in reducing impact to door frames and door edges.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Contractor to provide this additional protection through high traffic areas which experience cart, chair, and stretcher traffic.
6.6.3 Finish Carpentry, Millwork and Architectural Woodwork						
6.6.3.1(1) Conform to AWMAC Quality Standards Manual for minimum "Custom Grade," and DHI standards for the design, fabrication, materials, installation, and workmanship of finish carpentry and architectural woodwork.	Yes	TBD	Could not locate in documents.			Require AWMAC certifications and millwork shop drawings.
6.6.3.1(2) Use adhesives that are non-toxic, non-solvent glue and comply with AWMA Quality Standards Manual, Canadian 'Eco-Logo' program and CaGBC standards.	No					
6.6.3.1(3) Provide countertops that comply with the following requirements:						
6.6.3.1(3)(a) high pressure plastic laminate: general purpose grade, standard duty, minimum 1.06 mm thick complete with minimum 3mm PVC edge to match faces;	Yes	TBD	Upon review of millwork shop drawings			Require AWMAC certifications and millwork shop drawings.
6.6.3.1(3)(b) core: western softwood plywood in compliance with CSA 0151-M1978, good one side, solid two sides, for use as plastic laminate cores, minimum 19 mm thick. Provide liner grade backer sheet to the underside of all countertops. Use marine-grade plywood substrate for countertops. Do not use fibreboard or particleboard; and	Yes	TBD	Upon review of millwork shop drawings			Require AWMAC certifications and millwork shop drawings.
6.6.3.1(3)(c) solid surface countertops: solid surface material (SSM) consisting of reacted monomers and resins, mineral fillers and pigments manufactured in sheets of 13 mm nominal thickness. SSM will be solid, non-porous, homogeneous, hygienic, renewable, and, when applicable, may feature inconspicuous hygienic seams. SSM will be free from conspicuous internal strengthening fibers. SSM must meet or exceed performance standards set out in ISSFA -2-01.	Yes	TBD	Upon review of millwork shop drawings			Require AWMAC certifications and millwork shop drawings.
6.6.3.1(4) Provide casework that meets the following requirements:						
6.6.3.1(4)(a) Core for doors: plywood.	No					
6.6.3.1(4)(b) Core for all other panel products: hardwood plywood.	No					
6.6.3.1(4)(c) Laminate grade: general purpose grade, standard duty, minimum 1.06 mm thick.	Yes	TBD	Upon review of millwork shop drawings			Require AWMAC certifications and millwork shop drawings.
6.6.3.1(4)(d) Plastic laminate to both sides of doors and drawer fronts.	Yes	TBD	Upon review of millwork shop drawings			Require AWMAC certifications and millwork
6.6.3.1(4)(e) Edge banding for all exposed parts: minimum 3 mm PVC edge to match faces.	Yes	TBD	Upon review of millwork shop drawings			Require AWMAC certifications and millwork shop drawings.
6.6.3.1(4)(f) Edge banding at semi-exposed parts: minimum 1 mm PVC edge, colour to match door face.	Yes	TBD	Upon review of millwork shop drawings			Require AWMAC certifications and millwork shop drawings.
6.6.3.1(4)(g) Liner grade for semi-exposed parts: minimum thickness of 0.76 mm, used on the following: semi-exposed shelves, interior portions of case bodies, all surfaces of drawer boxes.	Yes	TBD	Upon review of millwork shop drawings			Require AWMAC certifications and millwork shop drawings.
6.6.3.1(5) Use plastic laminates with a wood grain appearance for the Kanban units.	Yes	TBD	Upon review of millwork shop drawings			Require AWMAC certifications and millwork shop drawings.
6.6.3.2 Kanban System						
6.6.3.2(1) Construct the Kanban System as a millwork element in the rooms identified in Appendix 3A [Clinical Specifications].	Yes	Yes				
6.6.3.2(2) Design the Kanban to:						
6.6.3.2(2)(a) be accessible from the corridor by staff for servicing and restocking, and accessible within the room by Clients and staff.	Yes	Yes				

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6.6.3.2(2)(b) have a lower cabinet for soiled goods and an upper cabinet for clean goods.	Yes	Yes				
6.6.3.2(3) Design Standards						
6.6.3.2(3)(a) Construct the Kanban System as a singular millwork unit consisting of a lower and upper cabinet.	Yes	Yes				
6.6.3.2(3)(b) Provide storage space in the lower cabinet portion for one linen hamper, at floor level (not on a raised base). Size the lower cabinet to accommodate a linen hamper 495mm w x 535mm d x 851mm h. Removal of hamper will be from the corridor side only (by staff). Provide a fixed upper lid to the lower cabinet with a 300mm diameter hole to allow linen to be inserted into the hamper. Note the lower cabinet is not to have door access within the room.	Yes	Yes				
6.6.3.2(3)(c) Provide a clear dimension of 380mm from the lid of the lower cabinet to the underside of the fixed bottom shelf of the upper cabinet.	Yes	Yes				
6.6.3.2(3)(d) Provide storage space with a fixed bottom shelf and two shelves in the upper cabinet. Size the upper cabinet to allow for 200mm in height clear between shelves. Bins are to be replenished from the corridor side and accessed from the room side.	Yes	Yes				
6.6.3.2(3)(e) Provide double cabinet doors for the upper cabinet on the room side that are lockable and keyed consistently throughout the Facility.	Yes	Yes				
6.6.3.2(3)(f) Provide a door (full height of millwork unit) in a pressed metal frame on the corridor side. The door and frame are to match the performance rating of the door of the room being served. The door hardware is to include a corridor side card reader and corridor side door hardware only.	Yes	Yes				
6.6.3.3 Client Room Wardrobe						
6.6.3.3(1) The Client room wardrobe will be constructed as a millwork element in the rooms as identified in Appendix 3A [Clinical Specifications].	Yes	Yes				
6.6.3.3(2) Design the Client room wardrobe so that:						
6.6.3.3(2)(a) it is accessible from within the Client room by staff and Clients; and	Yes	Yes				
6.6.3.3(2)(b) it has an upper cupboard for longer term storage and a lower cupboard for frequent use items.	Yes	Yes				
6.6.3.3(3) Design Standards:	Yes					
6.6.3.3(3)(a) Client room wardrobe will be constructed as a singular millwork unit consisting of a lower and upper cupboard.	Yes	Yes				
6.6.3.3(3)(b) The Authority prefers the wardrobe to be 1066mm in width, 610mm in depth, and 2440mm in height, however the minimal acceptable size is 914mm in width, 610mm in depth, and 2440mm in height.	Yes	Yes				
6.6.3.3(3)(c) The upper cupboard will be at least 610mm in height with double, lockable doors. Lower cupboard will be at least 1830mm in height with double, lockable doors, inclusive of 100mm kick plate at bottom.	Yes	Yes				
6.6.3.3(3)(d) The lower cupboard will be divided vertically into 2 equal sections with a fixed bottom shelf. (d).1 The right section will be divided into 5 equally sized compartments with fixed shelves. In wardrobes in Non-Secure Client rooms and the 30 bed Forensics unit only, the two lower compartments will be fitted with pull out drawers. (d).2 The left section will have one upper fixed shelf (sized to match the upper fixed shelf in the right section) with a clothes rail mounted immediately below the shelf. The rail will be mounted tight to the underside of the shelf such that there is room only for a wire hanger to be passed through the gap.	Yes	Yes				
6.6.3.4 Client Room Desk						
6.6.3.4(1) The Client room desk will be constructed as a millwork element in the rooms as identified in Appendix 3A [Clinical Specifications].						
6.6.3.4(2) Design Standards:						
6.6.3.4(2)(a) Client room desk will be constructed as a singular millwork unit but can be constructed in conjunction with the Client room wardrobe.	Yes	Yes				
6.6.3.4(3) Client room desk will be a minimum of 914mm in width, and 610mm in depth, and mounted 715mm above the finished floor.	Yes	Yes				
6.7 Thermal and Moisture Protection (Division 7)						
6.7.1 Basic Requirements						
6.7.1.1 Design construction assemblies according to sound building envelope principles.	Yes	No	Limited to what is documented, visible and observable from a thermal scan. Original building envelope relied spray foam as vapour barrier, which is risky. Shrinkage of the spray foam resulted in widespread failures in the building envelope. Remedial work to address this is in progress.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Further review and repair of transitions between sloped roofs and exterior walls and locations of suspected air leakage
6.7.1.2 Design construction assemblies to prevent the ingress of moisture or water vapour from the exterior through the building envelope and the passage of air through the building envelope from the interior spaces to the exterior and vice versa.	Yes	No	Limited to what is visible. Visible deficiencies were noted through visual review and thermographic scan	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Further review and repair of transitions between sloped roofs and exterior walls and locations of suspected air leakage
6.7.1.3 Design construction assemblies to prevent the ingress of moisture through foundation walls below grade, both subject and not subject to hydrostatic pressure.	No					
6.7.1.4 Provide protection (such as insulation) to resist the transfer of heat through exterior walls and roofs to create comfortable, livable interior environments.	Yes	Yes	Verified with thermographic scan. Besides some thermal bridges, most areas meet this requirement			
6.7.1.5 Provide resistance to the propagation and spread of fire for exterior walls and interior walls designated as fire-resistance rated separations where appropriate.	No					
6.7.2 Performance Criteria						
6.7.2.1 Damp proofing						
6.7.2.1(1) Do not use damp proofing as a means of prevention of moisture ingress.	Yes	Yes				
6.7.2.2 Waterproofing						
6.7.2.2(1) Provide waterproofing to prevent moisture ingress to basement and crawlspaces below grade.	No					
6.7.2.2(2) Use membrane waterproofing to prevent water ingress over suspended slabs and decks and associated walls over habitable spaces where water collection is anticipated.	Yes	Yes	Limited to what is visible.			
6.7.2.2(3) Use fluid-applied waterproofing for mechanical room floors.	Yes	Yes	Limited to what is visible.			
6.7.2.2(4) Provide waterproof membranes in exterior walls as part of the building envelope and integral with rain screen or cavity wall assemblies.	Yes	Yes	Limited to what is visible.			
6.7.2.2(5) Dam the floor under key mechanical equipment in the mechanical penthouse, mechanical rooms and mechanical shafts with a continuous curb and waterproofing to contain the water. Provide floor drains.	Yes	Yes	Limited to what is visible.			
6.7.2.3 Vapour Barriers						
6.7.2.3(1) Prevent water vapour transmission and condensation in wall assemblies, roofing assemblies, and under concrete slabs-on-grade within the building perimeter by means of a continuous vapour barrier membrane.	Yes	No	Limited to what is visible. Visible deficiencies were noted through visual review and thermographic scan	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Further review and repair of transitions between sloped roofs and exterior walls and locations of suspected air leakage
6.7.2.4 Air Barriers						
6.7.2.4(1) Prevent air leakage caused by air pressure across the wall and roof assembly by means of air barrier assemblies.	No					
6.7.2.4(2) Provide air barrier assemblies that:						
6.7.2.4(2)(a) limit air exfiltration and infiltration through materials of the assembly, joints in the assembly, joints in components of the wall assembly, and junctions with other building elements including the roof; and	Yes	No	Related to vapour barrier. See 6.7.2.3(1)	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Further review and repair of transitions between sloped roofs and exterior walls
6.7.2.4(2)(b) prevent air leakage caused by air pressure across the wall and roof assembly, including interruptions to the integrity of wall and roof systems such as junctions with dissimilar constructions.	Yes	No	Related to vapour barrier. See 6.7.2.3(1)	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Further review and repair of transitions between sloped roofs and exterior walls
6.7.2.5 Thermal Protection						
6.7.2.5(1) Provide continuous rigid and semi-rigid thermal insulation as part of the building envelope to prevent the transfer of heat both from the interior to the exterior and vice versa, depending on seasonal conditions, and to resist the absorption of water.	Yes	Yes	Limited to what is visible. Continuity not verifiable through visual review. Thermal scan found some discontinuities at thermal bridges. Most areas appear to be this requirement			
6.7.2.5(2) Use thermal protection materials of a type and quality that will provide consistent environmental quality to enclosed spaces.	Yes	Yes	Limited to document review and visual review			
6.7.2.5(3) Use foamed plastic insulation that is CFC and HCFC free.	Yes	Yes	Limited to product information and what is visible			
6.7.2.5(4) Minimum insulation values will be:						
6.7.2.5(4)(a) R20 (U-Value 0.05) for exterior walls; and	Yes	Yes	Limited to document review and visual review			
6.7.2.5(4)(b) R30 (U-Value 0.033) for roof areas or higher as necessary to achieve targeted energy performance.	Yes	Yes	Limited to document review and visual review			
6.7.2.6 Roofing						
6.7.2.6(1) Ensure that materials and workmanship conform to the Saskatchewan Roofing Contractors Association (SRCA) latest standards, as published in the Canadian Roofing Contractors Association (CRCA) Roofing Specifications Manual, and include a five (5) year guarantee.	No					
6.7.2.6(2) Inspect quality of roofing as required by SRCA.	No					
6.7.2.6(3) Comply with CRCA Roofing Specifications Manual "Acceptable Materials List," including the following:						
6.7.2.6(3)(a) membrane for vegetated green roofs – use SBS modified membrane (two-ply system); and	Yes	Yes	N/A No green roof areas			
6.7.2.6(3)(b) flexible membrane for reflective roofs – use elastomeric or thermoplastic (single-ply system), Energy Star compliant (highly reflective) and high emissivity membrane (of at least 0.9 when tested in accordance with ASTM 408).	Yes	Yes	TPO used on flat roof areas.			
6.7.2.6(4) Use foamed plastic insulation that is CFC- and HCFC-free.	No					
6.7.2.6(5) Provide a complete horizontal barrier to weather and climate using one of the aforementioned roofing systems.	Yes	Yes				

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6.7.2.6(6) If a vegetated green roof is used, design the assembly so that the system dead load, measured according to ASTM D2397, when added to the weight of the roofing membrane system, does not exceed the maximum allowable dead load for the roof.	Yes	Yes	N/A No green roof areas			
6.7.2.6(7) Include the following as part of the roofing systems:						
6.7.2.6(7)(a) flashings and sheet metal;	Yes	Yes				
6.7.2.6(7)(b) thermal insulation;	Yes	Yes	Limited to what is visible.			
6.7.2.6(7)(c) assembly components for green roofs, if used;	No					
6.7.2.6(7)(d) roofing specialties and accessories required for completion;	Yes	Yes	Limited to what is visible.			
6.7.2.6(7)(e) interior access systems to roof areas;	Yes	Yes	Limited to what is visible.			
6.7.2.6(7)(f) protection from pedestrian traffic and solar radiation; and	Yes	Yes	Limited to what is visible.			
6.7.2.6(7)(g) roof drainage, including overflow scuppers.	Yes	Yes	Limited to what is visible.			
6.7.2.6(8) Provide sheet metal flashings that divert water away from membrane flashing termination and protect the membrane from deterioration due to the exterior elements and mechanical damage. Provide flexible membrane sub flashing continuously under the metal.	Yes	Yes	Limited to what is visible.			
6.7.2.6(9) Metal roofing systems, if used, will be complete with continuous waterproof membrane as part of the assembly and provide clear internal paths of drainage to allow any trapped moisture to drain to the exterior and avoid the staining of architectural finishes, forming of puddles, forming of icicles, and dripping on pedestrians.	Yes	Yes	Limited to what is visible.			
6.7.2.6(10) In designing the Facility, including any roof systems, ensure that entrance ways are protected from sliding snow and ice and that there are no accumulations of snow and ice in roof valleys.	Yes	Yes				
6.7.2.6(11) Shingles are not permitted as a roofing material.	Yes	Yes				
6.7.2.7 Fire and Smoke Protection						
6.7.2.8 Use spray-applied cementitious fireproofing if required to achieve a fire resistance rating, except in locations as referred to in Section 6.5.2.6.	No					
6.7.2.9 Use spray-applied cementitious fireproofing that conforms to standards of Warnock-Hersey (WH) Certification Listings.	No					
6.7.2.10 Integrate barriers into vertical and horizontal space separations to protect against the spread of fire and smoke. Apply protection to exposed building elements (structural and non-structural) susceptible to fire and subsequent damage.	No					
6.7.2.11 Apply protection around penetrations through vertical and horizontal fire-resistance rated separations.	No					
6.7.2.12 Use firestopping and smoke seal systems that consist of asbestos-free materials and systems, capable of maintaining an effective barrier against flame, smoke, and gases.	No					
6.7.2.13 Use firestopping that:						
6.7.2.13(1) is compatible with substrates;	No					
6.7.2.13(2) allows for movement caused by thermal cycles; and	No					
6.7.2.13(3) prevents the transmission of vibrations from pipe, conduit or duct to structure and structure to pipe, conduit or duct.	No					
6.7.2.13(4) When more than one product is required for an assembly, use products that are compatible with one another and from the same manufacturer.	No					
6.7.2.13(5) Use fire stopping sealants and coatings that are silicone-based and guaranteed not to re-emulsify if subject to wetting or standing water. Do not use acrylic-based coatings and sealants.	No					
6.7.2.13(6) Ensure all firestopping is installed by an FM Global approved firestop contractor or an UL-qualified firestop contractor.	No					
6.7.2.13(7) Provide firestopping and smoke seal systems capable of maintaining an effective barrier against flame, smoke and gases when tested to CAN/ULC-S115 or ASTM E814 or UL 1479,	No					
acceptable to all applicable authorities having jurisdiction, and not exceeding opening sizes for which they are intended.	No					
6.7.2.14 Sealants						
6.7.2.14(1) Apply sealant materials to achieve:						
6.7.2.14(1)(a) seals to the building envelope systems and around openings in the building envelope systems as required to prevent water ingress;	Yes	No	Deficient and missing exterior sealants noted throughout	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Recommend a thorough review by the Building Envelope and have the operator remediate these conditions.
6.7.2.14(1)(b) seals around and over cavities in or behind surface elements to allow effective infection prevention and control (note that sealant around door frames must include joints at bottom of door frames between floor finish and frames);	No					
6.7.2.14(1)(c) sealed joints between dissimilar or similar materials to allow a smooth or even transitions; and	Yes	Yes				
6.7.2.14(1)(d) sealed expansion or controls joints in the building envelope systems or structural systems to allow movement.	Yes	No	Horizontal control joints not sealed in brick cladding	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co.
6.7.2.14(2) Do not use unsealed joints in clinical areas.	Yes	Yes				
6.7.2.14(3) For the exterior, use sealants to completely and continuously fill joints between dissimilar and/or similar materials.	Yes	No	Several deficiencies	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	This should be addressed during the next warm season to prevent further bulk water entry and potential moisture ingress into the exterior walls and balcony and soffit assemblies.
6.7.2.14(4) For the interior, use sealants (at frames such as those at doors, windows and skylights) to completely fill joints between dissimilar materials using one component, acrylic emulsion, paintable type.	Yes	Yes	Some deficiencies noted but not systematic			
6.7.2.14(5) Use silicone caulking that is mildew-resistant and impervious to water for caulking washroom plumbing fixtures.	No					
6.7.2.14(6) Use sealants with self-levelling properties for expansion and control joints in concrete floors using two-component epoxy urethane sealants.	Yes	Yes				
6.7.2.14(7) Use non-sag sealants for exterior vertical expansion and control joints in masonry or wall cladding.	Yes	Yes				
6.7.2.14(8) Use sealants that allow for minimum 25% movement in joint width.	No					
6.7.2.14(9) In corridors and other traffic areas used by equipment such as laundry carts, supply carts and material handling equipment, use traffic bearing type sealants suitable to support imposed load without deformation or failure.	No					
6.7.2.15 Traffic Coatings						
6.7.2.15(1) Provide traffic coating at the following locations:						
6.7.2.15(1)(a) loading docks; and	Yes	Yes				
6.7.2.15(1)(b) enclosed sally port/garage.	Yes	Yes				
6.7.2.15(2) Use traffic coating that complies with the following:						
6.7.2.15(2)(a) Primer: Multi-component, 100% solids, low VOC, low viscosity polyurethane primer or as recommended by manufacturer to suit substrate and site conditions.	No					
6.7.2.15(2)(b) Base and Intermediate Coats: Multi-component low VOC liquid urethane or epoxy elastomeric membrane forming part of manufacturer's vehicular traffic coating system.	No					
6.7.2.15(2)(c) Topcoat: Multi-component low VOC liquid urethane elastomeric membrane top coat forming part of manufacturer's vehicular traffic coating system; colour as selected by the Authority from manufacturer's full range, and meeting or exceeding the following specifications: (c).1 Tensile Strength: ASTM D-638 at 9.1 MPa (c).2 Elongation at Break: ASTM D-638 at 435% (c).3 Tear Strength: ASTM D-624 at 38.2 KN/mm (c).4 Hardness: ASTM D-2240 at 80 Shore A (c).5 Abrasion Resistance wear course (CS-17 wheel, 1000g): ASTM D-4068 at Maximum Weight loss of 22 mg/1000 cycles (c).6 Fire Rating: ASTM CAN/ULC S102.2 at Class A (c).7 Water vapour Permeability: ASTM E-96 at 0.0013 ng/Pa•s•m, 0	No					
6.7.2.16 Provide fluid applied integral flashings at all locations where a horizontal surface butts a vertical surface and at all deck projections. Apply the membrane over the prepared surfaces at a minimum thickness of 500 microns thick and extend the membrane a minimum of 10 cm on vertical and horizontal surfaces.	Yes	Yes				
6.8 Cladding (Division 7)						
6.8.1 Design and construct all exterior wall cladding systems for the buildings to incorporate the following:						
6.8.1.1 a means to drain all accumulated water to the exterior of the building;	Yes	No	limited to what is visible. Detailing at balcony/wall transitions does not prevent	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Further review and repair of junctions at balcony/wall transitions
6.8.1.2 materials installed to shed precipitation;	Yes	Yes	limited to what is visible. Except for above, this			
6.8.1.3 a means of preventing moisture penetration through the exterior of the wall assembly;	Yes	Yes	limited to what is visible			
6.8.1.4 flashings, drips or overhangs sufficient to deflect accumulated water away from the building face, at all:	Yes					
6.8.1.4(1) changes in plane;	Yes	Yes	verified by visual review			
6.8.1.4(2) intersections of walls and roofs;	Yes	Yes	verified by visual review			
6.8.1.4(3) changes in cladding material; and	Yes	Yes	verified by visual review			
6.8.1.4(4) window and door heads or sills.	Yes	Yes	except where brick angle is directly above			
6.8.2 Ensure materials are accessible for maintenance purposes provided that, within Client occupied spaces, materials will not be removable without use of special tools.	Yes	Yes				
6.8.3 In all exterior walls, use durable materials and secure materials in a fashion which, to the greatest extent practicable, resists Facility User Excessive Damage and ensures materials cannot be dislocated by Clients without use of special tools or otherwise used as a weapon.	Yes	No	Loose fasteners noted in secure courtyard. Building users have also found loose roof fasteners in secure courtyards	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Operator should do a full review of the exterior to ensure all fasteners are not loose.
6.8.3.1 Design claddings such that they are not climbable to access roof(s) or soffits.	Yes	Yes				
6.8.3.2 Provide tamperproof claddings so that they cannot be disassembled or vandalized without use of special tools.	Yes	Yes	except where exposed fasteners are loose			
6.8.3.3 Design claddings to prevent concealment of contraband.	Yes	Yes				
6.8.4 Refer to the following sections for descriptions of acceptable cladding materials:	No					
6.8.4.1 Section 6.2 Concrete & Precast Concrete	No					
6.8.4.2 Sections 6.3.2 Concrete Masonry Unit, 6.3.3, and 6.4 Concrete Masonry Unit, Brick & Stone Masonry	No					
6.8.4.3 Section 6.9.2.13Glass & Glazing	No					

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6.8.4.4 Section 6.8.5 Phenolic Panels	No					
6.8.4.5 Section 6.8.6 Metal or Composite Aluminum Cladding	No					
6.8.4.6 Section 6.9.2.6 Aluminum Windows and Curtain Walls.	No					
6.8.5 Phenolic Panels						
6.8.5.1 Use panels of high density phenolic resin with acrylic resin finish.	Yes	Yes				
6.8.5.2 Acceptable phenolic panels include Trespa, Prodema, Fundermax or similar.	Yes	Yes				
6.8.5.3 Use phenolic panels that comply with all applicable CSA standards.	Yes	Yes				
6.8.6 Metal or Composite Aluminum Cladding						
6.8.6.1 Metal Panel cladding will be integrated into aluminum curtain wall system or be a stand-alone system.	Yes	Yes				
6.8.6.2 Use metal panel with baked enamel finish. Use aluminum with prefinished aluminum or baked enamel finish.	No					
6.8.6.3 Maximum panel deviation (flatness) will be 3 mm in 1530 mm in any direction for assembled units (non-accumulative – no oil canning).	No					
6.9 Openings (Division 8)						
6.9.1 Basic Requirements						
6.9.1.1 Subject to any other glazing specifications set out in this Section 6.9, at minimum provide all exterior and interior glazing of tempered-laminated glass.	Yes	Yes				
6.9.1.2 Installation methods and locations for doors, frames and hardware to conform with the standards of the Door and Hardware Institute (DHI) for hospitals facilities unless otherwise indicated in the Design and Construction Specifications.	No					
6.9.1.3 All door assemblies will comply with all applicable reference standards and codes.	No					
6.9.1.4 Provide assemblies that resist local seismic conditions as a post-disaster building as defined in the National Building Code of Canada and that resist 1-in-100 year climatic events (with a safety factor).	No					
6.9.1.5 Doors						
6.9.1.5(1) Size, fabricate and install doors to suit the intended function of spaces or rooms requiring acoustic or visual privacy, security, special HVAC requirements, fire-resistance rated separations or other closures.	No					
6.9.1.5(2) Size Requirements for Doors						
6.9.1.5(2)(a) Provide door openings of adequate width to suit the intended purpose of rooms on either side of the doors and allow the movement of people and equipment associated with those rooms.	No					
6.9.1.5(2)(b) No single door will have a width of less than 750mm.	Yes	Yes	None observed			
6.9.1.5(2)(c) Provide double doors into rooms where large pieces of equipment will be moved in or out during the lifetime of the building and where such equipment will not pass through a single 1200 mm wide opening.	Yes	Yes	None observed			
6.9.1.5(2)(d) Size door openings to suit bariatric Client requirements as identified in the Appendix 3A [Clinical Specifications]. The minimum door opening size will be 1500 mm clear. Doors must have a large leaf and a small leaf.	Yes	Yes	limited to observation, measurements were not taken			
6.9.1.5(2)(e) Provide double doors into corridors and major rooms to ease access where Clients in beds or stretchers may be attended to or accompanied by a large number of medical staff and medical equipment.	Yes	Yes				
6.9.1.5(2)(f) Unless required otherwise, provide doors to Client care areas, including doors to washrooms and change room cubicles, with a minimum width of 900 mm.	Yes	Yes				
6.9.1.5(2)(g) Provide a minimum of 2150 mm high door or door leaf, unless specifically required for access to services or other purposes where height is restricted.	Yes	Yes				
6.9.1.5(3) Acoustic requirements for Doors: refer to Appendix 3C [Sound Transmission Ratings].	No					
6.9.1.5(4) Provide private Client rooms with hardware that allows the doors to stay in an open position and facilitates casual observance of Clients by the nursing staff.	Yes	Yes				
6.9.1.5(5) For doors into or between major departments or activity areas through which cart and wheel chair traffic is anticipated on a routine basis, provide automatic activation by an electronic device or manual push button, located to allow emergency access without the necessity to stop movement. For all other doors through which cart, or frequent Client or staff traffic is anticipated on a routine basis, provide appropriate hardware or automatic activation that allows the doors to stay in an open position.	Yes	No	Few automatic operators were observed.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Detailed review of circulation and automatic door requirements required.
6.9.1.5(6) Apply door sizes and designs consistently to rooms of similar use, location, and configuration.	Yes	Yes	limited to observation, measurements were not taken			
6.9.1.5(7) Avoid doors swinging into corridors in a manner that may obstruct traffic flow or reduce the corridor width, except doors to IPCRs, holding rooms or to spaces that are used infrequently and are not subject to occupancy, such as small closets.	Yes	Yes				
6.9.1.5(8) Doors may swing into private Client washrooms, provided they allow for ease of Client use, both on their own and assisted by staff. Equip such doors with appropriate hardware to allow the door to be opened out into the room in an emergency situation. Alternatively "barn type" sliding doors may be used for Client washrooms.	Yes	Yes				
6.9.1.5(9) Design and construct door assemblies, including frames, hinges, and associated hardware and components, to resist Facility User Excessive Damage to the greatest extent practicable, and to be easily maintainable and repairable.	Yes	No	It was observed that several door closers were not concealed and could be physically damaged.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Recommend a thorough review of antiligature requirements ahead of requiring the hardware to be changed.
6.9.1.5(10) Finish doors and frames with a suitable finish that prevents dirt and fingerprint accumulation, and will be easily cleaned and disinfected.	Yes	Yes				
6.9.1.5(11) Be consistent with the extent of glazing in doors throughout the Facility and the size and quantity of sidelights, and balance these between the nature of observation required and the privacy requirements of the occupants of the room. Where possible and appropriate, provide glazing in an adjacent sidelight rather than within the door itself.	Yes	Yes				
6.9.1.5(12) Provide glazing in doors and sidelights to allow Client observation	No					
6.9.1.5(13) Provide integral blinds or coverings suitable and appropriate for the	Yes	Yes				
6.9.1.5(14) Provide doors and door frames with the capability to withstand the varying and high levels of humidity and impact that occur typically within hospitals, and in specific rooms within these facilities, and maintain their inherent aesthetic and functional capacities.	No					
6.9.1.5(15) Design frames and anchors for door, sidelights, interior and exterior windows in areas to which Clients will have access, and other areas as requested by the Authority, to withstand a heavy degree of impact while maintaining their aesthetic and functional capacities. Glazing of such components will comply with Section 6.9.2.13 and Section 6.9.2.14 and use hospital-type cut-away jambs.	Yes	Yes				
6.9.1.5(16) Design all doors at mechanical, electrical, plumbing and telecommunication rooms to swing out, unless required otherwise by code, and be lockable through access control system.	Yes	Yes	Limited to review scope			
6.9.1.5(17) Provide a restricted keyway system for all lock cylinders in the Facility. Obtain the restricted keyway system from the applicable lockset manufacturer(s) on behalf of, and in the name of, the Authority. The Authority will control the restricted keyway system	Yes	Yes	generally medeco locks were used as witnessed			
such that all spare keys and key blanks must be ordered by an authorized representative of the Authority.	No					
6.9.1.5(18) Wicket and "door within a door" types of doors are not acceptable.	Yes	Yes				
6.9.1.5(19) Provide doors with vision panel in the following Secure Client care units and Forensic Assessment Client care unit rooms:	Yes	Yes				
6.9.1.5(19)(a) private Client room medical;	Yes	Yes				
6.9.1.5(19)(b) private Client room bariatric; and	Yes	Yes				
6.9.1.5(19)(c) private Client room.	Yes	Yes				
6.9.1.5(20) Provide doors with vision panel in the private Client rooms medical in the following areas:	Yes	Yes				
6.9.1.5(20)(a) Non-Secure Client care units; and	Yes	Yes				
6.9.1.5(20)(b) Forensic client care unit.	Yes	Yes				
6.9.1.5(21) Vision panels will not be allowed in the following Non-Secure Client care units and forensic Client care unit rooms:						
6.9.1.5(21)(a) private client room; and	Yes	Yes				
6.9.1.5(21)(b) private Client room bariatric.	Yes	Yes				
6.9.1.5(22) Provide doors with vision panel in the following areas:	Yes	Yes				
6.9.1.5(22)(a) all Sally Ports and Secure Vestibules; and	Yes	Yes				
6.9.1.5(22)(b) doors into stairwells (exit stairs and convenience stairs), as code permits.	Yes	Yes				
6.9.1.5(23) Project Co will provide door assemblies in accordance to the intended use of the room and ensure the security requirements are met based on the SLC definitions as stated in Appendix 3A [Clinical Specifications].	No					
6.9.1.6 Exterior Windows						
6.9.1.6(1) Size, configure, and adequately construct windows to suit rooms that require daylight, views and/or natural ventilation.	No					

	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
6.9.1.6(2) Provide window framing systems that are thermally-broken and designed based on principles of pressure equalized rain screen.	No					
6.9.1.6(3) Provide operable windows (windows that may be opened and closed) in all rooms and spaces where acceptable for the functionality of the room or space, as described in Appendix 3A [Clinical Specifications]. Provide contacts for each operable window to signal whether windows are open or closed, and monitor window contacts through the BMS. Ensure operable windows are in	Yes	No	Roto-vents provided in non-secure areas for natural ventilation, but they do not appear to be monitored by the BMS	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	A more detailed review of the BMS system is required
6.9.1.7 Interior Windows						
6.9.1.7(1) Provide 'borrowed light' through interior windows to occupied rooms that do not have exterior windows. The intent is to borrow light from areas that have windows and consequently create a more comfortable and less closed-in atmosphere.	Yes	Yes	This project agreement clause is subjective and verification would require input from the building operator			
6.9.1.7(2) In the wall between the IPCR Vestibule and the IPCR, provide an interior window with the following minimum dimensions: 900mm in width and 1200mm in height.	Yes	Yes				
6.9.1.7(3) Coordinate glazing heights with adjacent wall protection, handrails, and other accessories to achieve functional and aesthetic cohesiveness.	Yes	Yes				
6.9.2 Performance Criteria						
6.9.2.1 Hollow Metal Doors and Frames						
6.9.2.1(1) Ensure materials and manufacture of metal doors comply with the requirements of the Canadian Steel Door and Frame Manufacturer's Association (CSDFMA).	No					
6.9.2.1(2) Provide interior metal doors with flush face construction.	Yes	Yes				
6.9.2.1(3) Provide exterior metal doors with:						
6.9.2.1(3)(a) flush face construction;	Yes	Yes				
6.9.2.1(3)(b) edge seams to correspond with door function and minimize maintenance needed; and	Yes	Yes	This project agreement clause is subjective and verification would require input from the building			
6.9.2.1(3)(c) prepared surfaces to receive finishes that resist corrosion from exposure to weather.	Yes	Yes				
6.9.2.1(4) Provide pressed metal frames with:						
6.9.2.1(4)(a) fully welded construction (knock-down type frames are not allowed;	Yes	Yes				
6.9.2.1(4)(b) thermally-broken door frames for exterior door; and	Yes	Yes				
6.9.2.1(4)(c) anchors to each jamb to suit wall type and receive the frame.	No					
6.9.2.1(5) Door Glazing						
6.9.2.1(5)(a) For exterior hollow metal door glazing, use sealed units with warm edge, in thermally-broken frames to prevent heat loss.	Yes	Yes				
6.9.2.2 Security Doors						
6.9.2.2(1) Security doors, their corresponding hardware, and vision panels are required for SLC1, SLC1A and the Secure Perimeter and will be designed and constructed in accordance with Section 5.14.3.8 of this Schedule, in addition to all applicable requirements in this Section.	No					
6.9.2.3 Wood Doors						
6.9.2.3(1) Ensure all wood doors comply with all applicable standards, including the Quality Standards for Architectural Woodwork published by the Architectural Woodwork Manufacturer's Association of Canada (AWMAC).	No					
6.9.2.3(2) Provide wood doors with hardware and finishes that suit the intended function and aesthetics of the building.	No					
6.9.2.3(3) Construct, finish, and install wood doors to minimize the requirement for maintenance and resulting disruption to Facility operations.	Yes	Yes	This project agreement clause is subjective and verification would require input from the building operator			
6.9.2.3(4) Provide wood doors in flush design, Architectural Grade quality (as defined in the AWMAC standards referred to above), solid particleboard core.	No					
6.9.2.3(5) Provide fire-resistance rated doors with a homogeneous incombustible mineral core and AWMAC Quality Standards Option 5 blocking.	No					
6.9.2.3(6) Install finish hardware securely to resist loosening over time. Fasten to solid wood backing, except where hardware is designed to be through-bolted.	Yes	Yes	Limited to observation			
6.9.2.3(7) Glue stiles, rails and faces to the core with Type II water-resistant adhesive to minimize de-lamination or disassembly as a result of moisture ingress.	No					
6.9.2.3(8) Use B-Grade hardwood veneer with AWMAC No. 3 edge, finish to suit the intended use.	No					
6.9.2.3(9) Use wood doors with fiber reinforced laminate finish in SLC 2, SLC 3 and SLC 4 areas. Finish will be either solid colour or wood-look. Selection and locations will be determined in further consultation with the Authority.	No					
6.9.2.3(10) In locations requiring radiation protection, line doors with lead and label such doors with lead thickness.	No					
6.9.2.3(11) Wood doors will not be allowed in SLC 1 and SLC 1A areas, the Secure Perimeter, and service rooms (i.e. mechanical, electrical, communications, etc.).	Yes	Yes				
6.9.2.3(12) In addition to the requirement in this Section 6.9.2.3, all wood doors will be in accordance with Section 5.14.3.8 of this Schedule.	No					
6.9.2.4 Aluminum Entrances and Storefronts						
6.9.2.4(1) Aluminum entrances and storefront framing and doors may form part of the exterior envelope of the buildings.	Yes	Yes	verified by visual review			
6.9.2.4(2) Provide glazed interior partitions as appropriate to comply with the functions of the spaces as defined by the Appendix 3A [Clinical Specifications].	No					
6.9.2.4(3) Use aluminum doors within aluminum entrances and storefront.	Yes	Yes	verified by visual review			
6.9.2.4(4) Use frames that are thermally-broken, flush glazed, aluminum sections, to accept insulating glass units.	Yes	Yes	verified by visual review			
6.9.2.4(5) Incorporate in the frames drained and vented system (rain screen) with a complete air and vapour seal, allowing any moisture entering the frame to drain to the exterior and allowing air into the pressuring chamber.	Yes	Yes	Limited to what is visible.			
6.9.2.4(6) Use aluminum swing entrance doors that are heavy-duty commercial or institutional grade that may be automatically operated, motion-detector controlled.	No					
6.9.2.4(7) Apply aluminum finish for exposed aluminum surfaces. Finish to be permanent and resistant to corrosion caused by weather exposure and climate.	No					
6.9.2.5 Specialty Doors						
6.9.2.5(1) Overhead Rolling Service Doors						
6.9.2.5(1)(a) Restrain lateral movement of door curtain slats. Provide windlocks as required by door size or wind load requirements.	No					
6.9.2.5(1)(b) Provide interlocking flat slats, complete with bottom bar and contact type bottom astragal.	No					
6.9.2.5(1)(c) For manually operated doors, provide inside lift handle and locking bar or chain hoist. Motor operation may be provided on doors requiring constant usage. Chain operation will be by means of reduction gears and galvanized hand chain.	No					
6.9.2.5(1)(d) For fire doors, provide automatic closing device operated by fire door release device connected to fire alarm system.	No					
6.9.2.5(1)(e) Insulate overhead rolling service doors with a minimum insulation value of RSI-1.4 (R-8), and provide weather stripping / seals.	Yes	Yes	Verified			
6.9.2.5(2) Overhead Rolling Grilles						
6.9.2.5(2)(a) Provide grilles that allow visual access to secure areas.	Yes	Yes	None witnessed			
6.9.2.5(2)(b) Provide aluminum or steel guides that are: fabricated to withstand vertical and lateral loads; counterbalanced by helical torsion springs; and sound-deadened.	No					
6.9.2.5(2)(c) For manually operated closures, provide inside lift handle and locking bar or chain hoist. Provide motor operation on grilles requiring constant usage. Provide chain operation by means of reduction gears and heavy chrome plated hand chain.	No					
6.9.2.5(3) Overhead Rolling Counter Shutters / Horizontal Sliding Grilles						
6.9.2.5(3)(a) Provide shutter curtains fabricated with extruded aluminum, galvanized steel, or stainless steel interlocking flat slats, complete with guides of similar materials.	Yes	Yes				
6.9.2.5(3)(b) Provide closures that are manually operated and with locking capability.	Yes	Yes				
6.9.2.5(4) Interior Aluminum Sliding Doors and Sidelights						
6.9.2.5(4)(a) Provide interior glass sliding doors and sidelights without floor track.	Yes	Yes	None observed with floor tracks			
6.9.2.5(4)(b) Provide interior sliding doors and interior glass sliding doors with break-out capability.	Yes	Yes				
6.9.2.5(4)(c) Provide visual cues/glazing film in transparent glass panels as appropriate to prevent collisions.	Yes	Yes				
6.9.2.5(5) Automatic Sliding Doors						
6.9.2.5(5)(a) Automatic sliding doors complete with break-away capability for exiting may be installed at the main entrance of the Main Building, provided that the size and configuration of the entrance vestibule is designed such that both sets of doors will not be open at the same time.	Yes	Yes				

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6.9.2.5(5)(b) Ensure door equipment will accommodate medium to heavy pedestrian traffic and up to the following weights for active leaf doors: 100 kg for bi-part doors and 200 kg for single slide doors.	No					
6.9.2.5(5)(c) Provide door operators, including the motion and presence detection system, that are capable of operating within the temperature ranges existing at the Facility Main Building and Ancillary Buildings and unaffected by ambient light or ultrasonic interference.	No					
6.9.2.5(5)(d) Provide energy-saving devices to reduce conditioned air loss.	No					
6.9.2.5(5)(e) Provide integration with access control system.	No					
6.9.2.5(6) Automatic Swing Doors						
6.9.2.5(6)(a) Use automatic swing doors for interior and exterior locations where appropriate, including the entrance vestibule, cross-corridor double-egress doors, entrances to departments and areas where equipment is frequently wheeled, and doors to exterior spaces that are required to be handicapped accessible.	Yes	Yes				
6.9.2.5(6)(b) If used, provide directional motion sensor control device that are unaffected by ambient light or ultrasonic frequencies.	No					
6.9.2.5(6)(c) Equip all in-swing doors that are required exits with an emergency breakaway switch that internally cuts power to the operator. No external power switch allowed.	No					
6.9.2.5(6)(d) Implement longer hold-open times to accommodate the elderly and frail.	No					
6.9.2.5(6)(e) Provide integration with access control system.	No					
6.9.2.6 Aluminum Windows and Curtain Walls						
6.9.2.6(1) Ensure aluminum windows and curtain walls comply with all applicable standards, including the Aluminum Association Standards (AAS) and the American Architectural Manufacturers Association (AAMA) field testing specifications.	No					
6.9.2.6(2) Incorporate in aluminum windows and curtain walls a drained and vented system complete with air and vapour seal, allowing any water entering the framing/system and the glazing detail cavities to drain to the exterior and also allow air into the pressuring chamber.	Yes	Yes	Limited to what is visible.			
6.9.2.6(3) Provide aluminum windows and curtain walls that incorporate a thermal-break.	Yes	TBD	Thermal break is not visible, review of submittal is required to confirm.			Remove glazing to confirm thermal break
6.9.2.6(4) For exposed aluminum surfaces, provide a finish that is permanent and resistant to corrosion resulting from weather exposure and climate.	Yes	Yes	Limited to what is visible.			
6.9.2.6(5) Window wall framing relying on primary face seals is not allowed.	Yes	Yes	No window wall assemblies were observed			
6.9.2.6(6) Curtain Wall Minimum Performance:						
6.9.2.6(6)(a) Design the air infiltration rate for fixed glazing to be maximum 0.1 L/s/m2 (0.02 cfm/ft2) of glazing area when tested in accordance with ASTM E283 at test pressure of 300 Pa (6.24 psf).	No		The provided documents do not include this information. Air leakage test reports are required. This should be available from the curtain wall manufacturer			
6.9.2.6(6)(b) Ensure no condensation or frost will form on the interior of glazing or framing members when tested under the following conditions:	No					
(b).1 interior air 22°C, 20% R.H. minimum and (b).2 exterior air -32°C, 24 km/h (15 ml/h) wind speed.	No					
6.9.2.6(6)(c) Design the framing system such that condensation and frost will not form on the interior surface of the aluminum members before appearing on the adjacent insulating glass units. To achieve this requirement, any metal on the exterior will require a thermal break between work on the interior.	Yes	No	Visual review confirms this is not met. Condensation forms on interior aluminum surfaces before appearing on glass units	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Remove select glass units to confirm thermal break
6.9.2.6(6)(d) Fixed Vision Glazing Thermal Transmittance (U-factor): Ensure fixed vision glazing and framing areas have U- factor of not more than 0.33 Btu/sq. ft. x h x deg F (1.87 W/sq. m x K) for double-glazed units and 0.25 Btu/sq. ft. x h x deg F (1.41 W/sq. m x K) for triple-glazed units as average of largest and smallest lites as determined according to NFRC 100.	No		The provided documents do not provide U values. This information should be available from the glazing manufacturer			
6.9.2.6(6)(e) Non-Vision (Spandrel) Thermal Transmittance (U-factor): Ensure non-vision zones have spandrel assembly U- factor of not more than 0.10 Btu/sq. ft. x h x deg F (0.567 W/sq. m x K) as determined according to NFRC 100.	Yes	Yes	N/A. No spandrels were incorporated in curtain wall assemblies			
6.9.2.6(7) Greenhouse:						
6.9.2.6(7)(a) When tested in accordance with ASTM E-283 air infiltration, ensure the exterior glazing will not exceed .06 CFM per square foot (.0003 m3 / s-m2) of fixed area, plus .3 CFM per foot of ventilator crack length at 6.24 PSF (75Pa).	No					
6.9.2.6(7)(b) When tested in accordance with ASTM E-331, ensure there is no uncontrolled water penetration of the glazing system at a test pressure of 6.24 PSF.	No					
6.9.2.6(7)(c) Ensure structural performance of the glazing system will not exceed a maximum deflection of 1/175 of span, and the allowable stress of the glazing system will provide a minimum safety factor of 1.65.	No					
6.9.2.6(7)(d) All glazing in the Greenhouse will be tempered laminated.	Yes	Yes	Visual review confirmed this requirement was met			
6.9.2.7 Security Windows - SLC 1, SLC 2, SLC 3, and Secure Perimeter						
6.9.2.7(1) In addition to conform to all applicable requirements in Section 6.9:						
6.9.2.7(1)(a) provide security glazing with integral blind system as appropriate for the level of privacy and in accordance with Appendix 3A [Clinical Specifications]. Refer to Section 6.13.3;	Yes	Yes	Upon review of the document			
6.9.2.7(1)(b) ensure security windows comply with the 2000 ft-lb impact test as specified by New York State Office of Mental Health, Patient Safety Standards – Materials and Systems Guidelines and AAMA 501.8 Standard Test Method for Determination of Resistance to Human Impact of Window Systems Intended for Use in Psychiatric Applications; and	No					
6.9.2.7(1)(c) for operable windows, where applicable:						
(c).1 provide impact resistant security screens to prevent items being thrown from the Main Building; and (c).2 limit window opening to a maximum 100mm wide.	No					
6.9.2.7(2) Project Co will explore alternative glazing products for exterior window applications such as smart glass and other similar products in lieu of integral blind systems and propose them accordingly. Refer to Section 3.9.	No					
6.9.2.8 Not used.						
6.9.2.9 Skylights and Clerestory						
6.9.2.9(1) Skylights will comply with all applicable standards, including the Aluminum Association Standards (AAS), and the American Architectural Manufacturers Association (AAMA) field testing specifications.	No					
6.9.2.9(2) Incorporate in skylights and clerestory windows a drained and vented system complete with air and vapour seal, allowing any water entering the framing/system and the glazing detail cavities to drain to the exterior and also allow air into the pressuring chamber.	No					
6.9.2.9(3) Provide skylights and clerestory windows that incorporate a thermal-break.	No					
6.9.2.9(4) Roof or skylight glazing may be provided where natural light is required in interior spaces to augment or complement interior ambient lighting.	No					
6.9.2.9(5) Provide skylights that are sealed double glazed in thermally-broken, internally drained rain screen type extruded aluminum frames. Plastic skylights are not to be used.	No					
6.9.2.9(6) For exposed aluminum surfaces, provide a finish that is permanent and resistant to corrosion resulting from weather exposure and climate.	No					
6.9.2.9(7) Not used.	No					
6.9.2.9(8) When design provides for light through the roof, clerestory glazing is preferred over sloped glazing or skylights.	No					
6.9.2.9(9) Glazing slope will be 30° or greater.	No					
6.9.2.9(10) Ensure skylights, sloped glazing and clerestory windows are fully accessible for maintenance and cleaning from the interior and exterior of the buildings without disruption to their operations.	No					
6.9.2.9(11) Ensure air seal and water seal connections to curbs and walls will be fully accessible and will not be dependent on construction sequence.	No					
6.9.2.9(12) Provide drainage of water entering the glazing system to the exterior under all conditions.	No					

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6.9.2.9(13) Design glazing to prevent condensation on the interior face of the glazing or framing system. Provide interior gutters to catch water in the event condensation occurs. Drain condensation gutters to the interior.	No					
6.9.2.9(14) Provide dry glazing.	Yes	Yes	Limited to what is visible.			
6.9.2.10 Light Tubes						
6.9.2.10(1) If light tubes are required for providing natural light to internal areas, provide a reflective light tube system that that will transmit the full range of natural light, ensuring a bright, clean and white light source.	Yes	Yes	None observed			
6.9.2.10(2) Provide a daylight dimmer to control the level of light.	Yes	Yes	None observed			
6.9.2.10(3) Coordinate the light tube solution with the other components of the ceiling design, including the artificial lighting, to provide an integrated design solution.	Yes	Yes	None observed			
6.9.2.11 Roof Hatches						
6.9.2.11(1) Minimize use of roof hatch accesses per Section 5.4.1.3(5). If roof hatches are used to provide access to the roof for maintenance:	Yes	Yes				
6.9.2.11(2) provide access ladders and ships ladders;	Yes	Yes				
6.9.2.11(3) the minimum hatch size will be 762 mm x 762 mm;	Yes	Yes				
6.9.2.11(4) door will be electrified; and	Yes	Yes				
6.9.2.11(5) provide hardware that is lockable and will integrate with access control system.	Yes	Yes				
6.9.2.12 Entrance Mat Wells		Yes				
6.9.2.12(1) Provide a recessed, integrated mat well at all entrances with built in drainage.	Yes	Yes				
6.9.2.13 Glass and Glazing						
6.9.2.13(1) Ensure glass and glazing comply with all applicable standards, including the Insulating Glass Manufacturers Association of Canada (IGMAC) Guidelines and the equivalent standards to the Glazing Contractors Association of B.C. (GCA) Glazing Systems Specifications Manual.	No					
6.9.2.13(2) Exterior and interior glass and glazing may be provided as integral components of the exterior envelope, interior partitions and screens, exterior and interior doors, handrail balustrades, skylights and decorative and ornamental glazing.	Yes	Yes				
6.9.2.13(3) Not used.						
6.9.2.13(4) Use of wired glass is not permitted anywhere in the Facility. When glass is used in a fire rated partition Project Co will provide non-wired fire rated glass and meet all applicable standards and codes.	Yes	Yes				
6.9.2.13(5) Provide glazing with excellent optical clarity and ease of maintenance over time.	Yes	Yes				
6.9.2.13(6) Ensure glazing will withstand secondary threats, whether natural or man induced.	No					
6.9.2.13(7) Ensure glazing will provide for a "fail safe" condition once attacked, and will provide a barrier to keep people from entering or exiting a space without the need for an immediate "board-up".	No					
6.9.2.13(8) Ensure glazing will not allow for:						
6.9.2.13(8)(a) excessive loss of the glazing on the rear or protected side; or	No					
6.9.2.13(8)(b) breach of the building envelope and resulting exposure of the protected side.	No					
6.9.2.13(9) Interior glazing in hospital facilities is subject to possible frequent damage. Design the window sizes within the Main Building to a common standard size in order to reduce manufacturing costs and simplify the stocking of glazing material for replacement purposes.	No					
6.9.2.13(10) Provide interior glass sliding doors and sliding and fixed panel(s) that are single glazed with 6 mm clear fully tempered-laminated glass.	No					
6.9.2.14 Security Glazing – SLC 1, SLC 1A, SLC 2, and SLC 3 areas						
6.9.2.14(1) In insulating glass units, locate security glazing on the side where impact will occur. If impact will occur from both sides, provide security glazing on both sides of the insulating glass unit.	No					
6.9.2.14(2) Heat strengthen laminated safety glass to CAN/CGSB 12.1-M90.	No					
6.9.2.14(3) Ensure laminated glass products are fabricated free of foreign substances and air or glass pockets in autoclave with heat plus pressure.	No					
6.9.2.14(4) Comply with the 2000 ft-lb impact test as specified by New York State Office of Mental Health, Patient Safety Standards – Materials and Systems Guidelines and AAMA 501.8 Standard Test Method for Determination of Resistance to Human Impact of Window Systems Intended for Use in Psychiatric Applications. .	No					
6.9.2.15 Not used.						
6.9.2.16 Ensure non-wired fire rated glazing meets the following requirements:	No					
6.9.2.16(1) clear ceramic laminated, fire rated glass.	No					
6.9.2.16(2) impact Safety Resistance: ANSI Z97.1 and CPSC 16CFR1201 (Cat. I and II).	No					
6.9.2.17 Ensure non-wired fire rated security glazing meets the following requirements:						
6.9.2.17(1) clear ceramic laminated, fire rated glass for use in impact safety- rated locations such as doors, transoms, and borrowed lites complete with 0.3 mm (0.012") security anti-spall film.	No					
6.9.2.17(2) Impact Safety Resistance:						
6.9.2.17(2)(a) Comply with the New York State Office of Mental Health, Patient Safety Standards – Materials and Systems Guidelines.	No					
6.9.2.17(2)(b) Impact test performance: Provide glazing capable of withstanding minimum of ten 2000 ft-lb. impact loads from 1 foot diameter impact object without breach or dislodging of the glass or glazing materials.	No					
6.9.2.18 Mirrors						
6.9.2.18(1) For full wall unframed mirrors, use 6 mm thick minimum float glass backed with electrolytically-applied copper plating. Grind smooth and polish all edges.	No					
6.9.2.18(2) For wall mounted posture mirrors, use framed type; one piece, stainless steel channel frame with a No. 1 quality, 6 mm thick float glass mirror backed with electrolytically applied copper plating. Back with galvanized steel.	No					
6.9.2.18(3) In SCL 1 areas, no mirrors are allowed.	No					
6.9.2.18(4) In SLC 2 and SLC 3 areas, ensure mirrors are unbreakable, do not use glass and are securely fastened to the wall. Mirrors will not distort the viewer's reflection.	No					
6.9.2.18(5) In the IPCRs use one-way (two-way) mirrored glass that complies with CAN/CGSB-12.6; is 6 mm thick; and meets the criteria below, unless otherwise indicated:	No					
6.9.2.18(5)(a) Type 1 - Metallic coating applied to clear or tinted glass.	No					
6.9.2.18(5)(b) Class C - Tempered.	No					
6.9.2.18(5)(c) Form 1 - Float.	No					
6.9.2.19 Detention Equipment						
6.9.2.19(1) Coordinate the supply and installation of all detention equipment through a single detention equipment contractor, with the following qualifications:	No					
6.9.2.19(1)(a) a minimum of ten (10) years documented experience specifying and coordinating the installation of detention hardware, including security door assemblies; and	No					
6.9.2.19(1)(b) all of the following certifications, obtained from the DHI: (b).1 Architectural Hardware Consultant (AHC); (b).2 Certified Door Consultant (CDC); and (b).3 Electrical Hardware Consultant (EHC).	No					
6.9.2.19(2) Project Co may source the supply and installation of detention equipment through more than one source, provided that all products and installations are compatible and coordinated by the detention equipment contractor.	No					
6.9.2.19(3) Ensure detention door assemblies conform to, and are tested in accordance with, the ASTM F standards listed below. Project Co will prepare and submit reports and documentation confirming testing and performance of all detention door assemblies in accordance with:	No					
6.9.2.19(3)(a) ASTM F 1450: Test Methods for Hollow Metal Swinging Door Assemblies for Detention and Correctional Facilities, Section 9, "Report";	No					
6.9.2.19(3)(b) ASTM F 1592: Standard Test Methods for Detention Hollow Metal Vision Systems, Section 8, "Certification and Reports";	No					
6.9.2.19(3)(c) ASTM F 1577: Standard Test Methods for Detention Locks for Swinging Doors, Section 7, "Report"; and	No					
6.9.2.19(3)(d) ASTM F 1758 -05: Standard Test Methods for Detention Hinges Used on Detention-Grade Swinging Doors, Section 10 "Report".	No					
6.9.2.20 Finish Hardware						
6.9.2.20(1) Provide finish hardware that complies with all applicable standards, including the quality standards of the Door and Hardware Institute (DHI).	No					
6.9.2.20(2) Provide all finish hardware from one supplier that is a member in good standing of the Door and Hardware Institute (DHI) and has in its employ one or more AHC (Architectural Hardware Consultant).	No					

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6.9.2.20(3) Integrate hardware with the security requirements and coordinate with electrical wiring and power requirements.	No					
6.9.2.20(4) See Appendix 3D(v) [Door Operations Matrix] for additional requirements.						
6.9.2.20(5) Where openings are designed for locked down scenarios and are not congruent with building code compliance and life safety, such as IPCR rooms, holding rooms and private Client rooms Project Co will provide a code variance and obtain approval from the relevant Governmental Authority.	No					
6.9.2.20(6) In fire alarm conditions where openings are required to become fail secure, Project Co will provide a code variance and obtain approval from the relevant Governmental Authority.	No					
6.9.2.20(7) Project Co will also provide written procedures outlining specific rescue plans for those locations in the Facility that are designed for lock down scenarios or to be fail secure to the Authority and the local fire authorities.	No					
6.9.2.20(8) Select finishes that will provide maximum longevity and preservation of the finish.	No					
6.9.2.20(9) Provide, where applicable, ULC-listed hardware for the required fire rating.	No					
6.9.2.20(10) Use heavy-duty commercial quality hardware with locksets and latchsets fully mortised type and lever handles of solid material.	No					
6.9.2.20(11) For all doors with maglocks, provide a key override on both sides of the door.	No					
6.9.2.20(12) For special areas identified through the user consultation process as described in Appendix 2B [User Consultation and Design Review], provide hardware to suit the purposes unique to those areas.	No					
6.9.2.20(13) Ensure all hardware, including door strikes, are ligature resistant.	Yes	No	Although anti-ligature handle sets are used, non-concealed door closers are often used in conjunction which provide a significant ligature risk (#642, #123)	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	A comprehensive review of ligature risks should be carried out
6.9.2.20(14) Security door assemblies - Provide access and egress hardware for security door assemblies to restrict and control movement through the Main Building. Ensure hardware provides no opportunity for tampering or abuse.	Yes	Yes	Exiting plans required with any relevant exceptions allowed by the Authority			
6.9.2.20(15) For security door assemblies, with the exception of secure Client room doors and holding room doors, include a detention grade concealed door closer. For non-secure door assemblies that have no special detention requirements, provide heavy-duty commercial grade hardware for doors and frames, that provide normal security and resistance to tampering or abuse.	No					
6.9.2.20(16) Provide remote capable locking systems (pneumatic or electric) with connection to the ESS. Conform locksets for detention door assemblies to Grade 2 standards, as defined in the applicable ASTM standards, with the exception of Sally Port doors, which will conform to Grade 1 standards, as defined in the applicable ASTM standards.	No					
6.9.2.20(16)(a) Equip each Grade 2 lockset with a restricted keyway mogul high security cylinder that allows for manual locking and unlocking.	No					
6.9.2.20(16)(b) Equip each Grade 1 lockset with a restricted paracentric high security cylinder that allows for manual locking and unlocking.	No					
6.9.2.20(17) Test detention locksets in accordance with ASTM F 1577, Section 6 "Testing Methods".	No					
6.9.2.20(18) Prepare and submit reports and documentation of testing and performance in accordance with ASTM F 1577, Section 7 "Reports" for each type of detention lockset. All test reports will be current within two (2) years of the date of installation and all tests will be performed under the applicable manufacturer's current organizational structure.	No					
6.9.2.20(19) In addition to the Section 5.16.5.3(2)(a) requirements, ensure door and hardware selections comply with applicable provisions in Section 7.9 of this Schedule.	No					
6.9.2.20(20) Electronic Door Security – refer to Section 7.9.4 of this Schedule.	No					
6.9.2.20(21) Keying						
6.9.2.20(21)(a) Supply and install ASSA key cylinders, or pre-approved cylinders of equivalent quality, 6 pin (factory pinned).	No					
6.9.2.20(21)(b) Implement a 4-level system.	No					
6.9.2.20(21)(c) Keying groups will be assigned by the Authority.	No					
6.9.2.20(21)(d) New key fittings will be given to and controlled by the Authority.	No					
6.9.2.20(21)(e) Develop a keying schedule in consultation with the Authority	No					
6.9.2.20(21)(f) Turn over keys from factory to the Authority.	No					
6.9.2.20(21)(g) Supply four (4) keys for each lock cylinder.	No					
6.10 Finishes (Division 9)						
6.10.1 Basic Requirements						
6.10.1.1 Provide interior finishes that are capable of being easily cleaned throughout the Operating Period.	Yes	Yes	The wood handrail was noted as a difficult material but was specifically required by the PA			
6.10.1.2 In areas where finishes and systems of installation will occur and water is anticipated to be present as part of cleaning or other procedures, allow water to collect and exit without causing damage to the finishes or substrate.	Yes	No	Some change room and shower areas show evidence of ponding or excessive rusting of floor drains. #629, #633	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Replace problematic (light blue) drain covers. Replace shower niches and grab bars which are prematurely rusting
6.10.1.3 For areas in which wear is a concern, such as areas with anticipated pedestrian or wheeled traffic, use durable finish materials able to withstand damage and easily replaceable in sections if damage does occur.	Yes	Yes	open to interpretation without a standard being referenced			
6.10.1.4 Give priority to infection prevention and control in the selection of finishes where applicable as indicated in the Appendix 3A [Clinical Specifications]. Acoustic characteristics of finish materials will also be a priority consideration.	No					
6.10.1.5 Select the appearance of finishes and colours to create and promote a natural healing environment, prevent glare, and minimize artificial lighting requirements.	No					
6.10.1.6 Select materials to promote sustainability by, for instance, having low-emissivity or comprising of renewable resources.	No					
6.10.1.7 Select finish materials that do not use known carcinogenic material or chemicals in their manufacture or disposal. Consult the Green Guide for Healthcare.	No					
6.10.1.8 Select finishes and materials that will be durable to dissuade attack and damage and secure them such that they will not be dislodged by Clients or other persons without use of special tools. Finishes and materials in areas SLC 1, SLC 1A SLC 2, SLC 3, and the Secure Perimeter will be unbreakable, to the extent possible, to prevent use of pieces of materials as weapons or for creating areas of concealment. Refer to Section 5.14.3.8 of this Schedule..	No					
6.10.2 Performance Criteria						
6.10.2.1 Interior Wall Framing						
6.10.2.1(1) Interior wall framing will comply with all applicable standards, including the Canadian Sheet Steel Building Institute Standards (CSSB1) and the equivalent standards to the Association of Wall and Ceiling Contractors of B.C. (AWCC) Wall & Ceiling Specification Standards Manual for materials and workmanship for interior walls, including steel studs and furring and gypsum wall board ceiling suspension systems.	No					
6.10.2.1(2) System design and components will meet seismic restraint requirements for a post-disaster building where applicable.	No					
6.10.2.1(3) Use prefabricated non-load bearing steel studs for interior partitions and furring with no axial load other than its own weight, the weight of attached finishes, and lateral loads of interior pressure differences and seismic loads.	No					
6.10.2.1(4) Construct steel stud framing to accommodate electrical, plumbing and other services in the partition cavity, and to support fixtures, wall cabinets, medical equipment and other such wall-mounted items. Provide reinforcement and backing throughout.	No					
6.10.2.1(5) Design systems for the differences in air pressure that may result on opposite sides of the wall or partition due to factors such as wind and other lateral pressures, stack effects, or mechanically-induced air pressurization.	No					
6.10.2.1(6) Provide backing for wall and ceiling mounted equipment and furnishings, handrails, grab-bars, wall protection and other similar items. Identify areas for mounting artwork and other display items that would require backing and confirm with the Authority.	No					
6.10.2.2 Gypsum Wall Board						
6.10.2.2(1) Gypsum wall board will comply with all applicable standards, the equivalent standards to the Association of Wall and Ceiling Contractors of B.C. (AWCC) Wall & Ceiling Specification Standards Manual, and the following standards:	No					
6.10.2.2(1)(a) Plain gypsum board: to ASTM C1396/C1396-03a.	No					
6.10.2.2(1)(b) Fire-rated gypsum board: to ASTM C1396, Type X, Type C.	No					
6.10.2.2(1)(c) Abuse and impact resistant gypsum board: (c).1 Surface abrasion surface damage: to ASTM C1629. (c).2 Soft-body impact penetration: to ASTM E695.	No					
6.10.2.2(1)(d) Mould and moisture resistant board: to ASTM C1396. Paper face and moisture resistant core.	No					

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6.10.2.2(1)(e) Glass scrim exterior sheathing gypsum board: to ASTM C1177. Glass scrim faced on front and back sides and long edges, silicone-treated water-resistant core, to ASTM C1177/C1177M-04e1, fire rated where required.	No					
6.10.2.2(1)(f) Glass scrim tile backer gypsum board: moisture resistant core and fiberglass face mats and heat cured water resistant face coating to ASTM C1178/C1178M-04.	No					
6.10.2.2(1)(g) Gypsum shaftwall liner: to ASTM C1396 .25 mm minimum thickness.	No					
6.10.2.2(1)(h) Cement board: To ANSI A118.9, 12.5 mm cementitious tile backer board. High strength Portland cement building panel with self-adhesive glass tape.	No					
6.10.2.2(2) Gypsum wall board will be no less than 16 mm in thickness.	No					
6.10.2.2(3) Use cementitious backer board (tile backer board) behind ceramic wall tile in showers or other wet areas. Use glass mat water-resistant gypsum backing panels behind sinks.	No					
6.10.2.2(4) Provide abuse-resistant gypsum wall board in corridors with heavy Client, cart or equipment traffic, to be located on the bottom 1200mm of the corridor wall, in order to increase resistance to abrasion, indentation and penetration of interior walls.	No					
6.10.2.2(5) Use glass scrim exterior sheathing gypsum board wherever exterior gypsum sheathing is required at exterior walls.	No					
6.10.2.2(6) Provide airborne sound insulation for gypsum wall board/steel stud assembly to close off air leaks and flanking paths by which noise will go around the assembly. Make assemblies airtight. Do not locate back to back recessed wall fixtures such as cabinets or electrical, telephone and television outlets, which perforate the gypsum wall board surface. In addition, carefully cut any opening for fixtures to the proper size and appropriately seal piping penetration. Seal conduit/duct/piping penetrations with tape and fill at the plenum barrier. Make the entire perimeter of a sound insulating assembly airtight to prevent sound flanking. Use an acoustic caulking compound or acoustical sealant to seal between the assembly and all dissimilar surfaces (including at window mullions) in accordance with the recommendations of an acoustic consultant.	No					
6.10.2.2(7) Fasteners:						
6.10.2.2(7)(a) Fasteners for gypsum board: with corrosion resistant finish to ASTM C1002-01/ASTM C954 -04.	No					
6.10.2.2(7)(b) For cement board: with corrosion resistant polymer finish.	No					
6.10.2.2(7)(c) Tamper resistant fasteners: Fasteners on all products and systems exposed to view and accessible to patients to be tamper resistant, conforming to ISO standard 10664.	No					
6.10.2.2(8) Secure Perimeter wall/partition assemblies:	No					
6.10.2.2(8)(a) Interior partitions forming part of the Secure Perimeter will extend to the underside of structure above;	Yes	No	Limited to areas observed. Vestibules between client wings and courtyards do not extend do deck. (#628)	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Owner to comment on this is still a requirement
6.10.2.2(8)(b) Provide one of the following to the full extent of the wall face on the interior side in exterior wall assemblies and on the side with the highest SLC requirement for interior partitions: (b).1 one layer of 19mm fire retardant treated plywood between stud framing and exposed gypsum wall board layer, provided all applicable codes are met and with the approval of any authority having jurisdiction; (b).2 add one layer of security grade abuse resistant gypsum wall board (i.e. with metal lath component) between stud framing and exposed gypsum wall board layer; or (b).3 an equivalent assembly that will provide the same or higher level of resistance to breach, escape and damage that is to the satisfaction of the Authority.	No					
6.10.2.3 Ceramic Tilework						
6.10.2.3(1) Ceramic tilework will comply with all applicable standards, including the Terrazzo Tile and Marble Association of Canada (TTMAC) Specification Guide 09300 Tile Installation Manual.	No					
6.10.2.3(2) In order to reduce opportunities for the spread of infection, avoid use of ceramic tile in interior applications at Client and other clinical areas, and if used limit to no more than 10% of such applications.	No					
6.10.2.3(3) For installations on wet and exterior surfaces, use floor tiles that have the following dynamic coefficients of friction (DCOF) as per ANSI A137.1 standard:	No					
6.10.2.3(3)(a) Level Surfaces: Not less than 0.42 for interior wet and dry conditions, and not less than 0.65 for exterior wet and dry conditions.	No					
6.10.2.3(3)(b) Stair Treads: Not less than 0.55 for interior wet and dry conditions, and not less than 0.65 for exterior wet and dry conditions.	No					
6.10.2.3(3)(c) Ramp Surfaces interior and exterior: Not less than 0.65 wet and dry conditions.	No					
6.10.2.3(4) For exterior installations, provide frost-resistant exterior tiles with a moisture absorption rating of 3.0% or less.	No					
6.10.2.3(5) Provide control joints and expansion joints in conformance with the recommendations of the TTMAC Tile Installation Manual.	No					
6.10.2.3(6) Provide a waterproof membrane under ceramic floor and wall tile in showers and other wet areas. The membrane will be trowel-applied, built-up, liquid-applied or sheet-applied.	No					
6.10.2.3(7) Provide crack isolation membranes to resist crack transmission from the substrate due to lateral movement; design for use in thin- set applications of tile over a cracked substrate. Use elastomeric sheets or trowel-applied materials suitable for subsequent bonding of ceramic tile.	No					
6.10.2.3(8) Set ceramic tile with latex modified mortar and grout with epoxy grout.	No					
6.10.2.3(9) Only use Ceramic Tilework in SLC 4 and public areas.	Yes	Yes	tiling submittal review required			
6.10.2.4 Ceilings						
6.10.2.4(1) Ceiling reflectance will complement the lighting design.	No					
6.10.2.4(2) Provide permanence and durability appropriate for the applicable Security Level Classification in accordance with Section 5.14.3.8 of this Schedule.	No					
6.10.2.4(3) All ceiling systems and ceiling finishes will comply with the following:						
6.10.2.4(3)(a) fire and smoke separation and fire resistance ratings will conform to the requirements of the NBCC;	No					
6.10.2.4(3)(b) suspended ceilings will comply with seismic resistance as required by NBCC; and	No					
6.10.2.4(3)(c) equivalent standards to the Specification Standards Manual as published by the Association of Wall and Ceiling Contractors of BC (AWCC).	No					
6.10.2.4(4) Acoustic Tile Ceilings						
6.10.2.4(4)(a) Acoustic ceiling tiles in metal suspension system will:: (a).1 not be used in SLC 1 and SLC 2 areas; and (a).2 be permitted with hold down clips in SLC 1A and SLC 3 areas, except as indicated in Section 5.4.5.3(7) and Section 5.4.5.3(8).	No					
6.10.2.4(4)(b) Acoustic Panel: Non-directional, fissured pattern, Imperial dimension white ceiling panel, trim edge detail (square) to fit a standard 15/16" T-bar grid panel size.	No					
6.10.2.4(4)(c) Install acoustic ceiling tiles in the suspension system that comply with the requirements of Appendix 3C [Sound Transmission Ratings] and provide the levels of sound attenuation required to suit the intended function of the room.	No					
6.10.2.4(4)(d) All acoustic tile ceilings used in spaces which do not have special cleaning, maintenance or environmental needs (as in food preparation areas or high temperature / humidity areas) to have a Noise Reduction Co-efficient of 0.80 or greater.	No					
6.10.2.4(4)(e) Provide accessibility to the ceiling spaces where access is required to mechanical, electrical or other service systems.	No					
6.10.2.4(4)(f) Special surface-treated ceiling tiles, such as mylar, vinyl- faced or metal-faced tiles, may be used where maintenance and ease of cleaning are priorities as well as the accessibility and acoustic requirements.	No					

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6.10.2.4(4)(g) Provide acoustic panels that are appropriate for the normal occupancy condition range of 18°C - 28°C and maximum 70% relative humidity. When the service use temperature and relative humidity are expected to exceed these ranges, use acoustical units specifically designed for such applications.	No					
6.10.2.4(4)(h) Use tiles with scratch-resistant surfaces in any area where lay-in ceiling panels frequently need to be removed for plenum access.	No					
6.10.2.4(5) Hard Ceilings						
6.10.2.4(5)(a) Construct hard ceilings of 16 mm gypsum wall board or fire-rated gypsum board as required. Finish hard ceilings	No					
in accordance to Section 6.10.2.7. In addition to the applicable requirements in Section 5.4.5, provide hard ceilings for the following rooms: (a).1 kitchen and food preparation rooms, cart wash, pharmacy, Client clothing washing room, Client clothing drying room, (a).2 housekeeping and utility rooms; (a).3 clean supply rooms; (a).4 other areas where infection prevention and control may be an issue; and (a).5 washrooms and shower rooms.	Yes	No	questionable if t-bar ceiling system is suitable to the basement dry food storage room	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
6.10.2.4(5)(b) When applicable, hard ceilings in Client accessible areas: (b).1 construct a hard secured ceiling system that is not accessible or able to be dismantled by Clients and is secured with concealed tamper resistant fasteners to prevent entry into the ceiling space or adjoining spaces by Clients. Clients will not be able to dismantle the ceiling without use of special tools. (b).2 Make voids above suspended ceiling systems inaccessible to Clients. (b).3 Exposed building services are not permitted in: a. Lobbies, and b. any other Client accessible areas except where services are mounted at a minimum of 5000 mm above finished floor surfaces and stair landings and are otherwise unreachable by Clients using all reasonably available means.	No					
6.10.2.4(6) Access Panels						
6.10.2.4(6)(a) Where hard ceilings are used, provide access panels to allow for mechanical and electrical servicing in the ceiling.	No					
6.10.2.4(6)(b) Access panels are to be prefinished.	No					
6.10.2.4(6)(c) In SLC 1 areas, Secure Client Private rooms and Secure Client washrooms access panels will not be permitted.	Yes	Yes	clause appears to be complied with			
6.10.2.5 Flooring						
6.10.2.5(1) All Rooms except Wet Rooms						
6.10.2.5(1)(a) Use solid homogeneous sheet flooring, unless specified otherwise.	No					
6.10.2.5(1)(b) Hot weld all joint seams.	Yes	No	Joints between dissimilar floors were not typically sealed. IE Between VCT and LVT (#319, #127)	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	conduct full flooring review
6.10.2.5(1)(c) Use water soluble, low odour flooring adhesive.	No					
6.10.2.5(1)(d) Where there is no existing product to butt against, finish edging finish with vinyl finishing strip as per manufacturers' specifications.	No					
6.10.2.5(1)(e) Finish flooring with high speed buffing as per manufacturers' specification. Do not apply sealer or wax.	No					
6.10.2.5(2) Wet Rooms						
6.10.2.5(2)(a) Use slip-resistant solid sheet flooring that provides a coefficient of friction (COF) no less than 0.8 per ASTM D2047 standard in the following rooms: (a).1 Tub Room; (a).2 Soiled Utility Room; (a).3 Soiled Linen Room; (a).4 Client Laundry Room; (a).5 Housekeeping Room; (a).6 Dispensary/Medication Room; (a).7 Servery Room; (a).8 Staff Break/Locker Room; (a).9 Kitchen; (a).10 Kitchenette; (a).11 Changing/Locker Room; (a).12 Shower Room; (a).13 Specimen Collection/Washroom (a).14 IPCRs; and (a).15 All Washrooms;	No					
6.10.2.5(2)(b) Hot weld all joint seams.	Yes	Yes	Though some failed welds observed.			
6.10.2.5(2)(c) Provide integral wall base.	Yes	Yes	clause appears to be complied with			
6.10.2.5(2)(d) Use solvent based, low odour flooring adhesive.	No					
6.10.2.5(2)(e) Hot weld new flooring to existing floor product.	No					
6.10.2.5(2)(f) Finish flooring as per manufacturer's specification. Do not apply sealer or wax.	No					
6.10.2.5(3) Stair Covering						
6.10.2.5(3)(a) Use one piece treads and sheet risers with carborundum strip or an alternate designed for the visually impaired (product approved in advance by the Authority).	Yes	No	Exit stairs were unfinished concrete, with abrasive strips or additional nosings. (#639, #11)	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	confirm if change was approved. If not, provide floor finish
6.10.2.5(3)(b) Use water soluble, low odour adhesive.	No					
6.10.2.5(4) Comply with all applicable standards, including the National Floor Covering Association (NFCA) Specification Standards Manual. US Federal Specification RR-T-650d.	No					
6.10.2.5(5) Select flooring materials that are suitable for:						
6.10.2.5(5)(a) ease of cleaning and maintenance;	Yes	Yes	clause appears to be complied with			
6.10.2.5(5)(b) pedestrian and rolling traffic;	No					
6.10.2.5(5)(c) the acoustic requirements of the space;	No					
6.10.2.5(5)(d) infection prevention and control; and	No					
6.10.2.5(5)(e) the aesthetics of the Facility.	No					
6.10.2.5(6) Where epoxy flooring is used in wet areas, use water and slip- resistant grade and prevent water or moisture transmission to the substrate. Terminate flooring at the walls in the form of flash coves. Match the height of the base with all other wall bases.	Yes	Yes	clause appears to be complied with			
6.10.2.5(7) Use heavy-duty materials for flooring on which wheeled or service vehicle traffic is anticipated and to which wear and damage may result.	No					
6.10.2.5(8) Use permanent, heavy-duty integral materials for flooring in areas subject to moisture and heat over extended periods of time.	No					
6.10.2.5(9) Use suitable flooring in Client and staff areas where cart traffic is expected or where cleaning on a regular basis is necessary.	No					
6.10.2.5(10) Use water resistant and slip-resistant flooring in public, staff, and Client washrooms.	No					
6.10.2.5(11) Use resilient tile products for flooring in service corridors and service areas.	Yes	No	service areas to the basement utilized sealed concrete	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	confirm if change was approved
6.10.2.5(12) Use anti-static flooring material for telecommunication rooms.	No					
6.10.2.5(13) Provide flooring that will provide permanence and durability appropriate to the Security Level Classification and the specific function of each space as indicated in the Appendix 3A [Clinical Specifications].	Yes	Yes	very little variance in flooring types			
6.10.2.5(14) Resilient Flooring						
6.10.2.5(14)(a) Choose products with exposed surface having anti- bacterial properties to prevent entry of gram-positive and gram-negative micro-organisms.	No					
6.10.2.5(14)(b) Provide a coefficient of friction (COF) no less than 0.6 for level surfaces and 0.8 for incline surfaces per ASTM D2047 standard.	No					
6.10.2.5(14)(c) Avoid the use of linoleum sheet flooring.	Yes	Yes				
6.10.2.5(14)(d) Hot weld all seam joints.	Yes	Yes	clause appears to be complied with			
6.10.2.5(14)(e) Use solvent based low odour flooring adhesive.	No					
6.10.2.5(14)(f) Finish flooring with high speed buffing as per manufacturers specification.	No					
6.10.2.5(14)(g) Provide tactile warning strips and stair nosings to assist the visually impaired.	Yes	Yes	clause appears to be complied with			
6.10.2.5(14)(h) Use adhesive for resilient flooring that meets or exceeds the United States Environmental Protection Agency (EPA) Standards for acceptable VOC concentration and emission rates.	No					
6.10.2.5(14)(i) Provide integral wall base.	Yes	Yes	clause appears to be complied with			
6.10.2.5(15) Not used.						
6.10.2.5(16) Sports Flooring – Gymnasium & Cardio/Weight room						
6.10.2.5(16)(a) 6.10.2.5(16)(a) Provide sports flooring suitable for the intended use of the space.	Yes	Yes	clause appears to be complied with			
6.10.2.5(16)(b) 6.10.2.5(16)(b) Provide material that is a minimum of 7.5mm thick for shock absorption.	No					
6.10.2.5(16)(c) 6.10.2.5(16)(c) Choose products with exposed surface having anti-bacterial properties to prevent entry of gram- positive and gram-negative micro-organisms.	No					
6.10.2.5(16)(d) 6.10.2.5(16)(d) Provide a coefficient of friction (COF) no less than 0.6 for level surfaces and 0.8 for incline surfaces per ASTM D2047 standard.	No					
6.10.2.5(16)(e) 6.10.2.5(16)(e) Hot weld all seam joints or seamless.	Yes	Yes	clause appears to be complied with			
6.10.2.5(16)(f) 6.10.2.5(16)(f) Provide integral wall base.	Yes	Yes	clause appears to be complied with			
6.10.2.5(16)(g) 6.10.2.5(16)(g) Primers and adhesives will be waterproof, low VOC, of types recommended by flooring manufacturer.	No					
6.10.2.5(16)(h) 6.10.2.5(16)(h) Provide anti-reflective finish.	No					
6.10.2.5(16)(i) 6.10.2.5(16)(i) Ensure an Impact Sound Reduction of 6db when tested in accordance with ISO 717-2.e.	No					
6.10.2.5(17) Seamless Quartz Epoxy Flooring						
6.10.2.5(17)(a) Not used.						

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6.10.2.5(17)(b) Provide seamless epoxy flooring with 100% solids, zero VOC, solvent-free comprised of a two-component epoxy primer, a two-component epoxy resin and curing agent, coloured quartz aggregate broadcast into both primer and undercoat, and a high performance, UV-resistant two-component, clear epoxy sealer.	No					
6.10.2.5(17)(c) Provide integral wall base.	Yes	Yes	clause appears to be complied with			
6.10.2.5(17)(d) Provide a coefficient of friction (COF) no less than 0.6 for level surfaces and 0.8 for incline surfaces per ASTM D2047 standard.	No					
6.10.2.5(18) Carpets and Carpet Tiles						
6.10.2.5(18)(a) Only use of carpets and carpet tile in non-Client areas and non-wet areas, such as: (a).1 single and multi occupancy offices; (a).2 open office and administrative areas; (a).3 conference and meeting rooms; and (a).4 other similar administrative areas.	Yes	Yes	clause appears to be complied with			
6.10.2.5(18)(b) Provide secure wall base.	Yes	Yes	could not be reviewed during phase 1			
6.10.2.5(19) Concrete Stain:						
6.10.2.5(19)(a) Contractors used to install/apply concrete stains will have minimum 10 years verified experience in the installation of concrete floor treatment finishes.	No					
6.10.2.5(19)(b) Moisture: Ensure concrete substrate is within moisture limits prescribed by flooring manufacturer prior to applying.	No					
6.10.2.5(20) The use of flocked flooring is permitted, except in wet rooms.	Yes	Yes	no flocked flooring was observed to wet areas			
6.10.2.5(21) Use seamless flooring in Secure Client rooms and Secure Client washrooms.	Yes	No	welded seams were observed in secure client washrooms #73	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Owner to determine if the flooring provided is problematic, if so it should be replaced.
6.10.2.6 Acoustic Treatment						
6.10.2.6(1) Design and construct the Facility to comply with the minimum sound transmission ratings between spaces described in Appendix 3C [Sound Transmission Ratings].	Yes	No	Acoustic concerns are suspected to occur throughout this facility (#426)	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	acoustic testing should be carried out in numerous areas of this facility
6.10.2.6(2) In addition, provide acoustic treatment and other sound control measures as necessary to create a healing environment for Clients and a safe and comfortable environment for staff, and where confidentiality is required.	Yes	No	Acoustic concerns are suspected to occur throughout this facility (#426)	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	acoustic testing should be carried out in numerous areas of this facility
6.10.2.6(3) Sound control will include:						
6.10.2.6(3)(a) attenuation of sound within public, Client and staff environments;	Yes	No	Acoustic concerns are suspected to occur throughout this facility	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	acoustic testing should be carried out in numerous areas of this facility
6.10.2.6(3)(b) sound isolation between the exterior and interior spaces;	No					
6.10.2.6(3)(c) sound isolation between interior spaces within the building at both horizontal and vertical separations;	Yes	No	Acoustic concerns are suspected to occur throughout this facility	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	acoustic testing should be carried out in numerous areas of this facility
6.10.2.6(3)(d) sound and vibration isolation of building service noises and sound isolation of building service rooms; and	Yes	No	Acoustic concerns are suspected to occur throughout this facility	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	acoustic testing should be carried out in numerous areas of this facility
6.10.2.6(4) Design partition and ceiling construction to provide approximately the same degree of sound control through each assembly. When a partition is used for sound isolation, extend the sound control construction from slab to slab.	No					
6.10.2.6(5) Optimum sound isolation requires that the integrity of gypsum wall board partitions and ceilings (mass) never be violated by vent or grille cut-outs or by recessed cabinets, light fixtures, etc.	No					
6.10.2.6(6) Where penetrations are necessary, minimize placing them back-to- back and next to each other. Stagger electrical boxes preferably by at least one stud space. Use mineral fiber insulation to seal joints around all cut-outs such as electrical, TV and telephone outlets, plumbing escutcheons, recessed cabinets, and bathtubs. Use non setting acoustical caulking to seal where the gaps are too small to insert mineral fiber insulation.	No					
6.10.2.6(7) Minimize constructions such as ducts, rigid conduits, or corridors that act as speaking tubes to transmit sound from one area to another. At common supply and return ducts, provide sound attenuation liners at the diffuser and/or grill to maintain assemblies' STC. Seal around conduit.	No					
6.10.2.6(8) Isolate structure-borne vibrations and sound with resilient mountings on vibrating equipment to minimize sound transfer to structural materials. Provide ducts, pipes, and conduits with resilient, non-rigid boots or flexible couplings where they leave vibrating equipment; isolate from the structure with resilient gaskets and sealant where they pass through walls, floors, or other building surfaces.	No					
6.10.2.6(9) Use acoustic screens, vibration isolators, and carefully selected exterior equipment to prevent exterior noise that neighbours may find offensive.	No					
6.10.2.6(10) Acoustic Treatment requirements in SLC1, SLC 2, and SLC 3:						
6.10.2.6(10)(a) Friable materials are not permitted;	No		no acoustic panels were observed			
6.10.2.6(10)(b) Acoustic panels that are framed are not permitted; and	No		no acoustic panels were observed			
6.10.2.6(10)(c) Thoroughly anchor material mounted on walls to the wall structure with concealed stainless steel tamper resistant fasteners such that they will not be compromised or removed without use of special tools;	No					
6.10.2.6(10)(d) Acceptable Acoustic Wall Treatment Materials and Products: (d).1 Composite wood fiber bonded with cement binders such as Tectum Panels. (d).2 Semi rigid fiber glass with hardened edges and wrapped in an acoustic transparent vinyl fabric.	No					
6.10.2.6(11) Acoustic treatment requirements in Video Court Rooms and all other rooms where video conferencing is required as indicated in the Appendix 3A [Clinical Specifications]:	Yes	No	no acoustic panels were observed, acoustic issues were evident to the video court rooms	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	confirm what acoustic measures were required within the contracted work, suggest acoustic resting to video court rooms
6.10.2.6(11)(a) Project Co will comply with the acoustic requirements as described in 3F(iv)[Conference Room Design Standards].	No					
6.10.2.7 Painting and Protective Coatings						
6.10.2.7(1) Comply with LEED requirements for Low Emitting Materials Paints and Coatings. In particular:	No					
6.10.2.7(1)(a) architectural paints, coatings and primers: low voc.	No					
6.10.2.7(1)(b) anti-corrosive and anti-rust: low voc.	No					
6.10.2.7(1)(c) clear wood finishes, floor coatings, stains and shellacs: low VOC.	No					
6.10.2.7(2) Walls, doors and shelving						
6.10.2.7(2)(a) Use eggshell or semi gloss for all walls, doors and painted shelving.	Yes	Yes	clause appears to be complied with			
6.10.2.7(3) Door frames and metal doors						
6.10.2.7(3)(a) Use semi gloss for all door frames and metal doors.	Yes	Yes	clause appears to be complied with			
6.10.2.7(4) Wood finish doors						
6.10.2.7(4)(a) Use clear coat interior rub varnish for all wood finish doors.	Yes	Yes	clause appears to be complied with			
6.10.2.7(5) Paint Grade Doors						
6.10.2.7(5)(a) Use semi gloss for all paint grade doors.	Yes	Yes	clause appears to be complied with			
6.10.2.7(6) Ceilings						
6.10.2.7(6)(a) Use eggshell paint for all ceilings.	Yes	Yes	clause appears to be complied with			
6.10.2.7(7) Floors, concrete						
6.10.2.7(7)(a) Use a 2-component (base component A, curing agent B).	No					
6.10.2.7(7)(b) Use a primer if part of coating system.	No					
6.10.2.7(8) Paint painted Client care areas with a semi-gloss finish.	Yes	Yes	clause appears to be complied with			
6.10.2.7(9) Conform to all applicable standards, including the material and workmanship requirements of Master Painters Institute (MPI) Architectural Painting Specification Manual.	No					
6.10.2.7(10) Use exterior paints of a quality designed to protect substrate materials from weather and climate conditions.	No					
6.10.2.7(11) Use exterior and interior finish materials with surface finishes either as integral to the finish material or field-applied separately to the surface of the finish material.	No					
6.10.2.7(12) Treat exterior masonry materials such as brick and concrete block with water-repellent coatings to prevent water ingress into or through the material.	Yes	No	typical gloss finish from these costings was not observed.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	APP to provide evidence coatings were provided.
6.10.2.7(13) Provide a special protective coating on exterior and interior materials that are subject to corrosion from exposure to moisture or	No					
other corrosive agents, and where painting is deemed to be insufficient protection. Materials requiring a special protective coating include exterior and interior structural, galvanized, and miscellaneous steel.	No					
6.10.2.7(14) Use interior paint materials of a quality to withstand regular or repeated cleaning as the function of the area dictates.	No					
6.10.2.7(15) Paint handrails, doors, and frames with a contrasting colour from walls in consideration of the visually impaired.	Yes	No	contrasting colours to these areas were not evident during phase ! review	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	on-site verification required of all applicable areas
6.10.2.7(16) Do not use materials containing lead and mercury.	No					
6.10.2.7(17) If seamless epoxy wall coatings are used, provide a two- component, high solids, zero or low VOC, solvent-free, epoxy glaze wall coating that is seamless and abrasion, chemical, and UV-resistant.	No					
6.10.2.8 Vinyl Acrylic Wall Covering						

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6.10.2.8(1) If vinyl/acrylic wall covering is used, provide vinyl/acrylic high impact rigid sheet, nominal 10mm thickness with colour-matched vinyl/acrylic trim for joint/transitions.	No					
6.10.2.8(2) Furnish complete packaged system containing all primers and adhesive. Use non water-based and non-hazardous primer and adhesive materials.	No					
6.10.2.9 Dry Erase Wall Covering						
6.10.2.9(1) Provide as required throughout the Facility pigmented gloss vinyl wall covering presentation surfaces for dry erase markers, 0.61 kg/sq.m, non-woven backing.	No					
6.10.2.9(2) Provide trim and other accessories including but not limited to wall covering trim of anodized aluminum, low profile trim, plastic marker dispensers, dry erase markers (set of 4 colours), low odour, and eraser, magnets, clearer, towels.	No					
6.10.2.10 Padded Surfaces						
6.10.2.10(1) Provide protective surface padding system for floors, walls, doors and frames for use in IPCRs and Holding rooms as indicated in Appendix 3A [Clinical Specifications].	No					
6.10.2.10(2) Provide detention surface padding system which isolates Clients from hard surfaces within the room:	Yes	Yes	clause appears to be complied with, applicable to showers not located in client rooms			
6.10.2.10(2)(a) Padded surface system will resist chipping and peeling;	Yes	Yes	clause appears to be complied with, applicable to			
6.10.2.10(2)(b) Padded surface system will be easy to clean; and	Yes	Yes	clause appears to be complied with, applicable to			
6.10.2.10(2)(c) Padded surface system will be water-repellent, impervious to oil, urine, salt and blood.	No					
6.10.2.10(3) Door padding panels will be composed of a padded material system adhered to a 19mm thick fire resistant plywood backing board. OSB is not permitted.	No					
6.10.2.10(4) Provide openings in door padding for glazed observation openings and food slots.	No					
6.10.2.10(5) Quality Assurance and Quality Control:						
6.10.2.10(5)(a) Applicator Qualifications: Application of protective surface padding will be performed by an applicator with a minimum of 5 years' experience in the successful fabrication and installation of detention surface padding system;	No					
6.10.2.10(5)(b) Surface burning characteristics of detention surface padding system when tested in accordance with UL Standard 723 (ASTM E84) will be equal to or less than: (b).1 Flame Spread Index 10; (b).2 Fuel Contributed 10; and (b).3 Smoke Developed 160,	No					
6.10.2.10(5)(c) Compression Deflection (ASTM D 1056) 4 psi@ 25 % deflection;	No					
6.10.2.10(5)(d) Acute Oral Toxicity Test - Non Toxic;	No					
6.10.2.10(5)(e) Fungus Resistance (ASTM G-21-90) - 0 (Completely resistant); and	No					
6.10.2.10(5)(f) CSS 12-100-1 Corner Test – Pass.	No					
6.11 Specialties (Division 10)						
6.11.1 Basic Requirements						
6.11.1.1 Provide specialty products manufactured for the specific purposes intended, and installed in strict accordance with the manufacturer's directions.	No					
6.11.2 Tackboards and Whiteboards						
6.11.2.1 Provide, as required in Appendix 3G [Millwork, Casework and Systems Furniture]:	No					
6.11.2.1(1) tackboard surfaces that allow pin penetration of the surface materials and have reasonable resistance to deterioration; and	Yes	Yes	clause appears to be complied with, applicable to showers not located in client rooms			
6.11.2.1(2) whiteboard surfaces that allow use of felt-type writing instruments and allow erasing and cleaning with minimal effort. Use porcelain ceramic on steel surface, magnetic, scratch and abrasion-resistant and have maximum contrast, glare control, and reflectivity.	Yes	Yes	clause appears to be complied with, applicable to showers not located in client rooms			
6.11.2.2 Provide tackboards and whiteboards with extruded aluminum frames, accessory trays, map rails and map hooks.	Yes	Yes	clause appears to be complied with, applicable to showers not located in client rooms			
6.11.2.3 Use non-toxic, water based lamination adhesive for tackboards and whiteboards.	No					
6.11.3 Compartments and Cubicles						
6.11.3.1 Provide compartments and cubicles including toilet partitions, change cubicles, shower partitions, and other compartments and cubicles requiring privacy and security.	No					
6.11.3.2 Provide exposed surfaces that are permanent, water-resistant, corrosion-proof, and readily cleaned and maintained.	No					
6.11.3.3 Secure partitions and standards to the floor or ceiling structure, and in a manner to resist lateral loading and impact.	No					
6.11.3.4 For compartment/cubicle doors, use material matching the partitions and include permanent, purpose-made hardware. Design doors and hardware to provide barrier-free access.	No					
6.11.3.5 Provide a mirror in all change compartments.	No					
6.11.4 Toilet Partitions						
6.11.4.1 Galvannealed sheet metal will conform to ASTM A653 with minimum ZF001 (A01) zinc coating. Finish in polyester, baked enamel or powder coating.	No					
6.11.4.2 For stainless steel, use Type 304 conforming to ASTM A240 with No. 4 finish.	No					
6.11.4.3 For plastic laminate, use Grade 10/HGS GP50 scuff-resistant, high pressure laminate, conforming to NEMA LD-3.	No					
6.11.4.4 Avoid use of particleboard core partitions.	No					
6.11.4.5 For fiber-reinforced plastic (fiberglass), use a moisture resistant grade.	No					
6.11.5 Change Cubicle Partitions						
6.11.5.1 Where not adjacent to showers, change cubicle partitions will comply with the above requirements for toilet partitions.	Yes	Yes	clause appears to be complied with			
6.11.6 Shower Partitions						
6.11.6.1 Use solid phenolic laminated thick stock, factory-laminated with decorative finish both faces of core and conforming to CAN3-A172 or NEMA LD3.	Yes	Yes	clause appears to be complied with, applicable to showers not located in client rooms			
6.11.7 Metal Lockers						
6.11.7.1 Provide individual and shared storage facilities in designated staff and Client areas in the Facility as described in the Appendix 3A [Clinical Specifications], in Appendix 3G [Millwork, Casework and Systems Furniture], and as appropriate for operation of the Main Building. Such storage facilities may be metal lockers, millwork lockers, and metal locker systems of sizes, numbers, and groupings as determined in consultation with the Authority. Lockers will include a mix of full height and half size lockers.	No					
6.11.7.2 For sheet metal, use galvannealed steel conforming to ASTM A653 with ZF001 (A01) zinc coating.	No					
6.11.7.3 Lockers will be placed on minimum 150 mm high masonry bases finished with rubber wall cove bases.	Yes	Yes	clause appears to be complied with			
6.11.7.4 Lockers will fit tightly below gypsum wall board bulkheads or be complete with sloped metal tops.	Yes	Yes	clause appears to be complied with			
6.11.7.5 Finish steel surfaces with polyester baked enamel or powder coating.	Yes	Yes	clause appears to be complied with			
6.11.7.6 All metal lockers for staff use will have digital electronic locks, number plates and hanging hooks.	No					
6.11.8 Storage Shelving Systems						
6.11.8.1 Provide storage systems for materials in designated storage areas.	Yes	Yes	clause appears to be complied with			
6.11.8.2 Adjustable shelving systems may be specifically manufactured for storage purposes, such as plywood or steel-slotted angle industrial shelving for bulk materials of plastic laminate-faced plywood for clean storage.	Yes	Yes	clause appears to be complied with			
6.11.8.3 For mobile storage systems, provide a high-density system designed to make maximum use of available space by eliminating need for access aisle for each run of shelving. Install and brace systems to resist seismic loads. The mobile storage system will be either power assisted or will be easily operable without undue required strength by any person.	Yes	Yes	clause appears to be complied with			
6.11.9 Washroom Accessories						
6.11.9.1 Provide washroom accessories as specified in the Equipment List and this Schedule in all public, Client, and staff washrooms as required in accordance with the applicable high quality hospital standards. Determine the type, size, and number of accessories and placement on walls with regard for the numbers and categories of users, in consultation with the Authority.	No					
6.11.9.2 Install washroom accessories to allow cleaning and maintenance of the accessory and surrounding wall area.	Yes	Yes	clause appears to be complied with			
6.11.9.3 Ensure that acceptable products for SLC 1, SLC 2, and SLC 3 will comply with New York State Office of Mental Health, Patient Safety Standards – Materials and Systems Guidelines.	No					
6.11.9.4 Do not use recessed dispensers (such as those for paper towels, soap and waste receptacle).	Yes	Yes	clause appears to be complied with			
6.11.9.5 Use commercial grade accessories free from imperfections in manufacture and finish.	Yes	Yes	clause appears to be complied with			
6.11.9.6 Use fittings with concealed fastening for security and discouragement of tampering.	Yes	Yes	clause appears to be complied with			
6.11.9.7 Staff and public washroom accessories will include the following:						
6.11.9.7(1) soap dispensers;	Yes	Yes	clause appears to be complied with			
6.11.9.7(2) toilet paper dispensers;	Yes	Yes	clause appears to be complied with			
6.11.9.7(3) paper towel dispensers – "hands free" type;	Yes	Yes	clause appears to be complied with			
6.11.9.7(4) paper towel disposals;	Yes	Yes	clause appears to be complied with			
6.11.9.7(5) mirrors;	Yes	Yes	clause appears to be complied with			
6.11.9.7(6) barrier-free grab bars (with integral tactile grip finish);	Yes	Yes	clause appears to be complied with			
6.11.9.7(7) coat hooks;	Yes	Yes	clause appears to be complied with			
6.11.9.7(8) sanitary napkin dispensers (in public washrooms only);	Yes	Yes	clause appears to be complied with			
6.11.9.7(9) sanitary napkin disposals;	Yes	Yes	clause appears to be complied with			

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6.11.9.7(10) baby change table (in public washrooms only); and	Yes	Yes	clause appears to be complied with			
6.11.9.7(11) utility shelf.	Yes	Yes	clause appears to be complied with			
6.11.9.8 Non-Secure Client washrooms, except for Intensive Psychiatric Care Washroom and Holding Room Soft, will include the following washroom accessories:						
6.11.9.8(1) 2 soap dispensers (1 at each lavatory);	Yes	Yes	clause appears to be complied with			
6.11.9.8(2) toilet paper dispenser;	Yes	Yes	clause appears to be complied with			
6.11.9.8(3) paper towel dispenser;	Yes	Yes	clause appears to be complied with			
6.11.9.8(4) paper towel disposal;	Yes	Yes	clause appears to be complied with			
6.11.9.8(5) mirror above each lavatory;	Yes	Yes	clause appears to be complied with			
6.11.9.8(6) handicap grab bars (with integral tactile grip finish);	Yes	Yes	clause appears to be complied with			
6.11.9.8(7) 2 coat hooks;	Yes	Yes	clause appears to be complied with			
6.11.9.8(8) utility shelf; and	Yes	Yes	clause appears to be complied with			
6.11.9.8(9) recessed shelf for soap and shampoo in shower stall; and	Yes	Yes	clause appears to be complied with			
6.11.9.8(10) anti-ligature grab bars as is required for barrier-free design.	Yes	Yes	clause appears to be complied with			
6.11.9.9 Shower rooms or showers in washrooms will include the following						
6.11.9.9(1) shower curtain track or rod as appropriate;	Yes	Yes	clause appears to be complied with			
6.11.9.9(2) handicap grab bars; and	Yes	Yes	clause appears to be complied with			
6.11.9.9(3) fold-down shower seat.	Yes	Yes	clause appears to be complied with			
6.11.9.9(4) recessed anti-ligature shelf for soap and shampoo in shower stall.	Yes	Yes	clause appears to be complied with			
6.11.10 Not used.						
6.11.11 Shower Curtain Track						
6.11.11.1 Provide shower tracks meeting the following requirements for all private Client washrooms:						
6.11.11.1(1) track will be recessed in the ceiling in one piece of extruded aluminum running from wall to wall and secured with tamper-proof screws; and	Yes	Yes	shower rails reviewed were noted to be recessed			
6.11.11.1(2) track is not permitted to "break-away".	No					
6.11.12 Folding Panel Partitions						
6.11.12.1 Provide folding panel partitions with acoustic seal for subdividing rooms/spaces in accordance with Appendix 3A [Clinical Specifications].	No					
6.11.12.2 Provide an access door in each folding panel partition to allow access from meeting room to meeting room.	No					
6.11.13 Operable Partitions – Vertically Folding						
6.11.13.1 Provide vertically folding partitions with the following requirements:						
6.11.13.1(1) The folding partition will have a minimum sound rating of STC 49 tested in accordance with ASTM E90-Upon request a copy of the test result will be submitted to the Consultant.	No					
6.11.13.1(2) The design life of the folding partition will be 10,000 complete closed to opened to closed cycles.	No					
6.11.13.1(3) Components and finishes will be tested in accordance with CAN-ULC S102, Class A.	No					
6.11.13.1(4) The folding partition will be visibly flat and rigid in the down (closed) position.	No					
6.11.13.1(5) There will be no exposed hinges, brackets, screws, and no part of the mechanical system will be visible when the folding partition is in the down (closed) position.	No					
6.11.13.1(6) Lifting equipment:						
6.11.13.1(6)(a) The lifting equipment will be sized properly so that it will open and close the wall effectively over the cycle design life of the wall, at the minimum design speed specified.	No					
6.11.13.1(6)(b) The lifting mechanism will be designed to function smoothly, quietly and safely. Wherever possible, ball bearings will be used instead of bushings and wear surfaces. In no circumstance will chain or belt drive systems be acceptable.	No					
6.11.13.1(7) Safety equipment:						
6.11.13.1(7)(a) The folding partition will employ an electromagnetic type of brake which will activate firmly, without hesitation, when power is lost to the system.	No					
6.11.13.1(7)(b) The folding partition will employ electrical or other limit switches in order to stop the wall at its up and down travel limits.	No					
6.11.13.1(7)(c) The entire length of the bottom edge of the folding partition will be equipped with a continuous pressure sensing strip which will cut power to the lifting equipment, if the sensing edge comes in firm contact with an object, before the wall is in the full down (closed) position.	No					
6.11.13.1(8) Operation:						
6.11.13.1(8)(a) The folding partition will be opened and closed using a spring return, 3 position key switch.	Yes	Yes	folding partition appear to meet this requirement			
6.11.13.1(8)(b) The folding partition will automatically and acoustically seal against the floor, the two end walls and ceiling without the need for any manual intervention.	Yes	Yes	folding partition appear to meet this requirement			
6.11.13.1(8)(c)						
6.11.14 Electric Fireplace						
6.11.14.1 Provide manufactured electric fireplaces in the locations identified in the Appendix 3A [Clinical Specifications].	No					
6.11.14.2 Fireplaces will have all components and accessories for a complete, functional unit listed to UL or WHI and will be front view, opening-sealed unit and non-venting, with a fire on/off switch, log set and log grates.	No					
6.11.15 Mail Slots						
6.11.15.1 Provide mail slots that are a minimum of 25mm wide, 350mm high and 400mm deep, in locations identified in the Appendix 3A [Clinical Specifications].	Yes	Yes	mail slots appear to meet this requirement			
6.12 Equipment (Division 11)						
6.12.1 Refer to Section 7 of Schedule 2 [Design and Construction Protocols] and Appendix 2D [Equipment and Furniture].						
6.12.2 Equipment Supports						
6.12.2.1 Provide equipment supports for equipment outlined in Appendix 2D [Equipment and Furniture], with proper backing and structural reinforcing as described in Section 5.3 Post Disaster Requirements.	No					
6.12.3 Client Lifts						
6.12.3.1 Project Co will design and construct the Main Building to include bariatric Client lifts at the room locations specified in Appendix 3A [Clinical Specifications]. Project Co will provide all equipment and components not specifically listed in the Equipment List as required to integrate the Client lift equipment into the Main Building, including tracks and docking stations for all Client lifts.	Yes	Yes	some tub rooms were noted to not have gantry lifts installed, after communication with the staff on-site this is because of a change.			
6.12.3.2 Project Co will provide backing and structural reinforcing in the ceiling to support the installation of bariatric Client lifts in those locations as indicated in Appendix 3A [Clinical Specifications].	No					
6.12.3.3 Project Co will provide a bariatric Client lift system that:						
6.12.3.3(1) is a ceiling-mounted X-Y gantry track lift system;	Yes	Yes	ceiling lift was observed, not all client rooms			
6.12.3.3(2) have a Client load bearing capacity of 272 kg;	No					
6.12.3.3(3) is designed such that any traverses will be manual and will accommodate safe transfer of a Client by one Authority staff member;	No					
6.12.3.3(4) allows for Client pick up and care functions (turning, boosting, re- positioning, supporting/holding limbs) from all areas of the Client bedroom designed for Client use or access. The Client bedroom boom and gantry is to transfer to a single lift track to the en-suite washroom so as to enable Client use of the toilet, sink, shower and/or tub; and	No					
6.12.3.3(5) provides for effective transition points between the X-Y gantry tracks.	No					
6.12.3.4 Project Co will design and construct the Main Building so that ceiling heights in all rooms containing bariatric Client lifts will accommodate Client mobility on lifts when using specialized ambulatory slings and carry bars, and so that a Client's lower limbs will clear the edge of bed/stretcher/tub during seated transfers.	No					
6.12.3.5 Project Co will undertake final design of all Client lift systems in consultation with the Authority and bariatric lift equipment suppliers.	No					
6.12.4 Window Washing Systems						
6.12.4.1 Provide equipment or appropriate anchors to facilitate window washing.	Yes	Yes				
6.12.5 Loading Dock Equipment						
6.12.5.1 Provide a loading dock with the following:						
6.12.5.1(1) docking bays for trucks, each with built in dock leveler;	Yes	Yes	dock levelers appeared to comply			
6.12.5.1(2) waste compactor bays;	No					
6.12.5.1(3) recycling bay; and	No					
6.12.5.1(4) access stair and ramp access.	Yes	Yes	access stair and ramps appeared to comply			
Refer to Appendix 3A [Clinical Specifications] for quantities of items described above.						
6.12.5.2 The loading dock will be an enclosed area as described in Appendix 3A [Clinical Specifications], with a height of 4300mm overhead clearance.	No					
6.12.5.3 Provide lighting over the loading dock to allow night time functionality.	Yes	Yes	lights installed to loading bay exterior is not ideal			
6.12.5.4 The loading dock platform will be 1200mm higher than the truck bay.	No					
6.12.5.5 Dock Bumpers.						
6.12.5.5(1) Provide a dock bumper at each truck bay equipped with a built in dock leveler.	Yes	Yes	clause appears to be complied with			
6.12.5.6 Dock Leveler						
6.12.5.6(1) Provide pit style dock levelers, one per truck bay, in the loading dock area to facilitate deliveries as outlined in the Appendix 3A [Clinical Specifications] in the material management section;	Yes	Yes	clause appears to be complied with			

	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
6.12.5.6(2) The dock leveler is to be a hydraulic style lift system, equipped with a push button remote control;	No					
6.12.5.6(3) Assume an operational maximum tilt of 10 degrees for the dock leveler, based on a 52" – 55" high truck bed; and	No					
6.12.5.6(4) Provide each dock leveler with a minimum lifting capacity of 22,727 kg.	No					
6.12.6 Scissor Lift						
6.12.6.1 Provide a permanent, hydraulic style scissor lift at the Loading Dock as indicated in the Appendix 3A [Clinical Specifications].	Yes	No	Cannot utilize as intended due to proximity to the wall,. PlanGrid #367	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review operability of the scissor lift.
6.12.6.2 The scissor lift will have the height extension required to reach any mezzanines as applicable.	No					
6.12.6.3 Design the scissor lift to fit in the floor slab recess to ensure its platform is flush with the finished floor level.	No					
6.12.6.4 The scissor lift will have the following features:						
6.12.6.4(1) a push button remote control;	No					
6.12.6.4(2) warning lights and sirens for use when the unit is in operation;	No					
6.12.6.4(3) a swing gate to allow easy access to the platform; and	No					
6.12.6.4(4) a built-in scale.	No					
6.12.6.5 The scissor lift will be 1200mm x 2400mm with minimum lift capacity of 1000kg.	No					
6.12.7 Psychiatric Bed						
6.12.7.1 Provide a floor-mounted fixed bed engineered to withstand daily use in intensive healthcare and correctional environments as indicated on the Appendix 2D [Equipment and Furniture] equipment list.	No					
6.12.7.2 The bed will have the following features:						
6.12.7.2(1) Maintenance free, fire retardant surface chemically resistant to bodily fluids and excrement, with raised lip at bed deck for fluid retainage;	No					
6.12.7.2(2) 454 kg static load limit or greater; and	No					
6.12.7.2(3) Rigid structural polyurethane foam fill.	No					
6.12.7.3 The bed will be 2032mm x 1016mm x 394mm.	No					
6.12.8 TV Bracket						
6.12.8.1 Provide a wall-mounted fixed flat screen television bracket engineered to withstand daily use in intensive healthcare and correctional environments as indicated on the Appendix 2D [Equipment and Furniture] equipment list.	No					
6.12.8.2 The bracket will have the following features:						
6.12.8.2(1) Holds TV sizes from 30 to 60";	Yes	Yes	brackets viewed appeared to comply			
6.12.8.2(2) Adjustable tilt;	Yes	Yes	brackets viewed appeared to comply			
6.12.8.2(3) 59 Kg load limit or greater; and	No					
6.12.8.2(4) CSA listed.	No					
6.12.9 Narcotics Cabinet	No					
6.12.9.1 Provide a wall-mounted narcotics cabinet engineered to withstand daily use in intensive healthcare and correctional environments as indicated on the Appendix 2D [Equipment and Furniture] equipment list.	No					
6.12.9.2 The cabinet will have the following features:						
6.12.9.2(1) Heavy gauge stainless steel construction with continuous door hinge;	No					
6.12.9.2(2) Cylinder lock and key for door; and	No					
6.12.9.2(3) 2 adjustable shelves.	No					
6.12.9.3 The cabinet will be 457mm x 229 mm x 686mm.	No					
6.12.10 Dental Chair With Delivery System						
6.12.10.1 Provide a dental chair with delivery system as indicated on the Appendix 2D [Equipment and Furniture] equipment list.	No					
6.12.10.2 The dental chair system will have the following features:						
6.12.10.2(1) Four (4) position control block;	No					
6.12.10.2(2) Two (2) brake handles;	No					
6.12.10.2(3) Traditional style delivery system with left/right conversion and independently adjustable handpiece controllers;	No					
6.12.10.2(4) Wet/dry foot control and touchpad control;	No					
6.12.10.2(5) Dental chair lift height range of 343mm to 800mm, 30 degree side to side swivel, +62 to -12 degree recline range, and dual articulating back rest;	No					
6.12.10.2(6) Intraoral light source;	No					
6.12.10.2(7) Self-contained water bottle;	No					
6.12.10.2(8) Operation on 115VAC; and	No					
6.12.10.2(9) CSA listed.	No					
6.12.11 Wall Mounted Glove Box Dispenser						
6.12.11.1 Provide a wall mounted glove box dispenser as indicated on the Appendix 2D [Equipment and Furniture] equipment list.	No					
6.12.11.2 The glove box will have the following features:						
6.12.11.2(1) Stainless steel construction; and	No					
6.12.11.2(2) Holds one (1) box of exam gloves.	No					
6.12.11.3 The glovebox dispenser will be 268mm x 95.25 mm x 102mm.	No					
6.12.12 Wall Mounted Face Mask Dispenser						
6.12.12.1 Provide a wall mounted face mask dispenser as indicated on the Appendix 2D [Equipment and Furniture] equipment list.	No					
6.12.12.2 The face mask dispenser will have the following features:						
6.12.12.2(1) Steel construction with baked enamel finish; and	No					
6.12.12.2(2) Holds one (1) box of face masks.	No					
6.12.12.3 The mask dispenser will be190.5mm x 1025 mm x 216mm.	No					
6.12.13 Wall Mounted Ice Machine						
6.12.13.1 Provide a wall mounted ice machine as indicated on the Appendix 2D [Equipment and Furniture] equipment list.	No					
6.12.13.2 The ice machine will have the following features:						
6.12.13.2(1) Brushed stainless steel exterior;	No					
6.12.13.2(2) Touchless dispensing of water and nugget ice;	No					
6.12.13.2(3) 12 kg ice storage capacity;	No					
6.12.13.2(4) Air-cooled operation;	No					
6.12.13.2(5) 12 kg ice storage capacity; and	No					
6.12.13.2(6) 120VAC operation, CSA listed.	No					
6.12.13.3 The ice dispenser will be 660mm x 571mm x 1,041mm.	No					
6.12.14 Ceiling Mounted Dental Light						
6.12.14.1 Provide a ceiling mounted dental procedure light as indicated on the Appendix 2D [Equipment and Furniture] equipment list.	No					
6.12.14.2 The dental light will have the following features:						
6.12.14.2(1) LED lights;	No					
6.12.14.2(2) 5000 degree Kelvin color temperature;	No					
6.12.14.2(3) Adjustable light intensities of 15K, 25K, and 30K lux;	No					
6.12.14.2(4) Light power/intensity control either via wireless touchpad or unit mounted controls;	No					
6.12.14.2(5) Drift-free positioning via light, yoke and arm assemblies; and	No					
6.12.14.2(6) 120VAC operation, CSA listed.	No					
6.12.15 Diagnostic Set						
6.12.15.1 Provide a wall mounted diagnostic set inclusive of an oto/opthalmascope, thermometer, and specula dispenser as indicated on the Appendix 2D [Equipment and Furniture] equipment list.	No					
6.12.15.2 The diagnostic set will have the following features:						
6.12.15.2(1) An oto/ophthalmoscope transformer and handles, with one each coaxial ophthalmoscope and diagnostic otoscope heads inclusive of anti-theft lock rings;	No					
6.12.15.2(2) Specula dispenser for otoscope head;	No					
6.12.15.2(3) Battery operated, electronic, intra-oral thermometer with integral probe cover storage;	No					
6.12.15.2(4) System components listed above mounted to a 864mm x 305mm wall board for wall mounting; and	No					
6.12.15.2(5) Operation of oto/ophthalmoscope on 120VAC.	No					
6.12.16 Wall Mounted Apron Rack						
6.12.16.1 Provide a wall mounted x-ray apron rack as indicated in the Appendix 2D [Equipment and Furniture] equipment list.	No					
6.12.16.2 The apron rack will have the following features:	No					
6.12.16.2(1) Heavy-duty aluminum construction with powder coat finish; and	No					
6.12.16.2(2) Hold two (2) x-ray aprons.	No					
6.12.16.3 The apron rack will be 300mm x 76 mm.	No					
6.12.17 Wall Mounted Rail						
6.12.17.1 Provide a wall mounted rail as indicated on the Appendix 2D [Equipment and Furniture] equipment list.	No					
6.12.17.2 The rail will have the following features:						
6.12.17.2(1) Reinforce polyurethathane construction; and	No					
6.12.17.2(2) Rated at 45.5 kg per 305mm.	No					
6.12.17.3 The rail will be 1219mm x 152.4mm.	No					
6.12.18 Wall Mounted Projection Screen						
6.12.18.1 Provide a wall mounted projection screen as indicated on the Appendix 2D [Equipment and Furniture] equipment list.	No					
6.12.18.2 The projection screen will have the following features:	No					
6.12.18.2(1) Flame retardant and mildew resistant screen;	No					
6.12.18.2(2) Screen size of 1524mm x 1524mm;	No					
6.12.18.2(3) Case and screen slat pull of steel with baked enamel finish;	No					
6.12.18.2(4) Vibration damped, lubed for life pover roller system;	No					
6.12.18.2(5) Wall mounted configuration; and	No					
6.12.18.2(6) 120 VAC operation, CSA or UL listing.	No					
6.12.19 Dishwasher						

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6.12.19.1 Provide an ADA accessible undercounter dishwasher as indicated on the Appendix 2D equipment list.	No					
6.12.19.2 The dishwasher will have the following features:						
6.12.19.2(1) 5 –level wash design;	No					
6.12.19.2(2) Control lockout;	No					
6.12.19.2(3) Energy-saver cycles;	No					
6.12.19.2(4) Rinse only cycle;	No					
6.12.19.2(5) Sound insulated;	No					
6.12.19.2(6) Height adjustable from 825.5mm to 899mm; and	Yes	Yes	appeared compliant			
6.12.19.2(7) 120 VAC operation, CSA or UL listing.	No					
6.12.19.3 The dishwasher will be 610mm x 610 mm x 825.5mm (ADA Height).	Yes	Yes	appeared compliant			
6.12.20 Wall Mounted Intraoral Dental X-ray						
6.12.20.1 Provide a wall mounted intraoral x-ray unit as indicated on the Appendix 2D [Equipment and Furniture] equipment list.						
6.12.20.2 The x-ray system will have the following features:						
6.12.20.2(1) Focal spot 0.4 per IEC 386;	No					
6.12.20.2(2) Tube voltage selectable from 60kV to 70kV;	No					
6.12.20.2(3) High frequency generator;	No					
6.12.20.2(4) 7 ma tube current;	No					
6.12.20.2(5) Selectable exposure time from 0.01 to 3.2 seconds;	No					
6.12.20.2(6) Selectable detector media with adaptable exposure tables;	No					
6.12.20.2(7) Selectable automatic sleep mode;	No					
6.12.20.2(8) 2040mm maximum reach of support arms;	No					
6.12.20.2(9) 330 degree tube head rotation; and	No					
6.12.20.2(10) 120 VAC operation, CSA or UL listing.	No					
6.13 Furnishings (Division 12)						
6.13.1 Millwork, Casework, Clinical Systems Furniture and Systems Furniture						
6.13.1.1 In addition to Project Co's obligation to provide Category B and E Equipment, Project Co will provide and install all millwork, casework, clinical systems furniture, systems furniture and accessories as required to support the programs and functions described in the Appendix 3A [Clinical Specifications] or as required to support the operation of the buildings.	Yes	Yes	millwork observed appeared to meet this requirement			
6.13.1.2 Appendix 3G [Millwork, Casework and Systems Furniture] lists the locations in which millwork, casework, clinical systems furniture or systems furniture are required. Subject to Sections 6.13.1.5(1) and 6.13.1.6(1), Project Co may use millwork, casework, clinical systems or systems furniture interchangeably to satisfy the requirements of Appendix 3G [Millwork, Casework and Systems Furniture]. Project Co will submit an initial layout and configuration for review by the Authority.	No					
6.13.1.3 Project Co, in consultation with the Authority and during the user consultation process described in Appendix 2B [User Consultation and Design Review], will establish which option (millwork, casework, clinical systems or systems furniture) best meets the Authority's functional needs for each space and will achieve the most appropriate level of flexibility, re- configurability, serviceability, and reusability between all areas of the Facility.	No					
6.13.1.4 Millwork means custom fabricated wood or metal cabinetry and counter components and accessories that are installed with little or no modification. Millwork or casework may require mechanical, electrical power and data service connections.	No					
6.13.1.5 Millwork or casework components will include but are not limited to work surfaces (such as counters and work benches) and storage (such as cabinetry, files, drawers, wardrobes and cabinets).						
6.13.1.5(1) Project Co will provide the following as millwork:						
6.13.1.5(1)(a) kitchen and pantry counters, upper and lower cabinets, drawers and shelving;	Yes	Yes	millwork observed appeared to meet this requirement			
6.13.1.5(1)(b) utility room counters, storage cabinetry and shelving;	Yes	Yes	millwork observed appeared to meet this			
6.13.1.5(1)(c) Client room wardrobes, including shelving, drawers, coat rods, counters and cabinets;	Yes	Yes	millwork observed appeared to meet this requirement			
6.13.1.5(1)(d) workroom counters and storage;	Yes	Yes	millwork observed appeared to meet this			
6.13.1.5(1)(e) security kiosks;	Yes	Yes	millwork observed appeared to meet this			
6.13.1.5(1)(f) vanity counters containing sinks;	Yes	Yes	millwork observed appeared to meet this			
6.13.1.5(1)(g) ERT millwork lockers with the following requirements:						
(g).1 open front; (g).2 fixed lower and upper shelves; (g).3 4 hooks for clothing; and (g).4 be 610mm in width, 610mm in depth, and 1800mm in height.	Yes	Yes	millwork observed appeared to meet this requirement			
Refer to Appendix 3A [Clinical Specifications] for ERT millwork locker locations.						
6.13.1.5(2) All millwork doors and drawers will be lockable. Keyed locks are acceptable; keying will be reviewed in consultation with the Authority.	Yes	No	some drawers and cabinets were not lockable	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review variances with APP.
6.13.1.6 Modular Casework means a composition of factory produced, quickly installed parts that are easily replaceable, reconfigurable and interchangeable. Casework will be rearranged to change configuration or to include additional modules as needed.						
6.13.1.6(1) Project Co will provide the following as modular casework:						
6.13.1.6(1)(a) pharmacy casework;						
6.13.1.6(1)(b) medication room work surfaces, upper and lower cabinetry, shelving and storage components; and	Yes	Yes	casework observed appeared to meet this requirement			
6.13.1.6(1)(c) clinical, exam and treatment room counters, upper and lower cabinets, shelving and storage.	Yes	Yes	casework observed appeared to meet this requirement			
6.13.1.7 Clinical systems furniture means a factory produced, component system designed to be replaceable, reconfigurable, and interchangeable, and designed for specific use in health care facilities. Clinical furniture systems will be rearranged to change the configuration or to include additional modules and accessories as necessary. Clinical systems furniture requires electrical power and data service connections.	No					
6.13.1.7(1) Without limitation, Project Co may use clinical systems furniture for the following:						
6.13.1.7(1)(a) nursing workstations;	Yes	Yes	furniture observed appeared to meet this requirement			
6.13.1.7(1)(b) charting alcoves;	Yes	Yes	furniture observed appeared to meet this requirement			
6.13.1.7(1)(c) triage desk;	Yes	Yes	furniture observed appeared to meet this requirement			
6.13.1.7(1)(d) unit clerk stations;	Yes	Yes	furniture observed appeared to meet this requirement			
6.13.1.7(1)(e) team care stations;	Yes	Yes	furniture observed appeared to meet this requirement			
6.13.1.7(1)(f) registration cubicles;	Yes	Yes	furniture observed appeared to meet this requirement			
6.13.1.7(1)(g) adjustable height workstations;	Yes	Yes	furniture observed appeared to meet this requirement			
6.13.1.7(1)(h) reception desks;	Yes	Yes	furniture observed appeared to meet this requirement			
6.13.1.7(1)(i) information desks; and	Yes	Yes	furniture observed appeared to meet this requirement			
6.13.1.7(1)(j) triage desks.	Yes	Yes	furniture observed appeared to meet this requirement			
6.13.1.8 Project Co will provide all accessories, storage, cabinetry, upper and lower shelving, keyboard trays and counters necessary to facilitate efficient clinical operations.	No					
6.13.1.9 Systems furniture means a composition of factory-produced wall mounted or partition components that are easily reconfigurable and interchangeable. Systems furniture is designed for office or commercial use and includes accessories and attachments which complete its functionality. Systems furniture requires electrical power and data service connections.	Yes	Yes	furniture observed appeared to meet this requirement			
6.13.1.9(1) Without limitation, Project Co may use systems furniture for the following:						
6.13.1.9(1)(a) office workstations including desks, shelving, cabinets, keyboards and accessories;	Yes	Yes	furniture observed appeared to meet this requirement			
6.13.1.9(1)(b) cubicle partitions;	Yes	Yes	furniture observed appeared to meet this requirement			
6.13.1.9(1)(c) reception desks;	Yes	Yes	furniture observed appeared to meet this requirement			
6.13.1.9(1)(d) information desks; and	Yes	Yes	furniture observed appeared to meet this requirement			
6.13.1.9(1)(e) work/study carrels.	Yes	Yes	furniture observed appeared to meet this requirement			
6.13.2 Furniture						
6.13.2.1 Furniture means loose or unattached items that can be rearranged to suit various activities and includes:						
6.13.2.1(1) coffee tables and side tables;	Yes	Yes	furniture observed appeared to meet this requirement			
6.13.2.1(2) unattached seating (such as chairs and stools); and	Yes	Yes	furniture observed appeared to meet this requirement			
6.13.2.1(3) office desks.	Yes	Yes	furniture observed appeared to meet this requirement			
6.13.2.2 All furniture and millwork supplied by Project Co will meet the following requirements:						
6.13.2.2(1) Flexibility						
6.13.2.2(1)(a) Products must offer modular solutions that will enable flexibility and Lean principles to be practiced. Furniture pieces will: (a).1 allow for individualization; (a).2 possess the ability to be used in different applications or flex easily for future use; (a).3 use non-handed solutions that work in multiple configurations, when possible.	No					
6.13.2.2(2) Durability						
6.13.2.2(3) Activity, waiting, and dining room furniture will be engineered for high traffic use.	No					

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6.13.2.2(4) Client room furniture will be designed in conjunction with healthcare professionals and be tested to ensure durability and function.	No					
6.13.2.2(5) Furniture will conform to the Upholstery Section under "Cleaning and Ease of Maintenance" for additional criteria related to durability.	Yes	Yes	furniture observed appeared to meet this requirement			
6.13.2.2(6) Construction						
6.13.2.2(6)(a) The quality and make of the product (its construction, finish materials, and maintenance requirements) will be suitable for long term use and be designed for intense performance.	No					
6.13.2.2(6)(b) Products with replaceable components are preferred.	No					
6.13.2.2(6)(c) Wood furniture will be avoided in Private Client rooms, waiting rooms, unit offices, nurses' stations, treatment rooms, holding rooms, staff rooms and conference rooms. Where utilized, wood pieces will be constructed of: (c).1 Solid wood frames of kiln dried wood for added strength and long term durability. (c).2 A frame capable of supporting varying weights and body types and offering ease and reassurance to both Clients and care providers.	Yes	Yes	furniture observed appeared to meet this requirement			
(c).3 Plastic laminates will be used in place of real wood when a wood-look is desired.	No		unable to verify during phase 1 review. Identify where 'real wood' is look			
6.13.2.2(7) Seating						
6.13.2.2(7)(a) In waiting room and Client seating, steel tube construction and spring-seat construction are preferred.	Yes	Yes	seating observed appeared to meet this requirement			
6.13.2.2(7)(b) Seating with wall-saver legs or a wall-saver back design is preferred.	Yes	Yes	unable to verify during phase 1 review			
6.13.2.2(7)(c) Seating products with arms will include polyurethane arm caps rather than upholstered arm caps.	Yes	Yes	appears to be polyurethane but unable to verify during phase 1 review			
6.13.2.2(7)(d) See upholstered notes referenced throughout this document for information on upholstered seating products.	No					
6.13.2.2(7)(e) See Section 6.13.2.2(11) and 6.13.2.2(14) for additional requirements.						
6.13.2.2(8) Tables						
6.13.2.2(8)(a) For durability in waiting rooms and high traffic areas, horizontal table surfaces of solid surface material tops or plastic laminate are preferred.	No					
6.13.2.2(8)(b) Low VOC polyurethane sealed woods will be used on vertical surfaces if plastic laminate is not available.	No					
6.13.2.2(8)(c) Edges will feature an ergonomic profile for user comfort and be of durable material composition and construction.	No					
6.13.2.2(9) Workstations/Desks						
6.13.2.2(9)(a) Refer to individual specifications for material composition and finish information.						
6.13.2.2(9)(b) When installed, two adjoining end panels of work surfaces will be leveled so work surfaces sit at the same height.	Yes	Yes	adjoining surfaces observed appeared to meet this requirement			
6.13.2.2(9)(c) Tackboard, if specified with desk and/or workstation, between hutch and worktop, will span from work surface top to underside of overhead cabinetry leaving no visible gaps, while, at the same time, managing task light wires, if specified with assembly.	No					
6.13.2.2(9)(d) All workstations and desks will have keyboard trays. Front edge of keyboard tray will be set back from front edge of work surface and/or table.	Yes	No	it was noted at the reception millwork to the client wings did not have trays installed see PlanGrid item #445	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Confirm by submittal review of furniture/millwork supplied by the project co
6.13.2.2(9)(e) Any "smart" or "hardwired" furniture will be fully coordinated for proper circuitry and any other building requirements.	No					
6.13.2.2(10) Filing / Storage						
6.13.2.2(10)(a) Filing is for letter filing, unless specified otherwise. In order to maximize filing capacity, files will be set up forside-to-side filing.	Yes	Yes	filing observed appeared to meet this requirement			
6.13.2.2(10)(b) During installation, the conversion parts of the files will be left in the file to allow for front-to-back / side-to-side conversion at a later time.	No					
6.13.2.2(10)(c) Filing will be equipped with hanging frames at the time of installation.	No					
6.13.2.2(10)(d) At a minimum, two-drawer files will include a counter-balance package as recommended by the product manufacturer.	Yes	Yes	filing observed appeared to meet this requirement			
6.13.2.2(10)(e) Lockable storage will be keyed as per the building keying system. Keying schedule to be determined with the Authority.	No					
6.13.2.2(11) Cleaning and Ease of Maintenance						
6.13.2.2(11)(a) The size, shape, and design of the furniture will allow easy access for cleaning.	Yes	Yes	furniture observed appeared to meet this requirement			
6.13.2.2(11)(b) Materials, upholstery, and finishes will be capable of withstanding institutional grade detergents, cleaners, and disinfectants with no effect on the appearance, integrity, or life of the product. Selection will be based on the understanding of the principles of decontamination and maintenance requirements (able to withstand multiple applications of diluted disinfectants over time).	No					
6.13.2.2(11)(c) Project Co will request that manufacturers provide detailed cleaning and disinfection guidelines prior to Project Co's purchase along with a thorough listing of which cleaning products will be used on their products. Project Co will review instructions to ensure they are clear and cleanable with Authority approved detergents and disinfectants.	No					
6.13.2.2(11)(d) Other upholstered soft furnishings will have the following characteristics: (d).1 Be seamless where possible or have double stitched seams located on the non-contact areas of the furniture or sealed. (d).2 Limited pleating. (d).3 Upholstered furniture in care areas will be covered with fabrics that are fluid-resistant, non- porous and will withstand cleaning with hospital grade disinfectants. (d).4 Seating will have removable seat cushions for cleanability and/or "clean-out" spaces between the seat and back for lounge seating applications. (d).5 Seating will have removable upholstery covers for both the seat and back, if applicable. Attic stock of the removable upholstery covers will be ordered with the original purchase, in the amount of 5% of the total waiting room and Client room seating. (d).6 Have high-destiny foam cores with a moisture barrier and resistance to mold.	No					
6.13.2.2(11)(e) Upholstery will: (e).1 be impermeable to water and quick-drying; (e).2 be anti-microbial, and/or have anti-microbial inhibitor technology; (e).3 have a good abrasion rating for high-use areas (with a minimum of 100,000 DR (ASTM D4157- 02 Wyzenbeek Test Method); (e).4 have a high-rating for color-fastness, exceeding 40 hours (AATCC Method 16A); (e).5 be stain-resistant; (e).6 be latex-free; (e).7 have low volatile organic compounds; (e).8 contain no heavy metals; (e).9 have no halogenated flame retardant materials or perfluorinated chemicals; (e).10 have limited use of polyvinyl chloride, avoiding use of polyvinyl chloride where possible.	No					
6.13.2.2(12) Infection Prevention and Control						
6.13.2.2(12)(a) Organic finish substances (e.g. wood), which will be exposed to a liquid, and upholstered furnishings, will be avoided, or at least minimized, in areas where immunocompromised Clients are present.	No					
6.13.2.2(12)(b) The use of impermeable upholstery (such as vinyl) is permitted in high-risk areas (high-risk applies to any areas specifically used by Clients, including Private Client rooms and waiting rooms) and any area where a healthcare worker goes after providing direct Client care (including nursing station, staff lounge, report area, conference rooms and office within Client care areas). Polyurethane fabrics are preferred, if they meet the requirements of the application.	No					
6.13.2.2(12)(c) Durable, cleanable fabrics are appropriate in low risk areas. A low level of risk applies to any office areas where staff members are not providing direct Client care, or return to after providing direct Client care.	No					
6.13.2.2(13) Environmentally Sensitive						
6.13.2.2(13)(a) Products will be GREENGUARD certified, and be designed to achieve reduced environment impact.	No					
6.13.2.2(13)(b) If wood products are used, lumber will come from responsibly managed forests, with each piece utilized to its full capacity. Wood will have low formaldehyde emissions with little to no CFC's used in the production of the materials.	No					
6.13.2.2(13)(c) Furnishings will follow the Lean principles outlined in Section 3.4 of this Schedule.	No					
6.13.2.2(14) Comfort, Ergonomics, and Safety						
6.13.2.2(14)(a) Waiting room furniture will be designed to promote comfort and long term durability.	No					
6.13.2.2(14)(b) The product construction and design will avoid stress and fatigue to the Client.	No					
6.13.2.2(14)(c) Seating will have the stability to assist the Client or visitor in entering and exiting the chair.	Yes	Yes	furniture observed appeared to meet this requirement			
6.13.2.2(14)(d) All items of furniture (including tables) will be stable and will not move or tip over when touched by a person requiring support.	Yes	Yes	furniture observed appeared to meet this requirement			

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6.13.2.2(14)(e) Furniture will not constitute a hazard for persons who have visual limitations and will be usable by persons with varying abilities and disabilities.	No					
6.13.2.2(14)(f) Products will accommodate and facilitate comfort and well-being.	No					
6.13.2.2(14)(g) Back support will be provided on seating pieces, through the use of a high or mid back, to provide adequate back support to various populations.	Yes	Yes	back support observed appeared to meet this requirement			
6.13.2.2(14)(h) A minimum of 20% of seating will be designed to meet bariatric requirements of 600 lbs.	No					
6.13.2.2(14)(i) Task seating will be ergonomically correct with respect to the seat height and pan depth. Seating will be height adjustable, with height adjustable lumbar support to maintain correct body alignment, adjustable back rest tilt, adjustable seat pan depth, height, width, and swivel adjustable armrests. The seat pan will have a waterfall edge on the seat pan or a radius front seat cushion to avoid restriction of circulation to the lower legs. The overall dimensions will be appropriate for the vast majority of users.	Yes	Yes	task seating observed appeared to meet this requirement			
6.13.2.2(14)(j) General meeting room seating will have a backrest recline function, be stackable, mobile, cleanable and durable.	Yes	Yes	may not be stackable, it is unlikely this requirement could ever be fulfilled completely			
6.13.2.2(14)(k) Boardroom seating will be height adjustable, feature a backrest recline function, be stackable, mobile, cleanable and durable.	Yes	Yes	may not be stackable, it is unlikely this requirement could ever be fulfilled completely			
6.13.2.2(14)(l) Waiting room seating will include armrests to aid sitting and standing and have a raised seat pan for hip and knee considerations.	Yes	Yes	Waiting room seating observed appeared to meet this requirement			
6.13.2.2(14)(m) All Client areas will receive furniture that are not harmful or will not allow Clients to injure themselves or others. Security and safety are the main concern.	No					
6.13.2.2(15) Office and Workstation Allocation Guidelines						
6.13.2.2(15)(a) Single-user or Multi-user workstations for computer, reading, and writing: (a).1 Height: Allow leg clearance and movement under the work surface and keyboard to be placed at elbow height for most users (27- 1/4 inches, 692mm). (a).2 Depth: Allow room for keyboard, document holder between the keyboard and monitor and monitor positioned for comfortable viewing (30 inches, 760 mm). Additional depth may be required depending on the tasks completed at the workstation. (a).3 Width: Accommodate keyboard and mouse, telephone, writing and reading areas (min. 27.6 inches, 700mm). Additional width depending on tasks completed at the workstation.	Yes	Yes	Office and Workstations observed appeared to meet this requirement			
6.13.2.2(15)(b) Project Co will be responsible for verifying field measurements to ensure proper clearance for fitting items per the specifications and drawings.	No					
6.13.2.2(16) Supplemental Standards and/or Guidelines:						
6.13.2.2(16)(a) In addition to the above listed features, furnishings will be designed and specified in accordance with all appropriate ergonomic design principles and best design practices of the Authority. Products will also meet minimum criteria set out in National Building Code of Canada and in accordance with all applicable requirements of Saskatchewan Worker's Compensation Board.	No					
6.13.2.2(16)(b) The Facility and its components must be accessible by people with different functional capacitates including, children, the elderly, handicapped, and the disabled as defined in the National Building Code of Canada. Project Co will apply "Universal Design" principles in the design and planning to ensure the furnishings are usable by all people without the need for specialized design or adaptation. Counters, desks, and work surfaces in non- office areas will include wheelchair access for both Clients and the public.	Yes	Yes	this appears to have been satisfied on observed areas			
6.13.2.2(16)(c) Products, including foam and upholstery, will be fire retardant to meet applicable building code requirements.	No					
6.13.2.2(17) Furniture List and Specifications						
6.13.2.2(17)(a) The furniture is described in the Equipment List in generic terms and by a furniture identification number. The quantity column demonstrates the number of identical items in a room. All room numbers, room names, and department names are the same or are derivatives of the Appendix 3A [Clinical Specifications].	No					
6.13.2.2(17)(b) Furniture pieces and layouts will follow the accessibility principles of the Facility as a whole. Refer to Accessible Design Section 3.11.	No					
6.13.3 Window Coverings						
6.13.3.1 Provide window coverings as follows:						
6.13.3.1(1) all exterior windows are to receive shading devices providing privacy, sun and heat control, that are easy to clean and do not support or provide a surface that encourages spread of infectious disease (e.g. do not become electrostatically charged);	No					
6.13.3.1(2) roller shades are preferred for use on exterior windows, except at SLC 1, SLC 2, and SLC 3 areas;	Yes	Yes	this appears to have been satisfied on observed window units			
6.13.3.1(3) all interior windows to receive blinds where privacy may be a concern, as identified by the Authority; and	No					
6.13.3.1(4) in Video Court Rooms and all other rooms where video conferencing is required as indicated in the Appendix 3A [Clinical Specifications] comply with the requirements as described in Appendix 3D(iv) [Conference Room Design Standards].	No					
6.13.3.2 Window coverings will allow control of exterior light entering the room during daylight hours and provide privacy during daylight and non-daylight hours.	No					
6.13.3.3 Where window coverings are required for black-out functions, provide materials, tracks, seals, and operation suited to that purpose.	No					
6.13.3.4 Use window coverings manufactured from materials and mechanisms that minimize cleaning and maintenance operations and maximize infection prevention and control.	No					
6.13.3.5 Horizontal venetian blinds are also discouraged other than for between-glass installation in SLC 1, SLC 2, and SLC 3 areas. Roller shades and vertical blinds are preferable.	No					
6.13.4 Window Shade Systems						
6.13.4.1 Use manual and motorized roller shades with one piece extruded aluminum roller tube, extruded vinyl fabric spline, aluminum profile hem bars.	No					
6.13.4.2 Install recessed in ceiling pockets, facilitating easy removal and replacement. Use galvanized or zinc-plated steel mounting brackets and non-corrosive fasteners.	Yes	No	window shades that were reviewed were not recessed in ceiling pockets	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	review each installation individually to verify
6.13.4.3 Use shading fabric of non PVC coated fiberglass yarn and that:	No					
6.13.4.3(1) is waterproof, washable, rot-proof, flame-resistant, fungal and bacteria-resistant, colourfast to light, glare-reducing, and able to control heat gain and provide external visibility;	No					
6.13.4.3(2) conforms to CAN/CBSB-4.162-M, "Hospital Textiles - Flammability Performance Requirements"; and	No					
6.13.4.3(3) is tested in accordance with ASHRAE Standard 74073 for shading coefficient, fungal resistance in accordance with ASTM G21, and bacterial resistance.	No					
6.13.4.4 Audiovisual Light Blocking Shades: Fabricated from black-out shade panel material, designed to eliminate all visible light gaps when shades are fully closed.	No					
6.13.4.5 Manual shade operation with continuous loop bead chain, clutch, cord tensioner and bracket lift operator.	No					
6.13.4.6 Motorized operation utilizing in-tube motor dive, externally located control wheels and manual switch control.	No					
6.13.5 Venetian-Type Blinds between Glazing						
6.13.5.1 Provide integral blinds, manually operated, mounted between sealed glass unit and protective security glazing in SLC 1, SLC 2, and SLC 3 areas.	Yes	Yes	venetian blind units observed appeared to comply with this requirement			
6.13.5.1(1) Private Client room-medical: viewing window from corridor or nursing station outside;	Yes	Yes	identify Private Client room-medical			
6.13.5.2 Integral blinds will be operated by durable, anti-ligature operators with removable control knob.	Yes	Yes	venetian blind units observed appeared to comply with this requirement			
6.13.5.3 Integral blinds will be capable of blocking exterior lighting that is bright enough to disturb sleep and block night time views from outdoors into the Client room.	No					
6.13.5.4 Conceal blind raise-lower controls.	Yes	Yes	venetian blind units observed appeared to comply			
6.13.5.5 Blinds will consist of tempered aluminum alloy slats uniformly spaced and 100% interlaced between cross-ladders on at least one tape. Use tapes with no special end rails required to attach the suspension members from the window opening to the blind.	Yes	Yes	venetian blind units observed appeared to comply with this requirement			
6.13.5.6 Use a hardware/window design that does not allow air movement from a room to adjacent rooms. Openings in the glazing plane are not allowed.	Yes	Yes	venetian blind units observed appeared to comply with this requirement			
6.13.5.7 The operator will be a specially constructed, permanent magnet capable of moving the blind assembly from a closed position in one direction to a closed position in the opposite direction.	No					
6.14 Special Construction (Division 13)						
6.14.1 Radiation Protection						
6.14.1.1 Comply with all applicable requirements of the National Council on Radiation Protection and Measurement (NCRP); and Radiation Safety Unit in Saskatchewan.	No					
6.14.1.2 Provide radiation protection in walls, doors, floors, ceilings and windows as required and appropriate to protect staff and Clients from x-ray.	No					
6.14.1.3 Provide radiation protection by incorporating lead sheet of appropriate weight and thickness into wall and door assemblies and leaded glass manufactured for radiation shielding purposes into window assemblies.	No					

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6.14.1.4 Radiation shielding will be 9.75 kq/m^2, not less than 0.9 mm lead to 2.1 m above the floor level as a minimum.	No					
6.14.1.5 For sheet lead, comply with ASTM B749 Standard Specification for Lead and Lead Alloy Strip, Sheet and Plate and meet or exceed Federal Specification QQL-201F Grade C.	No					
6.14.1.6 For lead-lined gypsum wall board, comply with ASTM C36 or and ASTM C1396/1396M, Type X.	No					
6.14.1.7 For lead glass, meet or exceed Federal Specification DD-G-451.	No					
6.14.1.8 For cassette transfer cabinets, meet or exceed MIL-C-3673 (DM) Radiation shielded.	No					
6.14.1.9 For radiation shielded doors, meet or exceed American National Standards Institute/ National Woodworkers Manufacturers Association (ANSI/NWMA) Industry Standard for wood doors and NCRP Report #49.	No					
6.14.1.10 Fabricate radiation-shielded doors using a single layer of sheet lead with wood core laminated on each side of the lead. Bond cores using poured lead dowels at edges.	No					
6.14.1.11 Fabricate radiation-shielded door frames with lead-lining.	No					
6.14.1.12 Lead glass or lead louvers occurring in radiation shielded doors will be equivalent rated to sheet lead in doors.	No					
6.14.1.13 For lead-laminated gypsum wall board, use a single unpierced sheet of lead.	No					
6.14.1.14 For sheet lead applied directly to partition steel studs, provide a continuous and complete protective shield.	No					
6.14.1.15 Provide radiation shielding barriers, mobile or fixed, modular and transparent barriers to protect medical personnel by providing a full body shield. Provide units with distortion-free, lead-plastic windows.	No					
6.14.2 Cooler and Freezer Rooms						
6.14.2.1 Provide walk-in cooler and freezer rooms, with freezer room floors recessed into the slab for "flush" walk-in.	Yes	Yes	small threshold used at doorway does not appear to inhibit movement of goods into and out of the cooler rooms.			
6.14.2.2 Design room enclosure elements to accommodate movement in wall and structural movements without permanent distortion, damage to infills, racking of joints, breakage of seals, water penetration or glass breakage.	No					
6.14.2.3 Design temperatures for cooler and freezer rooms will be as follows: 6.14.2.3(1) for cooler rooms: + 2°C to + 10°C; 6.14.2.3(2) for freezer rooms: -10°C to -25°C, with normal operation at + 4°C +/- ½°C;	No					
6.14.2.4 Design floor, wall and ceiling panels to comply with ULC/ORD-C376 "Fire Growth of Foamed Plastic Insulated Building Panels in a Full-Scale Room Configuration".	No					
6.14.2.5 Design floor, wall and ceiling panels with tongue and groove joints to achieve a maximum air leakage rate of 75 Pa°F 0.00 m^3/h-m^2 and a water vapour permeance rate of 0.00 perms in accordance with ASTM E283 "Air Leakage Rate Testing" and ASTM E96" Water Vapour Permeance Rate Testing".	No					
6.14.2.6 Design ceiling panels with internal reinforcing to provide a maximum deflection of 1/240 of span under uniform loading of 20 psf and to support refrigeration systems.	No					
6.14.2.7 Design room assembly to permit replacement of components.	No					
6.14.2.8 Allow for ceiling, piping, conduit and other interior dead loads imposed on the structure.	No					
6.14.2.9 Provide components and accessories as follows:						
6.14.2.9(1) Floor, Wall and Ceiling Panels: fabricated from commercial grade galvanized steel conforming to ASTM A526M with zinc coating to ASTM A525M, designation Z275, and finished on exposed surfaces with manufacturer's standard baked white enamel.	Yes	Yes	components appear to be of the required construction			
6.14.2.9(2) Panel Insulation: foamed-in-place polyurethane.	No					
6.14.2.9(3) Doors: 915 mm x 2115 mm of same panel construction as panels, with soft perimeter gaskets, manufacturer's standard pre-wired light switch, dial thermometer, heavy duty door closer, spring loaded and self-closing hinges, latch, pull handles, kickplate and threshold plate. Furnish freezer doors with anti-condensate heater, heated vent and pre-wired sill.	Yes	Yes	doors appear to be of the required construction			
6.14.2.9(4) Provide self-supporting steel shelving racks in cooler rooms.	Yes	Yes	appeared compliant			
6.14.2.9(5) Refrigeration System: self-contained air cooled condensing units mounted on walk-in units, and forced-air evaporators mounted on interior of units. Capacities, air delivery and dimensions to manufacturer's design. The cooling units are to consist of minimum two separate units per room to provide full cooling capacity redundancy for servicing and maintenance.	No					
6.14.2.9(6) Lighting: CSA approved vapourproof box with standard incandescent light fixture pre-wired to switch on door frame.	No		confirm with relevant submittal			
6.14.2.9(7) Alarms: Modulam MT, 1 local and remote to the BMS for each room.	No		review as-builts			
6.15 Conveying Equipment (Division 14)						
6.15.1 Basic Requirements						
6.15.1.1 Project Co will provide an elevator study to demonstrate how it established the number, type and distribution of elevators required to meet the needs of the Main Building. Although the total number of elevators will be established by Project Co, as a minimum supply and install two elevators at the main entry, two elevators in the Secure Zone and two elevators in the Non-Secure client side of the Main Building to achieve redundant access means. Use good design practice taking into consideration infection prevention and efficient flow, while also addressing movement control requirements.	No					
6.15.1.2 Project Co will design the elevator and systems to accommodate the Authority Activities in a manner which contributes to the overall efficiency and effectiveness of the hospital operations.	No					
6.15.1.3 Project Co will design the elevator systems to ensure there is sufficient capacity to accommodate the wide range of user and functionality requirements, in a manner which satisfies expectations for safety, reliability, responsiveness, accessibility and operational efficiency.	No					
6.15.1.4 Project Co will include provisions for persons with special mobility needs and other forms of disabilities, such as learning difficulties.	No					
6.15.1.5 Project Co will ensure that elevators will support access provisions, for people and materials, to all functional areas. Elevator access to all building levels, including mechanical levels, will be provided by at least one elevator. Project Co will provide a security card reader inside the elevator for access to mechanical levels.	Yes	No	security access is not provided via a security card reader	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
6.15.1.6 Project Co will ensure that any equipment provided will be non-proprietary and have a proven track record of at least five years field operation in Canada in similar environments and of similar configuration.	No					
6.15.1.7 Project Co will provide durable elevator cab finishes (including stainless steel fronts as well as hand and bumper rails).	Yes	Yes	the elevators the group was guided through met this requirement			
6.15.1.8 Project Co will provide emergency power operation of elevators such that all elevators are fed with emergency power and they are all capable of operating simultaneously. Project Co will coordinate with electrical design and requirements to ensure that all singe phase and 3-Phase power supplies are fed from the emergency power system.	No					
6.15.1.9 Project Co will configure elevators used for support services with platforms to accommodate easy movement of material carts. Requirements for transport of heavy equipment will be accommodated by at least one service elevator in both the secure and non-secure areas, with elevators to be engineered for Class C3 loading based on a single piece load equivalent to the elevator's rated capacity.	No					
6.15.1.10 Project Co must clearly demonstrate how elevators and controls will be configured to maintain a distinction and separation between public (Client and visitor) and non-public (staff, service, Client transfer) routes and uses.	No					
6.15.1.11 Ensure that staff and clients in secure areas will not move into or through a non-secure zone to move vertically between secure functions and that staff and clients in non-secure zones will not move into or through a secure zone to move vertically between non-secure functions.	No					
6.15.1.12 Locate service elevators to avoid crossing public circulation areas and to ensure service elevators will not be used by the public.	No					
6.15.2 Performance Criteria						
6.15.2.1 Project Co will provide elevators as required to meet the following performance requirements:						
6.15.2.1(1) Elevators will consist of machine room less (MRL) traction elevators with gearless machines or overhead traction with geared or gearless machines although in cases where vertical travel is less than 6000 mm Project Co. will be permitted to utilize holeless hydraulic equipment.	No					
6.15.2.1(2) Elevators will use twin-post jacks located on either side of the platform:	No					
6.15.2.1(3) Maximum system working pressure will not exceed 3400 kPa.	No					
6.15.2.1(4) Equipment will be rated for a minimum rated speed of 0.63 m/s.	No					
6.15.2.1(5) Service Elevator Cabs: Non-public elevators used to transport Clients will accommodate a bariatric bed with up to four staff.	No					
6.15.2.2 Project Co will arrange the equipment such that there are no timers, dates, trip counters, or other counters that would shut down the equipment or change its operation.	No					
6.15.3 Scope of Work						
6.15.3.1 Provide all necessary components to make elevator systems fully operational and functional, whether or not specifically referenced in this Schedule.	No					
6.15.3.2 Provide all permits, labour, materials, products, equipment, services and all else necessary for the design, manufacture, delivery, installation and services required for a complete and fully functioning elevator system.	No					
6.15.3.3 Obtain and pay for design submission, registration, inspection and permit, as required (except for ownership and operating license), and make such tests as required by the Technical Safety Authority of Saskatchewan prior to licensing.	No					
6.15.3.4 Codes						

	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
6.15.3.4(1) Provide equipment and perform work in accordance with the B44 Safety Code for Elevators, active Bulletins issued by the Technical Safety Authority of Saskatchewan and any other code which may govern the installation.	No					
6.15.3.5 Training						
6.15.3.5(1) At the completion of the job, provide a training session for the Authority consisting of a review of the documentation.	No					
6.15.3.6 Programming						
6.15.3.6(1) Refer to Sections 7.1, 7.7.1 and 7.8.26.1 for requirements related to programming elevators to integrate with communication, networks, fire alarms and other systems in the Main Building.	No					
6.15.3.7 Barrier-Free Access						
6.15.3.7(1) Arrange the controls and fixtures to meet barrier-free access requirements of the B44 Safety Code for Elevators Appendix E and any other code which may govern the installation.	No					
6.15.3.8 Fixtures						
6.15.3.8(1) Unless indicated otherwise in these Schedule, provide a choice of fixtures from a third party supplier and the manufacturer's standard products.	No					
6.15.3.8(2) Provide buttons with LED illumination and stainless steel targets.	Yes	Yes	the elevators the group was guided through met this requirement			
6.15.3.9 Operating Conditions						
6.15.3.9(1) Provide equipment that will operate normally when the machine room and hoistway temperature is between 5 and 35 degrees Celsius.	No					
6.15.3.9(2) Provide equipment that will operate normally when the power supply is within 10 percent of its rated voltage.	No					
6.15.3.10 Seismic requirements						
6.15.3.10(1) Comply with Section 8.4 (Elevator Safety Requirements For local Seismic Risk Zone) of the B44 Safety Code for Elevators and any other code which may govern the installation.	No					
6.15.3.11 Maintainability						
6.15.3.11(1) Arrange the equipment such that there are no timers, dates, trip counters, or other counters that would shut down the equipment or change its operation.	No					
6.15.3.11(2) Elevator equipment Project Co provides under this specification will not contain proprietary features which limit the ability to engage a registered elevator maintenance contractor, other than the original manufacturer/installer, to provide routine maintenance services.	No					
6.15.3.11(3) If specialized tools or software are required to perform routine maintenance services, provide such tools with the elevator equipment as permanent "on board" equipment, or as separate devices. Such tools or software will become the property of the Authority.	No					
6.15.3.12 Equipment Summary						
6.15.3.12(1) Passenger elevators adjacent to the main entry of the Main Building will, at a minimum, meet the requirements set out in the table below:						
Passenger Elevators						
Number	Two (2) or more to suit the needs of the Main Building			No		requirement is unclear
Type	Passenger Elevators			No		this requirement is unclear
Type of Machine	Geared or Gearless Overhead Traction or Machine Room Less (MRL)			No		this requirement is unclear
Machine Room Location	Adjacent to hoistway at lowest landing served, although remote rooms up to 15 meters from hoistway are			Yes	Yes	the elevators the group was guided through met this requirement
Alternative Control Room Location	Overhead in case of overhead traction equipment			No		confirm with relevant submittal
Drive	AC VVVF			No		confirm with relevant submittal
Load (Capacity)	Min. 4000 lb. (1820 kg) to suit the performance			No		confirm with relevant submittal
Class of Loading	Passenger Classification and Class A General Freight			No		confirm with relevant submittal
Car Speed	Minimum of . 76 m/s			No		confirm with relevant submittal
Operation	Group Supervisory System; Full Selective Collective			No		confirm with relevant submittal
Control	Microprocessor			No		confirm with relevant submittal
Number of Stops	Provide service to all floors to suit the Main Building			Yes	Yes	the elevators the group was guided through met
Openings	Front openings only (DO NOT provide both front and rear openings)			Yes	Yes	the elevators the group was guided through met this requirement
Hoistway Size	To suit the equipment			No		confirm with relevant submittal
Cab Inside Dimensions	Min. 7'-8" (2340) w x 5'-5" (1650) d			Yes	Yes	the elevators the group was guided through met
Hoistway Overhead Clearance	To suit the equipment			No		confirm with relevant submittal
Pit Depth	To suit the equipment			No		confirm with relevant submittal
Cab Height	9'-0" (2745)			Yes	Yes	the elevators the group was guided through met
Door Type	Centre Opening			Yes	Yes	the elevators the group was guided through met
Door Size	Min. 4'-0" (1220) wide x 7'-0" (2134) high			Yes	Yes	the elevators the group was guided through met
Car Operating Panel	Two (2) per car			Yes	Yes	the elevators the group was guided through met
Car Position Indicator	Two (2) per car			Yes	Yes	the elevators the group was guided through met
In-Car Riding Lanterns	None					
Hall Buttons	Min one (1) riser for up to three (3) cars,			Yes	Yes	the elevators the group was guided through met
Hall Lanterns	At all Landings			Yes	Yes	the elevators the group was guided through met
Hall Position Indicators	at Main floor levels only			Yes	Yes	the elevators the group was guided through met
6.15.3.12(2) Service Elevators will at a minimum, meet the requirements set out in the table below:						
Client Transfer/Service Elevators						
Number	Groups of 2 or more to suit the needs of the Main Building in both the Secure Zone and the Non-Secure Client [illegible] Main Building			No		this requirement is unclear
Type	Passenger / Service Elevator			Yes	Yes	the elevators the group was guided through met
Type of Machine	Geared or Gearless Overhead Traction or Machine Room Less (MRL)			No		confirm with relevant submittal
Machine Room Location	Adjacent to hoistway to lowest landing served, although remote rooms up to 15 meters from [illegible]			Yes	Yes	the elevators the group was guided through met this requirement
Alternative Control Room Location	Overhead in case of overhead traction			No		confirm with relevant submittal
Drive	AC VVVF			No		confirm with relevant submittal
Load (Capacity)	Min. 5000 lb. (2270kg)			No		confirm with relevant submittal
Class of Loading	Class C3 loading to accommodate single piece load equivalent to rated capacity for a minimum of 1 elevator in each group.			No		confirm with relevant submittal
Car Speed	0.76 m/s minimum			No		confirm with relevant submittal
Operation	Group Supervisory System; Full			No		confirm with relevant submittal
Control	Microprocessor			No		confirm with relevant submittal
Number of Stops	Provide service to all floors to suit the Main Building. At least one (1) car will also service any interstitial or [illegible]			Yes	Yes	the elevators the group was guided through met this requirement
Openings	Front only or Front and Rear Openings to suit the Main Building			Yes	Yes	the elevators the group was guided through met this requirement
Hoistway Size	To suit the equipment			No		confirm with relevant submittal
Cab Inside Dimensions	Min. 5' -8" (1727) w x 8'-6" (2590) d			Yes	Yes	the elevators the group was guided through met
Hoistway Overhead Clearance	To suit the equipment			No		confirm with relevant submittal
Pit Depth	To suit the equipment			No		confirm with relevant submittal
Cab Height	9'-0" (2745)			Yes	Yes	the elevators the group was guided through met
Door Type	Two Speed Side Opening			Yes	Yes	the elevators the group was guided through met
Door Size	4'-6" (1370) wide x 7'-0" (2135) high			Yes	Yes	the elevators the group was guided through met
Car Operating Panel	One (1) per car if front openings only or Two (2) per car if front and rear			Yes	Yes	the elevators the group was guided through met this requirement
Car Position Indicator	One (1) per car if front openings only or Two (2) per car if front and rear			Yes	Yes	the elevators the group was guided through met this requirement
In-Car Riding Lanterns	None					
Hall Buttons	Min one (1) riser for up to three (3)			Yes	Yes	the elevators the group was guided through met
Hall Lanterns	At all Landings			Yes	Yes	the elevators the group was guided through met
Hall Position Indicators	at Main floor levels only			Yes	Yes	the elevators the group was guided through met
6.15.3.13 Machine Room Less (MRL) Elevator Equipment						
6.15.3.13(1) Provide a gearless traction hoisting machine located within the hoistway.	No					
6.15.3.13(2) Provide an automatic reset governor located in the hoistway that will be maintained from the car top. When the governor has tripped, arrange that it will be reset when the car is moved in the up direction and provide means to remotely activate the governor for testing purposes.	No					
6.15.3.13(3) Provide an electronically released and monitored brake system, to permit momentary nudging of elevator within the hoistway under test or emergency conditions.	No					
6.15.3.13(4) Provide a control room that allows full body access and permits maintenance and other work to be done with the control room door in the closed position, while maintaining minimum electrical and equipment clearances imposed by Code.	Yes	Yes	the elevators the group was guided through met this requirement			
6.15.3.13(5) Locate control room adjacent to the elevator hoistway at the lowest landing served, although room can be remote from hoistway by up to 15 meters provided there are valid reasons why an adjacent room cannot be accommodated. Control rooms overtop of the hoistway are acceptable provided that access provisions are consistent with local codes and standards.	Yes	yes	the elevators the group was guided through met this requirement			
6.15.3.14 Elevator Machine and/or Control Room Equipment — All Elevators						
6.15.3.14(1) Provide a non-proprietary elevator control system that is microprocessor-based with sophisticated group dispatching capability.	No					

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6.15.3.14(2) Provide a spring applied electric brake, held open by an electro- magnet actuated by the controller. Design the brake to automatically apply in event of interruption of power supply from any cause.	No					
6.15.3.14(3) Provide sound and vibration isolation pads such that there is no direct contact between the machine and the building structure.	No					
6.15.3.14(4) Provide an emergency brake to address prescribed requirements of the Code for ascending car overspeed speed protection and unintended car movement protection.	No					
6.15.3.14(5) Provide a solid state drive complete with isolation transformers, filters (to meet IEEE Standard 519 for Special Applications), and isolation pads.	No					
6.15.3.14(6) Provide a digital velocity encoder on the motor, giving feedback to the controller on motor speed and position.	No					
6.15.3.14(7) Provide a microprocessor based controller consisting of relays, contactors, switches, capacitors, resistors, fuses, circuit breakers, overload relays, power supplies, circuit boards, static drive units, wiring terminal strips, and related components all enclosed in a cabinet with hinged door panels.	No					
6.15.3.15 Hoistway Equipment – All Elevators						
6.15.3.15(1) Provide entrances consisting of doors, frames, sills, sight guards, door hangers, tracks, interlocks, door closers, gibs, and all other equipment required for a complete installation. Provide entrance doors and frames finished in brushed stainless steel.	No					
6.15.3.15(2) Provide standard 'T' section steel guide rails for the car (and counterweight). Install guide rails using brackets fastened to the building structure. Clamp the guide rails to the bracket with clips arranged to prevent any horizontal movement of the rail. Join the rail sections using steel backing plates.	No					
6.15.3.15(3) Provide hoist ropes/belts of sufficient size and number to lift the load and ensure proper wearing qualities. Provide either steel ropes consisting of at least six strands wound around a hemp core centre or Polyurethane coated belts with high-tensile-grade zinc-plated steel cords. Ensure that all the ropes for a particular elevator are from the same manufacturing run.	No					
6.15.3.15(4) Provide a counterweight to counterbalance the elevator for smooth and economical operation with cast iron or steel plate weights contained in a structural steel frame. Provide a counterweight equal to the weight of the elevator car plus between 40 and 50 percent of the rated capacity.	No					
6.15.3.15(5) Provide for the car (and counterweight) spring mounted roller guides located at the top and the bottom of the car (and counterweight frame).	No					
6.15.3.15(6) Provide fascias from each hall sill to the entrance header below. Include express zones. Extend the fascias into the pit and the overhead.	No					
6.15.3.15(7) Provide a car frame constructed of steel channels and a platform constructed of steel channels with a wood or metal sub-floor. Isolate the frame and platform from one another so that there is no metal to metal contact in order to prevent the transmission of noise and vibration. Mount the elevator cab shell on the platform in alignment with the hoistway entrances. Isolate the cab from the car frame and platform.	No					
6.15.3.15(8) Provide counterweight guarding consistent with requirements of the B44 Code where a counterweight is located between elevators.	No					
6.15.3.16 Cab Equipment – All Elevators						
6.15.3.16(1) For Public/Passenger Elevators provide factory Standard Cab Interior Finishes, Raised Plastic Laminate cab wall panels, Sectional Suspended Ceiling with LED Lighting, cab front & car door panels of Stainless Steel #4 Brushed Finish. 50 mm diameter stainless steel cylindrical handrails.	Yes	Yes	the elevators the group was guided through met this requirement			
6.15.3.16(2) For service elevators provide Factory Standard Cab Interior Finishes, Rigidized Stainless Steel 5WL Cab Wall Panels, Sectional Suspended Ceiling with Fluorescent Lighting and Translucent Panel Diffusers, cab front & car door panels of Stainless Steel #4 Brushed Finish, 100 mm flat bar stainless steel handrails and 200 mm flat bar stainless steel bumper rails.	Yes	Yes	the elevators the group was guided through met this requirement			
6.15.3.16(3) Provide three dimensional type Infrared light beam type door detector edges that reliably detect carts and wheelchairs of varying heights and finishes, including chrome. The depth of the infrared zone will be field adjustable.	No					
6.15.3.16(4) Provide car doors, jambs, headers, hangers. tracks, door closers, gibs. electrical contacts and all other equipment required for a complete installation.	No					
6.15.3.16(5) Provide swing return or applied faceplate car stations incorporating floor push buttons, door open and close buttons, an alarm button, and other fixtures required for normal operation. Provide for each floor button a call registered light and momentary audible tone. Provide a Firefighters' Emergency Operation panel. Provide below the car station a locked service cabinet containing devices other than those used for normal operation. Engrave the car station with the elevator capacity, identification number, government installation number, and other markings required by code.	No					
6.15.3.16(6) For service elevators provide Door Hold Open Push Button in Car Operating Panels.	Yes	Yes	the elevators the group was guided through met this requirement			
6.15.3.16(7) Provide a 110 V power outlet in each car in one of the Car Panels in a locked service cabinet	No					
6.15.3.16(8) Provide a digital (dot matrix or segmented) car position indicator located above each car station with a minimum 50 mm (2") high display.	Yes	Yes	the elevators the group was guided through met this requirement			
6.15.3.16(9) Do not install any certificates or licenses in the cab.	Yes	Yes	the elevators the group was guided through met			
6.15.3.16(10) Provide a voice announcer for each elevator with automatic verbal announcement of each floor at which the elevator stops. Provide a system that will handle a variety of other messages and indications as may be required by the Authority at a later date.	No		voice announcer was evident for each elevator with automatic verbal announcement of each floor but "variety of other messages" is not defined and as such is not verifiable			
6.15.3.16(11) Provide a two speed exhaust fan mounted in the cab top.	No		confirm with relevant submittal			
6.15.3.16(12) Provide one set of cab protective pads for each group of elevators that cover all walls and the cab front return panel along with pad hooks. Provide pad hooks in each elevator.	Yes	Yes	these pads were observed while stored in the mechanical penthouse, all pads may not be provided			
6.15.3.16(13) Provide a heavy duty closed loop door operator to open and close the car and hoistway doors simultaneously.	No		confirm with relevant submittal			
6.15.3.16(14) Provide a hands-free two-way voice intercommunication / telephone system with a lobby rescue station and remote handset. Provide communication from each car enclosure to designated security station located in the Facility. Include communication stations in each machine room which as a minimum will permit two- way communication with all elevators. The two-way communication means within the car will include a means to verify operability of the telephone line consistent with requirements of the B44Code including engraving, audible, visual and reset means.	No		confirm with relevant submittal			
6.15.3.17 Hall Equipment – All Elevators						
6.15.3.17(1) Provide hoistway access switches located in the entrance frame or in the hall door sight guard at the top and bottom landing for each elevator regardless of the elevator speed or floor to floor heights for the elevator. Provide unlocking devices for all lobby door panels at all landings	No		confirm with relevant submittal			
6.15.3.17(2) Provide in each hall station illuminating up and down push buttons (at terminal floors, provide only one button) located with their centerline 1070 mm ± 25 mm (42" ± 1") above the floor.	Yes	Yes	the elevators the group was guided through were accessible to barrier free occupants			
6.15.3.17(3) Provide an elevator monitoring & command interface (PC monitor) for monitoring and control of the elevators. Locate in each control or machine room or provide a centrally located system connected to all elevators as Reviewed by the Authority.	Yes	No	these requirement was not observed in the elevator rooms we visited	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	
6.15.3.18 Electric Wiring – All Elevators						
6.15.3.18(1) Provide copper wiring to connect the equipment.	No		confirm with relevant submittal			
6.15.3.18(2) Run the wire in metal conduit, duct or electrical metallic tubing.	No		confirm with relevant submittal			
6.15.3.18(3) Provide travelling cable between car stations and the controller in the machine and/or control room.	No		confirm with relevant submittal			
6.15.3.18(4) Provide at least eight (8) pair spare shielded wires and two (2) RG6 spare coaxial conductors in the travelling cable. This is in addition to the wiring required for the basic operation of the elevators.	No		confirm with relevant submittal			
6.15.3.18(5) Provide at least ten percent spare wires in each travelling cable.	No		confirm with relevant submittal			
6.15.3.19 Operational Features and General Requirements – All Elevators						
6.15.3.19(1) All Public Passenger and Service Elevators will serve all floors except interstitial floors or mechanical levels that are accessed infrequently.	Yes	Yes				
6.15.3.19(2) Provide Firefighter's Emergency Operations Phase I & II, including remote/duplicate keyed switches at building CACF where a CACF room is provided.	No		confirm with relevant submittal			
6.15.3.19(3) Provide Barrier Free Access in Accordance with Appendix "E" of latest B44 Elevator Safety Code including Voice Announcers.	Yes	Yes	the elevators the group was guided through were accessible to barrier free occupants			
6.15.3.19(4) Provide restricted access via electronic card access for any elevators which provide access to mechanical levels including the roof and other secure access that will not be accessible to the general public.	No		confirm with relevant submittal			
6.15.3.19(5) Provide for installation of security cameras in the elevators. Install and wire the security cameras provided by another trade. Provide the required wiring in the travelling cable run between the car top and the controller as well as power to the car top for the camera.	No		confirm with relevant submittal			
6.15.3.19(6) Provide equipment and labour for installation of a card reader security system on the inside of each cab. Provide card readers in every elevator lobby at the hall call location of all staff and service elevators. Each staff or service elevator requires authentication by card reader prior to calling a cab at the hall call station. Provide the required wiring between the card reader and the elevator security box in the machine room along elevator controller connections and circuits for the security system (including floor tracking).	No		confirm with relevant submittal			
6.15.3.19(7) Provide independent service.	No		confirm with relevant submittal			
6.15.3.19(8) Provide emergency power operation of the elevators such that all elevators are fed with emergency power and are capable of operating simultaneously.	No		confirm with relevant submittal			
6.15.3.19(9) Provide means to call elevators that provide access to interstitial, mechanical levels, etc. that may not be served by all elevators in a group. This will be by a separate call button, keyed switch or electronic access card reader as reviewed by the authority.	No		confirm with relevant submittal			

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6.15.3.19(10) For all elevators provide Medical Emergency Service Operation (Code Blue) and Priority Service Operation with activation means at all floors served and in remote locations as specified in this Schedule. Provide code blue key switches in each cab and at each hall call location for elevator code-blue override.	No		verify with elevator installer and verify with elevator submittal			
6.15.3.19(11) For all elevators providing access to Client care areas, the elevator will not operate when a Client Tracking / Wandering system tag is present in the elevator cab.	No		confirm with relevant submittal			
6.15.3.19(12) Each elevator cab will be provided with a 802.11 wireless network access point to ensure full coverage of the Authority's wireless network. Provide all necessary wiring.	No					
6.15.3.19(13) Each elevator cab will be provided with a RTLS wireless network access point to ensure full coverage of the RTLS wireless network. Provide all necessary wiring.	No					
6.15.3.20 Operating Performance						
6.15.3.20(1) Levelling - Arrange that the car stops within 3 mm (1/8") of the floor level.	Yes	Yes	the elevators the group was guided through achieved this requirement			
6.15.3.20(2) Operating time - Adjust the equipment so that the operating time is 18.0 seconds or less (based on 4'6" wide two speed side opening doors and a speed of 150 fpm and travel of 4.5 m (14'- 9")). Measure the operating time from the time that the doors begin to close until they are 3/4 open at the next floor.	No					
6.15.3.20(3) Ride quality - Arrange that the lateral acceleration (front to rear and side to side) measured during express runs is less than 150 mm/s/s (0.5 f/s/s) peak to peak.	No					
6.15.3.20(4) Adjust the door equipment so that the noise level is less than 62 decibels during a full door open and door close operation. Measure the noise levels using a sound level meter set to the "A" scale for a fast response.	No					
6.15.3.20(5) Arrange the machine room equipment so that the noise level with the elevator running is less than 70 decibels. Measure the noise levels using a sound level meter set to the "A" scale for a fast response.	No					
6.15.3.21 Wiring Diagrams and Manuals						
6.15.3.21(1) Prior to substantial performance, supply to the Authority three sets of manuals which include information itemized below:	No					
6.15.3.21(1)(a) Design Submission documents submitted to Regulatory Authority for permit	No					
6.15.3.21(1)(b) Final Shop drawings	No					
6.15.3.21(1)(c) Description of special features such as firefighters' emergency operation, independent service, emergency power operation, two-way voice communication, and security operation.	No					
6.15.3.21(1)(d) As-builts wiring and schematic diagrams	No					
6.15.3.21(1)(e) Schedule of recommended routine maintenance procedures, inclusive of a site specific Maintenance Control Program consistent with prescribed requirements of B44 Code.	No					
6.15.3.21(1)(f) Description of diagnostics procedures, including complete Fault Code listing and troubleshooting instructions.	No					
6.15.3.22 Trademarks						
6.15.3.22(1) Arrange that no equipment visible to the public has any trademark, company name, or logo.	No					

5.10 Structural Design	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
5.10.1 Structural Design Principles						
5.10.1.1 The structural engineer of record will be a Professional Engineer licensed in Saskatchewan and will have demonstrated experience in structural design of buildings similar in size and complexity to this Facility.	Yes	Yes	Saskatchewan seal on As-built drawings			
5.10.1.2 The structural design, including minimum design loads and general provisions and material specifications, will satisfy the more stringent requirements of the National Building Code of Canada, other applicable or referenced design standards, loading criteria required by equipment suppliers or construction technique and the principles detailed in this Section.	Yes	Yes	To the extent of the design information indicated on as-built drawings it appears this was met.			
5.10.1.3 Carry out the Construction so that Construction-caused settlement of existing buildings and structures does not exceed 6 mm at any location.	No					
5.10.1.4 The long term differential settlement in any structural bay will not exceed 20 mm.	No					
5.10.1.5 Refer to Schedule 2 [Design and Construction Protocols] for requirements regarding vibration from Construction activities.	No					
5.10.2 Design loads						
5.10.2.1 Performance criteria						
5.10.2.1(1) Use the following minimum specified floor design live loads except where the specific use and occupancy of a space requires a higher live load:						
5.10.2.1(1)(a) main (ground) floor : 4.8 kPa (100 psf);	Yes	Yes	To the extent of the design information indicated			
5.10.2.1(1)(b) upper floors 3.60 KPa (75 psf); and	Yes	Yes	To the extent of the design information indicated			
5.10.2.1(1)(c) mechanical/electrical service rooms: 6.0 kPa (125 psf).	Yes	Yes	To the extent of the design information indicated			
5.10.2.1(2) Design all suspended floors to accommodate concentrated loads from equipment, fixtures, and machinery, whether floor, wall, or ceiling-mounted, including medical equipment and client lifting devices.	Yes	Yes	This is only verified to the extent that we did not observe any failures as a result of applied loads			
5.10.2.1(3) Design floors for a minimum superimposed specified dead load allowance of 1.0 kPa to allow for partitions, and 0.5 kPa on upper floors and roof levels to allow for ceilings and mechanical equipment (other than medical equipment).	Yes	Yes	To the extent of the design information indicated on as-built drawings it appears this was met.			
5.10.2.1(4) Design roofs for a minimum net uplift wind load of 1.5kPa and for the minimum snow and rain loads, including snow drift loads, required by the National Building Code of Canada and referenced standards. Notwithstanding other requirements, design the roofs to accommodate concentrated loads from equipment, machinery and features, whether roof or ceiling-mounted, including medical equipment and client lifting devices.	Yes	Yes	To the extent of the design information indicated on as-built drawings it appears this was met.			
5.10.2.1(5) Design roofs for the superimposed specified dead load of roofing materials, green roofs (if applicable), ceilings, mechanical equipment, but not less than 1.5 kPa (30 psf) to allow for future re-roofing alternatives.	Yes	Yes	To the extent of the design information indicated on as-built drawings it appears this was met.			
5.10.2.1(6) Design floors and roofs above mechanical and electrical service rooms for a superimposed suspended equipment specified dead load of 2.0 kPa (40 psf) in addition to the minimum dead load allowances specified above.	Yes	Yes	To the extent of the design information indicated on as-built drawings it appears this was met.			
5.10.2.1(7) Design floors for rooms designated for medical records storage or compact mobile shelving for a minimum 12.0 kPa (250 psf) specified live load.	Yes	Yes	To the extent of the design information indicated on as-built drawings it appears this was met.			
5.10.3 Flexibility for Future Change						
5.10.3.1 Design the floor structure to be able to accommodate one 130 mm diameter cored hole per structural bay at almost any location in the floor plate. The design for the concrete floors will assume at least one reinforcing bar is cut in each direction at each core location.	No					
5.10.3.2 Design the floor structure with a minimum of one 150 mm diameter knock- out opening on two sides of each column for future use. The knock-out openings will be in addition to any openings required for current services; additionally the floor structure will be capable of having a minimum of six additional core holes (100 mm diameter) per bay without additional reinforcing.	No					
5.10.4 Coordination						
5.10.4.1 Coordinate the structural members with the architectural finishes to have adequate thickness, cover and reinforcing to satisfy the fire protection and durability requirements.	No					
5.10.4.2 Coordinate all structural members with other disciplines to avoid utility interferences and to ensure adequate architectural headroom and clearances.	Yes	Yes	This is only verified to the extent that we did not observe any conflicts at the time of our site visit			
5.10.4.3 Coordinate structure with equipment requirements for slab depressions and cast-in hardware. Provide adequate depth of slab depressions to avoid the need for ramps.	Yes	Yes	This is only verified to the extent that we did not observe any conflicts at the time of our site visit			
5.10.5 Deflection limitations						
5.10.5.1 Design the structure to meet the deflection limits of the National Building Code of Canada, and in accordance with the applicable materials design standards listed in this Schedule as a minimum and as appropriate for the non-structural components of the Facility. Notwithstanding the above, the deflection limit will not exceed the levels specified in this Section:						
5.10.5.1(1) for concrete floor or roof construction, the maximum deflection occurring after the installation of non-structural elements, including long-term creep deflection and live load deflection, will not exceed span/480 and total short and long-term deflection will not exceed span/360;	No					
5.10.5.1(2) for steel floor construction, the maximum live load deflection will not exceed span/480 with the total load deflection not exceeding span/360. The total load deflection is to include effects of shrinkage of concrete topping slabs;	No					
5.10.5.1(3) for steel roof construction, the maximum live load deflection will not exceed span/360 and the total load deflection will not exceed span/240;	No					
5.10.5.1(4) wind storey drift: Height/500; and	Yes	Yes	To the extent of the design information indicated			
5.10.5.1(5) seismic storey drift: Height/40.	Yes	Yes	To the extent of the design information indicated			
5.10.5.2 In addition to the above design deflection limits, the structure must conform to specific deflection requirements for specialty equipment as recommended by the supplier or manufacturer of that equipment.	No					
5.10.5.3 In addition to the above design deflection limits, the deformations of the structure under service loads must be compatible with the architectural finishes and cladding system.	No					
5.10.6 Vibration limitations						
5.10.6.1 Design the structural system to minimize the effects of floor vibration due to use, occupancy and equipment. Vibration is to be limited to acceptable levels for the use and occupancy of the floors.	No					
5.10.6.2 Performance criteria						
5.10.6.2(1) Select and design floor structural systems to have a vibration acceleration maximum limit of 0.5%g with a damping ratio of 0.02 when an excitation force of 0.29 kN is applied.	No					
5.10.6.2(2) Machinery that could be a source of vibration is to be mounted using vibration isolation techniques.	Yes	Yes	In general it appeared that mechanical equipment was mounted with vibration isolation techniques;			
5.10.6.2(3) In areas supporting sensitive equipment and occupancies, design the structure for the vibration limitations specified by the manufacturer of the specified equipment or required by the planned use and occupancy of the floor space. In-situ measurement verification of floor vibration characteristics is to be carried out where specified by the equipment manufacturer.	No					
5.10.6.2(4) To verify compliance with the vibration requirements, an independent testing firm may be retained by the Authority. The testing firm will measure the vibration using instrumentation which may include transducers, accelerometers, signal-conditioning equipment, data recorders, and analysis systems. Measured vibration performance characteristics for the structure must meet the requirements set out in these specifications. The following table indicates acceptable vibration levels for various typical medical and non-medical Facility spaces:						

Table 5.10.6 Vibration Limitations

Occupancy or Equipment Requirements	Vibrational Velocity (1)		Floor Stiffness KFn[(2)]		
	µin/s	µm/s	Kips/in-sec		
Occupancy or Equipment Requirements	Vibrational Velocity (1)		Floor Stiffness KFn[(2)]		
	µin/s	µm/s	Kips/in-sec		
Mechanical rooms on an unoccupied floor above or below an occupied floor	40000	1000	Not Applicable		No
Office areas, waiting rooms and corridors	8000	200	250-1500		No
Mechanical Rooms on the same floor as an occupied area	12000	300	Not Applicable		No
Computer areas; Client care areas (daytime) – threshold of human perception	8000	200	500-3000		No
(1) Value of constant velocity regions measured in one-third octave bands of frequency range 8 to 100 Hz. Based on ASHRAE, AISC and ISO Criteria. (2) KFn depends on walker weight and gait. Ranges indicated reflect average to conservative designs. Average walker (150 lbs, 75 steps/min). Conservative walker (185lbs, 100 steps/min)					

5.10.6.3 Driven pile foundations are prohibited.	Yes	Yes	To the extent of the design information indicated			
5.10.7 Durability						
5.10.7.1 Design the structure and structural components of the Main Building and Ancillary Buildings, including the secondary structure supporting cladding systems, to meet or exceed the requirements of CSA S478, Guideline on Durability in Buildings for a Long Life Category Design Service Life (50-99 years).	No					
5.10.7.2 Design the structure and structural components of the Facility to minimize the effects of corrosion and deterioration due to the environment and use in accordance with the following:						
5.10.7.2(1) provide adequate concrete crack control joints and expansion / contraction joints. Caulk exposed joints.	Yes	Yes	expansion/contraction joints were noted throughout the building; however, we cannot			

5.10 Structural Design	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
5.10.7.2(2) provide high strength concrete mixes proportioned to CSA A23.1/A23.2 durability requirements for exposure class.	Yes	Yes	To the extent of the design information indicated on as-built drawings it appears this was met.			
5.10.7.2(3) reinforce concrete for crack control and repair exposed cracks. The maximum allowable crack width is per ACI and CSA 23.3	No					
5.10.7.2(4) Chamfer all corners of exposed concrete.	Yes	Yes	observed corners were chamfered			
5.10.7.2(5) hot-dip galvanize or powder-coat exterior exposed steel.	Yes	Yes	This was generally met with the observed			
5.10.7.2(6) hot-dip galvanize embedded steel protection angles and skid plates for loading docks and garbage compactors.	Yes	Yes	This was satisfied to the extent that could be observed.			
5.10.8 Medical equipment supports						
5.10.8.1 Design and provide for support/anchorage of all supplied equipment. Medical equipment will be supported, anchored, and braced to resist gravity, operational, and seismic loads in a manner appropriate for the functional and service requirements for the specific equipment.	No					
5.10.8.2 The design for medical equipment supports, anchorage, and bracing will be carried out by a qualified professional engineer registered in the Province of Saskatchewan. Installations will be field reviewed by the design engineer.	No					
5.10.8.3 Performance criteria						
5.10.8.3(1) Design floor and roof assemblies to support the gravity and seismic loads for floor, wall, or ceiling-mounted medical equipment. Ensure that steel content of structural members is compatible with equipment which is sensitive to steel content of the surrounding structure.	No					
5.10.8.3(2) Design the structure for the vibration limitations specified by the manufacturer of the specified equipment or required by the planned use and occupancy of the floor space. Carry out in-situ vibration testing when specified by the equipment manufacturer.	No					
5.10.8.3(3) Where practical, design the supports for ceiling-mounted equipment, such as radiology gantries, to be universal so that the supports may be used for various types of equipment.	No					
5.10.8.3(4) Drilled insert-type anchors for medical equipment supports and anchorage are to be rated by the insert manufacturer for seismic and cyclic loading applications.						
5.10.9 Member Design Criteria						
5.10.9.1 Design all floor and roof structural framing members to have sufficient strength and stability so that the factored member resistance is equal to or greater than the effects of the factored loads.	No					
5.10.9.2 Design all floor and roof structural framing members to have sufficient stiffness so as to remain serviceable under the specified gravity loads.	No					
6.2 Concrete (Division 3)						
6.2.1 Overriding Principles						
6.2.1.1 Design and construct cast in place or precast concrete of appropriate properties for the intended use in accordance with the requirements of all applicable codes and specifications.	Yes	Yes	To the extent of the design information indicated on as-built drawings it appears this was met.			
6.2.1.2 Design concrete for the applicable concrete exposure class and provide high sulphate resistant performance where applicable.	Yes	Yes	To the extent of the design information indicated on as-built drawings it appears this was met.			
6.2.1.3 Maximize the fly ash and/or ground granulated blast furnace slag content of the mix consistent to ensure satisfactory concrete performance properties.	No					
6.2.2 Quality Requirements						
6.2.2.1 Inspect and test cast in place concrete and concrete materials through a CSA certified testing laboratory in accordance with CAN/CSA A23.1-09. Comply with CAN/CSA A23.2-09 for Non-Destructive Methods for Testing Concrete.	No					
6.2.2.2 Ensure inspection and testing of precast concrete materials and workmanship by the precast concrete contractor as part of its quality control program in accordance with all applicable standards. Maintain plant records and ensure quality control as required by CSA A251 and in accordance with this Agreement.	No					
6.2.3 Performance Criteria						
6.2.3.1 Finish concrete floors with a smooth, dense, steel trowel finish with a Class F2 Flatness Classification in accordance with CAN/CSA A23.1/A23.2-09, except where more strict requirements are needed to suit the proposed occupancy or equipment that will be located in the space. Do not use overlay toppings to level floors.	No					
6.2.3.2 Repair cracks in concrete floors and walls to suit the floor finish and long-term serviceability requirements of the floor.	Yes	No	Cracks in the basement floor were repaired in some locations but not all	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
6.2.3.3 Water proof all foundation walls for below-grade occupied spaces and crawl spaces to prevent groundwater ingress. Use purpose-made water stops in construction joints. Install a perimeter draining system around the exterior of earth-retained foundations.	No					
6.2.3.4 Comply with CAN/CSA A23.1/A23.2-09 to minimize honey combing or patching in exposed architectural concrete.	Yes	Yes	To the extent of the exposed concrete we observed it appears this was met.			
6.2.3.5 Provide architectural concrete for exposed concrete in areas used by staff, clients or public. Identify the proposed surface finishes intended for architectural concrete in each relevant Submittal.	No					
6.2.3.6 Provide vapour barrier under slabs-on-grade in the form of continuous, cross-linked, minimum 10 mil sheets with a water vapor transmission rate of less than 0.008 perms.	No					
6.2.3.7 See Section 6.5.2.4for concrete topping on metal deck requirements.						
6.2.3.8 Provide weeping tile as required to ensure proper drainage of the sub surface foundations and walls.	No					
6.2.3.9 Where no applied finish is required, seal concrete surfaces to resist penetration and staining from food products, bodily fluids, cleaning compounds, etc. Apply and maintain sealers in accordance with manufacturer's recommendations.	Yes	No	Stair floors are not sealed	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
6.2.3.10 Where floor drains are specified elsewhere in this Schedule, design and construct floors with minimum slope to drain of 2% (1:50) so as to prevent ponding of water or other fluids.	No					

5.11 Mechanical Systems Design	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
5.11.1 General - Project Co will provide mechanical systems that:						
5.11.1.1 comply with the applicable sections of ASHRAE, ASPE, NFPA, all local, provincial, and national codes;	No					
5.11.1.2 are designed to provide a healing, comfortable and productive environment for the Facility Users and meet the required environmental conditions for all equipment;	No					
5.11.1.3 are located and designed to meet the requirements set out in Appendix 3C [Sound Transmission Ratings] from outdoor spaces / places of respite intended for staff / client use; and from adjacent properties surrounding the Site;	No					
5.11.1.4 minimize impact on the natural and physical environment, through energy efficiency, optimization of resource use, and simplification of the systems;	No					
5.11.1.5 are configured and located in such a way to minimize disruption to clinical areas to perform maintenance and repairs;	No					
5.11.1.6 are developed to provide reliability of continual operation. Adequate standby capacity and redundancy will be included in system design;	No					
5.11.1.7 are vibration isolated to minimize noise and vibration through the structure or other components of the Facility;	No					
5.11.1.8 incorporate flexibility and adaptability for future expansion without major disruption or alteration to the Facility operations or infrastructure. All systems will be designed and sized to suit the consumption and discharge needs of the Facility at peak operational requirements, with the ability to increase the flow or capacity as follows:	No					
5.11.1.8(1) Not used;						
5.11.1.8(2) branch piping and ducting will be sized to meet the requirements of current demand.	No					
5.11.1.8(3) air handling equipment, exhaust fans, and pumps will be sized for 10% additional capacity;	No					
5.11.1.8(4) provide designated space within the mechanical rooms for 25% additional future equipment;	Yes	No	Space for large equipment such as air handlers and boilers cannot be accommodated	No documented variance allowed by the Authority.	N/A	
5.11.1.8(5) design the Energy Centre to allow for expansion of the mechanical infrastructure for convenient expansion of the Facility per Section 4.1.3;	No					
5.11.1.8(6) design piping, ductwork, heating/cooling coils, and air filters to meet the following minimum parameters:						
5.11.1.8(6)(a) hydronic pressure drop – maximum piping friction loss: 4 m/100m;	No					
5.11.1.8(6)(b) hydronic velocity – maximum velocity based on pipe manufacturer's recommendations;	No					
5.11.1.8(6)(c) supply and return ductwork will be sized within the ASHRAE Fundamentals upper and lower limits for duct air velocities and pressure drop. Duct velocity will be limited to achieve and acoustical design criteria of RC(N) 35;	No					
5.11.1.8(6)(d) Heating/ cooling coil face velocity – maximum velocity 2.5 m/s; and	No					
5.11.1.8(6)(e) Air filter face velocity – maximum velocity 2.5 m/s.	No					
5.11.1.9 such that steam, water, glycol and other fluids used within mechanical systems are treated to prevent corrosion, algae growth, build-up of deposits, disease, bacteria and will prolong the equipment life.	No					
5.11.2 All mechanical services installed within electrical, communication and UPS rooms will maintain a minimum clear height of 2000 mm above finished floor. Do not install any equipment requiring a water connection in the ceiling of these spaces. Do not route plumbing, drain pipes or hydronic distribution piping in the ceiling of these spaces.	No					
5.11.3 Pipes, ducts and fittings will be insulated to conserve energy, prevent condensation, attenuate noise and prevent accidental burns.	Yes	No	Continuous, no breaks, PEX residential type insulation. Insulation for domestic hot water has been submitted. Chilled water, heating water, steam information has not been submitted. Domestic hot water insulation value does not meet minimum requirement of National Energy Code (Table 5.2.5.3, Table 6.2.3.1). Duct insulation shop has been submitted, but it cannot be determined whether the duct insulation meets the National Energy Code at this time. All other systems cannot be commented at this time.	No documented variance allowed by the Authority.	Poor material and installation observed. No documented variance allowed by the Authority.	Owners to speak with APP on next steps regarding domestic hot water insulation. Insulation values for chilled water, heating water, steam and ductwork to be verified. Cutsheets required to be submitted and included within O&M manual
5.11.4 Integrate requirements for energy incentive programs into the mechanical systems.	No					
5.11.5 Coordinate with the electrical specification for all mechanical systems that must maintain operation during an expected or unexpected shut down of the Building's main electrical service. Where mechanical equipment and devices are required to be served by emergency power, provide UPS, or conditional power as per standards in Section 7.7.5	No					
5.11.6 Coordinate all mechanical systems with requirements of all Equipment, and provide all connections required from mechanical systems. Make allowances within the mechanical systems' designs so all equipment will be removed or replaced without disrupting the operation of other equipment connected to the mechanical systems.	No					
5.11.7 Mechanical systems for each component of the Facility may be stand-alone or connected to the Energy Centre.	Yes	Yes				
5.11.8 All computer based systems required to operate or supervise mechanical systems will comply with the Authority's IMIT standards and policies identified in this Schedule including applicable Appendices.	No					
5.11.9 Post-Disaster Design						
5.11.9.1 For the Main Building and the Energy Centre (if a separate building), design all mechanical piping, equipment, and systems seismically in accordance with the requirements for post disaster buildings. Refer to Section 5.3.	No					
5.11.9.2 The following is a list of additional requirements that Project Co will comply with beyond the National Building Code of Canada minimum:						
5.11.9.2(1) The heating plant will have a minimum of two sources of energy, each designed for post disaster. The tanks for fuel stored on site will be designed to operate for a minimum of 48 hours.	Yes	Yes	Heating plant has 2 sources of energy. Operating time could not be verified.			
5.11.9.2(2) The fuel storage system will also have sufficient capacity to supply fuel to the emergency generators (per Division 26) for a minimum period of 48 hours at 100% load including spare capacity. If the heating plant and generators use the same fuel, the supplies will be stored in separate tanks per applicable regulations.	No					
5.11.9.2(3) Each fuel storage system will be complete with a fuel polishing system to ensure the stored fuel remains clean and available for its intended use at any time.	No					
5.11.9.2(4) Boilers and pumping equipment will have sufficient redundancy to ensure the Main Building continues to be operational after an event.	No					
5.11.9.2(5) See Section 5.3 for additional information on the EOC.						
5.11.9.2(6) Provide a means of holding and storing a 24-hour quantity of calculated sanitary sewer flow from the entire Main Building. 100% of the daily sewer flow will be drained into a holding chamber before sewage is pumped from the holding chamber. Provide a piped exterior connection for connection to a remote pumper truck.	No					
5.11.9.2(7) Provide connections on the exterior face of the Main Building as follows:						
5.11.9.2(7)(a) inlet connections for fire water system as required;	Yes	Yes				
5.11.9.2(7)(b) a sanitary sewer pump-out for connection to a sewage pump truck. The connection will connect to the sewage storage system;	Yes	Yes	Sanitary pump station could not be visually confirmed on site. Staff has verbally confirmed that station exists.			
5.11.9.2(7)(c) except as otherwise set out in this Section all connections will be secure terminations (valved, capped and locked) to protect from tampering and vandalism; and	Yes	Yes	All domestic water ports viewed were of commercial grade.			
5.11.9.2(7)(d) all connections will be located in service areas away from general circulation routes, and where they will be readily accessible by service vehicles.	Yes	Yes				
PART 7. FACILITIES SERVICES SUBGROUP SPECIFICATIONS						
7.1 Mechanical Systems Design Principles						
7.1.1 Refer to Section 5.11.						
7.2 Fire Suppression (Division 21)						
7.2.1 Fire Protection						
7.2.1.1 Basic Requirements						
7.2.1.1(1) Provide fire protection services as required and sized to suit the code requirements of the Facility.	No					
7.2.1.1(2) Provide a sprinkler system and equipment that is designed for the applicable occupancy classification.	No					
7.2.1.1(3) Provide a detector double check valve assembly on the sprinkler system take-off connection from the water supply. The assembly will be complete with OS&Y gate valves on both sides and tamper proof switches.	Yes	Yes				
7.2.1.1(3)(a) Incorporate redundancy in the installation to maintain uninterrupted building operation while cleaning, repairing, or replacing devices.	Yes	Yes				
7.2.1.1(4) Provide a fire pump system if required to meet the fire pressure and flow requirements. Base the design on the lowest incoming pressure of the two water mains during peak summer operation.	No					
7.2.1.1(5) Provide a fire pump, if required, with a transfer switch that is part of the fire pump controller. Mount the switch package in a separate mechanically attached enclosure that is approved by UL, ULC, FM and CSA and built to NFPA 20 standards for this application.	No					
7.2.1.1(6) Provide dry type sprinkler heads and / or a dry type sprinkler system in areas that may be subject to freezing temperatures.	Yes	Yes	Spot check only. Overhangs in BBQ patio, entrance, outside gathering, exterior covered spaces are not protected with sprinklers. Overhangs to confirm whether constructed with non-combustible products.			

5.11 Mechanical Systems Design	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
7.2.1.1(7) Ensure sprinkler heads in areas subject to vandalism are vandal proof. This includes areas where Clients may be present and unsupervised.	Yes	Yes	Spot check only. All sprinkler heads within the building were the same. Cannot verify vandal proof through visual inspection. Shop drawings does not note any anti-ligature heads			
7.2.1.1(8) In areas where Clients may be present and unsupervised, provide anti-ligature sprinkler heads.	Yes	Yes	Spot check only. All sprinkler heads within the building were the same. Cannot verify vandal proof through visual inspection. Shop drawings does not note any anti-ligature heads			
7.2.1.1(9) Provide fire extinguishers complete with recessed or fully recessed cabinets. Locate each fire extinguisher within the space it serves, and ensure it is of appropriate size and hazard classification for that space. Do not use water extinguishers or other limited types. Coordinate fire extinguisher locations with the local authority having jurisdiction during design.	Yes	Yes	Spot check only.			
7.2.1.1(10) Provide zone shut-off valves that are readily identifiable and accessible from the floor level, but not located in Client rooms. Locate zone valves within the zone served.	Yes	Yes	Spot check only. Zone control boxes not labelled.			
7.2.1.1(11) Provide fire department connections at a location that is approved by the local authority having jurisdiction.	No					
7.2.1.1(12) Provide pre-action sprinkler system(s) for the Primary Equipment Room and all Telecom Rooms as well as a gas based clean agent system for the Primary Equipment Room.	Yes	Yes	Spot check only			
7.2.1.2 Performance Criteria						
7.2.1.2(1) Ensure all equipment is CSA or ULC approved.	No					
7.2.1.2(2) Install equipment installation incompliance with manufacturers' requirements.	No					
7.2.1.2(3) Ensure fire protection systems and equipment are installed, tested and certified by a qualified and licensed contractor who is regularly engaged in such installations.	No					
7.3 Plumbing (Division 22)						
7.3.1 Site Services						
7.3.1.1 Basic Requirements						
7.3.1.1(1) Provide water, fire protection, natural gas, sanitary, and storm services as required and sized to suit the usage needs of the Facility, plus the required additional capacity as per Section 4.1.3.	No					
7.3.1.1(2) Water supply to the Building will be by a combined domestic water / fire protection service. Provide two separate services for redundancy, complete with a separate water meter on each service. Calculate and submit to the authority having jurisdiction the estimated maximum flow requirement for the domestic water supply.	No					
7.3.1.1(3) Provide water inlet connections on the exterior of the Facility as per Section 5.11.9.2(7)(a). Provide a sanitary pump-out connection on the exterior of the Facility as per Section 5.11.9.2(7)(b).	Yes	No	Sanitary pump out ports could not be visually confirmed. Staff verbally noted that ports exist.			
7.3.1.1(4) Provide a strainer, water meter, two reduced pressure backflow preventers in parallel, filter, and independent shut-off valve on the main water supply to the Facility.	Yes	Yes				
7.3.1.1(4)(a) Installation will incorporate redundancy to maintain uninterrupted building operation while cleaning, repairing, or replacing devices.	Yes	Yes				
7.3.1.1(5) Provide subsurface drainage as required to alleviate water pressure exerted onto the bottom of foundations and/or floor slabs. Size and design subsurface drainage in accordance to the geotechnical conditions.	No					
7.3.1.2 Performance Criteria						
7.3.1.2(1) For any point of use filtration implemented, use stainless steel filter casings to minimize the occurrence of equipment failure and leaks.	No					
7.3.1.2(2) Provide utilities-commission approved meters for domestic water and natural gas. Use the meters to accurately measure water flow and natural gas consumption in all flow conditions.	Yes	Yes	Visually confirmed meters on site. Could not verify calibration. Could not verify approved meters			
7.3.1.2(3) Ensure water and gas meter have remote access capability for connection to the BMS.	No					
7.3.1.2(4) Ensure all piping is accessible. No in slab piping is permitted. No under slab piping is permitted except drains.	Yes	Yes	Spot check only.			
7.3.2 Domestic Hot Water Systems						
7.3.2.1 Basic Requirements						
7.3.2.1(1) Provide a domestic hot water system with sufficient capacity and recovery rate for the hot water requirements of the Facility, plus the required additional capacity as per Section 4.1.3.	No					
7.3.2.1(2) Ensure the domestic hot water supply is of adequate temperature to serve the needs of the Facility. Provide automatic mixing valves where the supply temperature at the fixture is required to be less than the system temperature.	No					
7.3.2.1(3) Locate thermostatic mixing valves serving plumbing fixtures as close as possible to the fixture it serves to minimize dead legs. Thermostatic mixing valves serving public washrooms may be located in the ceiling space above the fixture.	Yes	Yes	Spot check only.			
7.3.2.1(4) Design the domestic hot water system to prevent growth and spread of Legionella bacteria within the hot water generation plant, piping, fixtures, or any other component. Design methods may include heat-based control and/or active treatment systems; eliminating dead-leg piping; and minimizing uncirculated piping by connecting the circulation system as close as possible to fixtures.	No					
7.3.2.2 Performance Criteria						
7.3.2.2(1) Provide a hot water generating plant and hot water storage equipment to meet the requirements of CSA Z317.1.	No					
7.3.2.2(2) Recirculate domestic hot water from the distribution system(s) back to the generating equipment.	Yes	Yes	Spot check only.			
7.3.2.2(3) Monitor hot water supply temperatures via the BMS and provide alarm outputs when the temperature exceeds or drops below the design setpoint range.	No					
7.3.3 Plumbing Distribution Systems						
7.3.3.1 Basic Requirements						
7.3.3.1(1) Design the plumbing systems to avoid disruption to the operation of the Facility during maintenance or repairs and so that, as much as possible, rooms do not need to be entered when performing these functions. Locate all isolation, maintenance, balancing, and other service valves in the corridor ceiling spaces and ensure they are accessible. Refer to CSA Z317.2 for space Type definitions.	No					
7.3.3.1(2) Distribute plumbing by means of risers to each floor area to a maximum of 25% of the total floor area. Provide isolation valves to each area.	No					
7.3.3.1(3) Incorporate flexibility in the system designs to accommodate future alterations and allow for future expansion in accordance with Section 4.1.3.	No					
7.3.3.1(4) Label all systems clearly, including painting and labelling of all pipes, ceiling identification dots, valve tagging, and emergency valve identification signage.	No					
7.3.3.1(5) Design the water systems to ensure that water is supplied at the required pressures to all water outlets.	No					
7.3.3.1(6) Provide a domestic water booster pumping system if required to meet water supply requirements. Base the design on the lowest incoming pressure of the two water mains during peak summer operation.	No					
7.3.3.1(7) Provide durable materials to allow for 24 hour a day operation with minimal downtime. All ferrous, non-ferrous, CPVC and polypropylene pipe materials acceptable by the Plumbing Code for above ground potable water distribution systems are acceptable. Where copper pipe is used for potable water distribution systems, use Type K or L copper pipe.	No					
7.3.3.1(8) Design all systems to meet the infection control requirements of the Facility.	No					
7.3.3.1(9) Provide natural gas and fuel gas piping for all uses within the Facility.	Yes	Yes	Spot check only.			
7.3.3.1(10) Provide plumbing connections to all medical and food services equipment.	Yes	Yes	Spot check only. No medical gas on site. Food services plumbed			
7.3.3.1(11) Provide systems to maintain maximum water hardness of 100 mg per litre to the Facility at all times.	No					
7.3.3.1(12) Cross-connect both water service mains within the Main Building to allow for seamless building operation from either water service.	Yes	Yes				
7.3.3.2 Ensure the domestic cold water and domestic hot water quality is within the required conditions of the applicable codes, standards, and manufacturer's recommendations for all equipment.	No					
7.3.3.3 Performance Criteria						
7.3.3.3(1) Insulate storm drainage, domestic water piping, cooling water and exposed p-traps throughout. Where piping and/or piping components are subject to freezing, provide insulation and thermostatically-controlled heat tracing. Ensure life-safety systems are not installed in locations subject to freezing.	Yes	No	Spot check only. A number of roof drains in penthouse not insulated. All other drains insulated	No documented variance allowed by the Authority.	Poor installation observed. No documented variance allowed by the Authority.	Review with Project Co to provide appropriate insulation.
7.3.3.3(2) Provide flushing and disinfection of domestic water systems. Provide independent testing of piping systems once flushing and cleaning has been completed. Supply the testing reports to the Authority.	No					
7.3.3.3(3) Ensure all piping is accessible. No in slab piping is permitted. No under slab piping is permitted except drains.	Yes	Yes	Spot check only.			
7.3.3.3(4) Provide isolation valves for all plumbing services and clearly identify the location of all valves. Locate valves at a minimum at each set of piping branches from the main distribution line, and at all locations where the branches serve group of rooms with similar uses. At Client Care Units provide isolation valves within the public area in an easily accessible area to allow access without the need for a ladder.	Yes	Yes	Spot check only.			

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7.3.3.3(5) Provide solenoid valves in the cold water and hot water supply to all Client accessible washrooms with a control system located at the team center.	Yes	Yes	Spot check only.			
7.3.4 Plumbing Fixtures						
7.3.4.1 Basic Requirements						
7.3.4.1(1) Provide fixtures as described in the Appendix 3A [Clinical Specifications] and as needed to comply with all applicable codes and regulations.	No					
7.3.4.1(2) Provide all plumbing fixtures made of impervious, durable materials suitable for a hospital facility. Select fixtures with proven acceptable hospital performance from previous installations. In all washrooms accessible to Clients use plumbing fixtures approved by the New York State Office of Mental Health, Patient Safety Standards – Materials and Systems Guidelines. Hand held showers will not be used.	No	No	Long neck faucets in staff areas of poor quality. PlanGrid #22, 144, 411, 412	No documented variance allowed by the Authority.	Poor installation observed. No documented variance allowed by the Authority.	Review internally to determine if faucets are an acceptable quality.
7.3.4.1(3) Consult with the Authority on the selection of fixtures, and give particular attention to performance relative to infection prevention and control.	No					
7.3.4.1(4) Select all sink basin and faucet combinations to minimize the potential for splatter and contamination. Ensure the faucet does not discharge directly into the drain.	Yes	Yes	Spot check only.			
7.3.4.1(5) Provide anti-splash, anti-aerosolizing faucet fittings (i.e. laminar flow) that do not retain air. Provide gooseneck faucet fittings. Avoid low profile gooseneck faucet fittings.	Yes	Yes	Spot check only.			
7.3.4.1(6) Install sinks that are stand alone wall hung type or have bowls integrally formed into countertops. Drop in or under mount style countertop sinks will not be used.	Yes	Yes	Spot check only.			
7.3.4.1(7) Provide double or triple basin sinks where required.	Yes	Yes	Spot check only.			
7.3.4.1(8) Ensure sinks meet the requirements of CSA Z8000 including materials, size, construction, location, controls, backsplash, soap and lotion dispensers and accessibility.	No					
7.3.4.1(9) In IPCR washrooms and Client washrooms in Admissions and Discharge, provide a floor mounted, back discharge, anti-ligature, stainless steel one-piece sink / toilet combination unit with integral seat, push button controls and in wall concealed flush valve.	Yes	Yes	Spot check only.			
7.3.4.1(10) Provide barrier-free plumbing fixtures, fittings and where required and ensure they are suitable for use by bariatric users. Toilets in non-Client accessible public areas that are not designated specifically for bariatric users will be wall mounted.	Yes	TBD	Spot check only. Could not verify whether fixtures are suitable for bariatric use based on visual inspection. Shop drawings within O&M do not note bariatric rated fixtures for WC-6 & 7 even though rooms with these fixtures are noted as "Client Rooms".			
7.3.4.1(11) Select toilets that will reduce the spread of infection. The bowl must be designed to accommodate the flow of the flush valve. Select toilet bowls that will not splash or spray water onto the toilet rim or anywhere outside the toilet bowl and are designed to minimize the aerosolization of the toilet contents.	Yes	Yes	Spot check only.			
7.3.4.1(12) Public toilets will consist of wall hung elongated bowls with an open front seat and electronic hands free flush valves with manual override.	Yes	Yes	Spot check only.			
7.3.4.1(13) Provide all Client washrooms with a floor mounted, back discharge, anti-ligature, porcelain toilet with integral seat, push button controls and in wall concealed flush valve.	Yes	Yes	Spot check only.			
7.3.4.1(14) Provide urinals that are wall-hung and low-consumption with electronic hands-free flush valve operation.	Yes	Yes	Spot check only.			
7.3.4.1(15) Provide washroom lavatory fixtures that are electronic hands-free type faucets with single temperature discharge that will be adjusted and set to the desired temperature, except as follows:	Yes	Yes	Spot check only.			
7.3.4.1(15)(a) for Client washroom lavatory fixtures, provide an anti- ligature electronic faucet with a mixing valve located below the lavatory. Supply a vandal proof protective enclosure to enclose the lavatory drain, supplies and mixing valve.	Yes	Yes	Spot check only.			
7.3.4.1(16) For handwashing sinks or hand hygiene stations for team centers, Client care areas, examination rooms, food services, soiled utility rooms and other similar function rooms, provide electronic hands- free type faucets with gooseneck spouts and single temperature supply that will be adjusted and set to the desired temperature. Ensure basins are adequately sized for proper washing and scrubbing of hands.	Yes	Yes	Spot check only.			
7.3.4.1(17) For equipment cleaning sinks and other utility sinks, provide stainless steel sinks with blade handle faucets and gooseneck spout. Ensure that sinks are large and deep to accommodate proper washing of equipment and that materials and piping are suitable for the intended application of the sink.	Yes	Yes	Spot check only.			
7.3.4.1(18) Supply some of the soiled utility rooms, as indicated in Appendix 3A [Clinical Specifications], with a wall mounted cleaning and disinfecting appliance for bedpan washing and a clinical service sink. Provide required plumbing and electrical services per manufacturer's recommendations. Supply all soiled utility rooms with an eyewash station at the hand-washing sink.	No					
7.3.4.1(19) For pharmacy sinks in all areas including modular clean rooms and dispensary areas, provide a stainless steel sink with blade handle faucets and gooseneck spout. Stainless steel will be of an alloy suitable for the intended use. Provide eyewash stations at the sinks.	Yes	Yes	Spot check only.			
7.3.4.1(20) Provide showers with an electronically controlled pressure balanced and high temperature limit shower valves, and anti-ligature shower heads. Design shower bases to ensure that the water is contained within the shower area. ADA accessible Client showers must be free of barriers with no lip between the washroom floor and shower. Install a floor drain at the drying area outside of each shower.	Yes	No	Spot check only. No floor drain in drying off area. Only one floor drain provide per room. Floor sloped to single floor drain.	Yes, a documented change exists in Change Certificate #6, DCR-CR-003 #188.	No documented variance allowed by the Authority.	None
7.3.4.1(21) Provide suitable quantities of janitors' sinks, hose bibs, eye wash stations, drinking fountains with bottle fillers to provide sufficient service to the Facility.	No					
7.3.4.1(21)(a) Ensure eye wash stations are complete with a water receptor and drain piping or are of the swing out type located at sink.	Yes	TBD	Spot check only. Emergency eyewashes present. Could not determine if all water would be captured in receptor			
7.3.4.1(21)(b) Design emergency showers to supply tempered water within an acceptable timeframe in accordance with the occupational health and safety legislation.	No					
7.3.4.1(21)(c) Locate drinking fountains with bottle fillers in or near staff rooms, staff gyms and as outlined in the Appendix 3A [Clinical Specifications].	No					
7.3.4.1(21)(d) Locate eyewash stations in Vocational 01/Vocational 02, Pharmacy, each Client Care Unit in the Staff Break Rooms, and treatment/exam rooms.	Yes	Yes	Spot check only.			
7.3.4.1(21)(e) Provide dedicated yard hydrant for Sweat Lodge fire pit and ceremonial area.	Yes	Yes				Review when on site with Landscape
7.3.4.1(22) Provide all appropriate services and connections to all equipment for Client care areas and all other areas. Provide all accessories as needed.	No					
7.3.4.1(23) In all Extended Client Care Unit – Client washrooms, provide a floor mounted, back discharge and anti-ligature toilet with integral seat, push button controls and in-wall concealed flush valve. Provide a central sanitary vacuum system with fully redundant components and sanitary distribution to each toilet. If the toilet is stainless steel, then the toilet will be glazed inside and out. The purpose of this system is to prevent Clients from consuming toilet water as part of Polydipsia symptoms.	Yes	Yes	Spot check only.			
7.3.4.1(24) Provide bariatric Client washrooms with provide floor mounted, back discharge, anti-ligature, porcelain toilet with integral seat, push button controls and in wall concealed flush valve (same as other Client washroom toilets but with a higher weight rating).	Yes	TBD	Spot check only. Could not verify whether fixtures are suitable for bariatric use based on visual inspection. Shop drawings within O&M do not note bariatric rated fixtures for WC-6 & 7 even though rooms with these fixtures are noted as "Client Rooms".			
7.3.4.1(25) Provide a hair washing sink and hair interceptor in the hair salon.	Yes		Yes			
7.3.4.2 Performance Criteria						
7.3.4.2(1) Ensure all electronic sensor activated fixtures meet the following requirements:						
7.3.4.2(1)(a) all sensors will be hardwired and served by the emergency power system so water is available during a power outage;	No					
7.3.4.2(1)(b) the duration of sensor faucet flow will be adjustable. All sensors will be able to operate for a minimum of 30 seconds without interruption of flow, to facilitate proper hand washing. Sensors will turn off automatically when hands are no longer in the sensor range; and	Yes	No	Spot check only. Various lavatories were tested and all operated. Duration time varied from 5s to past 30s.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with GOS if a preference was provided, as there is a wide variance in their operation time.
7.3.4.2(1)(c) the domestic hot water recirculation system will be connected to the fixture's hot water supply immediately next to the fixture shut-off at the wall.	No					
7.3.4.2(2) Provide water hammer arresters at the cold water and hot water supply to each fixture or bank of fixtures served by a single branch.	Yes	Yes	Spot check only.			
7.3.4.2(3) Ensure fixtures with electronic flush valves also have a manual flush operator.	Yes	Yes	Spot check only.			
7.3.4.2(4) If system pressure exceeds the acceptable delivery pressure, then provide pressure reducing valves with 100% redundancy. Place the valves in accessible locations.	No					
7.3.5 Plumbing Drainage and Venting Systems						
7.3.5.1 Basic Requirements						
7.3.5.1(1) Provide sanitary, storm, specialty drainage, and venting systems to avoid disruption to the operation of the Facility or interference with other services during operation and maintenance activities. Design the systems so that, as much as possible, Type I and Type II rooms do not need to be entered when performing these functions. Refer to CSA Z317.2 for space Type definitions.	No					

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7.3.5.1(2) Design all drainage systems such that the system connects to the site drainage services, utilizing gravity drainage wherever possible.	No					
7.3.5.1(3) Not used.						
7.3.5.1(4) Design pumping systems for subsurface, storm, or sanitary drainage with 100% redundancy (one redundant unit for each active unit) and supply related equipment with emergency power. Design the sump with twin compartments (separate chambers for settling and pumping) and size the sump to prevent short cycling of the pump. Provide engineered packaged system(s) complete with controls and alarms including high water level and pumps failure alarms. Provide local alarms annunciation with audible and visible alarms indication and remote connection via the BMS.	No					
7.3.5.1(5) Provide drainage and venting piping and fittings of a material suitable for the expected effluent. This includes dialysis systems and other specialty systems with acidic or high-temperature discharges. Drainage piping material may only be changed downstream at the following pointswhere the hazardous property of the effluent is reduced so a different piping material is suitable:	No					
7.3.5.1(5)(a) where the branch connects into a main drain line, such that the additional effluent flow dilutes the discharge; and	No					
7.3.5.1(5)(b) where a device is placed in-stream to reduce the hazard of the discharge, such as an acid neutralizer.	No					
7.3.5.1(6) Provide floor drains in all mechanical rooms and other rooms where water spillage from equipment or operations is reasonably expected.	Yes	Yes	Spot check only.			
7.3.5.1(6)(a) Provide drains for all devices that may discharge water, including emergency showers and backflow prevention devices.	Yes	Yes	Spot check only.			
7.3.5.1(6)(b) Install floor drains in Client care areas only as needed for the specific use of the room.	Yes	Yes	Spot check only.			
7.3.5.1(6)(c) Ensure all equipment drain piping is terminated at floor drains with the proper air gap.	Yes	Yes	Spot check only.			
7.3.5.1(6)(d) Size floor drains serving backflow preventers, sprinkler test points or other devices to accommodate the discharge flow rate of the device.	No					
7.3.5.1(7) Provide interceptors and sediment buckets to grease, dirt and solids where necessary.	Yes	Yes	Spot check only.			
7.3.5.1(7)(a) Provide interceptors in accordance with the manufacturer's specifications.	No					
7.3.5.1(7)(b) Provide grease interceptors to serve all sinks and floor drains in Food Services and Ware Washing areas. Run an independent drainage system sloped at a minimum 2%. Locate interceptors outside of building for servicing.	No					
7.3.5.1(8) Provide automatic trap primers at drains that are subject to losing the trap seal, including infrequently used fixtures and p-traps in negatively pressurized rooms. Locate trap primers in a location where they will easily be accessed, inspected, and repaired.	Yes	No	Spot check only. No automatic trap primers on site. Basement has manual trap primers	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co.
7.3.5.1(9) Provide liquid medical waste disposal system for Soiled Utility Rooms. Ensure units are powered by tap water and safely empty canisters containing infectious liquid medical waste directly into the sanitary sewer with no pouring required.	No					
7.3.5.1(10) Provide flushing rim type floor drains in all Mental Health / Psychiatry Secure Rooms.	Yes	TBD	Spot check only. Could not be verified visually on site.			
7.3.6 Plumbing Systems – Greenhouse						
7.3.6.1 Provide a 50mm domestic water supply, complete with check meter networked to the BMS and with backflow prevention. Provide interior hosebibbs located at 30 metre intervals and a 38mm valve and cap for connection to a future irrigation system, all supplied from the 50mm domestic water supply. Provide for area drainage of the concrete floor base slab. Provide area drains suitable for the application of gravel and plant growing medium environment without clogging.	No					
7.4 Heating, Ventilating and Air Conditioning (Division 23)						
7.4.1 Heating Plant:						
7.4.1.1 Provide a heating plant to provide all necessary heating for the Facility and to meet the heating plant requirements of CSA Z317.2 for a Type B HCF. Determine the peak design load and redundancy per the requirements of CSA Z317.2 and to ensure the heating plant has sufficient heating capacity to continue operations at all times of the year. Ensure that no failure of any single boiler, pump, fan, variable frequency drive (VFD), or central system control valve will be able to prevent heating of the Facility to the required design conditions.	No					
7.4.1.2 Apply energy recovery systems to offset plant heating requirements. Provide analysis of energy savings, life-cycle costing, and maintenance concerns.	No					
7.4.1.3 Design the heating plant to sufficiently meet the maximum simultaneous Facility demand for all systems served by the heating plant, as well as to be capable of controlling and responding to periods of low usage.	No					
7.4.1.4 Provide heat for all spaces to meet their full functional requirements following any disruption of the primary energy source.	No					
7.4.1.5 Provide separate standalone steam generators for all steam uses within the Facility. Provide separate steam generation systems for humidification and process loads.	Yes	Yes	Spot check only.			
7.4.1.5(1) Ensure the feed water quality to steam generators is within the required conditions of the applicable codes, standards, and manufacturer's recommendations for both the generator and the downstream equipment. Steam quality must be condensate free and minimum 97% saturated vapour.	No					
7.4.1.5(2) Provide connections in the steam system near the point-of-use, which will be used to access the steam for quality measurement.	Yes	Yes	Spot check only.			
7.4.1.6 Provide fuel tanks of underground double-walled fiberglass type installed with sufficient depth below the frost line. Provide required tank monitoring systems, fill protection, and fuel polishing system. Install in accordance with Provincial standards.	No					
7.4.2 Cooling Plant:						
7.4.2.1 Design the cooling plant to meet the maximum simultaneous Facility demand for all systems served by the cooling plant, as well as to be capable of controlling and responding to periods of low usage. Provide a minimum of two chillers. Ensure no failure of any single chiller, pump, fan, VFD, air conditioner, cooling tower or condenser will be able to prevent:	No					
7.4.2.1(1) air conditioning of the Main Telecom Room and Remote Telecom Rooms; or	No					
7.4.2.1(2) cooling of at least 50% of capacity for all other spaces at peak cooling load.	No					
7.4.2.2 Provide equipment for all necessary cooling, including the required redundancy in the cooling systems and cooling required by building systems in a post disaster event.	No					
7.4.2.3 Provide 100% outdoor air for free cooling as the first means of space cooling.	No					
7.4.2.4 Apply energy recovery systems to offset plant cooling requirements.	No					
7.4.2.5 Provide chillers rated in accordance with ARI 550/590. No absorption chillers may be used.	Yes	Yes				
7.4.2.6 Provide cooling towers with performance certified in accordance with CTI (Cooling Technology Institute) Standard STD-201. Provide a minimum of one cooling tower cell per chiller. Ensure cooling towers :	Yes	Yes	Site does not utilize cooling towers.			
7.4.2.6(1) are located away from fresh air intakes; and	Yes	Yes				
7.4.2.6(2) do not emit water vapours that interfere or could interfere with Facility operations.	No					
7.4.2.7 Design and locate chillers and cooling towers so as not to have an adverse effect on mechanical systems.	No					
7.4.2.8 Provide chillers and cooling towers for ease of operation, accessibility for maintenance, safety and appearance.	No					
7.4.2.9 Install cooling plant in compliance with ASHRAE Guideline 12 for Minimizing the Risk of Legionellosis Associated with Building Water Systems.	No					
7.4.3 Space Heating and Cooling						
7.4.3.1 Basic Requirements						
7.4.3.1(1) Provide all necessary space, ventilation and process heating for the Facility.	No					
7.4.3.1(2) Ensure space heating capacity is sufficient to meet the required indoor design temperature per CSA-Z317.2-10.	No					
7.4.3.1(3) Connect sources of heating that serve Type I and Type II spaces to the emergency power supply. Refer to CSA Z317.2 for space Type definitions.	No					
7.4.3.1(4) Provide air curtains to all vestibules adjacent to the exterior to prevent cold drafts from entering the adjacent occupied space.	Yes	No	Spot check only. All entrances/exits have CUH. Main entrance only has air curtain	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	
7.4.3.1(5) Design pumps to:						
7.4.3.1(5)(a) operate at the system fluid temperature without vapour binding and cavitation;	No					
7.4.3.1(5)(b) be non- overloading in parallel or individual operation;	No					
7.4.3.1(5)(c) operate within 25% of the midpoint of published maximum efficiency curve.	No					
7.4.3.1(6) Ensure pump construction and installation will permit complete pump servicing without disrupting piping or motor connections.	Yes	Yes	Spot check only.			
7.4.3.1(7) Insulate all piping, equipment and accessories in accordance with all applicable standards as a minimum.	Yes	Yes	Spot check only.			
7.4.3.1(8) Provide seismic mitigation and building separation devices for all piping that crosses buildings and/or utility corridors.	No					
7.4.3.1(9) Provide adequate expansion compensation for heating piping. Locate anchors and guides, design expansion compensation loops and select expansion compensation devices based on a thorough review of piping layout and engineered piping stress analysis.	No					
7.4.3.1(10) Ensure that no air within the air conditioning system, outside of the central air handling equipment, drops below its dewpoint temperature.	No					
7.4.3.1(11) Once through cooling is not permitted for any process or service within the Facility.	No					

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7.4.3.1(12) Provide continuously available chilled water or condenser water systems for all areas containing specialized medical equipment, walk in coolers, server rooms and electrical rooms for managing continuous internal heat gains. Cooling and heat rejection for these critical loads may be served by the central cooling plant provided the system incorporates redundancy per CSA Z317.2 requirements and is connected to the delayed vital electrical system. Design HVAC terminal components in conjunction with equipment location in order to mitigate unnecessary heat gain into the space.	No					
7.4.3.2 Performance Criteria						
7.4.3.2(1) Install piping in an orderly manner (aligned with structural elements and at right angles). Slope piping to permit complete drainage of the system. Make allowances in all pipe sizing to provide flexibility for future renovations in accordance with Section 4.1.3.	Yes	Yes	Spot check only. Piping was generally installed in an orderly manner, however pipe sizing allowing for flexibility and future renovation could not be determined with only visual inspection.			
7.4.3.2(2) Install equipment and piping with adequate service space, access panels and the ability to remove equipment for servicing or replacement. Locate services that require access for regular maintenance above non-critical spaces, such as corridors, to minimize or eliminate disruptions to the delivery of health care services.	Yes	No	Spot check only. Refer to task 223, drawing M06-03C. Refer to task 278, drawing A00-02. Basement fan coils are not easily accessible. Penthouse air handlers installed at high level.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co.
7.4.3.2(3) Equip all high points in piping with air removal devices such as air collection chambers and air vents. Do not locate automatic air vents above the ceilings of occupied spaces.	Yes	Yes	Spot check only.			
7.4.3.2(4) Provide isolation valves, unions, and bypass piping to allow for equipment isolation and removal without unduly affecting the system operation or major drain down.	Yes	Yes	Spot check only.			
7.4.3.2(5) Provide balancing valves, flow-measuring devices, temperature and pressure sensors throughout the system to facilitate system balancing.	Yes	Yes	Spot check only.			
7.4.3.2(6) Ensure all piping is accessible. No under-slab piping is permitted. No in-slab piping is permitted except as follows:	Yes	Yes	Spot check only.			
7.4.3.2(6)(a) Piping embedded in concrete for radiant heating and/or cooling systems is permitted in areas that are not expected to change in layout over the life span of the building.	No					
7.4.4 Ventilation						
7.4.4.1 Basic Requirements						
7.4.4.1(1) Provide all necessary ventilation for the Facility.	No					
7.4.4.1(2) Design the air handling equipment for the Facility to provide 100% outdoor air capability at all times of the year. Refer also to Section 7.4.4.1(9) of this Schedule.	No					
7.4.4.1(3) The clinical support spaces, administration spaces, meeting spaces, and energy centre ventilation systems may be designed to ASHRAE Standard 170 for Health Care Facilities provided these spaces are not served from a common ventilation system serving the Client Care Units.	No					
7.4.4.1(4) Provide HVAC systems that maintain appropriate pressure relationships between various areas of the buildings and provide necessary outdoor air quantity, air filtration, cleansing and exhaust to control the transmission of infection. Refer to applicable infection control standards and CSA Z317.2- for the relative pressurization and other minimum indoor air quality requirements for the Facility.	No					
7.4.4.1(5) Provide HVAC systems with adequate backup capacity and equipment redundancy to ensure continuous Facility operations at all times.	No					
7.4.4.1(6) Provide air handling units with sectional heating and cooling coils and manual isolation valves that will enable isolation and repairs to the damaged sections of coils without stoppage of the system.	Yes	Yes	Spot check only.			
7.4.4.1(7) Design and construct the Facility to comply with the requirements of CSA Z317.02 (Special requirements for heating, ventilation & air conditioning systems in health care facilities) for a Class B HCF (Health Care Facility), except as follows:	No					
7.4.4.1(7)(a) at least two 12-bed clusters within the Acute Client Care Units will have interconnected air handling equipment to provide adequate redundancy. Ensure the redundancy for critical spaces being served will provide sufficient supply air, outside air ventilation, and filtration as outlined in CSA Z317.02; and	No					
7.4.4.1(7)(b) for all air handling equipment serving Client areas, implement multiple fans or a fan wall within a single air handling unit cabinet.	No		Could not be verified on site.			
7.4.4.1(8) For private Client rooms requiring negative pressure, provide dampers of sufficient quality to ensure minimal leakage of airflow. Provide airflow sensor at damper to ensure isolation has been achieved, and provide pressure monitor at Nurse Station, monitored by BMS.	No					
7.4.4.1(9) Provide air filtration in accordance with all applicable standards. Ensure all HVAC systems will perform such that any indoor contaminants are maintained at less than 50% of their occupational exposure limits (OELs).	No					
7.4.4.1(10) Provide dedicated supply air with HEPA filters for spaces as required by applicable standards.	No					
7.4.4.1(11) Provide fans with Variable Frequency Drives (VFDs) for energy savings under part-load conditions. Select motor starters in accordance with Section 7.7.7.2.	No					
7.4.4.1(12) Provide factory-fabricated air handling equipment to ensure the highest construction standard.	Yes	Yes				
7.4.4.1(13) For Medical Gas Storage Rooms, provide ventilation systems in compliance with NFPA-99.	No					
7.4.4.1(14) Provide vandal-proof, anti-ligature HVAC equipment and devices in Client rooms and other areas where Clients may be present and unsupervised.	Yes	Yes	Spot check only.			
7.4.4.1(15) Ensure the ventilation systems are designed to accommodate any additional ventilation supply needed for commercial spaces to maintain proper pressurization throughout the building. Provide sufficient make up air for all NFPA-96 commercial exhaust hood systems.	No					
7.4.4.1(16) Ensure the ventilation of residential dryers and range hoods exhaust air is ducted to the exterior. If the ducting exceeds the dryer's maximum allowable distance, provide an interlocked booster fan.	Yes	No	Spot check only. Dryer fans exist, however kitchenette hood fans are not connected to the outdoors. They discharge into the space and recirculate. Refer to task 427, drawing A00-03	Yes. Change Report #7, DCR-CR-004 #231 notes the addition non-vented range fans.	No documented variance allowed by the Authority.	Update Project Agreement.
7.4.4.1(17) Apply CSA-Z317.2-10 and ASHRAE Standard 170 for space pressurization and minimum air change rates. If the standards differ apply the most stringent requirement.	No					
7.4.4.2 Performance Criteria						
7.4.4.2(1) Provide Indoor Air Quality (IAQ) management plans to meet the project's IAQ requirements.	No					
7.4.4.2(2) Incorporate a strategy to allow the installation and removal of major HVAC equipment such as fans without disrupting Facility operations.	No					
7.4.4.2(3) Locate fans, common filters (e.g. HEPA), and other equipment in the central mechanical rooms. Allow for adequate clearance for service access.	Yes	No	Spot check only. Basement fan coils are not easily accessible for filter changes.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co.
7.4.4.2(4) Provide 100% redundancy for isolation room exhaust systems.	No					
7.4.4.2(5) All equipment for exhaust systems located exterior to the building will be designed and constructed to withstand the exposure to outdoor conditions.	Yes	Yes	Spot check only.			
7.4.4.2(6) Provide fresh air intakes, cooling coil drain pans, air handling units, duct mounted humidifiers, ductwork, and all other interconnected components to prevent moisture or contaminants from collecting within the system. Provide sufficient access panels to allow for inspection and cleaning.	No					
7.4.4.2(7) Locate fresh air intakes so as not to not entrain contaminants from outdoor sources, including existing exhaust points of adjacent buildings and the Sweat Lodge. Locate all intakes in areas that are not accessible by the public and are not near exhaust air outlets.	Yes	Yes	Spot check only.			
7.4.4.2(8) Ensure all supply, return, and exhaust air is fully ducted to the space being served. Ceiling area may not be used as return air plenums.	Yes	Yes	Spot check only.			
7.4.4.2(9) Insulate all ductwork to all applicable standards as a minimum.	Yes	No	Spot check only. Supply duct has thermal insulation. No acoustic insulation observed. Noise concerns were mentioned during investigation.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review along with sound level concerns.
7.4.4.2(10) Provide seismic mitigation and building separation devices for all ductwork that crossings buildings and/or utility corridors.	No					
7.4.4.2(11) No in-slab or under slab ductwork is permitted.	No					
7.4.4.2(12) Smudging activities:	No					
7.4.4.2(12)(a) Design spaces incorporating smudging activities to comply with LEED Canada, IEQ Prerequisite 2 "Environmental Tobacco Smoke (ETS), Option 2, Case 1.	No					
7.4.4.2(13) For the Sweat Lodge, provide manually operated ventilation systems consisting of motorized intake louvers mounted near the floor and exhaust fans mounted high to exhaust heat and moisture.	No					
7.4.5 Exhaust Systems	No					
7.4.5.1 Basic Requirements						
7.4.5.1(1) Design exhaust air discharges to ensure that there is no cross contamination with outdoor air intakes for any new or existing buildings on the Site.	Yes	Yes	Spot check only.			
7.4.5.1(2) Provide exhaust fans and locate them at the end of the exhaust ductwork systems. Ensure that the fans will be readily serviceable and are separated from spaces that house other mechanical equipment.	Yes	Yes	Spot check only.			
7.4.5.1(3) Integrate control of the exhaust systems with the ventilation supply air systems for spaces with differential pressure requirements from adjacent spaces.	No					
7.4.5.1(4) Provide exhaust air systems suitable for special venting requirements as per CSA standards. Interlock these systems with associated supply air systems.	No					
7.4.5.1(5) Provide dedicated exhaust systems for all spaces incorporating smudging activities.	No					

5.11 Mechanical Systems Design	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
7.4.5.1(6) Provide commercial-grade NFPA-96 exhaust hood systems where commercial cooking operations will occur. Interlock the hood(s) with a make-up air system to ensure that proper pressurization within the Main Building is maintained.	Yes	Yes	Limited review only.			
7.4.5.1(7) Provide complete central dust collection systems for vocational areas, sized to provide dust collection from woodworking equipment. Provide adequate make-up air if dust collection systems exhaust to the exterior. Install dust collection systems will be installed in compliance with NBCC and NFPA 664.	No					
7.4.5.1(8) Provide exhaust systems at the emergency generators for radiator cooling and engine exhaust. Ensure exhaust termination points are located so flue gases are not entrained in air intakes, operable windows or any other building opening for the Main Building or adjacent buildings.	Yes	Yes				
7.4.5.2 Performance Criteria						
7.4.5.2(1) Provide dedicated exhaust systems as required for medical equipment. Do not use portable systems.	No					
7.4.5.2(2) Ensure all ductwork that exhausts humid air at or near saturation is constructed of welded stainless steel of a suitable alloy or of a material equally resilient to corrosion. Ensure all duct are sloped to drain points and are accessible for inspection and cleaning.	No					
7.4.6 Metering Requirements for Energy Measurement and Verification						
7.4.6.1 Provide meters on all services connecting to the building from an external infrastructure including natural gas service, domestic water and electrical service.	Yes	Yes				
7.4.6.2 Provide all required meters, sensors, and trend logging equipment at end uses within the building to meet the energy monitoring requirements set out in Appendix 2C [Energy].	No					
7.4.6.3 Connect all meters to the BMS to monitor, record, report and analyze energy consumption. Coordinate electrical metering and the energy management system with the requirements of Section 7.7.	No					
7.4.6.4 Design metering intervals to be fifteen minutes or less.	No					
7.4.7 Sound Attenuation and Vibration Isolation						
7.4.7.1 Design all mechanical systems to prevent sound and vibration transmission between spaces, to prevent transmission from mechanical equipment to the spaces, and to minimize sound and vibration transmission to the outside of the Main Building and Ancillary Buildings. Provide sound attenuation to limit sound levels in accordance with Appendix 3C [Sound Transmission Ratings].	No					
7.4.7.2 Provide systems with noise attenuation screening if the equipment or their exterior openings are located facing and within 200 meters of residential areas.	No					
7.4.7.3 Provide vibration isolation devices on all equipment with rotating components.	Yes	No	Spot check only. No vibration isolation: unit heaters, fan coils. Concerns of insufficient isolation where isolation does exist. Refer to task 206, drawing M06-02W; task 232, drawing M06-04C;	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co.
7.4.7.4 Ensure all suspended equipment utilize spring isolators designed for the weight and vibration characteristics of the equipment.	Yes	No	Spot check only. No vibration isolation: unit heaters, fan coils. Concerns of insufficient isolation where isolation does exist. Refer to task 206, drawing M06-02W; task 232, drawing M06-04C;	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co.
7.4.7.5 Provide flexible connections to isolate mechanical equipment sound and vibration from ducting, piping and electrical wiring systems.	Yes	No	Spot check only. No vibration isolation: unit heaters, fan coils. Concerns of insufficient isolation where isolation does exist. Refer to task 206, drawing M06-02W; task 232, drawing M06-04C;	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co.
7.4.7.6 Ensure duct silencers meet or exceed the requirements of the ductwork for cleanliness and inspection.	Yes					
7.4.7.7 Utilize fibre free internal insulation. Do not internally insulate supply ductwork.	No					
7.4.8 Testing, Adjusting, Balancing (TAB) and Commissioning (Cx)						
7.4.8.1 Without limiting Project Co's commissioning obligations under Section 12 (Commissioning and Operational Readiness) of Schedule 2 [Design and Construction Protocols], Project Co will:	No					
7.4.8.1(1) perform TAB & Cx of all mechanical equipment;	No					
7.4.8.1(2) configure the TAB & Cx plan so it will support a phased occupancy of the building, if required by construction conditions and approved by the Authority;	No					
7.4.8.1(3) utilize a quality assurance system throughout the TAB & Cx process to ensure that TAB & Cx has been performed to all equipment and systems requiring TAB & Cx. Demonstrate the quality assurance system to the Authority prior to beginning TAB & Cx;	No					
7.4.8.1(4) ensure any construction or installation errors are identified and remedied prior to the start of Cx functional testing;	No					
7.4.8.1(5) perform follow-up TAB & Cx services during each season over the first year of the building's operation;	No					
7.4.8.1(6) make all TAB & Cx reports available to the Authority. The reports will identify how much additional capacity is available for in all systems, as required by Section 4.1.3; and	No					
7.4.8.1(7) retain complete records of all TAB and Cx data.	No					
7.4.9 Greenhouse HVAC Systems						
7.4.9.1 Provide HVAC system(s) for the Greenhouse to maintain a maximum interior temperature of 32 deg. C (90 deg F) and a minimum interior temperature of 10 deg C (50 deg F). Furnish and arrange automatic roof and sidewall vents to open out and work in sequence with the HVAC system(s) to control temperature and humidity. A dedicated humidification system will not be required. Zone the vents into 3 separate controlled areas. Provide easily removable screens for the vent openings. Ensure all regulated energy consumed by the Greenhouse is metered separately from the rest of the Facility and is networked to the BMS.	No					
7.4.9.2 Provide evaporative cooler sized for 1.5 times the volume of the Greenhouse per minute.	No					
7.4.9.3 Provide indoor temperature and relative humidity sensor for each controlled zone. Integrate the roof and sidewall ventilation and HVAC system for the Greenhouse with the BMS.	No					
7.6 Integrated Automation (Division 25)						
7.6.1 Controls						
7.6.1.1 Basic Requirements						
7.6.1.1(1) Provide a building management system ("**BMS**") for the Facility that performs the following functions:						
7.6.1.1(1)(a) automatically operates, monitors and manages the Facility's systems to provide a high level of occupant comfort and maintains a healthy and productive environment without disruption to the delivery of Client treatment services;	Yes	Yes				
7.6.1.1(1)(b) provides an internet based means of external monitoring by the Authority, including all associated hardware and software;	Yes	Yes	Web based system in place.			
7.6.1.1(1)(c) interfaces with the Facility mechanical, electrical and communication systems and controls;	Yes	Yes				
7.6.1.1(1)(d) meters, trends and archives all data related to the flow of services into and out of the Facility, including domestic water, gas and electricity, and takes into account seasonal variations in flow rate;	No					
7.6.1.1(1)(e) annunciates building and equipment alarms, including fire alarm, security alarms, freezer alarms, medical equipment alarms, lighting, UPS, emergency power systems. switchgear alarms, temperature and humidity setpoint deviation alarm;	Yes	Yes				
7.6.1.1(1)(f) monitors the status, temperature, humidity and alarms for equipment identified in consultation with the Authority, including freezers, coolers, labs and medical equipment;	Yes	Yes				
7.6.1.1(1)(g) acquires and collates all data associated with energy measurement and verification as required by Section 7.4.6; and	No					
7.6.1.1(1)(h) contains safeguards to prevent unauthorized external access.	No					
7.6.1.1(2) Design the controls systems to allow monitoring and operation of the Facility from a BMS location in the Main Building, or from any location with appropriate security controls in place via an integrated BMS over IP.	No					
7.6.1.1(3) Ensure the BMS is a completely integrated (front-end and back-end) Native BacNET DDC system.	No					
7.6.1.1(4) Ensure the BMS is non-proprietary and designed with open protocol.	Yes	Yes	BACnet Delta system implemented.			
7.6.1.1(5) Provide the BMS as a complete package from one manufacturer, not a composite system from several manufacturers. Proprietary systems may be integrated into the BMS provided there are sufficient control points between the two systems to monitor and operate the system as required by these specifications and to diagnose problems.	No					
7.6.1.1(6) Ensure the BMS:						
7.6.1.1(6)(a) will optimize the system performance under all operating conditions to minimize Facility energy usage;	No					
7.6.1.1(6)(b) will accommodate future technological changes and that the architecture of the BMS will permit expansion of the system for future renovations; and	No					
7.6.1.1(6)(c) is an independent system separate from the fire alarm and other control systems.	Yes	Yes				
7.6.1.1(7) Provide airflow sensors at negative isolation dampers in ductwork and provide space pressure monitors to ensure that isolation has been achieved.	Yes	No	Only measures space pressure difference, not airflow	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co.
7.6.1.1(8) Provide sensors to monitor outdoor air volumes, space CO2 levels, and other levels as required.	No					
7.6.1.1(9) Provide continuously-operating sensors between all spaces requiring differential pressurization to monitor that the required pressure differential is in place. In addition to BMS alarms, provide local audio and visual alarms at the room entrance and also at the local monitoring station if applicable.	Yes	Yes				

5.11 Mechanical Systems Design	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
7.6.1.1(10) Provide BMS complete with Automated Fault Detection, Diagnosis and Reporting (AFDDR) software. Configure and operate the AFDDR software to ensure building systems remain continuously optimized and the need for fault diagnosis by the building operator is minimized. Ensure the AFDDR software will provide customizable web-accessible reports available to the Authority.	No					
7.6.1.1(11) Provide a separate physical network and any required network equipment for the BMS.	Yes	Yes				
7.6.1.1(12) Ensure all system critical server/head-end applications on which the BMS relies upon will reside on the Project Co's server equipment. Ensure all software systems, platforms and equipment comply with the Authority's standards and policies as described in this Schedule. Provide an interface to the Authority's network for alarm, notification, and other requirements as requested by the Authority.	No					
7.6.2 Performance Criteria						
7.6.2.1 Provide an independent temperature control zone for each Client room. The space thermostat will control supply air temperature to the room, and perimeter heating, if applicable. For type 3 spaces as defined in CSA Z317.2, base the zoning for HVAC systems on occupancy, room location, room orientation and room heating and cooling loads.	No					
7.6.2.2 Zone floor areas to provide control of smoke in a fire situation. Zone floor areas to ensure infection control for each of the care team stations.	No					
7.6.2.3 Provide space thermostats for each zone. Mercury-containing components will not be permitted.	Yes	Yes				
7.6.2.3(1) Provide adjustable type recessed thermostats in all private Client rooms with temperature read out. Ensure the temperature range may be controlled by the BMS.	Yes	Yes				
7.6.2.3(2) Interior control zones will not exceed 180 m2 (1,500 sf) per zone for open areas or a maximum of three rooms per zone for closed office areas. Corner offices will be a dedicated zone. Perimeter zones will be no more than 4.7 meters (15 feet) from an outside wall along a common exposure. Independent zones will be provided for each clinically unique space. Perimeter zones will not exceed 30m2 (300 sf).	No					
7.6.2.4 Provide local pressure control for each negative pressure room and anteroom. Provide a local annunciator panel located in the corridor outside each of these rooms.	Yes	Yes				
7.6.2.5 Design all components to default to a safe position upon failure, and install all components to ensure reliable operation at any failure situation.	No					
7.6.2.6 Design the BMS to monitor, control and indicate alarms, and to provide trending where applicable for all connected sensors and control points.	Yes	Yes	Could not be tested at the time of review. Verbally confirmed by staff that it is integrated.			
7.6.2.7 Connect the BMS to emergency power and UPS to ensure continued availability during utility power disruptions.	Yes	Yes	Could not be tested at the time of review. Verbally confirmed by staff that it is integrated.			
7.6.2.8 Design the BMS to monitor critical alarms for essential building and life safety systems. Critical alarms include:	Yes	Yes				
7.6.2.8(1) fire alarm system for alarm, supervisory and trouble;	Yes	No	BMS does not generate an alarm. The fire alarm system will generate the alarm. They are independent systems.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co.
7.6.2.8(2) all temperature alarms resulting from setpoint deviations;	Yes	Yes				
7.6.2.8(3) failure of any major HVAC or plumbing equipment;	Yes	Yes				
7.6.2.8(4) all alarms relating to the fire protection system; and	Yes	No	BMS does not generate an alarm. The fire alarm system will generate the alarm. They are independent systems.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co.
7.6.2.8(5) all alarms related to the emergency power generators and transfer switch control system.	Yes	Yes				
7.6.2.9 Include in the BMS documentation a detailed narrative description of the sequence of operation of each system.	No		Could not be tested at the time of review.			
7.6.2.10 Design user interface to be graphical in nature with animated graphics to indicate equipment operation. Graphics will be grouped in systems and in departments.	Yes	Yes				
7.6.2.11 Connect the energy management system to the BMS.	No		Could not be tested at the time of review.			

5.12 Electrical Systems Design	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
5.12.1.1 Project Co will comply with the following design principles for electrical, communications and security systems.						
5.12.1.1(1) All electrical systems, materials and equipment will be of a type and quality intended for use in a health care and correctional facilities. Configure electrical systems to meet requirements of the identified program and Client care needs in an efficient manner, with optimal utilization of space, staff and equipment resources.	No		Unable to verify system's integration and performance			
5.12.1.1(2) Provide electrical systems that: allow the Authority to deliver the program described in the Clinical Specifications; and provide redundancy, protection, continuity of service, serviceability of equipment; and a comfortable and safe working environment for Clients, visitors, and staff.	No		Unable to verify system's integration and performance			
5.12.1.1(3) Implement the latest proven technologies in the design of the electrical systems and equipment.	No		Unable to verify system's integration and performance			
5.12.1.1(4) Integrate systems where integration provides efficiency, operational and cost advantage.	No		Unable to verify system's integration and performance			
5.12.1.1(5) All electrical, communication, security, medical and life safety systems will be fully compatible with existing Authority regional based systems. Provide all infrastructures, interfaces, modifications, programming, testing and commissioning to local and off-Site systems to ensure that there is seamless integration with remote facilities.	No		Unable to verify system's integration and performance			
5.12.1.1(6) Regional IMIT standards include the following:	No					
5.12.1.1(6)(a) VoIP Telephone Service refer to Section 7.8.14;	No					
5.12.1.1(6)(b) Authority Network Electronics refer to Section 7.8.11;	No					
5.12.1.1(6)(c) Wireless Systems refer to Section 7.8.16;	No					
5.12.1.1(6)(d) LANSPAN is the SaskTel Service which connects all of the PNHRA systems to the Battleford Data Centre;	No					
5.12.1.1(6)(e) CNET is the provincial connection for corrections video court on the GoS MPLS;	No					
5.12.1.1(6)(f) Real-time Locating Service refer to Section 7.8.20;	No					
5.12.1.1(6)(g) Client Entertainment 7.8.23 Servers only required for Content Management of if they go IPTV solution	No					
5.12.1.1(6)(h) Client Education 7.8.24 Server required for Content Management;	No					
5.12.1.1(6)(i) Nurse Call System refer to Section 7.8.25 Servers;	No					
5.12.1.1(6)(j) Integration Engine refer to Section 7.8.26 Servers	No					
5.12.1.1(6)(k) Access Control System refer to Section 7.9.4 Servers – unless they want this a part of the regional solution;	No					
5.12.1.1(6)(l) Intrusion Detection refer to Section 7.9.6 Servers;	No					
5.12.1.1(6)(m) Surveillance Cameras refer to Section 7.9.7 Servers and SAN for the DVMS;	No					
5.12.1.1(6)(n) Perimeter Security refer to Section 7.9.6 Servers;	No					
5.12.1.1(6)(o) Local network management servers may be required if they plan to put IT staff in the Facility.	No					
5.12.1.1(7) Coordinate the design of network architectures and communication, security, clinical and Building systems functionality with the Authority's representatives. Refer to Appendix 3D(i) [Structured Telecommunications Cabling Systems], Appendix 3D(ii) [Wireless Infrastructure Standard], Appendix 3D(iii) [Wireless Data Communications Policy], Appendix 3D(iv) [Conference Room Design Standards], Appendix 3D(vii) [IMIT Systems Responsibility Matrix] and Appendix 3D(viii) [IMIT Systems Integration Matrix]. All computer based systems required to operate or supervise electrical, communications, security and buildings systems will comply with the Authority's IMIT standards and policies identified in this Schedule including Appendix 3D(viii) [IMIT Systems Integration Matrix].	No		Unable to verify system's integration and performance			
5.12.1.1(8) All head-end/server equipment and applications will reside on the Authority's network equipment which resides in the Main Telecommunications Room, Workstations will be located as required for system operator use.	No		Unable to verify system's integration and performance			
5.12.1.1(9) Incorporate into the design and construction the principle that change will be a constant and inevitable fact within the Facility. Utilize a combination of natural light, luminaries and controls to optimize daylight.	No		Unable to verify system's integration and performance			
5.12.1.1(10) Provide lighting schemes that support staff activities and provide enhance safety for staff, Clients and visitors.	No		Unable to verify system's integration and performance			
5.12.1.1(11) Design lighting with the objective of creating a comfortable working environment and an environment conducive to healing and recovery.	No		Unable to verify system's integration and performance			
5.12.1.1(12) Include systems and equipment coordinated to provide synergy and reliable electrical performance for the various Facility functions.	No		Unable to verify system's integration and performance			
5.12.1.2 Provide devices and systems to minimize the noise and vibrations of electrical equipment/ components (transformers, luminaries, cables etc.) to below an acceptable level as required in health care and correctional facilities.	No		Unable to verify system's integration and performance			
5.12.1.2(1) Locate electrical rooms and power distribution equipment in order to minimize the distances for feeder runs, to provide easy access for equipment moves and to avoid interference with other services and equipment. Where electrical equipment is located below grade, provide protection against the risk of flooding.	Yes	Yes	Where observable			
5.12.1.2(2) Install electrical systems and equipment in a fixed and permanent manner, seismically restrained to meet post-disaster building standards in accordance with the latest version of the National Building Code of Canada.	No					
5.12.1.2(3) Locate electrical equipment and feeder routes to minimise the risk to service continuity resulting from fire, flood, adverse weather, seismic events, construction activities and vandalism. Separate main normal electrical room and generator plant rooms with a fire rated partition as required by the national Building Code of Canada and physical separate to maximize reliability.	Yes		Partially - only separated rooms viewable			
5.12.1.2(4) Incorporate energy management systems to minimize demand pressures on the Building systems and minimize the anticipated increase to energy costs.	No		Unable to verify system's integration and performance			
5.12.1.2(5) Refer to Appendix 2C [Energy] regarding energy incentive programs. Integrate any requirements of those programs into the electrical systems.	No		Unable to verify system's integration and performance			
5.12.1.2(6) Design each electrical service to with adequate capacity to accommodate a 25% increase in electrical demand.	No		Unable to verify system's integration and performance			
5.12.1.2(7) Project Co will:						
5.12.1.2(7)(a) design and construct the entire electrical system with adequate spare capacity to accommodate an increase in electrical demand by 25%. Size the emergency power generators, main normal power transformers, feeders and 600V and 208V switchgear accordingly;	No		Unable to verify system's integration and performance			
5.12.1.2(7)(b) Provide adequate spare physical space in the main electrical room and configure the equipment provided to facilitate all electrical equipment in the main electrical room to be easily expanded by an additional 25% capacity without replacement, relocation or major shutdown of the existing equipment. A major shutdown is defined as a switchboard or transfer switch power outage extending beyond 4 hours, or a main transformer outage exceeding 12 hours;	No		Unable to verify system's integration and performance			
5.12.1.2(7)(c) provide one complete set of spare power and controls raceways extending from the main electrical room generator bus / controls locations to a future generator pad adjacent to the proposed generators. Cap off these raceways. Raceways will be sized to accommodate a similar sized generator; and	Yes	Yes	yes - limited to observable conditions			
5.12.1.2(7)(d) provide 25% spare capacity for switchgear and panelboards by means of spare adjustable trip circuit breakers. Exact sizing of these spare circuit breakers will be confirmed by the Authority during design.	Yes	Yes	partial - only presence of spare breakers possible.	Project Agreement tracker reduced to 15%		
5.12.1.2(8) Provide adequate physical space to facilitate the installation of new feeders which will utilise the spare electrical capacity. Installation of new feeders will have minimal impact on the Facility.	No		Unable to verify system's integration and performance			
5.12.1.2(9) Plan installation of equipment to facilitate easy access to equipment which may require inspection or maintenance.	Yes	No	Some areas in Penthouse were found to be too limited on space. Most spaces were fine.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review areas of concern with Authority
5.12.1.2(10) Provide electrical distribution schemes which are sized and configured to achieve service continuity in the event of equipment failure. Failure of any electrical equipment or feeder will not impair Facility operation or leave any Client treatment room or area of the Facility without at least one active light and one active receptacle.	No		Unable to verify system's integration and performance			
5.12.1.2(11) Install electrical systems and equipment in a fixed and permanent manner, seismically restrained to meet post-disaster building standards in accordance with the latest version of the National Building Code of Canada.	No		Unable to verify system's integration and performance			
5.12.1.2(12) The following equipment will be designed, certified and installed in accordance with the International Building Code (IBC) chapters 16 and 17 and tested in accordance with the shake table testing standard ICC-ES AC-156:	No		Unable to verify system's integration and performance			
5.12.1.2(12)(a) emergency power generators;	No		Unable to verify system's integration and			
5.12.1.2(12)(b) automatic transfer switch;	No		Unable to verify system's integration and			
5.12.1.2(12)(c) UPS systems;	No		Unable to verify system's integration and			
5.12.1.2(12)(d) main distribution boards;	No		Unable to verify system's integration and			
5.12.1.2(12)(e) utility transformers; and	No		Unable to verify system's integration and			
5.12.1.2(12)(f) distribution transformers 112.5kVA and larger.	No		Unable to verify system's integration and			

5.12 Electrical Systems Design	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
5.12.1.2(13) Size and configure equipment to permit routine testing and servicing of power generation and distribution equipment with minimal loss of service continuity.	Yes	Yes	Testing and servicing possible. Minimal loss of service will occur depending on the servicing being performed			
5.12.1.2(14) Design and construct all systems with protection, grounding, isolation and control to address the functional requirements where they are located.	No		Unable to verify system's integration and performance			
5.12.1.2(15) Power throughout the Main Building and Ancillary Buildings will comprise of a combination of 347/600V and 120/208V for all power, lighting and equipment loads.	Yes	Yes	Limited to observable conditions			
5.12.1.2(16) Provide services to the parking areas including lighting, wired and wireless data, video surveillance, duress, public address, a parking stall numbering system, and a vehicle engine block power receptacle at each parking space. Provide associated branch circuits for these system installations.	Yes	Yes	Limited to observable conditions			
5.12.1.2(17) All coverplates and faceplates accessible to Clients will be stainless steel affixed with tamperproof fasteners and will be of detention grade and quality.	Yes	Yes	Limited to observable conditions			
7.7 Electrical (Division 26)						
7.7.1 Wiring Methods, Materials and Devices						
7.7.1.1 Basic Requirements						
7.7.1.2 Use wiring methods, materials and devices that result in a safe, reliable and flexible electrical power, lighting control, communication, data and life safety system.	Yes	No	Limited to observable conditions. Receptacles found located over counter top sinks and mop sinks in numerous locations. Reference CEC 26-712(e)(i): the receptacles specified in Item (d) shall not be located on the area of the wall directly behind the kitchen sink.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Receptacles should be relocated
7.7.1.3 Install all wiring in a neat and secure manner so that it is protected from damage, is not in conflict with mechanical or architectural components and allows for future changes and additions.	Yes	Yes	Limited to observable conditions			
7.7.1.4 Do not install conduit or wiring in floor slabs, except where it is impossible to supply the device from the ceiling, or specific approval has been granted by the Authority.	Yes	No	Confirmed where visible. Through floor empty conduit in Kitchen found. Proper sealing of infloor conduit required	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Correct deficient installation.
7.7.1.5 Route feeders to panelboards to the panelboard from the ceiling space above. Do not feed panelboards fed via the slab below, and do not 'daisy- chain' panelboards through floors.	Yes	Yes	Limited to observable conditions			
7.7.1.6 Route Branch circuits from panelboards to a large pullbox located in the ceiling space immediately above the panelboard for distribution through the above-ceiling service space.	Yes	Yes	Limited to observable conditions			
7.7.1.7 Colour-code the power receptacles as follows:						
7.7.1.7(1) Normal power – WHITE	Yes	Yes	Limited to observable conditions			
7.7.1.7(2) Essential power – RED	Yes	Yes	Limited to observable conditions			
7.7.1.7(3) UPS power – GREY	Yes	Yes	Limited to observable conditions			
7.7.1.7(4) Housekeeping – BLACK	Yes	No	not all housekeeping receptacles are black - most are RED. Fed from emergency power supply, not compliant with Z32, article 5.6.1.2	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
7.7.1.8 Identify all power receptacles with a panel and circuit number. Arrange colour of labelling in accordance with Authority colour coding standards as follows:						
7.7.1.8(1) Vital power - RED with WHITE text	Yes	No	confirmed colour but not which power system	No documented variance allowed by the	No documented variance allowed by the	Review with Project Co
7.7.1.8(2) Delayed vital power - BLUE with WHITE text	Yes	No	not present	No documented variance allowed by the	No documented variance allowed by the	Review with Project Co
7.7.1.8(3) Conditional power - YELLOW with BLACK text	Yes	No	not present	No documented variance allowed by the	No documented variance allowed by the	Review with Project Co
7.7.1.8(4) UPS - GREY with BLACK text	Yes	No	not present	No documented variance allowed by the	No documented variance allowed by the	Review with Project Co
7.7.1.8(5) Normal power - BLACK with WHITE	Yes	Yes	Limited to observable conditions			
7.7.1.9 Project Co will obtain approval from the Authority of the proposed classification of all Client care areas in the Main Building per CSA Z32-09. The Authority will review these classifications and confirm the areas as basic, intermediate or critical care. Provide as a minimum the circuit and receptacle requirements identified in CSA Z32-09. Where this Schedule 3	No					
identifies requirements beyond CSA Z32-09, comply with the requirements of this Schedule 3.						
7.7.1.10 Performance Criteria						
7.7.1.10(1) Utilize non-alloyed copper for all conductors and all conducting components of electrical equipment, which form part of a building's wiring systems. Minimum conductor size will be #12AWG. Aluminum conductors installed in conduits may be used for feeders larger than #6AWG.	No		not viewable during audit			
7.7.1.10(2) Ensure that all conductors #12 AWG and larger are stranded.	No		not viewable during audit			
7.7.1.10(3) Project Co may use Teck cable in mechanical plant rooms and service rooms for connection to mechanical equipment. Teck cable will be installed in perpendicular runs and will be neatly strapped to dedicated cable support systems or tray. Do not support armoured cabling from mechanical ducts, pipes or equipment. Where possible, Teck cable runs will be consolidated into common routes.	Yes	No	Limited to observable conditions. Some cables require proper clamping to support structure	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Additional clamps are required where noted to secure cable to support structure
7.7.1.10(4) Provide a dedicated neutral conductor for each branch circuit.	No		not viewable during audit			
7.7.1.10(5) Provide panel boards, feeders and branch circuiting with double neutral(s) capacity where significant non-linear load(s) are anticipated. This includes open office and other areas with a medium to high density of personal computers.	No		not viewable during audit			
7.7.1.10(6) Conceal all wiring and wiring support systems from public view except where approved by the Authority.	Yes	Yes	Limited to observable conditions			
7.7.1.10(7) Separate all wiring for systems of different voltages and from different sources and do not run in common raceways. Maintain adequate shielding and separation between wiring for power and communication systems to prevent interference.	Yes	Yes	Limited to observable conditions			
7.7.1.10(8) Provide hospital grade receptacles for all Client accessible areas. Receptacles in all other areas will be specification grade. Receptacles will be colour coded.	Yes	Yes	Limited to observable conditions			
7.7.1.10(9) Utilize stainless steel cover plates for receptacles and switches. Provide tamperproof fasteners when accessible to Clients. Grouped receptacles and switches will have a single cover plate for the whole group.	Yes	Yes	Limited to observable conditions			
7.7.1.10(10) Design each room in the Facility such that receptacles and data outlets are distributed throughout the room as required to support functionality and convenient use of equipment by Facility Users and in accordance with Good Industry Practice and as required by other provisions of the Agreement. Provide sufficient quantities of receptacles and data outlets:	Yes	Yes	Limited to observable conditions			
7.7.1.10(10)(a) to meet or exceed the requirements of these documents and CSA Z32-09 and ANSI/TIA/EIA-1179	Yes	Yes	Limited to observable conditions			
7.7.1.10(10)(b) to support all of the systems and equipment to be installed or used in the Facility, including any additional power outlets required by other provisions of this Agreement; and as required by Good Industry Practice to provide convenience, flexibility of use and operational support throughout the Facility.	Yes	Yes	receptacle count appeared as per drawings. Count appeared to be sufficient for areas.			
7.7.1.10(11) Unless otherwise requested by the Authority or elsewhere in this specification, provide emergency power per CSA Z32 requirements.	Yes	Yes	Except where previously identified in our report			
7.7.1.10(12) Allow a maximum connection of six general use receptacles to one 15 amp circuit.	No		not viewable during audit			
7.7.1.10(13) Provide one duplex convenience receptacle rated at 15A, 125V in all rooms. This is in addition to all other receptacles identified in this Schedule. All receptacles installed in Private Client rooms will be GFCI and AFCI protected.	Yes	Yes	Limited to observable conditions			
7.7.1.10(14) Utilize NEMA 5-20R 15/20Amp style receptacles for printers and copiers. Provide 20A rated dedicated circuits for each printer and copier.	Yes	Yes	Limited to observable conditions			
7.7.1.10(15) Utilize NEMA 5-20R 15/20Amp style receptacles for housekeeping staggered on alternate sides of the hallways spaced a maximum of 10 meters apart. Provide 20A rated dedicated circuits for each area, to a maximum of 6 receptacles per circuit.	Yes	No	Fed from emergency power supply, not compliant with Z32, article 5.6.1.2	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
7.7.1.10(16) Provide a minimum of one power outlet on each wall in all offices. In single occupancy offices, two outlets will be quadplexes located to serve the location of possible workstations, the other two will be convenience duplexes.	Yes	Yes	Limited to observable conditions			
7.7.1.10(17) Provide a minimum of one 15Amp circuit per four open office workstations.	Yes	Yes	Limited to observable conditions			
7.7.1.10(18) Provide a minimum of one 15Amp circuit per two single person enclosed offices.	Yes	Yes	Limited to observable conditions			
7.7.1.10(19) In each multi-occupancy office provide a minimum of one quadplex receptacle for each desk or workstation and a minimum of one duplex receptacle spaced every 3 meters of open wall space.	Yes	Yes	Limited to observable conditions			
7.7.1.10(20) Each Administration workstation will have a minimum of two duplex receptacles.	Yes	Yes	Limited to observable conditions			
7.7.1.10(21) Provide a minimum of five duplex receptacles in each exam treatment room, two of which will be fed from vital power.	Yes	Yes	Limited to observable conditions			
7.7.1.10(22) Provide a minimum of six duplex receptacles at each clean utility room, 50% of which will be fed from vital power and the remainder connected to conditional power.	Yes	Yes	Limited to observable conditions			
7.7.1.10(23) In each care team station, provide one quadplex receptacle spaced 1 m on centre below work counters in knee space or above counter if no knee space is provided. 50% of these receptacles will be fed from vital power and the remainder connected to conditional power.	Yes	Yes	Limited to observable conditions			
7.7.1.10(24) In each conference or meeting room provide a minimum of one duplex receptacle spaced every 2 meters of wall space and one duplex receptacle spaced a maximum every meter above work counters. In addition, provide receptacles for all dedicated equipment such as microwaves, coffee makers, refrigerators, etc. At all locations with overhead projectors provide 15Amp 120 volt receptacle located at ceiling and provide one 27 mm conduit and pullstring to floor and/or wall outlet for the video signal to the projector.	Yes	Yes	Limited to observable conditions			
7.7.1.10(25) In each Client room, provide GFCI and AFCI protected duplex receptacles as follows:						
7.7.1.10(25)(a) Two at the bed wall for general use - connect one of the receptacles to vital power.	Yes	Yes	Limited to observable conditions			
7.7.1.10(25)(b) One at the bed wall for dedicated electric bed use – connect to vital power.	Yes	Yes	Limited to observable conditions			

5.12 Electrical Systems Design	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
7.7.1.10(25)(c) One for the TV within the wardrobe cabinet to prevent ligature risk,	No		not observable during visit			
7.7.1.10(25)(d) One openly accessible for general use.	Yes	Yes	Limited to observable conditions			
7.7.1.10(25)(e) One for the desk area.	Yes	Yes	Limited to observable conditions			
7.7.1.10(26) Provide a minimum of four duplex receptacles at each medication room, connect 50% of these receptacles to vital power.	Yes	Yes	Limited to observable conditions			
7.7.1.10(27) Provide one duplex receptacle for every 35 square meters, or portion thereof, of service, housekeeping and storage space. A minimum of one duplex receptacle will be provided per room.	Yes	Yes	Limited to observable conditions			
7.7.1.10(28) Provide special receptacles for fixed and moveable equipment as defined in the Equipment List.	Yes	Yes	Limited to observable conditions			
7.7.1.10(29) Provide each workbench in the biomedical technical work area with one 50A, 208V outlet, plus two dedicated 15A, 120V circuits each of which serves a six outlet power bar. One of the 15A circuits will be delayed vital power.	Yes	Yes	Limited to observable conditions			
7.7.1.10(30) Install approved fire stopping to maintain all fire separations and as required by local Governmental Authority.	Yes	Yes	Limited to observable conditions			
7.7.2 Raceways						
7.7.2.1 Basic Requirements						
7.7.2.1(1) Provide raceways for all wiring and cabling to support, protect and organize all wiring and cabling systems. Raceway systems will not be accessible to Clients.	Yes	Yes	Limited to observable conditions			
7.7.2.1(2) Design raceways to provide ease of access and install with capacity for expansion and change, consistent with the requirements of the equipment and systems that they serve.	Yes	Yes	Limited to observable conditions			
7.7.2.1(3) Install all raceways in a neat and secure manner in such a way that they are protected from damage, are not in conflict with mechanical or architectural components and allow for future changes and additions.	Yes	Yes	Limited to observable conditions			
7.7.2.1(4) Except as noted otherwise, install power wiring in EMT with steel couplings and connectors.	Yes	Yes	Limited to observable conditions - some use of Teck cable within main electrical room			
7.7.2.1(5) Install telecommunication outlet and building system wiring (unless otherwise required by applicable codes and standards) in EMT with steel couplings and connectors and/or cable trays. Install individual steel backboxes for all communication system devices. Conduits connecting to cable trays for communication system wiring will be mechanically connected, completed with grounding bushings.	Yes	Yes	Limited to observable conditions			
7.7.2.1(6) EMT is to be surface mounted in mechanical and electrical equipment rooms and concealed in ceiling spaces and partition walls. In mechanical equipment rooms, do not use EMT below 2 meters. Do not encase EMT in concrete, unless such installation is permitted by code and is:	Yes	Yes	Limited to observable conditions			
7.7.2.1(6)(a) Reviewed by the Authority as being necessary to achieve a concealed installation in finished spaces such as exposed concrete stairwells.	Yes	Yes	Limited to observable conditions			
7.7.2.1(7) If EMT conduit is encased in concrete, such conduit runs will:						
7.7.2.1(7)(a) be as short as possible; and	No		not viewable during audit			
7.7.2.1(7)(b) emerge from the concrete in the closest adjacent space above suspended ceilings.	No		not viewable during audit			
7.7.2.1(8) Minimum EMT conduit size is 21 mm (3/4"), except that minimum EMT conduit size for each communication or data outlet is 27 mm (1") – see Div. 27 for minimum cabling requirements for a telecommunication or data outlet.	Yes	Yes	Limited to observable conditions			
7.7.2.1(9) Use flexible conduit for all final connections to vibrating equipment, such as transformers and motors. Flexible PVC conduit (ENT) is not permitted.	Yes	Yes	Limited to observable conditions			
7.7.2.1(10) Minimum flexible conduit size is 21 mm (3/4") and maximum length of any flexible conduit run is 1.5 metres.	Yes	Yes	Limited to observable conditions			
7.7.2.1(11) Except as noted below, armoured cable (BX) may be used only for final connections from concealed junction boxes to lighting fixtures on suspended ceilings. The maximum length of any individual piece of armoured cable is 3.0 metres.	No		not viewable during audit			
7.7.2.1(12) Use rigid PVC conduits for the underground portion of services to lighting and power outlets located outside of a building. Use PVC for exposed conduits subject to washdown, such as the Greenhouse as approved by the Authority.	Yes	Yes	Limited to observable conditions			
7.7.2.1(13) Install individual bonding conductor in each conduit and/or raceway.	No		not viewable during audit			
7.7.2.1(14) Raceways will typically be concealed, however, surface raceways may be installed where required and approved by the Authority. Typical areas will include laboratory spaces, workbenches, nurse stations, and other areas where frequent changes in power and telecommunication outlets are likely.	Yes	Yes	Limited to observable conditions			
7.7.2.1(15) Armoured cable (BX) may be provided for modular pre-fabrication of non-clinical electrical systems. Modular wiring will consist of pre- cut flexible wiring which will terminate at an easily located and accessible junction box above the ceiling. The junction box will be located in an adjacent room within 3m (horizontally) of the prefabricated unit. Excess lengths of armoured cable will be neatly coiled up in the ceiling space to accommodate future changes. All wiring installed in walls will be vertical from device to ceiling space.	No		not viewable during audit			
7.7.2.1(16) Armoured cable (BX) may be provided for receptacles and light switches for non-clinical administrative areas. All installation of armoured cabling will be concealed and will originate from an easily located and accessible junction box mounted above the ceiling of the room it serves. This junction box will only serve one room, and will utilise conduit to home run its circuits back to a panelboard. Armoured cable may be daisy-chained within a single wall, but will not extend (i) around a corner, or (ii) horizontally beyond 10 metres of its vertical drop from the junction box. There will be no excess armoured cabling in the ceiling space and all wiring will be neatly strapped to the underside of slab, or onto dedicated wire management supports. Do not support armoured cabling from mechanical ducts, pipes or equipment, or suspended ceiling systems.	No		not viewable during audit			
7.7.2.2 Design all power outlet and telecommunication outlet back boxes such that they are minimum 4" square welded steel type, equivalent to a Iberville 5200 series.	Yes	Yes	Limited to observable conditions			
7.7.2.2(1) Provide cable trays for installation of all communication system wiring for data, telephone, public address and other such systems. Install cable trays from communication rooms and above all corridors. If cable trays pass through walls with fire resistance ratings, provide a non-removable ULC approved firestopping system similar to 'EZPath' raceway or 'Hilti Speedsleeve' of a quantity capable of accommodating the entire capacity of the cable tray. Use conduit for final drop from cable tray to field devices.	Yes	No	Limited to observable conditions: all speed sleeves require closing around cables	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	All speed sleeves are to be closed around cables and any empty sleeves to be closed
7.7.2.2(2) Provide aluminum or steel wire mesh cable trays with manufactured fittings. Provide continuous #6AWG minimum bare copper bonding wire which is connected by split bolt to each length of the cable tray. Provide bare copper bonding jumper between the cable tray and every associated conduit to ensure continuous bond between tray and low tension raceways.	Yes	No	Not best industry practice to use bare copper wire in aluminum tray	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
7.7.2.2(2)(a) Bond and ground all conduits, cable trays, racks and other infrastructure as per CEC and TIA 607A to the associated building ground.	Yes	Yes	Limited to observable conditions			
7.7.2.2(3) Identify all conduits, raceways, pull boxes, and junction boxes using painted colour bands. Colouring scheme will be determined by the Authority at a later date. Provide all power and communication systems with unique colours in accordance with the colouring scheme. Major colour to be 100 mm wide and minor colour to be 50 mm wide. Identify raceways with coloured bands (using either spray paint or coloured duct tape) at intervals of 6 m, plus at the point where the raceway enters a wall or floor (i.e. raceway is identified on both sides of a penetration to facilitate tracing of raceway). Colour-code all junction boxes using spray paint on the cover. Neatly identify the relevant system and circuit ID using permanent marker pen. Identify parallel conduit runs at common locations.	Yes	Yes	Limited to observable conditions			
7.7.2.2(4) Indicate the location of conductors encased or embedded in concrete or masonry by conspicuous permanent markers set in the walls, floors, or ceilings. Markers will indicate each point at which buried conductors penetrate a wall. Markers will indicate encased or buried conductors every 10 meters and at each change in direction.	No		not viewable during audit			
7.7.2.3 Performance Criteria						
7.7.2.3(1) Construct separate raceways or barriered raceways to isolate systems of different voltages and prevent magnetic interference to low voltage system conductors.	No		not viewable during audit			
7.7.2.3(2) Design and install raceways without sharp edges or tight bends so that cables will be pulled in or laid in and removed without damage to the cables.	No		not viewable during audit			
7.7.2.3(3) Provide all cable trays with minimum 100% spare capacity for the installation of future cables. This requirement includes maintaining existing cabling while installing new cabling as required for life cycle replacement. If multiple raceways are required in a group, such as a duct bank or tray system interconnecting two or more major areas, provide matching empty raceway equal to a minimum of 50% of the capacity of the total installed group.	No		not viewable during audit			
7.7.2.3(4) Provide 50% spare branch circuit raceways with fishwire to data rooms from all paneboards servicing room equipment loads.	No		not viewable during audit			
7.7.2.3(5) Provide all duct banks with a minimum quantity of 50% spare conduits of the largest conduit size.	No		not viewable during audit			
7.7.2.3(6) Install all conduits in finished areas within finished walls and above finished ceilings.	Yes	Yes	Limited to observable conditions			
7.7.2.3(7) Where cable tray is not possible to install, another pathway method must be reviewed by the Authority for implementation.	No		not viewable during audit			
7.7.2.3(8) Coordinate installation of cable tray to allow a minimum of 12 inches above, 6 inches in front, and 3 inches below of clearance from piping, conduits, ductwork, etc. Mount ceiling supports to ceiling structure directly or with 1/4", 3/8" or 1/2" threaded rod.	No		not viewable during audit			
7.7.2.3(9) Provide miscellaneous accessories to protect cabling within the cable tray and entering / leaving the cable tray to maintain cable manufacturer's recommended bend radius and protect the cable from being damaged. Include waterfalls, cable spools, radius 90 degree bends, etc.	No		not viewable during audit			
7.7.3 Electrical Utilities						
7.7.3.1 Basic Requirements						

5.12 Electrical Systems Design	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
7.7.3.1(1) Prepare load calculations identifying Facility power load to confirm sufficiency in power capacity of designed power distribution system. The Authority will coordinate with SaskPower to bring service to the Site with two independent 25kV utility services that will terminate at the same point at the electrical service entry point. The Authority will be responsible for bringing service to this point only, and the responsibility of extending the 25kV utility services within the Site will be Project Co's. These services will be redundant and will be supplied from separate circuits. For added redundancy, the SaskPower on-Site services will not share common physical routes into the primary service switchgear. Provide reliable incoming services on-Site that are protected from mechanical damage and vandalism.	Yes	Yes	Limited to observable conditions			
7.7.3.1(2) Coordinate with local utility service provider and provide telephone, internet, fibre and cable TV services to the Site. Consult with the Authority for ordering services through the Authority's 3rd party service providers and provide redundant fibre and copper services from the utility provider. Provide redundant service demarcation rooms and redundant diverse service connections to the main telecommunications room.	Yes	Yes	Limited to observable conditions			
7.7.3.1(3) Design and construct the main electrical room to facilitate future expansion with minimal disruption to Facility operation and continuity. Construct the Facility with all necessary infrastructure including spare capacity, spare circuit breakers, physical expansion space, raceways stubbed out from the building footprint and capped off for easy future extension, pull-pits, sleeves, housekeeping pads, wiring, controls, distribution routes, and ventilation as necessary to accommodate the future system expansion.	No		functionality not viewable during audit			
7.7.3.2 Performance Criteria						
7.7.3.2(1) Design the electrical systems and equipment to comply with the National Building Code of Canada requirements for a post-disaster building.	No		not viewable during audit			
7.7.3.2(2) Design the electrical and communication utility services and electrical and communication rooms to be accessible to authorized personnel only. Route on-Site services underground in duct banks sloped away from the building and drained to the Site drainage system. Coordinate with the utilities transitioning of Off-Site overhead services to underground on-Site. Pull boxes (manholes) will have lockable hasps and will not be located in secure areas, on roadways, or in areas accessible to Clients. Provide security measures as required by the Authority including access controls, intrusion detection and video surveillance. The required on-Site service at the northwest creek bed crossing can be provided by overhead crossing .	No		not viewable during audit			
7.7.3.2(3) Incorporate design features and practices to reduce arc flash hazards on electrical systems such that routine operations such as transfer switch operation, opening and closing distribution breakers, and inspection and maintenance activities will require (as defined in NFPA 70E) PPE Level 2. No activities will expose personnel to arc flash hazards which exceed the protection afforded by PPE Level 4.	No		not viewable during audit			
7.7.3.2(4) Utilise technologies such as zone selective interlocking protection, limiting available fault current from transformers, maintenance mode settings of circuit breakers or providing remote control of switching and motorised racking devices.	No		review of supplied information required			
7.7.3.2(5) Prepare and submit to the Authority a detailed arc flash study signed and sealed by a professional engineer registered in Saskatchewan and provide equipment labelling indicating available energy levels and level of PPE required when servicing the equipment.	Yes	Yes				
7.7.3.2(6) Provide a fully selective protection scheme for all of the circuit breakers on all essential system distribution equipment immediately downstream of the transfer switches, for both hydro and generator available fault currents. Additionally, all essential system circuit breakers will be fully selective for circuit breaker sizes 150A and larger.	No		not viewable during audit			
7.7.3.2(7) Prepare and submit to the Authority a detailed distribution coordination study signed and sealed by a professional engineer registered in Saskatchewan.	No		review of supplied information required			
7.7.4 Service Switchgear – Over 600 Volts						
7.7.4.1 Basic Requirements						
7.7.4.1(1) Provide metal clad electrical equipment for the primary service switchgear system for the Facility.	Yes	Yes	Limited to observable conditions			
7.7.4.1(2) Utilize transmission and distribution equipment that are robust, reliable, easily operated and maintained.	Yes	Yes	Limited to observable conditions			
7.7.4.1(3) Provide an indoor load break switch and motorized high voltage circuit breaker for each of the two incoming 25kV utility services. The circuit breakers will be configured as an open transition automatic transfer switch and will provide the capability of local manual and automatic transferring between services. The open transition service configuration will be subject to a SaskPower operating order. The operating order will define switching operations during planned and unplanned outages, key contacts, authorized personnel and specific nomenclature / sequences to support the switching orders. Provide all necessary arrangements to conform to SaskPower requirements.	Yes	Yes	Limited to observable conditions			
7.7.4.1(4) Provide indoor high voltage circuit breakers and load break switches for each utility (normal) power transformer.	Yes	Yes	Limited to observable conditions			
7.7.4.1(5) Provide one spare 25kV distribution circuit breaker adjacent to the main service transformer circuit breakers.	Yes	Yes	Limited to observable conditions			
7.7.4.1(6) Provide a spare section in which a circuit breaker will be added for future medium voltage distribution of normal power. Provide a capped off duct bank stubbed out of the switchgear enclosure or associated building service location to facilitate future extension of 25kV power to a new building or load on the Site. Coordinate the location of the spare duct bank with the Authority	Yes	Yes	Limited to observable conditions			
7.7.4.2 Performance Criteria						
7.7.4.2(1) Provide main load break switches utilising HRC current limiting fuses.	No					
7.7.4.2(2) Provide rackable 500 MVA rated metal-clad switchgear with vacuum circuit breakers, potential transformers, current transformers and metering sections.	Yes	Yes	Limited to observable conditions			
7.7.5 Emergency Power						
7.7.5.1 Basic Requirements						
7.7.5.1(1) Provide emergency power generating plant comprising a minimum of two diesel powered generators. Generators will be located at grade level, preferably inside the Energy Centre. Generators will be capable of being installed and withdrawn from the building through the air discharge louvers with minimal deconstruction work being required.	Yes	Yes	Limited to observable conditions			
7.7.5.1(2) If exterior generators are provided, located the exterior generators at grade housed in secure, walk-in, illuminated and heated enclosures. Enclosures will be supervised for unauthorised intrusion.	Yes	Yes	Limited to observable conditions			
7.7.5.1(3) Locate the generators to enable routine and emergency maintenance activities to be performed quickly and efficiently. Removal of the generators from the Site will be simple and will not require disassembly of the building or systems, nor special lifting equipment.	Yes	Yes	Limited to observable conditions			
7.7.5.1(4) Do not place generators located where they are subject to damage from vandalism, falling objects or debris, road traffic, fire, flood or adverse weather conditions.	Yes	Yes	Limited to observable conditions			
7.7.5.1(5) Generator sizing will include the electrical system 25% spare capacity per Section 5.12.1.2(7). Upon loss of one generator, the remaining generator(s) will be capable of supplying the total future vital and delayed vital power systems peak load. All generators will be of common size with each generator able to pick up the first step vital loads plus 25%. The electrical system expansion criteria identified in Section 5.12.1.2(7) pertains to load growth within the Facility. The provision for a future generator must allow for 25% Facility generator plant expansion with an identical generator size.	No					
7.7.5.1(6) Additionally, a spare physical space requirement within the Energy Centre is identified in Section 4.1.3.2. This space is required to accommodate future additional electrical distribution equipment necessary to serve the future site expansion identified in Section 4.1.3. Project Co will provide suitable physical space, ducts etc. required to accommodate the future additional electrical distribution equipment, but no additional electrical capacity is required to be provided for this expansion.	Yes	Yes	Limited to observable conditions			
7.7.5.2 Performance Criteria						
7.7.5.2(1) Ensure that generators will be supplied by an established supplier of generators to healthcare facilities in Saskatchewan. The generator supplier will have a full service repair Facility within 8 hours travel time (by road and sea) to the Site. Ensure that generator spares will be routinely stocked within the Saskatchewan and will be available on Site within 24 hours.	Yes	Yes	Limited to observable conditions			
7.7.5.2(2) Ensure that the generators will normally operate in parallel and provide features including load sharing and base loading. It will be possible to use the building load as a base load for annual load testing of the generators.	Yes	Yes	Limited to observable conditions			
7.7.5.2(3) Design the generator plant to minimise noise emissions. Provide high grade exhaust mufflers and other sound attenuation means, as necessary, to achieve a maximum sound level of 72 dBA measured at 7 m from the Energy Centre in any horizontal plane.	No		functionality not viewable during audit			
7.7.5.2(4) Provide a generator exhaust system to discharge exhaust fumes in a manner that does not create an objectionable odour or noise issue to the Facility or neighbouring properties.	No		functionality not viewable during audit			
7.7.5.2(5) Provide a fuel system capable of supplying the maximum capacity of the emergency power plant at 100% load (including spare capacity) for a minimum of 48 hours.	No		functionality not viewable during audit			
7.7.5.2(6) Provide a dedicated load bank connection point for each generator which does not require the disconnection of existing cabling. The circuit breaker will automatically shunt trip the load bank upon loss of utility power to the Facility.	Yes	Yes	Limited to observable conditions			
7.7.5.2(7) The essential electrical systems will include tie breakers from the main conditional distribution to each of the main vital and delayed vital distributions. Conditional power will be derived at 600V by means of selectable automatic or manually operated automatic transfer switch(es) connected between the generator bus and normal power distributions.	Yes	Yes	Limited to observable conditions			
7.7.5.2(8) Implement redundancy such that if an automatic transfer switch system fails, there is a manual means to restore power to the essential loads in the Facility. All transfer switches will have double sided bypass capability. Transfer switch mechanism will be capable of being withdrawn for servicing while the switch is in bypass mode.	No		functionality not viewable during audit			
7.7.5.2(9) Transfer switches will be 4 pole, isolation bypass contactor type and will be listed to UL1066 and will not require upstream circuit breakers for protection of the transfer switch. Include a common transfer switch test function at the generator paralleling control system.	Yes	Yes	Limited to observable conditions			

5.12 Electrical Systems Design	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
7.7.5.2(10) Essential power branches will serve essential loads as defined by CSA Z32-09 and as required to meet the Appendix 3A [Clinical Specifications], including:						
7.7.5.2(10)(a) Vital branch loads: (a).1 Selected lighting and receptacles in: (a).1.1 Emergency Operations Center (EOC) (a).1.2 Energy Center (a).2 Path of egress lighting including lighting at all building entrances which will include instant on technology.	Yes	Yes	Limited to observable conditions			
(a).3 Exit signs. (a).4 Stair and ramp lights. (a).5 Receptacles and lights in mechanical and electrical equipment rooms. (a).6 Medical gas alarm panels. (a).7 Elevator cab and machine room lighting. (a).8 Fire alarm system. (a).9 Telecommunications systems. (a).10 Public address systems. (a).11 50% of receptacles and lights in all Client care rooms. (a).12 50% of lights and receptacles in nurse's stations and care team stations. (a).13 Private Client rooms – selected lighting, one general use receptacle at bed head side, and one electric bed receptacle. (a).14 Selected lighting and one receptacle in ward treatment rooms (a).15 Selected lighting and receptacles in generator room, maintenance shops, MEPT equipment rooms, and pharmacy dispensing and medi-prep areas. (a).16 Smoke control systems. (a).17 Nurse call system power supplies. (a).18 Real Time Location Systems (RTLS) (a).19 Pharmacy dispensing areas. (a).20 Equipment indicated on Equipment List. (a).21 Security systems including ESS. (a).22 Medical fridges (a).23 All lighting and selected receptacles in: (a).23.1 Academic and skill development education (a).23.2 Wellness services (a).23.3 Religious and counseling services (a).23.4 Work/industry services	Yes	Yes	Limited to observable conditions			
7.7.5.2(10)(b) Delayed vital branch loads: (b).1 Remainder of lighting in areas accessible to Clients. (b).2 Ventilation systems serving Client care rooms. (b).3 Elevators (b).4 Sump pumps and sewage ejector pumps. (b).5 Fire pump and jockey pump if provided. (via integral transfer switch). (b).6 Fume hoods.	Yes					
(b).7 Essential heating, ventilation and plumbing systems. (b).8 Radiology equipment as per Equipment List and Appendix 3A [Clinical Specifications]. (b).9 Alarmed all freezers and refrigerators. (b).10 Automated dispensing cabinets for medication (b).11 Food services freezers and refrigerators (b).12 Retail services freezers and refrigerators.	Yes		Will require review of as-built drawings			
7.7.5.2(10)(c) Conditional branch loads: (c).1 Per CSA Z32-09 Table 7 (c).2 Food service equipment required to maintain food service during power outages (c).3 Air conditioning systems for Data Rooms (c).4 Air conditioning systems for Facility operations control and security & surveillance posts where equipment heat gain may result in temperatures above 30 degrees C. (c).5 Greenhouse (c).6 Vehicle engine block heater receptacles. (c).7 As required by other provisions of this Agreement.	Yes	Yes	Limited to observable conditions			
7.7.5.2(11) The BMS will monitor and record emergency loads and provide alarms and systems status associated with the generator plant and transfer switch system.	Yes	Yes	Limited to observable conditions			
7.7.5.2(12) All elevators within the Main Building will operate on emergency power.	Yes	Yes	Limited to observable conditions			
7.7.6 Uninterruptible Power Supply (UPS) Systems						
7.7.6.1 Basic Requirements						
7.7.6.1(1) Provide UPS power for all areas, equipment and systems that require a continuous and uninterrupted source of power as per the requirements of this Schedule, Appendix 3D(i) [Structured Telecommunications Cabling Systems], the Appendix 3A [Clinical Specifications], the Appendix 2D [Equipment List], and for the following additional rooms, equipment and systems:	Yes	Yes	Limited to observable conditions			
7.7.6.1(1)(a) Care Hubs, Care Team, Collaboration Centres - select lighting and receptacles;	No		not viewable during audit			
7.7.6.1(1)(b) Switchboard;	No		not viewable during audit			
7.7.6.1(1)(c) EOC – select lighting and receptacles;	Yes	Yes	Limited to observable conditions			
7.7.6.1(1)(d) 7.7.6.1(1)(e) Energy Centre – select lighting and receptacles; all equipment and systems located in communications rooms (PER, TRs) including Equipment Racks as defined in 7.8.7.1(16);	Yes	Yes	Limited to observable conditions			
7.7.6.1(1)(f) network equipment for the wired and wireless networks;	Yes	Yes	Limited to observable conditions			
7.7.6.1(1)(g) wireless access points;	Yes	Yes	Limited to observable conditions			
7.7.6.1(1)(h) wireless communications system;	Yes	Yes	Limited to observable conditions			
7.7.6.1(1)(i) nurse call system;	No		Refer to 1.8.25.1(1)			
7.7.6.1(1)(j) public address system;	Yes	Yes	Limited to observable conditions			
7.7.6.1(1)(k) RTLS system;	No		RTLS not implemented. Unable to verify			
7.7.6.1(1)(l) video surveillance system;	Yes	Yes	Limited to observable conditions			
7.7.6.1(1)(m) Radio system;	Yes	Yes	Limited to observable conditions			
7.7.6.1(1)(n) Client Tracking / Wandering system;	No		RTLS not implemented. Unable to verify			
7.7.6.1(1)(o) Equipment and Asset Tracking system;	No		RTLS not implemented. Unable to verify			
7.7.6.1(1)(p) Fire alarm system;	Yes	Yes	Limited to observable conditions			
7.7.6.1(1)(q) Wireless Staff Communication System;	Yes	Yes	Limited to observable conditions			
7.7.6.1(1)(r) Building Management System (BMS);	Yes	Yes	Limited to observable conditions			
7.7.6.1(1)(s) Staff duress system;	No		not viewable during audit			
7.7.6.1(1)(t) access control systems;	Yes	Yes	Limited to observable conditions			
7.7.6.1(1)(u) intrusion detection and perimeter system;	Yes	Yes	Limited to observable conditions			
7.7.6.1(1)(v) emergency power plant control system.	Yes	Yes	Limited to observable conditions			
7.7.6.1(1)(w) Path of egress lighting.	Yes	Yes	Limited to observable conditions			
7.7.6.1(1)(x) Exit signs.	Yes	Yes	Limited to observable conditions			
7.7.6.1(1)(y) Stair and ramp lights.	Yes	Yes	Limited to observable conditions			
7.7.6.1(1)(z) Minimum one unswitched luminaire in each mechanical, electrical, plumbing, or data room.	Yes	Yes	Limited to observable conditions			
7.7.6.1(1)(aa) 25% of lighting in areas accessible to Clients other than Private Client rooms and including exterior courtyards which will include instant on technology.	No		not viewable during audit			
7.7.6.1(1)(bb) 100% lighting in Health Care Clinic.	No		not viewable during audit			
7.7.6.1(1)(cc) All security systems equipment including ESS.	Yes	Yes	Limited to observable conditions			
7.7.6.1(1)(dd) All lighting, receptacles, and equipment at all staff and security workstations for monitoring, surveillance, and operations control of Client care areas, and all associated data rooms equipment and remote devices.	Yes	Yes	Limited to observable conditions			
7.7.6.1(1)(ee) All data rooms will be fed with "A" and "B" panels from the two centralised UPS distribution systems. Provide each centralised UPS systems with a line side dedicated local transfer switch to minimize the risk of a single point of failure.	Yes	Yes	Limited to observable conditions			
7.7.6.1(1)(ff) Networked low voltage control system.	No		not viewable during audit			
7.7.6.1(1)(gg) VoIP Telephone System	Yes	Yes	Limited to observable conditions			
7.7.6.1(1)(hh) Voice Communication Systems	Yes	Yes	Limited to observable conditions			
7.7.6.1(1)(ii) Distributed Antenna System (DAS)	Yes	Yes	Limited to observable conditions			
7.7.6.1(2) Provide two centralised UPS systems, each configured as an N+1 arrangement. One UPS system will be located in or directly adjacent to the PER and the other in a physically separate location from the other to maximize system reliability. Allow provision in each UPS room for space for supply and connection of a second UPS of equal size to allow future replacement of the first UPS unit with minimal UPS load disruption.	Yes	No	UPS are redundant - future space for additional fully redundant UPS is questionable	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
7.7.6.1(3) Do not provide small distributed, stand-alone UPS systems. All equipment will be supplied from the centralised UPS systems.	Yes	Yes	Limited to observable conditions			
7.7.6.1(4) Provide a UPS power sub-distribution system throughout the Facility. At a minimum provide one 42 circuit, 100 A, 120/208V UPS panelboard on Client block of the Facility. Provide additional panelboards as required to meet the requirements within this section. Each UPS panelboard will serve an area no greater than 1600m2.	Yes	Yes				
7.7.6.2 Performance Criteria						
7.7.6.2(1) Ensure that the UPS system will be certified as suitable for post-disaster Facility.	No		not viewable during audit			
7.7.6.2(2) Connect UPS units to vital power.	Yes	Yes	Limited to observable conditions			

5.12 Electrical Systems Design	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
7.7.6.2(3) Ensure that each UPS system will have:						
7.7.6.2(3)(a) True dual conversion style complete with static bypass and wrap-around maintenance bypass switching to permit servicing of the UPS without power interruption. All UPS units will automatically transfer the load to and from the source supply without any interruption or disturbance of the supply to the loads. Minimum spare capacity will be 30% of calculated UPS load; and	Yes		requires review of shop drawings			
7.7.6.2(3)(b) two battery strings (fully redundant batteries), each with an individual battery monitoring system.	Yes	Yes	Limited to observable conditions			
7.7.6.2(4) Provide capacity from each redundant battery string rated for a minimum of 15 minutes at full UPS capacity.	Yes	Yes	Limited to observable conditions			
7.7.6.2(5) Provide an audible warning in the Energy Centre, OSC, Switchboard, BOSC and PER to indicate that the UPS battery supply has less than ten minutes of power remaining. Provide adequate labelling.	No		not viewable during audit			
7.7.6.2(6) Provide monitoring of all alarm and trouble conditions of the UPS systems by the BMS. Include a countdown timer located in the OSC to display output alarm contacts triggered at 75%, 50%, and 25% battery life.	No		not viewable during audit			
7.7.6.2(7) The UPS will be capable of providing adequate fault clearing current for a 100A circuit breaker without operation of the static bypass switch.	No		not viewable during audit			
7.7.6.2(8) The UPS utilisation voltage will be 120V, however the UPS system may operate at 208V, 480V or 600V.	Yes	Yes	Limited to observable conditions			
7.7.7 Distribution Equipment – 600 Volts and below						
7.7.7.1 Basic Requirements						
7.7.7.1(1) Provide electrical power transmission and distribution from the main sources of supply to meet all requirements of the Facility and the Appendix 3A [Clinical Specifications]. Provide electrical equipment to establish a building distribution voltage of 600V.						
7.7.7.1(2) Provide two normal power main service transformers arrangements complete with a switching configuration so that if one service fails, the other service (by manual switching) will continue servicing all loads connected to the failed service. Size the main transformers and distribution system such that each transformer arrangement is capable of carrying the entire Facility load plus 25% spare capacity. Separate from generator plant components with fire-rated construction and separate physically to maximize reliability.	Yes	Yes	Limited to observable conditions			
7.7.7.1(3) Provide rackable power circuit breakers for all circuit breakers upstream of the transfer switches. Provide motorized operators and local remote control on these circuit breakers to reduce the arc flash exposure hazard.	Yes	Yes	Limited to observable conditions			
7.7.7.1(4) In accordance with Appendix 2C [Energy], separate the Facility electrical loads into 'metered electrical components' and 'non- metered electrical components'. Provide dedicated panelboards, motor control centres, distribution centres, feeders and circuit breakers as necessary to segregate the electrical loads and facilitate the metering requirements.	No		not viewable during audit			
7.7.7.2 Performance Criteria						
7.7.7.2(1) Protect the main electrical room and generator plant from ground water infiltration and separate them from each other and from plumbing and mechanical equipment. Provide raised housekeeping pads, drainage and sump pumps (on vital power) as required in electrical service areas to mitigate the risk of flooding. Design the electrical room and generator plant to be readily accessible, secure, well ventilated and free of corrosive or explosive fumes, gases or any flammable material. Establish routes clear of obstruction to and from the rooms which facilitate the addition and removal of the largest current and future components located within the room.	Yes	Yes	Limited to observable conditions			
7.7.7.2(2) Locate major electrical equipment to minimize run length of feeders and branch circuits, and locate within the Facility so as to provide a clean, dry, safe, accessible installation protected from unauthorized access.	No		functionality not viewable during audit			
7.7.7.2(3) Locate and design electrical equipment for ease of maintenance and with due regard for future expansion and renovation.	No		functionality not viewable during audit			
7.7.7.2(4) Provide all circuit breakers 150A and larger with electronic trips and LSI field adjustable settings.	Yes	Yes	Limited to observable conditions			
7.7.7.2(5) Provide a ground fault protection scheme such that ground faults are selective between the transformer and generator main circuit breakers and the downstream breakers sized 200A and larger.	No		not viewable during audit			
7.7.7.2(6) Install 120/208V dry type transformers for small equipment loads in electrical rooms on concrete pads or suspend from structure. Install transformers so that removal will be facilitated without removal of any other equipment or conduit serving the room, except for luminaires.	Yes	Yes	Limited to observable conditions			
7.7.7.2(7) Ensure all transformers will have copper windings and be rated minimum K-13. Provide areas with significant non-linear loads with transformers with a higher K-rating.	Yes	Yes	Limited to observable conditions			
7.7.7.2(8) Rate all distribution devices to handle available fault duty at line terminals. Perform and implement a short circuit and coordination study to ensure all protective devices provide selective coordination to ensure tripping of the downstream device nearest the fault and not a cascading effect to upstream devices. Implement measures based on the arc flash summary prepared pursuant to Section 7.7.3.2(5). All circuit breakers 150A and larger will be fully selective.	No		not viewable during audit			
7.7.7.2(9) Design and install protection equipment so that the initial electrical installation, future additions and modifications will be fully coordinated to isolate only the faulty portion of the system.	No		not viewable during audit			
7.7.7.2(10) Select, configure, locate and install all components of transmission and distribution systems to minimize the transmission of noise, vibration or unwanted heat into other parts of the Facility. Provide shielding, isolation, grounding, bonding, harmonic filtration, or other means to prevent interference between systems or degradation of performance of an individual system.	No		not viewable during audit			
7.7.7.2(11) Provide a networked digital metering system to monitor and record electrical loads and quality of power in the Facility.	Yes	Yes	Limited to observable conditions			
7.7.7.2(12) Provide power factor correction equipment within the building to ensure the building power factor does not fall below the threshold established for SaskPower surcharge. Coordinate capacitors with adjustable frequency drives and other harmonic generating equipment to avoid resonance conditions.	Yes	Yes	Limited to observable conditions			
7.7.7.2(13) Provide dedicated transformation equipment for diagnostic imaging equipment as required by the imaging equipment vendors.	No		not viewable during audit			
7.7.7.2(14) Provide circuit breaker type panelboards fully rated to handle calculated fault current level. Series rating of breakers and panel boards is not acceptable.	No		not viewable during audit			
7.7.7.2(15) Provide oversize neutral(s) for panel boards, feeders and branch circuiting where significant non-linear load(s) are anticipated, such as in open office and other areas with a high density of personal computers.	No		not viewable during audit			
7.7.7.2(16) Construct flush mounted panel boards with two spare 53 mm conduits stubbed into an accessible location above the panel. Do not feed panelboard from below. All feeders must be routed down from the ceiling for top entry into the panelboard.	Yes	Yes	Limited to observable conditions			
7.7.7.2(17) Provide electronic grade panel boards to serve electronic equipment susceptible to electrical transients.	No		not viewable during audit			
7.7.7.2(18) Install panelboards on the same floor as the loads they serve. Per CSA Z8000-11, all panelboards will be located in electrical equipment rooms.	Yes	No	for the most part - yes. Panels in CRUs not in electrical room.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co.
7.7.7.2(19) Do not daisy-chain the feeders to panelboard. All panelboard feeders must be dedicated.	No		not viewable during audit			
7.7.7.2(20) Ensure that components of the electrical distribution systems in any public, clinical, administrative or staff area will have long life expectancy without perceptible deterioration and a good appearance. Design and install so as to permit easy and complete cleaning.	No		not viewable during audit			
7.7.7.2(21) Provide individual enclosed motor starters for individual motors. Utilize motor control centers for groups of four or more motors that require individual motor starters.	Yes	Yes	Limited to observable conditions			
7.7.7.2(22) Provide motor starters that will be combination of magnetic MCP (Motor Circuit Protector) type with integral control power transformers, Hand-Off-Auto (HOA) or start/stop control and at least two auxiliary contacts in addition to seal-in contacts. HOA starters will include start/stop for Hand position. Include undervoltage and single phase dropout protection devices. Provide "power on" and "running" LED type indicators on each motor starter.	No		not viewable during audit			
7.7.7.2(23) Provide combination starters for all motors 1/2 HP and larger that are not already controlled by adjustable frequency drive or include an integral control package. All motors of ½ HP or more will be 600 volt 3 phase.	No		not viewable during audit			
7.7.7.2(24) Provide parallel type voltage transient / surge protection with dedicated disconnect for the main 600V and 120/208V switchgear loads and all other panels serving sensitive electrical loads including diagnostic equipment, lab equipment and adjustable frequency drives.	Yes	Yes	Limited to observable conditions			
7.7.7.2(25) Ensure that the locations of receptacles will comply with the requirements for each program area as described in the Appendix 3A [Clinical Specifications].	No		not viewable during audit			
7.7.7.2(26) Ensure that main switchboards and low voltage switchgear will include space for an additional 25% breaker capacity including a minimum of four spaces for circuit breakers (100A/3P,200A/3P,300A/3P, 400A/3P).	Yes	Yes	Limited to observable conditions			
7.7.7.2(27) Ensure that distribution panels will have space for 50% additional circuit breakers including a minimum of four spaces for circuit breakers (60A/3P, 100A/3P,150A/3P, 200A/3P).	Yes	Yes	Limited to observable conditions			
7.7.7.2(28) Provide drip shield protection for all distribution panels, switchboards, and switchgear where located in a space that has a sprinkler.	Yes	Yes	Limited to observable conditions			
7.7.7.2(29) Provide branch panelboards and feeders that will have space for an additional 25% breaker capacity including a minimum of 20% spare 15A/1 pole circuit breakers.	Yes	Yes	Limited to observable conditions			
7.7.7.2(30) Provide circuit breakers supplying receptacles in Private Client rooms that will be AFCI style. Branch circuit will be connected to GFCI protection in service space by the rooms and then connected to receptacles within the rooms to provide AFCI and GFCI protection on all receptacles. AFCI circuit breakers will be compatible with GFCI receptacles.	Yes	Yes	Limited to observable conditions			
7.7.7.2(31) Unless otherwise specified all receptacles requiring GFCI protection will have the GFCI protection incorporated into branch circuit breaker.	Yes	Yes	Limited to observable conditions			

5.12 Electrical Systems Design	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
7.7.7.2(32) Branch panelboards will include quick-make and quick-break circuit breakers. All floor mounted distribution equipment will be placed on concrete housekeeping pads.	Yes	Yes	Limited to observable conditions			
7.7.8 Metering						
7.7.8.1 Basic Requirements						
7.7.8.1(1) Supply networked digital metering to provide detailed information about power quality and power consumption at key points throughout the Facility. Key points include: motor control centres, panelboards feeding mechanical equipment and power consumed by elevators and dedicated plug-load panelboards. Integrate information from all meters on a common software platform residing on a dedicated electrical metering server.	Yes	Yes	Limited to observable conditions			
7.7.8.1(2) In addition to the above, provide metering as necessary to support the energy calculations required by Appendix 2C [Energy]. Integrate this metering to the Site metering system and provide custom energy consumption reports as required by the Authority.	No		not viewable during audit			
7.7.8.1(3) Implement a networked metering system with terminals for maintenance and plant administration, and data transfer to the BMS.	No		not viewable during audit			
7.7.8.1(4) Connect electrical demand and consumption meters to the BMS.	No		not viewable during audit			
7.7.8.1(5) Design the digital metering system to be accessible from any Authority networked computer using appropriate software.	No		not viewable during audit			
7.7.8.1(6) Provide to the Authority five software licenses to enable access to the Facility metering system from remote Authority sites. These licences will enable the Authority to access real time data, peak demand data, and to produce custom reports on energy consumption at the Facility.	No		not viewable during audit			
7.7.8.1(7) Provide metering which complies with Section 7.7.7.1(4). Provide monthly reports which summarise total electrical energy consumed by the regulated and non-regulated loads.	No		not viewable during audit			
7.7.8.1(8) Include trend logging equipment sensors to comply with and fulfill energy measurement and verification requirements. Logged information will not be overwritten and will be archived.	No		not viewable during audit			
7.7.8.1(9) Ensure that metering intervals will be 15 minutes or less.	No		not viewable during audit			
7.7.8.1(10) All metering information and records will be accessible to Authority personnel upon request.	No		not viewable during audit			
7.7.8.2 Performance Criteria						
7.7.8.2(1) Include local metering displays at all distribution switchgear, switchboards, UPS output, generator plant, and transfer switch loads. Also include for services to diagnostic equipment.	Yes	Yes	Limited to observable conditions			
7.7.8.2(2) Design the metering system network to store historical data and with the capability to generate user configurable electronic and printed real-time and trending reports on demand.	No		not viewable during audit			
7.7.8.2(3) Support the metering system by a backup power source(s), which ensures operation when the metered circuit is de-energized. The metering system will not be dependent on power from the metered circuit for its operation.	No		not viewable during audit			
7.7.8.2(4) The metering system will, at a minimum, provide the following information about each metered circuit: Phase-to-Phase Voltage (all phases), Line-to-Neutral Voltage (all phases), Phase Current (all phases and neutral), KW, KVA, Power Factor, KWH, VAR hours.	Yes	Yes	Limited to observable conditions			
7.7.8.2(5) Utilize power quality type meters for monitoring harmonics and surges / sags. Provide power quality meters for monitoring harmonics on the normal, vital, delayed vital, conditional and UPS switchboards.	Yes	Yes	Limited to observable conditions			
7.7.9 Grounding and Bonding						
7.7.9.1 Basic Requirements						
7.7.9.1(1) Provide grounding and bonding for all electrical equipment and systems in the Facility for the safety of people and for protection against damage to equipment or property in the case of a fault occurring in any of the equipment or systems. Install grounding and bonding as required by all applicable codes and EIA/TIA standards for communications and security equipment and systems.	No		not viewable during audit			
7.7.9.1(2) Provide supplementary grounding per CSA Z32 in areas identified by the Authority as Client care areas and for all Client dwelling and clinical treatment areas in the Facility. Provide supplemental insulated bonding conductors with all feeders and branch circuits supplying security systems loads.	Yes		Partially. Clarify which areas are applicable to Z32			
7.7.9.2 Performance Criteria						
7.7.9.2(1) Utilize non-alloyed copper for all conductors and all conducting components of electrical equipment which form part of the grounding and bonding systems in the Facility.	No		not viewable during audit			
7.7.9.2(2) Provide solid system grounding including conductors and bussing.	No		not viewable during audit			
7.7.9.2(3) Provide a minimum #12 copper bonding conductor in each and every conduit or raceway. Provide a #6 copper bonding conductor on each communications tray and ensure each section of the tray is securely bonded.	Yes	Yes	Only bonding conductor in tray was able to be viewed on site			
7.7.9.2(4) Bond all exposed non-current carrying components of communication, radio or television equipment in Client care areas to ground using a properly sized equipment bonding conductor. Uniquely identify each bonding conductor at each end.	Yes	Yes	Limited to observable conditions			
7.7.9.2(5) Provide a lightning protection system for the Facility buildings and on-site electrical equipment, such as 25KV service substation and generators, as defined by CAN/CSA B72. Risk value will not be considered a determinant in lightning protection need except for remote small structures or on-site equipment having a risk value of 3 and under.	Yes	Yes	Partial review only as system was dismantled in most areas due to roof repair. Equipment and installation that remained appeared to be correct			
7.7.10 Seismic Requirements for Electrical Systems						
7.7.10.1 Basic Requirements						
7.7.10.1(1) Provide seismic restraint for all electrical equipment and components of electrical systems. Design the electrical systems and its associated equipment to comply with the National Building Code of Canada for a post-disaster Facility.	No		not viewable during audit			
7.7.10.1(2) Provide seismic restraint systems and methods that facilitate ease of maintenance and ease of replacement and reconfiguration of electrical equipment and systems and other equipment and building components.	No		not viewable during audit			
7.7.10.1(3) Provide seismic restraint systems and methods that coordinate with the Facility's architecture and finishes. Wherever practicable, conceal components of seismic restraints from public view. Where concealment is not practicable, provide systems that complement the Facility's architecture and finishes.	No		not viewable during audit			
7.7.10.2 Performance Criteria						
7.7.10.2(1) Provide seismic support for all electrical equipment and components of electrical systems that have the potential to cause injury or damage during or following a seismic event.	No		not viewable during audit			
7.7.10.2(2) Use seismic restraint systems that are designed by a professional engineer, registered in Saskatchewan, or, where an identified pre- designed standard restraint device or system exists for a particular item, that equipment may be used provided that written confirmation of its acceptability for the installation is provided by a professional engineer registered in Saskatchewan. Provide signed and sealed drawings as well as typewritten field reports from a professional seismic engineer, registered in Saskatchewan. Obtain certification of the main electrical distribution equipment for "seismic withstand capability" and, to maintain the certification, anchor such equipment according to the manufacturer's instructions.	No		not viewable during audit			
7.7.11 Power Quality						
7.7.11.1 Basic Requirements						
7.7.11.1(1) Establish and maintain an overall power quality which assures suitable conditions for operation of all electrical and electronic equipment throughout the Facility.	No		not viewable during audit			
7.7.11.1(2) Provide equipment and systems which assure that electrical equipment and systems will not be harmed or impaired either by external events or conditions, such as lightning and disturbances on the utility service, or by internal events or conditions generated within the Facility.	No		not viewable during audit			
7.7.11.1(3) Meet or exceed relevant standards for power quality where deemed necessary by the Authority and IEEE.	No		not viewable during audit			
7.7.11.1(4) Provide harmonic mitigation equipment, to ensure that power quality meets or exceeds recommendations in IEEE, including standard 519. For the purposes of measuring the harmonic distortion, the "Point of Common Coupling" will be any of the main transformers. As part of commissioning, confirm compliance to tables 10-2 and 10-3 of IEEE 519 by field measurements after building occupancy and under normal operating conditions.	Yes	Yes	Limited to observable conditions			
7.7.11.1(5) Provide individual harmonic filters ahead of and coordinated with variable speed drive for every motor greater than 7.5 HP.	No		not viewable during audit			
7.7.11.2 Performance Criteria						
7.7.11.2(1) Provide equipment, such as filters, SPDs (surge protection devices), etc, specifically designed to control and remove all adverse power quality conditions that could damage or impair function of sensitive electronic equipment used in the Facility. Install SPDs in location categories B and C and as per NFPA 780 standards. Adverse power quality conditions include voltage spikes, dips and droops, transients, harmonics, power factor and radio frequency interference.	No		not viewable during audit			
7.7.11.2(2) Provide the ability to demonstrate to the Authority at any time that there are no potentially harmful power conditions present and that equipment intended to guard against such conditions is in proper working order.	No		not viewable during audit			
7.7.12 Lighting						
7.7.12.1 Basic Requirements						
7.7.12.1(1) The lighting installed will meet the requirements of the Appendix 3A [Clinical Specifications]. Lighting systems will accommodate the needs of Facility staff, Clients and visitors, and will support the visual tasks being performed and the desired appearance of the space. Selection and location of all luminaires will be closely coordinated with the video surveillance system to avoid "wash-out" of video surveillance video images and to ensure proper illumination levels are maintained to permit video capture from the video surveillance system.	Yes	Yes	Limited to observable conditions			
7.7.12.1(2) Provide complete lighting solutions which align with the requirements and recommendations of section 4 of IESNA-RP29-06. Illuminance levels and design criteria will be consistent with IESNA RP-29-06 tables 3A and 3B	Yes	Yes	Limited to observable conditions			
7.7.12.1(3) Provide a networked low voltage lighting control system that will provide flexibility to adjust lighting to suit functions and activities and permit simple, integrated control of lighting. Controls will be easily operated and located in each area to suit the function of the space. Each room and area will have separate lighting control.	Yes	Yes	Limited to observable conditions			
7.7.12.1(4) Lighting controls will comprise a significant part both of the energy management of the Facility and of the flexibility required to adjust lighting to suit functions and activities.	Yes	Yes	Limited to observable conditions			

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7.7.12.1(5) Utilize a combination of natural light, luminaires, and daylight harvesting controls to maximize energy savings.	Yes	Yes	Limited to observable conditions			
7.7.12.1(6) Provide daylight sensors and luminaires to maximize daylight use throughout the Facility. Carefully coordinate this design with computer generated architectural daylight simulation models.	Yes	Yes	Limited to observable conditions			
7.7.12.1(7) Provide video specific dedicated lighting for video conferencing, video visitation, and video courtrooms to facilitate visual quality of video transmission in accordance with IESNA Design Guideline DG-17-05.	Yes	Yes	Limited to observable conditions			
7.7.12.1(8) Provide luminaires which are easily maintainable (accessible components, quick change capability).	Yes	Yes	Limited to observable conditions			
7.7.12.1(9) In Client treatment areas, related Client care support and service spaces and anywhere the Authority would use chemical cleaning for infection control purposes, provide luminaires which minimise accumulation of dust and debris and support Authority's infection control policies and procedures. Provide and locate luminaires such that they are easily cleaned and of suitable construction to withstand chemical cleaning. The Authority Policies related to infection control will not apply to luminaries in administrative areas, non-Client care support spaces (stores, technical/service spaces, lobbies, cafeterias, stairwells etc.), public spaces, non-sterile corridors and the Facility exterior.	Yes	Yes	Limited to observable conditions			
7.7.12.1(10) Place an electrically powered "X-ray In Use" sign outside any room in which fixed x-ray equipment is anticipated to be used. The sign will be connected to an internally illuminated switch inside the room label "X-ray". The switch will be interlocked with the x-ray equipment such that the equipment will not operate with the switch in the "off" position. Internal illumination of the switch will be on only when the "X-ray in Use" sign is illuminated.	Yes	No	Not provided. Indicator light above door.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co.
7.7.12.1(11) Place a luminaire outside all Client washrooms, controlled by a washroom ceiling mounted dual technology (ultrasonic and infrared) type occupancy sensor (an inherent 30 second "time off" period is acceptable), to alert staff that the washroom is occupied – connect to vital power.	Yes		presence of luminaire and controller only			
7.7.12.2 Performance Criteria						
7.7.12.2(1) Provide luminaires that require minimal cleaning and permit practical and easy access and disassembly for authorized staff. All luminaires will be free of light leaks. Luminaires in secure and common Client areas will be of form to provide a friendly, inviting, welcoming, non-institutional ambiance feel while providing vandal and ligature resistant performance.	No		not viewable during audit			
7.7.12.2(2) Specify luminaire construction based on the SLC of the areas, as defined in Appendix 3A [Clinical Specifications], into which the luminaires are being installed:	Yes		require shop drawings; may not be confirmable on site during audit			
7.7.12.2(2)(a) SLC 1 – High abuse security grade.						
7.7.12.2(2)(b) SLC 2 – High abuse security grade.						
7.7.12.2(2)(c) SLC 3 – Vandal resistant grade.						
7.7.12.2(2)(d) SLC 4 – Specification grade.						
7.7.12.2(2)(e) Luminaires in the community reintegration units will be residential grade.	Yes	Yes	Limited to observable conditions			
7.7.12.2(3) Ensure that Client room luminaires will have an interlocked night light control which automatically turns on red LED night lighting, integral to the luminaire, when the general room lighting portion of the luminaire is switched off. The night light function will provide sufficient illumination for viewing Client activities while not disturbing their circadian sleep cycle and to allow room occupant visibility for wayfinding. Include an override key switch outside the Client room door to allow Authority staff to turn off the automatic night light operation, if acceptable to meet a specific Client's needs, and still allow Authority staff to manually turn on the night light function for intermittent Client viewing.	Yes	Yes	functionality not possible during audit			
7.7.12.2(4) Use LED lighting technology for all project luminaires. Where LED is not available, utilize high efficiency fluorescent lighting for interior illumination and metallic halide for exterior lighting. The use of compact fluorescent lighting for decorative purposes will be kept to a minimum. Use high efficiency electronic fluorescent linear T8 and T5 lamps when LED is not available. Do not use incandescent lighting unless otherwise indicated in this Schedule.	Yes	Yes	Limited to observable conditions			
7.7.12.2(5) Utilize premium grade quality luminaires with emphasis on energy efficiency (69 lumens/watt minimum) and high color rendition (.80 color rendering index minimum for fluorescent fixtures and .70 for metal halide lamps). Where achieving the energy efficiency specified in this Section is not feasible due to functional constraints imposed by the task being performed by the luminaire, the luminaire will be exempt from the energy efficiency requirement. Examples of luminaires that are exempt from the energy efficiency requirement include:	No		not viewable during audit			
7.7.12.2(5)(a) wall sconces (used for night-time illumination);	No		not applicable			
7.7.12.2(5)(b) medical procedure luminaires;	No		not applicable			
7.7.12.2(5)(c) task lighting.	No		not applicable			
7.7.12.2(6) Ensure that lamps will have a colour temperature of 3500K.	No		not viewable during audit			
7.7.12.2(7) Master-slave wiring of multiple luminaires from a single driver or ballast is not permitted.	No		not viewable during audit			
7.7.12.2(8) Do not use exterior low pressure sodium, high pressure sodium, and mercury vapor lamps. Do not use incandescent lamps except for exterior HID (high intensity discharge) applications with quartz restrike lamps,	Yes	Yes	Limited to observable conditions			
7.7.12.2(9) HID sources are not permitted for interior applications.	Yes	Yes	Limited to observable conditions			
7.7.12.2(10) All exterior lighting will have a colour temperature as indicated in Section 5.4.1.1(10).	No		not viewable during audit			
7.7.12.2(11) Provide exterior lighting, including lighting for streets, pathways, and building perimeter. Parking area lamp sources will be low glare LED type with full cut off photometrics. Outdoor recreation courtyards will have luminaires to assure full cutoff photometrics to prevent light leakage into the building while eliminating shadows, and providing two levels of average minimum lighting control: one for minimum 5 lux (0.5 FC) for general night illumination, and one for minimum 30 lux (3.0 FC) enhanced security lighting level.	Yes	Yes	Limited to observable conditions			
7.7.12.2(12) When use of fluorescent luminaires is necessary, utilize program start electronic ballasts for fluorescent lamps with a THD of 10% and no more than 8% for third harmonic. Power factor will be .98 or greater and efficiency will be 90% or higher. Ballasts will be supplied by an established vendor with minimum 10 years history of serving the healthcare sector in North America, and manufactured in a Facility certified to ISO9002.	Yes	Yes	Limited to observable conditions			
7.7.12.2(13) Minimize use of battery-operated unit emergency lighting. Battery- operated emergency lighting may be an acceptable alternative as a second level of emergency lighting in areas including Client areas, emergency power distribution rooms, and mechanical areas.	No		not viewable during audit			
7.7.12.2(14) Utilize low glare, recessed indirect luminaries specifically design to eliminate indirect glare in treatment rooms, offices, reception areas, care team stations and other areas where computer terminals and similar screens are available.	Yes	Yes	Limited to observable conditions			
7.7.12.2(15) Design lighting in corridors to limit glare to Clients being transported on stretchers.	Yes	Yes	Limited to observable conditions			
7.7.12.2(16) Provide sconce lighting in Client bedroom area corridors for glare-free, low level, night time illumination.	Yes	Yes	Limited to observable conditions			
7.7.12.2(17) Provide separate lighting control for each of the following areas within each Client bedroom:	Yes	Yes	Limited to observable conditions			
7.7.12.2(17)(a) Entry (locate control at entry);	Yes	Yes	Limited to observable conditions			
7.7.12.2(17)(b) Client Reading Light (locate control at bed head side;	Yes	Yes	Limited to observable conditions			
7.7.12.2(17)(c) Client Area (locate 3-way lighting control at entry/bed head side);	Yes	Yes	Limited to observable conditions			
7.7.12.2(17)(d) Desk Area (locate 3-way lighting control at entry/desk area); and	Yes	Yes	Limited to observable conditions			
7.7.12.2(17)(e) Night Lights (locate one switch at entry).	Yes	Yes	Limited to observable conditions			
7.7.12.2(18) Provide two nightlights in private Client rooms, one in the room luminaire which is switched on when the room light is switched off and the other along the walkway between the Client bed and washroom to prevent tripping hazards which is switched at the room entry.	Yes	TBD	There were two night lights in the room each sleeping room. One was a combination white/red ceiling mounted LED fixture that had separate control for white/red lighting. The second night light was a recessed wall mounted LED night light up at approximately 450 – 600mm and separately switched. The recessed wall light was intended to illuminate the path between the bed and washroom, but so does the RED light if on. Found the location of the recessed wall night-light in some rooms were blocked by the bed – either a larger bed was provided or just poor choice in locating the wall light in the room.			
7.7.12.2(19) Design lighting in technology conference rooms and video conferencing facilities to maximize viewing of monitors and screens and provide suitable illumination of people being viewed.	No		not viewable during audit			
7.7.12.2(20) Provide special task lighting designed for the types of procedures conducted for rooms and areas where treatment is provided and	No		not viewable during audit			
rooms and areas where specialized analytical or diagnostic work is carried out.	No		not viewable during audit			
7.7.12.2(21) Provide dimmable lighting in Radiology reading rooms and Snoezelen therapy room.	Yes	Yes	Limited to observable conditions			
7.7.12.2(22) Provide ceiling mounted articulated lighting with dimmable controls in all procedure, exam and treatment rooms. Confirm lighting requirements with the Authority.	Yes	Yes	Limited to observable conditions			
7.7.12.2(23) As architectural features, design lighting in main lobbies, waiting areas and the main entrance with high quality products aesthetically pleasing to the public and staff.	Yes	Yes	Limited to observable conditions			
7.7.12.2(24) Utilize vandal resistant and dark sky compliant exterior luminaires.	Yes	Yes				
7.7.12.2(25) Utilize LED type exit signs.	Yes	Yes				
7.7.12.2(26) Utilize lighting controls that comprise of a networked low voltage relay switching system with programmed ON/OFF operation and local manual override capabilities for corridor lighting levels. Provide local control from care team stations and reception desks where applicable. Provide override controls from the main security control room.	Yes	Yes	Limited to observable conditions			
7.7.12.2(27) Protect lighting controls from unauthorized operation when required to be located in areas accessible to the public.	Yes	Yes	Limited to observable conditions			
7.7.12.2(28) Design all lighting in public and administration areas to be capable of being switched from a central location.	No		not viewable during audit			
7.7.12.2(29) In open areas and common areas, zone and subdivide lighting to permit energy management and appropriate control and variation of light levels.	Yes	Yes				

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7.7.12.2(30) Provide local lighting control for each treatment room. Each room will have 2 or more levels of illumination in addition to the off position unless specified otherwise. Lighting will support the clinical functions being performed.	Yes	Yes	Limited to observable conditions			
7.7.12.2(31) Integrate controls in technology conference rooms, videoconference rooms and meeting rooms with equipment controls and control stations in the room so as to permit the conference manager to vary the lighting as required for different activities. Provide a minimum of 2 levels of lighting control.	Yes	No	The lighting controls provided in the meeting rooms do provide 2 or more levels of control. Partition sensors to provide separate room control in rooms with dividers is not provided.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review rooms with partitions with APP.
7.7.12.2(32) Provide manually operated lighting controls of a type, which will be completely cleaned and disinfected without requiring any disassembly, and which will not deteriorate or be otherwise adversely affected by frequent cleaning and disinfection.	No		not viewable during audit			
7.7.12.2(33) Install specifically rated lighting controls for the application/condition in locations where they may be subjected to excessive moisture or to chemicals that might cause deterioration.	No		not viewable during audit			
7.7.12.2(34) In rooms not accessible to Clients, utilize vacancy type (manual on/auto off) automatic sensors and daylight control systems to maintain light levels at appropriate levels based upon the occupancy of the room and the quantity of daylight. This will include dual technology vacancy sensors in offices, meeting rooms, restrooms, support spaces, and storage rooms and daylight control systems at perimeter rooms where daylight contribution is significant.	Yes	Yes	Limited to observable conditions			
7.7.12.2(35) Provide a time clock, photocell and contactors with HOA switch for control of site lighting. Optionally control through the BMS system. Provide override control in the Security control room. Submit a control plan to the Authority for approval.	Yes	Yes	Limited to observable conditions			
7.7.12.2(36) Interface the lighting control system with the BMS for the purpose of implementing energy management schemes.	No		functionality not viewable during audit			
7.7.13 Lighting Control						
7.7.13.1 Networked Low Voltage Lighting Control System						
7.7.13.1(1) Basic Requirements:						
7.7.13.1(1)(a) Provide a lighting control system that will provide the ability to adjust lighting to suit functions and activities, reduce energy consumption and permit simple and integrated control of lighting both locally and remotely;	Yes	Yes	system present - functionality not reviewed			
7.7.13.1(1)(b) Connect the lighting control system to the BMS and allow for OSC staff to override programmed settings, occupancy sensor, daylight sensor, or manual control events;	Yes	Yes	system present - functionality not reviewed			
7.7.13.1(1)(c) Consult with the Authority when programming the lighting operation (controllability, zones, timing) of the Facility.	No					
7.7.13.1(2) Performance requirements:						
7.7.13.1(2)(a) Ensure that the Facility, including all buildings and on-site lighted areas, will have a networked low voltage lighting control system divided into buildings and logical zones and be subdivided to permit energy management and allow staff control of light levels for all interior and exterior lighting;	Yes	Yes	system present - functionality not reviewed			
7.7.13.1(2)(b) Lighting systems will maximize the use of daylight and vacancy type sensors to maintain lighting levels and use the least amount of energy to provide the required illumination and in conformance with ASHRAE 90.1 energy use requirements. Consider special plant growth considerations in the design of the Greenhouse lighting and daylighting control;	Yes	Yes	daylight and vacancy sensors present - system operation not verified			
7.7.13.1(2)(c) Provide all required communications and security units between the BMS control interface and the low voltage lighting controllers;	No					
7.7.13.1(2)(d) Complete all lighting program scheduling through the BMS;	No					
7.7.13.1(2)(e) Ensure that all lighting controls will be interfaced with the security system to permit manual on/off control (override) of interior and exterior lighting from the OSC and BOSC operator screens;	Yes	Yes	system present - functionality not reviewed			
7.7.13.1(2)(f) Identify on/off status of lighting control zones and relays on the Security command operator screen;	Yes	Yes	system present - functionality not reviewed			
7.7.13.1(2)(g) Provide OSC override for all exterior lighting zones and Client accessible interior lighting zones;	Yes	Yes	verbally confirmed by OSC staff			
7.7.13.1(2)(h) Provide local controls for each Client wing at the associated staff workstation and security control areas. The master controls will be divided into logical zones to allow staff the flexibility to control lighting levels within the Client areas, including two illumination levels at outdoor recreation courtyards;	Yes	Yes	system present - functionality not reviewed			
7.7.13.1(2)(i) All rooms will have local low voltage switching, unless specified otherwise within this Section;	Yes	Yes	system present - functionality not reviewed			
7.7.13.1(2)(j) Provide time program control of Client care unit lighting to provide automatic night time shut-off. Provide manual override control in the OSC and Nurse Stations;	Yes	Yes	system present - functionality not reviewed			
7.7.13.1(2)(k) Provide dimmable 100% -10% lighting in rooms that require adjustable illumination levels, including the following locations: (k).1 OSC; (k).2 BOSC; (k).3 Nurse Stations; (k).4 conference rooms; (k).5 meeting rooms; (k).6 training rooms; and (k).7 Video Court rooms;	Yes	Yes	Limited to observable conditions			
7.7.13.1(2)(l) A minimum of one luminaire within each mechanical and electrical equipment room will be fed from a 24hr, un-switched "Vital UPS" branch circuit;	Yes	Yes	Limited to observable conditions			
7.7.13.1(2)(m) Provide one night light per 100m2 of office space. Corridors and stairwells will be provided with adequate 24hr, un-switched lighting to permit safe staff movement;	Yes	Yes	Limited to observable conditions			
7.7.13.1(2)(n) Except for security, exit, emergency, and night lighting, circuit breakers will not be used to switch lighting circuits;	Yes	Yes	Limited to observable conditions			
7.7.13.1(2)(o) All open areas will be provided with independent switching controls with a minimum of one switch per 90m2;	No		not viewable during audit			
7.7.13.1(2)(p) Meeting rooms 16.7m2 in size or greater will have separately switched dimmable low-level presentation luminance;	Yes	Yes	Limited to observable conditions			
7.7.13.1(2)(q) With the exception of Client room luminaires within secure Client units, Isolation, and Admission & Discharge which will be controlled by the applicable staff workstation, security control rooms, all Client room luminaires will be controlled from a local low voltage high security grade momentary touch switch within the room;	Yes	Yes	Limited to observable conditions			
7.7.13.1(2)(r) Provide unswitched 24hr lighting within all stairwells and corridors;	Yes	Yes	Limited to observable conditions			
7.7.13.1(2)(s) All exterior luminaires will be switched from the building low voltage lighting control system via BMS programmed time signals and photocell inputs to produce four channels of control as follows: (s).1 Channel 1 - Dusk to Dawn; (s).2 Channel 2 - Dusk to Preset; (s).3 Channel 3 – Preset to Preset; and (s).4 Channel 4 - Preset to Dawn;	Yes	Yes	Limited to observable conditions			
7.7.13.1(2)(t) The exterior lighting system zones and Client accessible interior lighting zones will have manual override control through a multi-gang low voltage switchbank located in the OSC. Include override controls divided into logical zones. Include the following zones as the minimum: (t).1 Perimeter/Perimeter Road Lighting (minimum 5 zones = north, west, south, east, all on); (t).2 Admitting and Discharge Vehicular Secure Vestibule; (t).3 Outdoor Recreation Courtyard Night Illumination and Enhanced Security Illumination (separate); (t).4 Parking Lot; (t).5 Fire Access Routes; (t).6 Site Entry Road; (t).7 Pathway/Walkway lighting; (t).8 Building entrance, including exterior stairs and ramps; and (t).9 "ALL ON" single point control; and	Yes	Yes	Limited to observable conditions			
7.7.13.1(2)(u) Lighting control will provide flexibility required to adjust lighting to minimal levels during predetermined night time hours to achieve Energy savings while maintaining required uniformity to provide and support video surveillance system functionality.	Yes	Yes	Limited to observable conditions			
7.7.13.2 Energy Harvesting (Daylight Harvesting)						
7.7.13.2(1) Basic Requirements						
7.7.13.2(1)(a) Maximize the use of daylight to maintain lighting levels while reducing Energy consumption with a combination of natural light, luminaires and controls.	Yes	Yes	Limited to observable conditions			
7.7.13.2(2) Performance Requirements:						
7.7.13.2(2)(a) Provide photocell sensors to optimize Energy use and provide a stable illumination level utilizing natural and artificial light; and	Yes	Yes	Limited to observable conditions			
7.7.13.2(2)(b) Where day lighting control is installed in Client accessible spaces, provide such spaces with separate lighting with a uniform minimum 50 lux of illumination throughout the space. Day lighting control sensors will not control this separate lighting. Provide for manual and time/mode controlled switches disabling the day lighting control.	Yes	Yes	Limited to observable conditions			
7.7.13.3 Occupancy Sensors						
7.7.13.3(1) Basic Requirements						
7.7.13.3(1)(a) Use occupancy sensors (auto-on/auto-off) to automatically turn off lighting in areas that are unoccupied to reduce Energy consumption. Vacancy sensor (manual-on/auto-off) functionality will be a programming option and is preferred for energy efficiency.	Yes	Yes	Limited to observable conditions			
7.7.13.3(2) Performance requirements						
7.7.13.3(2)(a) Low voltage occupancy sensors will be capable of detecting presence, in the floor area to be controlled; and	Yes	Yes	Limited to observable conditions			

5.12 Electrical Systems Design	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
7.7.13.3(2)(b) Where occupancy sensors are installed in Client accessible spaces, provide such spaces with separate lighting with a uniform minimum 50 lux of illumination throughout the space. Occupancy sensors will not control this separate lighting. Provide for manual and time/mode controlled switches disabling the occupancy sensors.	Yes	Yes	Limited to observable conditions			
7.7.14 Mechanical Equipment Connections						
7.7.14.1 Basic Requirements						
7.7.14.1(1) Provide electrical power control and monitoring connections to all mechanical equipment as required for proper operation, protection and maintenance of the equipment. Materials and installation methods will result in safe, reliable and serviceable mechanical equipment and systems in the Facility.	Yes	Yes	presence of connections only			
7.7.14.2 Performance Criteria						
7.7.14.2(1) Utilize institutional or industrial quality cables, connectors, conduit systems, fittings and hardware used to make connection to mechanical equipment so as to provide for high levels of reliability, durability and ease of maintenance of the equipment.	Yes	Yes	Limited to observable conditions			
7.7.14.2(2) Design connections made to motors and/or motor driven equipment or equipment with noticeable levels of vibration to accommodate the vibration.	Yes	Yes	Limited to observable conditions			
7.7.14.2(3) Design connections to mechanical equipment to easily permit removal and replacement of the equipment.	Yes	Yes	Limited to observable conditions			
7.7.14.2(4) Size motor control centres, main feeders to motor control centres, and mechanical distribution centres to accommodate the current mechanical equipment with an additional 50% spare capacity.	Yes	Yes	Limited to observable conditions	Project tracker agreed to reduce to 15%		
7.7.14.2(5) Utilize motor control centres when four 3-phase motors that require a starter are located within 50 m of each other.	Yes	Yes	Limited to observable conditions			
7.7.15 Specialty Systems						
7.7.15.1 Basic Requirements						
7.7.15.1(1) Special electrical and communications systems are required in the Facility (as described in this Schedule) and form essential parts of the Facility. Provide power supply, specially conditioned power and communication conduits and other electrical operational support equipment to meet all requirements of these special electrical and electronic systems.	No		not viewable during audit			
7.7.15.2 Performance Criteria						
7.7.15.2(1) Utilize institutional or industrial quality cables, connectors, conduit systems, fittings and hardware to make connection to special equipment and to provide for high levels of reliability, durability and ease of maintenance of the equipment.	No		not viewable during audit			
7.7.15.2(2) Provide connections to special equipment that easily permit removal and replacement of the equipment.	No					
7.7.16 Power and Lighting – Greenhouse						
7.7.16.1 Provide a power distribution system sized to assure full services for the Greenhouse. Connect the Greenhouse to a generator system "Conditional" branch power except for egress lighting and fire alarm system, which will be connected to the "Vital" branch.	Yes	Yes	Limited to observable conditions			
7.7.16.2 Design the greenhouse lighting system to be comprised of general luminaires, energy efficient HID or LED task light fixtures and lighting required for growing flowers and vegetable bedding plants from seed.	Yes	Yes	Limited to observable conditions			
7.7.16.3 Provide lightning and grounding protection for the Greenhouse.	Yes	Yes	Limited to observable conditions			
7.7.17 Clock System						
7.7.17.1 Basic Requirements						
7.7.17.1(1) Provide a synchronized wireless clock system to assure accurate consistent time is available at key control and clinical spaces in the Facility. Connect to the Authority's network time server for synchronization of all clocks throughout the Facility.	Yes	Yes	Limited to observable conditions			
7.7.17.1(2) Supply master time controllers and all clocks by a recognized industry leader with all components by the same manufacturer.	Yes	Yes	Limited to observable conditions			
7.7.17.2 Performance Criteria						
7.7.17.2(1) Not used						
7.7.17.2(2) Not used.						
7.7.17.2(3) Locate synchronized digital clocks in areas including:	Yes	Yes	Limited to observable conditions			
7.7.17.2(3)(a) each Client care area including Treatment Rooms, Care Stations, Client Therapy Rooms, Interview/Consult Rooms, Medication Rooms, and Locker Rooms, and corridors; and	Yes	Yes	Limited to observable conditions			
7.7.17.2(3)(b) conference rooms, meeting rooms, care team stations, staff lounges, family rooms, reception desks and staff work rooms.	Yes	Yes	Limited to observable conditions			
7.7.17.2(4) Provide digital clocks that will be synchronized that will receive correction signals from the master clock. Provide UPS power to these clocks.	Yes	Yes	partial - UPS circuit allocation not verifiable on site			
7.7.17.2(5) Digital clocks will display numerical values for hours, minutes and seconds, and will have the capability of displaying 12 or 24 hour time format. Displays will be highly visible and legible from a minimum 10 metres away.	Yes	Yes	partial - correct digital clocks provided - some areas had analog battery clocks			
7.7.17.2(6) Provide local satellite transmitters to provide signals to all clocks in the Facility where required.	Yes	Yes	Limited to observable conditions			
7.7.17.2(7) Connect all clocks power supply to emergency generator and UPS power.	Yes	Yes	partial - circuit allocation not verifiable on site			

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7.8 Communications (Division 27)						
7.8.1 Principles, Guidelines and Assumptions						
7.8.1.1 The Authority is committed to delivering a safe, secure, therapeutic and welcoming environment to meet the needs of its Clients, families, community and providers by seamlessly integrating modern rehabilitative models of care with innovative technology that drive efficiencies in service delivery.	No					
7.8.1.2 The IMIT systems will:						
7.8.1.2(1) have the capability for the Authority's infrastructure to operate as a "single facility", share IMIT to the fullest extent where possible and allow for future accommodation of devices and uses over the network;	No		Unable to verify system's integration and performance			
7.8.1.2(2) enable flexibility in the day-to-day operations of the Authority so that services will be adapted to differing Client populations/locations within the Facility based on existing and future needs;	No		Unable to verify system's integration and performance			
7.8.1.2(3) foster collaboration and the integration of care/education/research through adaptable physical spaces and the capability to connect easily onto the Authority's network to share information;	No		Unable to verify system's integration and performance			
7.8.1.2(4) improve Client safety and reduce errors by ensuring that staff will access the resources required to deliver the right care to the right Client at the right time;	No		Unable to verify system's integration and performance			
7.8.1.2(5) promote a secure environment that allows security staff to know where staff and Clients are at all times and reliably supports the mobilization of resources to reduce risk or harm;	No		Unable to verify system's integration and performance			
7.8.1.2(6) supports a therapeutic and engaging Client and family centered experience throughout the Facility;	No		Unable to verify system's integration and performance			
7.8.1.2(7) support advancement towards an integrated, smarter Facility that continuously contributes to operational efficiencies through standardization, improved workflow and access to information; and	No		Unable to verify system's integration and performance			
7.8.1.2(8) align with regional and Provincial standards of delivering mental health and corrections services.	No		Unable to verify system's integration and performance			
7.8.1.3 The Authority uses the following regional information systems:						
7.8.1.3(1) the primary electronic health record (eHR) software application package is Allscripts – Sunrise Clinical Manager;	No		not applicable for audit purposes			
7.8.1.3(2) the ADT is Momentum WinCIS;	No		not applicable for audit purposes			
7.8.1.3(3) the pharmacy system is Interactive Business System - WinPharm;	No		not applicable for audit purposes			
7.8.1.3(4) the regional health records charting is Med2020 – WinRecs; and	No		not applicable for audit purposes			
7.8.1.3(5) the dictation system is Nuance – Dictaphone and Dragon Naturally Speaking.	No		not applicable for audit purposes			
7.8.1.4 Most of the regional clinical systems will be hosted on Servers located at a remote data centre. Some applications may be hosted locally within the Facility. The local data centre, any applications/systems installed therein and the processes for maintenance of said systems are all subject to the Authority's defined standards/requirements outlined in this Schedule and related appendices.	No		not applicable for audit purposes			
7.8.1.5 The management of all the Authority's employees' and Clients' information is the responsibility of the Authority.	No		not applicable for audit purposes			
7.8.1.6 The IMIT systems will be Integrated and interoperable to facilitate workflows, create efficiencies and improve Client safety and security. The Integration Engine will form the integrations as outlined in Appendix 3D(viii) [IMIT System Integration Matrix].	No		not applicable for audit purposes			
7.8.1.7 Except as expressly stated otherwise Project Co will be responsible for designing and constructing all required Infrastructure, Servers and Software required to support the communication systems to be included within the Facility.	No		Only partially possible for audit purposes			
7.8.2 IMIT Systems Procurement						
7.8.2.1 Refer to Section 4.15 of the Agreement regarding software licensing and support.	No		Unable to verify system's integration and performance			
7.8.2.2 If a system procured for use in the Facility represents a net new addition to the overall Authority systems inventory, Project Co will ensure that any contract it enters into for that system includes provisions allowing use of the system to be expanded beyond the Facility to other Authority sites provided the associated increase of scope charges are paid.	No		not applicable for audit purposes			
7.8.2.3 Project Co will ensure that all contracts for the supply of IMIT systems and equipment:	No		not applicable for audit purposes			
7.8.2.3(1) have a defined service level commitment that complies with the service level requirements set out in Appendix 3D(vii) [IMIT Systems Responsibility Matrix];	No		not applicable for audit purposes			
7.8.2.3(2) have a privacy and security schedule that aligns with the Freedom of Information and Protection of Privacy Act (Saskatchewan), the Health Information Protection Act (Saskatchewan) and the Personal Information Protection and Electronic Documents Act (Canada) as applicable; and	No		not applicable for audit purposes			
7.8.2.3(3) for systems and equipment to be maintained by the Authority, include the following at Project Co's cost and on terms reasonably satisfactory to the Authority:	No		not applicable for audit purposes			
7.8.2.3(3)(a) a warranty, extending from the later of the Service Commencement Date and the date of commissioning of the system and continuing for the duration specified in Appendix 3D(vii) [IMIT Systems Responsibility Matrix],; and	No		not applicable for audit purposes			
7.8.2.3(3)(b) support and maintenance services at the service level and for the duration specified in Appendix 3D(vii) [IMIT Systems Responsibility Matrix].	No		not applicable for audit purposes			
7.8.2.4 Applications, software modules and any related software installed, operated or used by Project Co must not interfere with the operation or performance of, or reduce the security or privacy of, any Authority applications or equipment.	No		not applicable for audit purposes			
7.8.2.5 Review and acceptance by the Authority is required prior to completion and acceptance of any IMIT system by Project Co.	No		not applicable for audit purposes			
7.8.2.6 Project Co will submit all documentation, custom programming and configuration of all IMIT systems to the Authority post commissioning of each IMIT system.	Yes	TBD	require submission for review			
7.8.3 Basic Requirements	No		Unable to verify system's integration and performance			
7.8.3.1 The IMIT systems will be self-monitoring and provide alerts via the Integration Engine.	No					
7.8.3.2 Obtain final sign off by the Authority for the final design of all IMIT systems after the conclusion of Design and the user consultation process as described in Appendix 2B [User Consultation and Design Review], where expected system workflow, integration, requirements and expectations will be addressed.	No					
7.8.3.3 Train the Authority's IT specialist(s) on configuration/setup and testing of the communication systems equipment as part of the equipment procurement.	No					
7.8.3.4 Training will include classroom training, web training, hands on, on-site training or any combination as appropriate for the applicable system, along with user reference guides and take away handouts for Authority staff.	No					
7.8.3.5 The communications systems in the Facility will be an extension of the Authority's communications systems, and must meet all of the Authority's standards at the time of procurement. Project Co will ensure that all new technology, systems, and equipment are fully compatible and seamlessly interfaced with the existing systems and equipment used by the Authority.	No					
7.8.3.6 All applications used in the Facility for clinical purposes will be provided by the Authority. Project Co will provide all communication infrastructure necessary to support, interface, and integrate these systems.	No					
7.8.3.7 The communications systems will be proven technology for use in facilities similar to the Facility.	Yes	No	partial - some systems were such as intercom and phone but nurse call and code blue were not. Using a customized system	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review RTLS performance requirements, this section references communication systems
7.8.3.8 All IMIT systems procured as part of the Facility will be extended from the Main Building to all Ancillary Buildings, including the Community Re-Integration Units.	Yes	No	partially - OSC commented that the range of the Vocera badges are greatly negatively affected by external cold temperatures	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
7.8.3.9 All communications systems infrastructure and equipment provided by Project Co and not covered by existing Authority standards will be the latest proven version of the equipment at the time of procurement.	No		unable to view during audit visit			
7.8.3.10 Communication systems utilized in the Facility consist of multiple tiers of technical infrastructure and services applied in support of both clinical and non-clinical Authority services.	No		unable to view during audit visit			
7.8.3.11 Design all IMIT systems such that they are provided with tamper proof end use devices to ensure the safety and protection of Clients, staff and visitors.	Yes	Yes	Limited to observable conditions			
7.8.4 IMIT Systems and Equipment Categorization and Responsibilities	No		Unable to verify system's integration and performance			
7.8.4.1 The Construction Period and Operating Period responsibilities of the Authority and Project Co for each of the IMIT systems are outlined in Appendix 3D(vii) [IMIT Systems Responsibility Matrix]. This Schedule sets out requirements for information technology and information management systems on a system by system basis. The following definitions are used:	No		not applicable			
7.8.4.1(1) "**Infrastructure**" means everything required to support an IMIT system except for the required Software and Server(s);	No		not applicable			
7.8.4.1(2) "**Integrate**" and "**Integration**" mean the combining of software or hardware components or both into an overall system that must be able to physically connect via a standards based Interface to Authority systems if required to pass information, status, or extend system functionality;	No		not applicable			
7.8.4.1(3) "**Interface**" means the physical infrastructure, system components, software application development, configuration, messaging standards, commissioning and testing necessary to perform data interchange between separate systems. Interfacing of systems will be provided to achieve the integration of systems which supports the overall clinical, operational and technical functional requirements. For each IMIT system required for the Facility, this Schedule sets out a non-exhaustive list of other systems with which the system must interface with in order to achieve the technical, performance and functional requirements specified within this Schedule for the purposes of integrating into a complete system;	No		not applicable			
7.8.4.1(4) "**Server**" means a computer that provides hosting services for one or more applications including also acting as a data repository. Servers typically have additional processing capacity, memory, and data storage availability than basic or home computers. These requests between clients and servers are usually transported via standard TCP/IP network connectivity. Examples of server roles within the Authority include: authentication servers, application	No		not applicable			
hosting, data repository servers, web servers, utility servers, building operation and life safety servers.	No		not applicable			

	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
7.8.4.1(5) "**Service Level**" means the service level requirements set out in Appendix 3D(vii) [IMIT Systems Responsibility Matrix].	No		not applicable			
7.8.4.1(6) "**Software**": also known as applications, software's role is to execute computer based instructions resulting in defined outputs supporting the Authority's end user's business and clinical workflow requirements including building control and life safety systems. Software is grouped into two general categories: application based software and operating system software (including operating and related utilities). Samples of application based software within the Authority include Sunrise Clinical Manager and Microsoft Office suites. Samples of operating systems and related software utilities include HP Unix, Redhat Linux, Microsoft Server, SCCM, SCOM and Symantec Backups and Antivirus systems.	No		not applicable			
7.8.4.1(7) "**Refresh**" means the renewal or replacement of all components of the applicable IMIT systems, including hardware, Software, Infrastructure and commissioning, to ensure that such IMIT systems and equipment continue to comply with the Design and Construction Specifications and benefit from the technology then available.	No		not applicable			
7.8.4.2 A summary of responsibilities for IMIT systems and equipment, including categorization of responsibility for system components (including Software and Server), Infrastructure and Integration, and including Operating Period responsibilities is included in Appendix 3D(vii) [IMIT Systems Responsibility Matrix]. Refer also to Appendix 3D(viii) [IMIT Systems Integration Matrix].	No		not applicable			
7.8.4.3 Project Co will Refresh applicable IMIT systems at the time periods following Service Commencement as set out in the "Project Co Refresh" column of Appendix 3D(vii) [IMIT Systems Responsibility Matrix]. Project Co will train the Authority staff on any changes to such IMIT systems arising from the Refresh.	No		not applicable			
7.8.4.4 Project Co will be responsible for integrating all IMIT systems and equipment in accordance with Good Industry Practice with the overall design of the Facility and will include such IMIT systems and equipment as part of the design development process described in Section 4.2 of Schedule 2 [Design and Construction Protocols].	No					
7.8.4.5 Application of Appendix 2D [Equipment and Furniture]:	No		not applicable			
7.8.4.5(1) Provide IMIT connections, service, support to equipment and systems identified in Appendix 2D [Equipment and Furniture]. Obtain approval from Authority for connection of equipment and systems identified in Appendix 2D [Equipment and Furniture] with the Authority.	Yes		May not be possible to verify for all equipment			
7.8.4.5(2) Systems described in this Schedule may also have components and equipment that are listed on the Equipment List, to which Appendix 2D [Equipment and Furniture] applies.	No		unable to view during audit visit			
7.8.5 IMIT Design and Construction Responsibility						
7.8.5.1 System Design						
7.8.5.1(1) Project Co will design all IMIT systems and equipment in conformance with the applicable industry telecommunications standards plus the Authority technical standards and integration, interfacing, performance and quality requirements as described in this Schedule and the Appendices to this Schedule. In the event of any conflict between standards, the more stringent requirement will apply.	No		unable to view all relevant equipment during audit visit			
7.8.5.1(2) All systems that will be Integrated with, or that Interface with the Authority's systems must be reviewed and approved by the Authority prior to development and implementation of the systems.	No		unable to view during audit visit			
7.8.5.2 System Development/Implementation						
7.8.5.2(1) For development and implementation of all systems that will be Integrated with, or that Interface with the Authority's systems, Project Co will comply with the Authority standards and protocols, as amended from time to time.	No		unable to view during audit visit			
7.8.6 Telecommunications Infrastructure						
7.8.6.1 Basic Requirements						
7.8.6.1(1) Physical network design and installation by Project Co will have high availability and security that meets or exceeds the industry standard for use in and support of mental health hospital applications and Authority standards.	Yes	Yes	Limited to observable conditions			
7.8.6.1(2) Provide the following network separation in the Facility:						
7.8.6.1(2)(a) the Authority's network (data, voice, video, wireless);	Yes	Yes	Limited to observable conditions			
7.8.6.1(2)(b) Client monitoring systems;	Yes	Yes	Limited to observable conditions			
7.8.6.1(2)(c) the BMS;	Yes	Yes	Limited to observable conditions			
7.8.6.1(2)(d) nurse call system;	Yes	No	Not present	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review as part of RTLS and Fire Alarm system performance
7.8.6.1(2)(e) Client entertainment;	Yes	Yes	Limited to observable conditions			
7.8.6.1(2)(f) RTLS system;	Yes	TBD	Partial - RTLS system not presently implemented.			
7.8.6.1(2)(g) Project Co equipment; and	Yes	Yes	Limited to observable conditions			
7.8.6.1(2)(h) Client telephone system.	Yes	Yes	Limited to observable conditions			
7.8.6.1(3) Project Co will consult with the Authority and meet all of the Authority's policies and standards for all connections to the Authority's data, voice, video and wireless networks. The above list is indicative only and does not limit Project Co's obligation to provide all physical networks required for the Facility.	No					
7.8.6.1(4) Provide systems which promote operational efficiency and integrate systems where this integration provides efficiency and operational and cost advantages.	No					
7.8.6.1(5) The communications systems will accommodate all media types, including data, voice, video and wireless.						
7.8.6.1(6) Train the Authority's IM/IT specialist(s) on configuration/setup and testing of the communication systems equipment in the Facility.	No					
7.8.6.1(7) Design and install equipment and Infrastructure to remain operational during and after disasters.	No					
7.8.6.1(8) Provide all necessary infrastructure, including power, pathways, conduits, grounding / bonding, spaces and structured cabling, to support the clinical program.	No					
7.8.6.2 Performance Criteria	No		Unable to verify system's integration and performance			
7.8.6.2(1) Provide infrastructure for the communications network as detailed in Appendix 3D(i) [Structured Telecommunications Cabling Systems].	No					
7.8.6.2(2) Use IP Protocol for data, voice and video network based equipment. Telephone equipment will be a mix of VoIP and analog equipment.	Yes	Yes	Limited to observable conditions			
7.8.6.2(3) Provide IPV6 compatible network protocols.	No					
7.8.6.2(4) Maintain the manufacturer's warranties on all IMIT Systems Equipment and ensure that the warranties are transferable to the Authority. Transfer warranties to the Authority as requested by the Authority after installation.	No					
7.8.6.2(5) All communications systems equipment provided by Project Co will support all applications run by the Authority, which include WinCIS and Microsoft Office.	No					
7.8.6.2(6) All networked equipment provided by Project Co intended for integration with Authority networks/systems will include any adapters necessary to integrate with the Authority's IP based network.	No					
7.8.6.2(7) All IMIT systems must be reviewed by the Authority in accordance with Appendix 2B [User Consultation and Design Review].	No					
7.8.6.3 Quality Requirements						
7.8.6.3(1) Project Co will:						
7.8.6.3(1)(a) use the latest technology for transferring, securing, and storing information available at the date of procurement of the communications system for the Facility;	No					
7.8.6.3(1)(b) use equipment and materials that are certified and clearly sealed by CSA or ULC or other testing agency approved and accepted by the local inspection authorities; and	Yes	Yes	Limited to observable conditions			
7.8.6.3(1)(c) comply with all Appendices of this Schedule.	No		may not be able to address 'all' of them			
7.8.6.3(2) In the event of a conflict between applicable industry standards, Authority standards or this Schedule, the more stringent standard will apply.	No					
7.8.7 Site Utilities / Access Provider						
7.8.7.1 Project Co will design the Facility in coordination with the Authority's access providers to provide telecommunications services to the Facility to support Authority and Project Co systems.	Yes	Yes	Limited to observable conditions			
7.8.7.2 The communications systems that will be integrated or interoperate with Authority systems will be compatible with the systems of the Authority's service providers as of the date of installation of the systems and be designed to integrate with the service providers' equipment and, as appropriate, to utilize the Authority's existing service agreements by extending them to the Facility.	No					
7.8.7.3 Extend cabling from the service provider demarcation to the PER / Main Telecom Room. Provide all jumper cables and connectors as required.	Yes	Yes	Limited to observable conditions			
7.8.7.4 Provide four 100mm (4") conduits below grade to the Utility service provider pole location. Provide duct banks and manholes.	Yes	Yes	Limited to observable conditions			
7.8.7.5 Provide lightning protection for all copper cables entering / leaving the Facility.	No					
7.8.7.6 Coordinate installation of service utilities with the service provider and the Authority. Provide fiber and copper cable quantities as required to support the Authority's and Project Co's systems. Provide separate service as required by the system and Authority requirements. Coordinate with the Authority to support the following services at a minimum:	No					
7.8.7.6(1) LANSPAN;	No					
7.8.7.6(2) CNet connection on GoS MPLS;	No					
7.8.7.6(3) cable TV;	Yes	Yes	Limited to observable conditions			
7.8.7.6(4) internet access;	Yes	Yes	Limited to observable conditions			
7.8.7.6(5) Facility telephone service;	Yes	Yes	Limited to observable conditions			
7.8.7.6(6) Client telephone service; and	No		unable to differentiate between services as significant amount of fibre cabling is brought into facility			
7.8.7.6(7) Distributed Antenna System (DAS).	No					
7.8.7.7 Order utility services to support Project Co and Authority IMIT systems. Order multiple Internet Service Providers (ISPs) to support Project Co and Authority systems. Order multiple services and service types in order to support clinical and departmental systems within the Facility. Provide 25% additional capacity for adding services as needed in the future.	No					
7.8.8 Telecommunication Equipment Rooms						
7.8.8.1 Basic Requirements						

	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
7.8.8.1(1) Project Co will provide telecommunication equipment rooms to accommodate the telecommunications infrastructure and equipment in accordance with Schedule 3, Appendix 3D(i) [Structured Telecommunications Cabling Systems] and EIA/TIA standards.	Yes	Yes	Limited to observable conditions			
7.8.8.1(2) "Telecommunication equipment room" includes the following room types: Telecommunications Service Entrance Room (TSER), Primary Equipment Room (PER) / Main Telecommunications Room, and Telecommunication Room (TR).	Yes	Yes	Limited to observable conditions			
7.8.8.1(3) Ensure minimum design requirements for the telecommunication equipment rooms comply with EIA/TIA-1179. Provide and size telecommunication equipment rooms to accommodate the telecommunications requirements of the Facility, including all required equipment cabinets, cabling systems and all active and	Yes	Yes	Limited to observable conditions			
passive network equipment, devices and infrastructure. Provide capacity for 25% growth in Telecommunication Rooms.	No					
7.8.8.1(4) Provide structured cabling between telecommunication equipment rooms as detailed in Appendix 3D(i) [Structured Telecommunications Cabling Systems].	Yes	Yes	Limited to observable conditions			
7.8.8.1(5) Design telecommunication equipment rooms to provide sufficient redundant cooling capacity to permit all cabinets to be fully populated with a total load of 6KW of conditioned power per cabinet. Provide additional cooling to support Project Co equipment in TRs where sharing of space is allowed by the Authority.	No					
7.8.8.1(6) Telecommunication equipment rooms must provide a minimum of 6kw of fully redundant power from both of the centralized UPS's to each cabinet.	No					
7.8.8.1(7) Provide cable runway ladder tray on perimeter walls and extending over the data cabinets for routing cable. Provide 100% spare capacity.	Yes	Yes	Limited to observable conditions			
7.8.8.1(8) Provide redundant TSER's to accommodate the telecommunications services to the Facility. Provide diverse redundant pathways to the utility provider.	Yes	Yes	Limited to observable conditions			
7.8.8.1(8)(a) Provide one TSER to accommodate the telecommunications services to the Facility.	Yes	Yes	Limited to observable conditions			
7.8.8.1(8)(b) Locate TSER on an exterior wall in close proximity to the incoming service connections.	Yes	Yes	Limited to observable conditions			
7.8.8.1(8)(c) Provide redundant pathways and connectivity to the PER / Main Telecom Room.	No					
7.8.8.1(9) Primary Equipment Room (PER) / Main Telecommunications Rooms						
7.8.8.1(9)(a) Design the PER to host, among other things, Authority network equipment, Authority VoIP systems, Authority security equipment, Authority servers and additional equipment as determined by the Authority. The PER will be designated as a ANSI/TIA-942 Tier Level 2 Data Center.	No					
7.8.8.1(9)(b) No horizontal cabling to telecommunication outlets located outside of the PER will terminate in the PER.	No					
7.8.8.1(9)(c) Equip the PER with a minimum of 15 equipment cabinets with the ability to add 6 in the future at 12.3 square metres per cabinet or 78 square metres of floor space for Authority equipment. Project Co may increase the size of room to accommodate Project Co equipment if reviewed and accepted by the Authority.	Yes	Yes	Limited to observable conditions			
7.8.8.1(9)(d) With approval of the Authority, Project Co may co-locate Project Co supplied servers and equipment in the PER. Provide physical separation of Project Co equipment and cabinets from Authority equipment and cabinets with a secure fence that extends from the floor to the underside of deck and has a separate entrance from the Authority space. Project Co will not be allowed access to Authority equipment unless accompanied by the Authority's IMIT staff.	No					
7.8.8.1(9)(e) Provide gas based fire suppression system within the PER / Main Telecom Room. Locate equipment on the Project Co side of the room.	Yes	Yes	Limited to observable conditions			
7.8.8.1(9)(f) Provide redundant diverse pathways from the Main Telecom Room/PER to each of the remote TRs.	No		unable to view during audit visit			
7.8.8.1(10) Telecommunications Room (TR)						
7.8.8.1(10)(a) TRs will comprise enclosed architectural spaces throughout the Facility to house telecommunications equipment, provide horizontal cross connects and cable terminations. Refer to Appendix 3D(i) [Structured Telecommunications Cabling Systems].	Yes	Yes	Limited to observable conditions			
7.8.8.1(10)(b) Ensure all horizontal and backbone communication cabling for a given floor or area terminates at a TR. A TR includes the equipment cabinets containing backbone and horizontal cabling and network electronics serving that area and floor.	Yes	Yes	Limited to observable conditions			
7.8.8.1(10)(c) Locate TRs to serve only the floor on which they are located. Design TRs to provide easy access for equipment modifications and working space and to avoid interference with other services and systems.	Yes	Yes	Limited to observable conditions			
7.8.8.1(10)(d) Locate TR's to minimize the distances for cable runs and so that no cable run will exceed 85m (280').	Yes	Yes	Partial - Require cable test reports			
7.8.8.1(10)(e) Provide a minimum of 3 data cabinets per TR as required to support the cable terminations in that area with the ability to add an additional cabinet as needed.	Yes	Yes	Limited to observable conditions			
7.8.8.1(10)(f) Project Co will share the TR with the Authority. Project Co will provide a fence extending from the floor to the underside of the deck with separate cable entrances. Provide lockable doors through separation with access control to allow the Authority to access both sides of the TR. Project Co will not be allowed to access Authority equipment unless accompanied by the Authority's IMIT staff.	Yes	No	Not present	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review internally, maybe this was mixed into a DCR using a different term
7.8.8.1(10)(g) The TR rooms will support the Aruba 802.11a/b/g/n/ac wireless access points, Mitel Telephones and IP video surveillance cameras which require PoE / PoE plus functionality and standards based QoS (Quality of Service) traffic prioritization.	No		unable to view during audit visit			
7.8.8.1(10)(h) Subject to compliance with the cable distance requirements of TIA 568-B, the maximum quantity of data drops per TR is 1,200. This quantity will be logically and physically separated into two distinct groups of up to 600 data drops in order to accommodate the Authority's labelling and cable management requirements. The Authority will review the layout and configuration of each TR. The maximum number of Category 6 - 48 port horizontal copper patch panels per horizontal wiring cabinet will not exceed 5 panels or a total of 240 ports per horizontal wiring cabinet.	Yes	Yes	Partial - Require cable test reports			
7.8.8.1(10)(i) Provide CATV distribution amplifiers in a star configuration with the head end and incoming service connection located in the PER / Main Telecom Room. Provide two RG-11 quad shield coaxial cables home run between the head end distribution amplifier in the PER and each Telecom Room. Provide two RG-11 quad shield coaxial cables to the demarc in the TSER. (i).1 Provide splitters as required to distribute CATV signal to Telecommunication Rooms. (i).2 Provide an amplifier in the TR to amplify the signal from the PER / Main Telecom Room to the TV outlet. (i).3 Terminate at the workstation with F-Connector. (i).4 Provide connection to all TV locations throughout the Facility including private Client rooms, support space, entertainment distribution system and as identified by the Authority. (i).5 Provide Homerun Quad shield RG-6 cabling to the TV outlet. Increase to RG-11 as required to maintain acceptable dB levels for signal transmission. (i).6 Provide 25% spare capacity for the CATV system included distribution amplifiers, components and cabling.	Yes	Yes	Partial - cannot view all connections during site visit			
7.8.8.1(10)(j) Connect end-use equipment to the TR layer 3 switch and a 10/100/1000 base T Ethernet 802.3 protocols run on Category 6A twisted pair plenum rated cable.	Yes	Yes	Limited to observable conditions			
7.8.8.1(10)(k) All network ports with network devices attached will be activated. A small percentage of ports, to be used for portable equipment or on an as required basis, will be designated by the Authority as active.	No		unable to view during audit visit			
7.8.8.1(10)(l) Not used.						
7.8.8.1(10)(m) Secure all Telecommunication Rooms and the PER with access controls (card reader, electric strike and door contacts).	Yes	Yes	Limited to observable conditions			
7.8.8.1(10)(n) Use light color for wall, floor and ceiling finishes to enhance the lighting in the room.	Yes	Yes	Limited to observable conditions			
7.8.8.1(10)(o) Provide full height walls to the underside of the deck. Where possible the TR ceiling will be higher than the corridor ceiling.	Yes	Yes	Limited to observable conditions			
7.8.8.1(10)(p) Provide a drip tray below sprinklers located directly above data cabinets.	Yes	Yes	Limited to observable conditions			
7.8.8.1(10)(q) In the PER and TRs provide additional quad outlets, on each wall served with a dedicated 15A, 20V circuit spaced at no more than 1800mm intervals around the perimeter walls. Provide sufficient receptacles to support wall mount systems plus two additional quad outlets. Consult with the Authority for any additional systems that may require power.	Yes	Yes	Limited to observable conditions			
7.8.8.1(10)(r) Design the redundant HVAC systems serving the TRs and PER to maintain a temperature between 18-24 degree Celsius with a relative humidity between 30 and 55%. Design the HVAC system to maintain these requirements on 7x24 hour operation. Detailed heat loads will be calculated at time of design.	No					
7.8.8.2 Equipment Cabinets						
7.8.8.2(1) Except as noted otherwise, provide all cabinets with floor space per TIA standards. Provide seismic bracing for all equipment cabinets.	No					
7.8.8.2(2) Where two or more cabinets are next to each other remove the inside panel to allow access to the adjacent cabinet.	Yes	Yes	Limited to observable conditions			
7.8.8.2(3) Provide 1 meter clear access in front and behind data cabinets.	Yes	Yes	Limited to observable conditions			
7.8.8.2(4) Provide 1m spacing between rows of cabinets. Provide 150mm (6") space between end of cabinet row and wall. Provide 1 m clear on the other end of row to allow access to the front and rear of the cabinet.	Yes	Yes	Limited to observable conditions			

	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
7.8.8.2(5) Ensure review by a structural engineer of all installations for certification as being seismically restrained in accordance with the requirements for a post disaster facility.	No					
7.8.8.2(6) Provide lockable cabinets with access control card readers.	Yes	Yes	Limited to observable conditions			
7.8.8.2(7) Each cabinet requires a minimum of 40 sq ft of floor space with a minimum distance of 4.5 ft from any electrical panel.	Yes	Yes	Limited to observable conditions			
7.8.8.2(8) All cabinets must meet or exceed industry standard specifications with front and rear door locks, 42U in size, outside width of 750mm with internal rack width of 19" and depth of 1200mm.	Yes	Yes	Limited to observable conditions			
7.8.8.2(9) Mount all cabinets, unless otherwise specified, on seismic isolation bases. The platforms will be bolted together and seismically anchored.	No					
7.8.8.2(10) Provide each cabinet with redundant PDUs (Power Distribution Units) connected to separate L15-30R-208V (3 phase) circuits, one fed from each of the separate redundant centralized UPSa. Each PDU will be capable of supporting C13, C14 and C19 power connections.	No					
7.8.8.2(11) Provide Authority standard APC Net Shelter SX cabinets with multiple fans, vertical and horizontal wire management and grounding as set out below.	Yes	Yes	Limited to observable conditions			
7.8.8.2(11)(a) Provide APC roof fan tray for APC NetShelter SX cabinet for each cabinet.	No					
7.8.8.2(11)(b) Provide APC horizontal rack mount fan at bottom front of cabinet to pull in cool air for each cabinet.	No					
7.8.8.2(11)(c) Provide vertical wire management to accommodate a fully populated cabinet with Category 6A cabling.	Yes	Yes	Limited to observable conditions			
7.8.8.2(11)(d) Provide horizontal wire management as required to accommodate Category 6A cabling and patch cords. Provide a minimum of 2RMU horizontal wire management with fingers, rear access and cover plate. Provide horizontal wire management between each patch panel and data network electronic switch for routing cable.	Yes	Yes	Limited to observable conditions			
7.8.8.2(11)(e) Ground cabinet per manufacturer recommendations and as required in Section 7.7.9.	Yes	Yes	Limited to observable conditions			
7.8.8.2(12) Provide space for additional Authority and Project Co systems including grounding and bonding, CATV distribution panels, radio system, and nurse call and other systems as determined by the Authority in conjunction with Project Co.	Yes	Yes	Limited to observable conditions			
7.8.9 Structured Cabling						
7.8.9.1 Basic requirements						
7.8.9.1(1) Design, install and test all structured cabling in accordance with Appendix 3D(i) [Structured Telecommunications Cabling Systems].	Yes	Yes	Limited to observable conditions			
7.8.9.1(2) The cabling infrastructure will be universal and support the networks and systems required in the Facility, including voice (VOIP and analog), data, video, RTLS, video surveillance, clinical, and security systems and to allow all forms of end-use equipment, including computers, telephones, video conferencing equipment and other digital end-use equipment as identified by the Authority, access to the various IT, telecommunication, and digital video networks.	Yes	Yes	Limited to observable conditions			
7.8.9.1(3) Appendix 3D(i) [Structured Telecommunications Cabling Systems] identifies the structured cabling required by the Authority for its own networks. Project Co will provide any cabling required by Project Co to support its own networks in addition to that identified in Appendix 3D(i) [Structured Telecommunications Cabling Systems].	No					
7.8.9.1(4) Project Co will cause:						
7.8.9.1(4)(a) the cabling infrastructure to be designed by an RCDD;	No					
7.8.9.1(4)(b) the RCDD to work with the Authority to complete the physical network design; and	No					
7.8.9.1(4)(c) the RCDD to provide, as necessary, a network plan which would include the following: all active network devices, non-Authority applications, all connecting End- Use Equipment and each separate network. Project Co will assist the Authority in the network plan by supplying all necessary information to the Authority about their building network. The building network equipment is to match the network equipment specified by the Authority.	No					
7.8.9.1(5) Project Co will provide preliminary conceptual drawings of proposed telecommunications outlet locations in advance of the first detailed room review meetings with the Authority.	No					
7.8.9.1(6) As part of the design process described in Section 4.2 of Schedule 2 [Design and Construction Protocols], provide detailed plans including risers, cabinet layouts, telecommunication equipment layout, infrastructure, raceways, expansion space, and elevations of telecommunication equipment room walls, including layouts in each of the PER and TRs.	Yes	Yes	Limited to observable conditions			
7.8.9.1(7) Create, in consultation with the Authority, an operational plan for the cable infrastructure, including a management strategy and resource requirements for maintenance.	No					
7.8.9.1(8) Project Co will test all cable infrastructure in consultation with the Authority.	No					
7.8.9.1(9) Provide and install a complete structured cabling solution for the Facility in accordance with Appendix 3D(i) [Structured Telecommunications Cabling Systems] and all applicable standards as detailed in Section 2.9.	No					
7.8.9.1(10) Provide separate physical networks, in accordance with Good Industry Practice or equipment vendor specifications and in consultation with the Authority, as required for the telecommunications systems and equipment installed or used in the Facility. At a minimum, provide a separate physical network for each of the networks identified in Section 7.8.6.1(2).	Yes	Yes	Partial - equipment appears to be installed as per industry practice - separate networks unable to be verified during audit. Also requires site identifiable racks containing equipment			
7.8.9.1(11) In consultation with the Authority, design and provide physically diverse and redundant pathways between the PER and TRs.	No					
7.8.9.1(12) Telecommunication Outlets and Data Drops						
7.8.9.1(12)(a) In this Schedule and the Appendices to this Schedule, the terms "telecommunication outlet", "data outlet", "work station outlet, and "communications outlet" are used interchangeably. Notwithstanding any standard referenced in this Schedule, all such outlets included in the Facility will: (a).1 include a minimum of two data drops, with each "data drop" comprising a complete Category 6A structured cabling connection between the RJ45 outlet jack and the port on the patch panel and connection on a network switch; (a).2 comply with all requirements set out in Appendix 3D(i) [Structured Telecommunications Cabling Systems]; (a).3 have a minimum conduit size as defined in Section 7.7.2.1(10) serving an outlet box as defined in Section 7.7.2.2; (a).4 include a 4 port cover plate with RJ45 jacks as required to terminate the supplied cabling, plus blank filler plates on unused outlets; and (a).5 use Category 6A termination technique. No differentiation will be made between data and voice cables.	Yes	Yes	Limited to observable conditions			
7.8.9.1(12)(b) All horizontal cables will be terminated on Category 6A patch panels termination hardware located in a TR. Provide harness cabling for each horizontal cable and connect through to the corresponding switch port.	Yes	Yes	Limited to observable conditions			
7.8.9.1(12)(c) Provide a minimum of one unused data drop at each telecommunication outlet.	Yes	Yes	Limited to observable conditions			
7.8.9.1(12)(d) Project Co will, in consultation with and as directed by the Authority, assign each room and space in the Facility a work area data drop density ("High", "Medium" or "Low") in accordance with the ANSI/TIA-1179 Healthcare Facility Telecommunications Cabling Standard Table 1. Notwithstanding the quantities defined in ANSI/TIA-1179, Project Co will provide a minimum quantity of data drops as defined below: (d).1 Low Density Work Area – per TIA 1179 Table 1; (d).2 Medium Density Work Area - provide 11 data drops; (d).3 High Density Work Area - provide 15 data drops.	No					
7.8.9.1(12)(e) Project Co will provide additional data drops in excess of the minimum quantity required by Section 7.8.9.1(12)(d) as required: (e).1 to support all of the networks, systems and equipment (including the Equipment) to be installed or used in the Facility; (e).2 to comply with any other provisions of this Agreement that require data drops; (e).3 by Good Industry Practice to provide convenience, flexibility or use and operational support throughout the Facility; and (e).4 to ensure there is one unused data drop for each telecommunications outlet with the exception of wall mounted telephones, which do not require an unused data drop.	No					
7.8.9.1(12)(f) Specific Requirements for data drops have been identified for Private Client rooms as follows: (f).1 Head Wall - (4) Data Drops (f).2 Footwall - (2) Data Drops (f).3 TV Locations - (2) Data Drops, 1 Coaxial CATV drop.	Yes	Yes	Refer to amendments for Secure and Non Secure rooms	Coaxial CATV drop was removed in change certificate #006, DCR #151		
7.8.9.1(12)(g) Project Co will design each room in the Facility such that data drops are distributed throughout the room as required to support clinical functionality and convenient use of equipment by Facility Users and in accordance with Good Industry Practice.	No					
7.8.9.1(12)(h) Provide an additional 50 data drops to be terminated, installed and tested in locations as directed by the Authority.	No					
7.8.9.1(13) Project Co will co-locate, at each telecommunications outlet location, an appropriate number of power outlets.	No					

	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
7.8.9.1(14) Terminate all cables in TRs in accordance with Section 7.7.1 of this Schedule and Appendix 3D(i) [Structured Telecommunications Cabling Systems].	Yes	Yes	Limited to observable conditions			
7.8.9.1(15) Project Co will provide appropriate cabinets, UPS, power, cooling and connectivity in each of the PER and TRs.	Yes	Yes	Limited to observable conditions			
7.8.9.1(16) All conduit pathways will have spare capacity of 100%. TR will have physical floor and wall space to accommodate such expansion. For each cross-connect wall, provide adequate space to accommodate 50% expansion on the same and adjacent wall.	Yes	Yes	Limited to observable conditions			
7.8.9.1(17) Provide all ceiling spaces with telecommunication outlets for wireless network access points, information display systems, and other ceiling mounted digital devices.	Yes	Yes	Limited to observable conditions			
7.8.9.1(18) Follow the equipment and cabling labelling standards per Appendix 3D(i) [Structured Telecommunications Cabling Systems]. Confirm details with the Authority prior to labelling.	No					
7.8.9.1(19) Provide floor telecommunications outlets and floor power to connect floor mounted self-registration systems, electronic directional systems and Client education kiosks, Client telephone system devices, as reviewed by the Authority.	Yes	Yes	Limited to observable conditions			
7.8.9.1(20) Provide a data outlet for all public phones, minimum 1 per lobby area per department in the Facility.	Yes	Yes	Limited to observable conditions			
7.8.9.1(21) Run 12 category 6A network cables between each communication room (PER to each TR).	Yes	Yes	Limited to observable conditions			
7.8.9.1(22) Provide redundant fibre connections between the PER, Main Telecom Room and each TR. Fibre connections will be routed in separate diverse pathways.	No					
7.8.10 Equipment Residing on the Network						
7.8.10.1 Project Co's Equipment						
7.8.10.1(1) Provide end-use equipment and communications equipment to provide a fully operational Facility network and that Project Co may require for its own use for the performance of its obligations under this Agreement ("**Project Co's End-Use Equipment**").	No					
7.8.10.1(2) Do not connect any of Project Co's End-Use Equipment to the Authority's network, both wired and wireless.	No					
7.8.10.1(3) Servers and related equipment for Project Co's End-Use Equipment will be located in the PER and TRs as allowed by the Authority.	No					
7.8.10.1(4) Design the PER to have physically separate space for Project Co's equipment and servers from the Authority's equipment and servers and such that access is managed and audited by the security system.	No					
7.8.10.1(5) Any wireless devices used by Project Co will not interfere with the Authority's wireless infrastructure or devices.	No					
7.8.10.2 Authority's End-Use Equipment	No					
7.8.10.2(1) The Authority will provide its own end-use equipment including:						
7.8.10.2(1)(a) computer, desktop;	No					
7.8.10.2(1)(b) computer, laptop;	No					
7.8.10.2(1)(c) tablet PCs;	No					
7.8.10.2(1)(d) printer laser, multifunction;	No					
7.8.10.2(1)(e) photocopiers;	No					
7.8.10.2(1)(f) facsimile machines, general: facsimile, multifunction;	No					
7.8.10.2(1)(g) healthcare card readers;	No					
7.8.10.2(1)(h) dictation microphones;	No					
7.8.10.2(1)(i) scanner, barcode;	No					
7.8.10.2(1)(j) printers, label;	No					
7.8.10.2(1)(k) flat panel television in client rooms;	No					
7.8.10.2(1)(l) handheld computer devices;	No					
7.8.10.2(1)(m) monitor, blood glucose;	No					
7.8.10.2(1)(n) bed, residential, single; bed, electric; bed, electric, bariatric;	No					
7.8.10.2(1)(o) pump, infusion;	No					
7.8.10.2(1)(p) multifunction communication devices; and	No					
7.8.10.2(1)(q) telehealth clinical devices;	No					
(collectively, the "**Authority Supplied End-Use Equipment**").	No					
7.8.10.2(2) Project Co will:						
7.8.10.2(2)(a) include the installation of the Authority Supplied End-Use Equipment as part of the Move-in Schedule;	No					
7.8.10.2(2)(b) assist the Authority to define locations for the Authority Supplied End-Use Equipment;	No					
7.8.10.2(2)(c) provide adequate space, infrastructure, power, and wired network data outlets for the Authority Supplied End-Use Equipment; and	No					
7.8.10.2(2)(d) provide jack number information (on the Authority's cable information Excel spreadsheet) to the Authority to facilitate placement of the Authority Supplied End-Use Equipment.	No					
7.8.11 Authority Network						
7.8.11.1 Basic Requirements						
7.8.11.1(1) For the Authority's network, the Authority will:						
7.8.11.1(1)(a) provide Firewall and authentication servers to serve Authority networks located at the Battleford Data Center;	No					
7.8.11.1(1)(b) provide programming and configuration of Authority network switches.	No					
7.8.11.1(1)(c) provide interface to the Authority's wireless network and the Authority's VoIP telephone System; and	No					
7.8.11.1(1)(d) be responsible for all network management licensing.	No					
7.8.11.1(2) For the Authority's network, Project Co will:						
7.8.11.1(2)(a) provide redundant HP Layer 3 Core switches with redundant power supplies and redundant fans in the PER / Main Telecom Room. Provide 10GB ports to accommodate redundant connections to each of the remote TRs.	Yes	Yes	partial - only that the switches are present - characteristics are not able to be verified during audit			
7.8.11.1(2)(b) provide HP ProCurve network switches for installation in cabinets by Project Co;	Yes	Yes	partial - only that the switches are present - characteristics are not able to be verified during audit			
7.8.11.1(2)(c) provide stackable 48 port, Layer 3, PoE Plus, 10/100/1000 switches with redundant power supplies and redundant 10Gb uplinks to the network core in the TRs for connection to Horizontal work area outlets. Provide sufficient quantity of switches to support all data cabling installed for the Facility to an active data switch port;	Yes	Yes	partial - only that the switches are present - characteristics are not able to be verified during audit			
7.8.11.1(2)(d) provide 25% spare 10/100/1000 Layer 3 PoE plus switches.	No					
7.8.11.1(2)(e) install all network switches and connect harness cabling and patch cords; and	No					
7.8.11.1(2)(f) complete all physical network design and provide all structured cabling.	No					
7.8.11.1(2)(g) Provide aggregation / top of rack switches with 24 port 1000 /10000 ports to isolate Authority servers and iSCSI traffic in a virtual environment. Provide redundant 10GB uplinks to the core. Provide SFP+ modules and fiber optic patch cables to connect all ports.	No					
7.8.11.1(3) For all other networks required in the Facility, Project Co will:						
7.8.11.1(3)(a) provide all required network equipment, including network switches;	No					
7.8.11.1(3)(b) in consultation with the Authority, complete the logical network design and program and configure all network equipment and integration with Authority networks;	No					
7.8.11.1(3)(c) be responsible for all network management licensing;	No					
7.8.11.1(3)(d) locate network and other equipment in the PER or TRs as determined in consultation with the Authority; and	No					
7.8.11.1(3)(e) identify the requirements and interface systems / networks with the Authority's network through consultation with the Authority.	No					
7.8.11.1(4) Project Co will be responsible for providing firewalls to serve Project Co networks.	No					
7.8.11.1(5) For all of the networks described above, Project Co will mount and connect all network switches, harness cables, and cross connect and test all network equipment and cable infrastructure per Appendix 3D(i) [Structured Telecommunications Cabling Systems] in consultation with the Authority.	No					
7.8.11.1(6) Project Co will provide and install harness cables for all network switches for all networks plus spare capacity, per Appendix 3D(i) [Structured Telecommunications Cabling Systems].	No					
7.8.11.1(7) Project Co will provide patch cords for all network switches for all networks, per Appendix 3D(i) [Structured Telecommunications Cabling Systems].	Yes	Yes	Limited to observable conditions			
7.8.11.1(8) Install all network equipment in accordance with all applicable IEEE and EIA/TIA standards, including the 802.1 and 802.3 standards.	No					
7.8.11.1(9) The Authority will provide and manage all firewalls, security and IDS/IPS systems for connections to the Authority's networks.	No					
7.8.11.1(10) Project Co is responsible to provide and manage all firewalls, security and IDS/IPS systems for connections to all networks in the Facility other than the Authority's network.	No					
7.8.11.1(11) Project Co will retain a manufacturer certified network engineer trained on the Authority's network electronics, HP Procurve.	No					

	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
7.8.11.1(12) Provide HP ProCurve as the standard manufacturer for Project Co networks for the purpose of standardization, operational efficiencies, interface coordination throughout the facility.	No					
7.8.11.1(13) Incorporate redundancy and security in all network designs.	No					
7.8.11.1(14) Project Co will comply with the requirements set out in Appendix 3D(ix) [Data Network Electronics]	No					
7.8.12 Authority Servers	No					
7.8.12.1 Basic Requirements						
7.8.12.1(1) Authority servers will be installed in the PER by the Authority.	No					
7.8.12.1(2) All servers will align with Authority policies and operational procedures with regards to security and operations.	No					
7.8.12.1(3) Servers will meet minimum "*Lights out*" requirements where all servers will have remote access cards and data outlets for remote management and support.	No					
7.8.12.2 Performance Criteria						
7.8.12.2(1) Project Co will provide infrastructure to support each server with the required network and power redundancy by means of dual power supplies, dual NIC cards and a minimum of RAID 5 or superior storage technology installed in each server. Connect each power supply to separate redundant rack PDUs and connect each network card to separate distribution switches in the PER.	No					
7.8.12.2(2) Project Co will provide the cable infrastructure to support each server.	No					
7.8.12.2(3) Servers requiring virtualizations will use VMware and will align with Provincial server standards.	No					
7.8.13 Project Co Servers						
7.8.13.1 Basic Requirements						
7.8.13.1(1) All Servers must align with Authority policies and operational procedures with regards to security and operations in accordance with this Schedule and its Appendices. This includes aligning to the Authority operating system and hardware patching processes.	No					
7.8.13.1(2) Servers must meet minimum "*Lights out*" requirements where all servers must have remote access cards and data outlets for remote management and support.	No					
7.8.13.1(3) Provide Servers of the latest technology, as of the date of installation (Intel processor latest model or similar acceptable to the Authority) and that interface to the Ethernet network via a dual and redundant 1000Mb network interface card.	No					
7.8.13.1(4) Ensure all Servers deployed align with the Authority's standards for procuring equipment including hardware models, operating systems, software licenses, maintenance and contract agreements. Maintain all agreements for the life cycle of the hardware and or application.	No					
7.8.13.1(5) Ensure all Servers as well as the applications hosted on those servers are entered into the Authority's change management database system as configuration items and dependencies identified and linked. All changes, incidents, and problems relating to such servers and applications must be managed, monitored, and tracked using the Authority's change, incident, and problem management processes as defined within this Schedule and its Appendices.	No					
7.8.13.2 Performance Criteria						
7.8.13.2(1) Provide each server with network and power redundancy by means of dual power supplies and dual NIC cards installed in each server. Each power supply will be connected to separate redundant rack PDU`S and each network card would be connected in consultation with the Authority.	No					
7.8.13.2(2) For all network attached Servers, install and manage:						
7.8.13.2(2)(a) antivirus software that aligns with the Authority's antivirus policies; and	No					
7.8.13.2(2)(b) enterprise data backup and retention software that aligns with the Authority's backup and retention policies and procedures.	No					
7.8.13.2(3) Hardware and software configuration of servers provided by Project Co must be reviewed by the Authority.	No					
7.8.13.2(4) Servers for the technology and communication systems will be Microsoft compliant (version acceptable to the Authority) and will be from a common manufacturer.	No					
7.8.13.2(5) Any servers that are required to support those IMIT systems that the Authority will be maintaining pursuant to Appendix 3D(vii) [IMIT Systems Responsibility Matrix] will be Nutanix servers.	No					
7.8.14 Telephone Equipment						
7.8.14.1 Basic Requirements						
7.8.14.1(1) For the Authority's telephone network, the Authority will:	No					
7.8.14.1(1)(a) provide a centralized Unified Messaging and Administration Platform manufactured by Mitel and located at the Battleford Data Center; and	No					
7.8.14.1(1)(b) configure and program the VoIP telephone system based on the end users' needs, and Project Co will provide assistance as reasonably required.	No					
7.8.14.1(2) For the Authority's VoIP system, Project Co will:	No					
7.8.14.1(2)(a) design and construct the Facility including infrastructure per Appendix 3D(i) [Structured Telecommunications Cabling Systems] and Appendix 3d(vi) [VoIP Communication System] to support the Authority's VoIP system, Client telephone system and public telephone systems;	No					
7.8.14.1(2)(b) provide redundant Mitel VoIP Telephone Systems with redundant power supplies. Provide telephone types and install at locations identified by the Authority;	Yes	Yes	Limited to observable conditions			
7.8.14.1(2)(c) provide VoIP telephone system with analog voice gateways, software, licensing and VoIP and analog telephone handsets. Provide the same level of software utilized by the Authority;	No					
7.8.14.1(2)(d) not use the Authority phone system for its telecommunications needs. Project Co will provide its own telephone system to support its operations;	No					
7.8.14.1(2)(e) provide the licensing for all telephone devices, voicemail and unified messaging. Expand voicemail and unified messaging software installed offsite at the Authority's Battleford Data Center. Provide 10% spare licensing in addition to what is required to support the Facility;	No					
7.8.14.1(2)(f) provide power and data infrastructure for installation of the Client telephone system in the Secure side of the Facility only. The Client telephone system will be separate from the VoIP telephone system. Coordinate installation of the Client telephone system with the Authority's existing provider, Synergy Inmate Phone Solutions; and	No					
7.8.14.1(2)(g) provide infrastructure to support Client telephone system in the Secure side of the Facility in shared common areas (minimum 3 devices per common area), Video Court Admissions and family visiting areas as required by the Authority.	Yes	Yes	partially - only that outlets are presents and only if visible during visit			
7.8.14.1(3) Authority standard for VoIP / Unified messaging platform is Mitel	No					
7.8.14.1(4) Provide Mitel as the standard manufacturer for the telephone system for the purpose of standardization, operational efficiencies, interface coordination throughout the Facility.	Yes	Yes	Limited to observable conditions			
7.8.14.1(5) Retain a manufacturer certified VoIP system engineer trained on the Authority's VoIP telephone system, Mitel.	No					
7.8.14.1(6) Project Co will be responsible for providing 2 pay phones, for all associated costs for installation including ordering of service with pay phone provider, ongoing maintenance and support, installing infrastructure to support payphones, and providing power and telephone lines for connectivity to pay phone service provider. Location of payphones will be in determined in further consultation with the Authority.	Yes	Yes	Limited to observable conditions			
7.8.14.1(7) Order telephone services with local utility company for Authority VoIP System, Project Co VoIP system and auxiliary systems requiring telecommunications services. Provide redundant utility service to the Authority's communications systems.	No					
7.8.14.1(8) Provide a dedicated data drop for each telephone device. A computer will not share a data drop with a telephone device.	Yes	Yes	Limited to observable conditions			
7.8.15 Cellular Services						
7.8.15.1 Basic Requirements						
7.8.15.1(1) Project Co will provide infrastructure and equipment required to support a singular distributed antennae system that will universally support cellular service provider SaskTel.	Yes	Yes	Limited to observable conditions			
7.8.15.1(2) Ensure that the system installed supports both cellular voice and data requirements and functions effectively in all areas of the Facility, including the basement and underground rooms.	No		Unable to verify system's integration and performance			
7.8.15.1(3) Project Co will work with the Authority and the cellular service provider to transfer the contract to the Authority upon Service Commencement.	No		Unable to verify system's integration and performance			
7.8.15.1(4) Provide active DAS system approved by SaskTel at time of installation for 100% coverage throughout the Facility.	No		Unable to verify system's integration and performance			
7.8.15.1(5) The Distributed Antennae System will provide wireless voice and data services, including life safety and emergency services for Clients, staff and visitors throughout the Facility.	No		Unable to verify system's integration and performance			
7.8.15.1(6) Design the Distributed Antennae System to deliver high performance voice and data services via UMTS and LTE wireless technologies.	No		Unable to verify system's integration and performance			
7.8.15.1(7) Design the Distributed Antennae System so that dedicated Facility coverage and capacity is maintained regardless of external wireless network traffic or coverage.	No		Unable to verify system's integration and performance			
7.8.16 Wireless Networks						
7.8.16.1 Basic Requirements						

	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
7.8.16.1(1) In consultation with the Authority, design and install a complete 802.11 wireless network solution for the Facility in accordance with Appendix 3D(ii) [Wireless Infrastructure Standard] and Appendix 3D(iii) [Wireless Data Communications Policy] to support the Authority wireless network throughout the Facility. The Authority currently utilizes a single wireless network that extends across all its regions. Project Co will not install any other 802.11 wireless network in the Facility without prior approval by the Authority.	No		Unable to verify system's integration and performance			
7.8.16.1(2) The wireless network in the Facility will have sufficient wireless access points to support the Authority's systems and integration to Project Co provided systems.	No		Unable to verify system's integration and performance			
7.8.16.1(3) Refer to Section 7.8.20.1(9) regarding use of the Authority's 802.11 wireless network by the RTLS system in the Facility. Design the wireless network to support RTLS throughout the Facility.	No		Unable to verify system's integration and performance			
7.8.16.1(4) The Authority will:						
7.8.16.1(4)(a) program and configure wireless access points and redundant wireless controllers provided and installed by Project Co, and Project Co will provide assistance as reasonably required; and	No		unable to view during audit visit			
7.8.16.1(4)(b) provide centralized authentication and security appliances or latest equivalent to support the Authority's wireless network within the Facility.	No		unable to view during audit visit			
7.8.16.1(5) Project Co will:						
7.8.16.1(5)(a) install all structured wiring and wireless access points, and test all cable infrastructure and wireless system devices for the wireless network in consultation with the Authority;	No		unable to view during audit visit			
7.8.16.1(5)(b) provide wireless infrastructure to service 802.11b (2.4Ghz DSSS), 802.11g (2.4Ghz OFDM), 802.11a (5Ghz OFDM), 802.11n Draft 2.0, or newer (5Ghz and 2.4Ghz MIMO), and 802.11ac release 2 wireless communications and data transfer requirements for access by wireless devices to data and voice services within the Facility and across the Authority, via the Authority WAN;	No		Unable to verify system's integration and performance			
7.8.16.1(5)(c) provide a complete structured cabling infrastructure that will allow the installation of the complete wireless network, including PoE wireless access points. Project Co will install telecommunication outlets and access points in consultation with the Authority in accordance with Appendix 3D(ii) [Wireless Infrastructure Standard];	No		unable to view during audit visit			
7.8.16.1(5)(d) test all aspects of the wireless network and provide heat maps for the Facility indicating the channel coverage, signal level, data rate and noise floor for 802.11 standard including 802.11b, 802.11g, 802.11a and 5GHz 802.11n and 802.11ac wireless networks.	No		unable to view during audit visit			
7.8.16.1(5)(e) relocate wireless access points based on a physical Site survey after occupation of the Facility.	No		unable to view during audit visit			
7.8.16.1(6) The wireless network will provide 100% coverage that meets the performance requirements, as described in Appendix 3D(ii) [Wireless Infrastructure Standard], throughout the Facility including elevator cabs, mechanical spaces, service areas, Facility exterior, stairwells, and parking lots.	No		Unable to verify system's integration and performance			
7.8.16.1(7) Project Co will procure and install Wireless LAN Controllers, licensing, software and Wireless Access Points.	No		unable to view during audit visit			
7.8.16.2 Performance Criteria						
7.8.16.2(1) Work with the Authority in creating an operational plan for the wireless network complete with management strategy alerts notification and resource requirements for maintenance.	No		Unable to verify system's integration and performance			
7.8.16.2(2) Retain a RCDD certified network engineer with expertise and experience in working with the Authority approved equipment to design the wireless network infrastructure.	No		unable to view during audit visit			
7.8.16.2(3) Each wireless access point will have two Category 6A data drops terminated at a telecommunication outlet installed in accordance with Appendix 3D(ii) [Wireless Infrastructure Standard].	No		unable to view during audit visit			
7.8.16.2(4) Design the Facility including equipment locations (e.g., microwave ovens) that does not interfere beyond the noise floor and signal strength requirements (SNR) of the wireless network. The resulting RF environment in the Facility must be consistent with the strictest specifications of the wireless end-use equipment.	No		Unable to verify system's integration and performance			
7.8.16.2(5) Provide a signal strength and bandwidth within the boundaries of the Facility to support Authority systems and RTLS. Provide exterior wireless signal strength and bandwidth for outdoor coverage to support the Authority's systems in accordance with Appendix 3D(ii) [Wireless Infrastructure Standard] .	No		Unable to verify system's integration and performance			
7.8.17 Wireless Staff Communication System						
7.8.17.1 Basic Requirements						
7.8.17.1(1) The Authority's wireless network will support a complete wireless staff to staff communication system.	No		Unable to verify system's integration and performance			
7.8.17.1(2) The staff communication system will allow staff to initiate 2-way voice conversations from their staff communication system device to:	No		Unable to verify system's integration and performance			
7.8.17.1(2)(a) other staff communication system devices; and	No		Unable to verify system's integration and performance			
7.8.17.1(2)(b) VoIP telephone.	No		Unable to verify system's integration and performance			
7.8.17.1(3) The staff communication system will allow staff to receive 2-way voice conversations into their staff communication system device from:	No		Unable to verify system's integration and performance			
7.8.17.1(3)(a) other staff communication system devices;	No		Unable to verify system's integration and performance			
7.8.17.1(3)(b) VoIP telephone;	No		Unable to verify system's integration and performance			
7.8.17.1(3)(c) nurse call consoles;	No		Unable to verify system's integration and performance			
7.8.17.1(3)(d) Client stations;	No		Unable to verify system's integration and performance			
7.8.17.1(3)(e) staff/duty station; and	No		Unable to verify system's integration and performance			
7.8.17.1(3)(f) external telephone.	No		Unable to verify system's integration and performance			
7.8.17.1(4) The system will align with the Authority's standard Vocera staff communication system and allow for the central management of devices and users via the existing Vocera administrative modules.	No		Unable to verify system's integration and performance			
7.8.17.1(5) [Not used]						
7.8.17.1(6) The system will be capable of being fully Integrated with existing Hospital Blackberry phones.	No		Unable to verify system's integration and performance			
7.8.17.1(7) Project Co will provide 500 wireless staff communication devices and will purchase such devices from the vendor identified in Appendix 3D(vii) [IMIT System Responsibilities Matrix].	Yes	Yes	Partially - only that wireless staff communication devices have been provided and only if we can obtain a sample of them to verify			
7.8.17.1(8) Project Co will ensure that all required systems integrate with the staff communication system. At the Authority's discretion, some of the system integration may be performed through the Authority's phone system.	No		Unable to verify system's integration and performance			
7.8.17.1(9) Project Co may use a different system for its own communication such as portable radios. Any such devices or system must not interfere with the Authority's wireless communication devices or systems or other devices or systems.	No		Unable to verify system's integration and performance			
7.8.17.1(10) The wireless staff communication system will function throughout 100% of the Facility, including elevator cabs, mechanical spaces, service areas, facility exterior, stairwells, parking lots and outdoor courtyards.	No		Unable to verify system's integration and performance			
7.8.17.2 Quality Requirements						
7.8.17.2(1) Comply with the requirements of Appendix 3F(ii) [Wireless Infrastructure Standard].	No		Unable to verify system's integration and performance			
7.8.17.3 Performance Requirements						
7.8.17.3(1) Provide adequate space and power outlets for wireless device charging stations inside each department, taking in to account that charging units with multiple devices may cause signal concentrations that impact active unit performance. Sufficient spread of units must be maintained for both charging and storage areas so as not to impact operational performance of active units.	Yes	Yes	Limited to observable conditions			
7.8.18 Intercommunication System						
7.8.18.1 Basic Requirements						
7.8.18.1(1) Local intercom systems are required at locked entrance doors that delivery personnel or the public will need access through, and at doors provided with Access Controls as identified in Appendix 3D(v) [Door Operations Matrix].	Yes	Yes	Limited to observable conditions			
7.8.18.2 Quality Requirements						
7.8.18.2(1) The intercom systems will be manufactured by recognized industry leaders in the intercom business.	Yes	Yes	Limited to observable conditions			
7.8.18.3 Performance Criteria						
7.8.18.3(1) Provide an intercom system at all entrance locations as identified in Appendix 3D(v) [Door Operations Matrix], in consultation with the Authority, and based on the Facility Threat and Risk Assessment.	Yes	Yes	Limited to observable conditions			
7.8.18.3(2) Provide an intercom door-station at the entrance to each Client department. Each Client department will have master stations at each collaboration station and care hub. Calls from the door-station will be broadcast to each master station simultaneously, and may be answered from any of these locations. Any master station will be capable of releasing the Client entrance door.	Yes	Yes	door intercoms present - unable to verify broadcast zones			
7.8.18.3(3) Not used.						
7.8.18.3(4) Door stations will be provided with the following:						
7.8.18.3(4)(a) Not used;						
7.8.18.3(4)(b) hands-free full duplex audio capability;	Yes	Yes	Limited to observable conditions			
7.8.18.3(4)(c) push-to-talk/call buttons; and	Yes	Yes	Limited to observable conditions			
7.8.18.3(4)(d) vandal resistant and weatherproof where required.	Yes	Yes	Limited to observable conditions			
7.8.18.3(5) Master stations will be provided with the following:						
7.8.18.3(5)(a) desk and wall mount capability;	Yes	Yes	Limited to observable conditions			
7.8.18.3(5)(b) Not used;						
7.8.18.3(5)(c) hands-free full duplex audio capability; and	Yes	Yes	Limited to observable conditions			
7.8.18.3(5)(d) capability to release to the secure entry door.	Yes	Yes	Limited to observable conditions			
7.8.18.3(6) Provide desk loud-speaking master station with handset at locations as determined in consultation with the Authority, including:	Yes	Yes	Limited to observable conditions			
7.8.18.3(6)(a) each imaging control room.	Yes	Yes	Limited to observable conditions			
7.8.18.3(7) Provide flush wall loud-speaking master station without handset at locations including:	Yes	Yes	Limited to observable conditions			

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7.8.18.3(7)(a) X-ray rooms.	Yes	Yes	Limited to observable conditions			
7.8.18.3(8) Provide dedicated duplex voice intercom system between each IPCR and the local nurse station. Nurse station will have the capability of turning the volume off, or up, as required. Intercom will be hands free in the IPCR and will be ceiling mounted behind a guard.	Yes	Yes	Limited to observable conditions			
7.8.18.3(9) Design and provide intercommunication system to include 25% growth after final commissioning has been completed.	No		unable to view during audit visit			
7.8.18.3(10) Include 5 end user intercom devices for quick swap out.	No		unable to view during audit visit			
7.8.18.3(11) Not used.						
7.8.18.3(12) Integrate intercom stations with the video surveillance system such that in the event an intercom station is activated the nearest CCTV camera will focus on the location of the request and display the image on the workstation associated with the master station receiving the call.	No		unable to view during audit visit			
7.8.18.3(13) All events on the intercom system will be sent to the OSC for notification and audit purposes.	No		Unable to verify system's integration and performance			
7.8.19 Video Conferencing and Telehealth						
7.8.19.1 Basic Requirements						
7.8.19.1(1) All videoconferencing systems will interface with Authority's videoconferencing infrastructure and systems as identified in this section.	No		Unable to verify system's integration and performance			
7.8.19.1(2) Provide the supporting infrastructure including power, telecommunication outlets, audio-video wiring, raceways, outlet boxes, structural requirements necessary to deliver the Telehealth requirements identified in Appendix 3A [Clinical Specifications].	No		Unable to verify system's integration and performance			
7.8.19.1(3) Retain audio visual professionals with expertise and experience in the application, use and integration of audio/video conferencing systems for the design, configuration and integration of the required videoconference rooms and systems.	No		Unable to verify system's integration and performance			
7.8.19.1(4) Provide the supporting infrastructure including power, incoming services (C-Net services), communication drops and incoming services for the regional Video Court System.	No		Unable to verify system's integration and performance			
7.8.19.1(5) Current regional standards for videoconferencing systems include Polycomm and Tanberg solutions.	No		Unable to verify system's integration and performance			
7.8.19.1(6) The Authority will also use Saskatchewan Telehealth videoconferencing on mobile carts for clinical purposes. Project Co will ensure system compatibility for such use.	No		Unable to verify system's integration and performance			
7.8.19.2 Quality Requirements						
7.8.19.2(1) Comply with all applicable standards and codes, including the latest IP based video conferencing standards or the latest high speed common standard.	No		Unable to verify system's integration and performance			
7.8.19.2(2) Audio quality will be comparable to voice quality found in typical PSTN voice networks. Video quality will be high definition (1080p) and synchronized with the audio content. Video conference systems will allow for adjustments of compression and audio and video quality to accommodate for bandwidth management.	No		Unable to verify system's integration and performance			
7.8.19.3 Performance Criteria						
7.8.19.3(1) Design and construct videoconference rooms and locate microphones, video cameras, video monitors, lighting systems and sound attenuation structures/materials to optimize the performance of the video conferencing systems.	No		Unable to verify system's integration and performance			
7.8.19.3(2) Consult and identify requirements for network access with the Authority. Configure video conferencing systems in consultation with the Authority and adhere to the Authority security and quality of service requirements so not to negatively impact the Authority's network performance in any way.	No		Unable to verify system's integration and performance			
7.8.20 Real Time Location System (RTLS)						
7.8.20.1 Basic Requirements						
7.8.20.1(1) In consultation with the Authority, design and install a complete RTLS solution for the Facility and Site that includes the following applications and systems:	Yes	TBD	System not yet implemented. Training on going.			
7.8.20.1(1)(a) equipment and asset tracking;	No		Unable to verify system's integration and performance			
7.8.20.1(1)(b) Client tracking;	No		Unable to verify system's integration and performance			
7.8.20.1(1)(c) staff location;	No		Unable to verify system's integration and performance			
7.8.20.1(1)(d) staff to Client interactions with automatic association to the eHR;	No		Unable to verify system's integration and performance			
7.8.20.1(1)(e) Client to medical device interactions with automatic associations to the eHR;	No		Unable to verify system's integration and performance			
7.8.20.1(1)(f) room utilization;	No		Unable to verify system's integration and performance			
7.8.20.1(1)(g) staff duress;	No		Unable to verify system's integration and performance			
7.8.20.1(1)(h) Client wandering;	No		Unable to verify system's integration and performance			
7.8.20.1(1)(i) staff presence within an Client room with automatic association to the nurse call system;	No		Unable to verify system's integration and performance			
7.8.20.1(1)(j) staff workflow analysis and reporting; and	No		Unable to verify system's integration and performance			
7.8.20.1(1)(k) compliance requirements.	No		Unable to verify system's integration and performance			
7.8.20.1(2) RTLS will utilise a server and allow multiple work stations to access the system for supervision, control and reporting purposes. Each of the above applications and systems will have a dedicated customised monitoring and reporting interface for each of the following departments:	No		Unable to verify system's integration and performance			
7.8.20.1(2)(a) security services;	No		Unable to verify system's integration and performance			
7.8.20.1(2)(b) logistics department (equipment depot);	No		Unable to verify system's integration and performance			
7.8.20.1(2)(c) infection control; and	No		Unable to verify system's integration and performance			
7.8.20.1(2)(d) all clinical departments.	No		Unable to verify system's integration and performance			
7.8.20.1(3) Project Co will consult with the Authority to ensure that departmental tracking/dashboard displays in each department listed above are capable of displaying real-time location mapping of RTLS-tagged staff, Client and equipment.	No		Unable to verify system's integration and performance			
7.8.20.1(4) Provide for staff work flow analysis to enable time-in-room tracking for staff and compliance with room/fire exit checks according to a frequency established by the Authority, including the appropriate PC based software to view information and create alerts and reports.	No		Unable to verify system's integration and performance			
7.8.20.1(5) The RTLS system will have the capability to allow the Hospital Information system (HIS) to report from the RTLS system and pull data from the RTLS system for the purposes of reporting and analytics for items such as workflow optimization and time-in-use tracking. All data points within the RTLS system will be available for HIS access.	No		Unable to verify system's integration and performance			
7.8.20.1(6) All data points within the RTLS system will be capable of being retained for the purposes of reporting for a minimum 30 days.	No		Unable to verify system's integration and performance			
7.8.20.1(7) The RTLS equipment and asset location system will provide for asset utilisation, preventative maintenance and provide custom reports for such.	No		Unable to verify system's integration and performance			
7.8.20.1(8) Provide the following quantities of active RTLS tags:	No		Unable to verify system's integration and performance			
7.8.20.1(8)(a) 300 Client tags;	No		Unable to verify system's integration and performance			
7.8.20.1(8)(b) 1000 staff tags, including panic/duress function;	No		Unable to verify system's integration and performance			
7.8.20.1(8)(c) 300 visitor tags, including panic/duress function; and	No		Unable to verify system's integration and performance			
7.8.20.1(8)(d) 200 equipment tags.	No		Unable to verify system's integration and performance			
7.8.20.1(9) The Authority's existing 802.11 wireless network is designed to maximize use for voice and data (with emphasis on the staff to staff communication system). Project Co may use the Authority's wireless network for the RTLS system in the Facility, subject to the following conditions:	No		Unable to verify system's integration and performance			
7.8.20.1(9)(a) Project Co will not be permitted to add to, modify, reconfigure or tune the Authority's wireless network to facilitate use by the RTLS system; and	No		Unable to verify system's integration and performance			
7.8.20.1(9)(b) use of the wireless network by the RTLS system must not negatively impact the Authority's wireless network.	No		Unable to verify system's integration and performance			
7.8.20.1(10) Provide a complete structured cabling infrastructure that will allow the installation of the complete RTLS network, including access points, exciters and/or ultrasonic receivers if applicable. Project Co will install telecommunication outlets and access points in consultation with the Authority.	No		Unable to verify system's integration and performance			
7.8.20.1(11) Test all aspects of the RTLS network and provide heat maps for the Facility indicating the channel coverage, signal level, data rate and noise floor for the wireless network.	No		Unable to verify system's integration and performance			
7.8.20.1(12) The RTLS system will provide 100% coverage throughout the Facility including elevator cabs, mechanical spaces, service areas, facility exterior, stairwells, parking lots and outdoor courtyards.	No		Unable to verify system's integration and performance			
7.8.20.2 Quality Requirements						
7.8.20.2(1) Provide an RTLS manufactured by a recognized industry leader in the RTLS business.	Yes	TBD	Require shop drawings			
7.8.20.2(2) Tags must have a minimum of 12 months of battery life in a typical usage scenario.	No		Unable to verify system's integration and performance			
7.8.20.2(3) Provide full calibration and recalibration of RTLS system for the Facility until the Authority approves the RTLS system.	No		Unable to verify system's integration and performance			
7.8.20.3 Performance Criteria	No		Unable to verify system's integration and performance			
7.8.20.3(1) The RTLS must provide the following functionality:						
7.8.20.3(1)(a) tracking of Client, staff and equipment locations in all areas within the Facility to floor and room level;	No		Unable to verify system's integration and performance			
7.8.20.3(1)(b) all entry/exit locations to the Facility and each Department must have an RTLS array capable of determining direction of travel and be interfaced with the corresponding access control system such that a 'lock- down' of a door based on 'tag' credentials will be initiated automatically;	No		Unable to verify system's integration and performance			
7.8.20.3(1)(c) Client tags must be non-line of sight and must work when covered with bed sheets and shirt sleeves;	No		Unable to verify system's integration and performance			
7.8.20.3(1)(d) the RTLS system will provide absolute detection of tags within elevator cabs. Provide additional exciters in each elevator cab to ensure adequate accuracy;	No		Unable to verify system's integration and performance			
7.8.20.3(1)(e) alerting and reporting based on Client location, Client proximity to location, Client duration in location and Client proximity to other tagged items or persons;	No		Unable to verify system's integration and performance			
7.8.20.3(1)(f) each treatment/procedural area and Client room will be capable of associating a RTLS tagged medical device with a Client via the HIS when the device is brought to within 1.5m of an Client bed location;	No		Unable to verify system's integration and performance			

	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
7.8.20.3(1)(g) each treatment/procedural area and Client room will be capable of associating a RTLS tagged staff member with a Client the HIS when the staff member is within 1.5m of an Client bed location;	No		Unable to verify system's integration and performance			
7.8.20.3(1)(h) each treatment/procedural area and Client room will be capable of signalling to HIS that a RTLS tagged staff member is present within a treatment/procedural area or Client room;	No		Unable to verify system's integration and performance			
7.8.20.3(1)(i) the RTLS will interface with the HIS and the nurse call system, and this interface will support the 'staff presence' functionality of the nurse call system and will provide automatic call acknowledgement when an RTLS tagged staff member is within 2 meters of the Client in treatment/procedural area or Client room;	No		Unable to verify system's integration and performance			
7.8.20.3(1)(j) identifying equipment and asset location, Client location, staff location, and staff duress location within the Facility by floor, within a 3 m x 3 m or smaller area;	No		Unable to verify system's integration and performance			
7.8.20.3(1)(k) reporting on tag and RTLS infrastructure health and availability;	No		Unable to verify system's integration and performance			
7.8.20.3(1)(l) reporting on tag movement and tag location relative to other tag locations;	No		Unable to verify system's integration and performance			
7.8.20.3(1)(m) reporting on tag button press and alerting based on button press;	No		Unable to verify system's integration and performance			
7.8.20.3(1)(n) reporting on compliance to security rounds throughout the Facility and Site;	No		Unable to verify system's integration and performance			
7.8.20.3(1)(o) tags must be submersible and cleanable within the Authority's infection control standards;	No		Unable to verify system's integration and performance			
7.8.20.3(1)(p) tags must support configuration in "always on" mode;	No		Unable to verify system's integration and performance			
7.8.20.3(1)(q) tags must be resistant to tampering and will immediately alarm if the tag is cut, damaged or modified or removed from the Client or equipment without authorisation;	No		Unable to verify system's integration and performance			
7.8.20.3(1)(r) tags must have a visual alerting option (LED or light on tag);	No		Unable to verify system's integration and performance			
7.8.20.3(1)(s) tags must have multiple attachment options, including integration with Client wrist bands and staff ID badge lanyards; and	No		Unable to verify system's integration and performance			
7.8.20.3(1)(t) integrate with HIS systems, using HIS system's interfacing to import/export Client information and location information; and	No		Unable to verify system's integration and performance			
7.8.20.3(1)(u) integrate with the Client entertainment/education system for the purposes of displaying clinician information on the display based upon staff presence within a Client room.	No		Unable to verify system's integration and performance			
7.8.20.3(2) Design the RTLS to include features that assist the Authority to achieve the highest possible tag recovery rate.	No		Unable to verify system's integration and performance			
7.8.20.3(3) Design the RTLS to be Facility-wide including all buildings and courtyards with no 'Dead-Zones'.	No		Unable to verify system's integration and performance			
7.8.20.3(4) Design and provide RTLS System that includes 25% growth after system commissioning has been completed.	No		Unable to verify system's integration and performance			
7.8.20.3(5) Include 5% additional end-use devices, including controllers and exciters, to cover any difficult to reach areas.	No		Unable to verify system's integration and performance			
7.8.20.3(6) Provide the Elpas System for the RTLS System and ensure the RTLS system is consistent with the Authority's RTLS solution at its other facilities.	No		Unable to verify system's integration and performance			
7.8.21 Equipment and Asset Tracking						
7.8.21.1 Basic Requirements						
7.8.21.1(1) Provide an RTLS based equipment and asset tracking system, in accordance with Section 7.8.20 (Real Time Location System).	No		Unable to verify system's integration and performance			
7.8.21.1(2) The equipment and asset tracking system will be capable of interfacing with a Computerised Maintenance Management System (CMMS), such as Maintenance Connection. The CMMS will be capable of interfacing with VFA Canada Corporations (VFA) capital asset facility assessment system as mandated by the Ministry of Health.	No		Unable to verify system's integration and performance			
7.8.21.1(3) Provide a quantity of tags as outlined in section 7.8.20.1(8) Real Time Location System (RTLS).	No					
7.8.21.2 Performance Criteria						
7.8.21.2(1) The equipment and asset tracking system will be capable of locating and tracking a particular piece of equipment anywhere within the Facility and Site.	No		Unable to verify system's integration and performance			
7.8.21.2(2) Project Co will consult with the Authority to ensure that departmental tracking/dashboard displays:	No		Mot applicable			
7.8.21.2(2)(a) are located as determined through the user consultation process as described in Appendix 2B [User Consultation and Design Review]; and	No		Unable to verify system's integration and performance			
7.8.21.2(2)(b) are capable of displaying real-time location mapping of RTLS-tagged staff and equipment.	No		Unable to verify system's integration and performance			
7.8.21.2(3) Project Co will provide a PC based application that will provide a presentation of equipment and assets by superimposing positional data on a Facility floor plan and providing asset tag based information.	No		Unable to verify system's integration and performance			
7.8.21.2(4) Provide an RTLS based equipment and asset tracking system that:						
7.8.21.2(4)(a) facilitates each treatment/procedural area and Client room to be capable of associating a RTLS tagged medical device with a Client via the HIS when the device is brought to within 1.5m of an Client bed location;	No		Unable to verify system's integration and performance			
7.8.21.2(4)(b) has the capacity to send an alarm signal if a particular piece of equipment or a Client pass through a door that leads to the exterior of the Facility;	No		Unable to verify system's integration and performance			
7.8.21.2(4)(c) provides alerting for RTLS tagged equipment and asset location based on:	No		Unable to verify system's integration and performance			
7.8.21.2(4)(d) upon the initiation of an alert the system will identify the location of the event and the particular piece of equipment;	No		Unable to verify system's integration and performance			
7.8.21.2(4)(e) includes, at all entry/exit locations to the Facility and at each Department, an RTLS array that is capable of determining direction of travel and will be interfaced with the corresponding access control system such that a 'lock-down' of a door based on 'tag' credentials will be initiated automatically;	No		Unable to verify system's integration and performance			
7.8.21.2(4)(f) annunciates on the Nurse Station; and	No		Unable to verify system's integration and performance			
7.8.21.2(4)(g) interfaces with the video surveillance system such that when RTLS-tagged equipment exits through a department or Main Building perimeter door, all local video surveillance cameras associated with the door are	No		Unable to verify system's integration and performance			
displayed at the Nurse Station and the Operations Security Centre. Equipment and asset tracking tags will have a push button for request for service functionality.	No		Unable to verify system's integration and performance			
7.8.21.2(5) Equipment and asset tracking tags will have a barcode label affixed for the purpose of interfacing the tag, and related equipment information, into the CMMS.	No		Unable to verify system's integration and performance			
7.8.22 Client Tracking / Wandering						
7.8.22.1 Basic Requirements						
7.8.22.1(1) Provide an RTLS based Client tracking / wandering system, in accordance with Section 7.8.20 (Real Time Location System).	No		Unable to verify system's integration and performance			
7.8.22.1(2) Clients may be provided with RTLS tags/bracelets, ID bands, badges or bracelets.	No					
7.8.22.1(3) Provide a quantity of tags as outlined in Section 7.8.20.1(8) Real Time Location System (RTLS).	No		unable to view during audit visit			
7.8.22.2 Performance Criteria						
7.8.22.2(1) The Client tracking / wandering system will be capable of locating and tracking a Client anywhere within the Facility.	No		Unable to verify system's integration and performance			
7.8.22.2(2) The system will incorporate latest encryption techniques to secure Client ID and location.	No		Unable to verify system's integration and performance			
7.8.22.2(3) Project Co will coordinate with the Authority to ensure that departmental tracking/dashboard displays in Secure Client and Non-Secure Client areas of the Facility are capable of displaying real-time location mapping of RTLS-tagged staff.	No		Unable to verify system's integration and performance			
7.8.22.2(4) Project Co will provide a PC based application that will provide a presentation of Client locations by superimposing positional data on a Facility floor plan and Site map and providing Client tag based information.	No		Unable to verify system's integration and performance			
7.8.22.2(5) Provide an RTLS based Client tracking / wandering system that:						
7.8.22.2(5)(a) performs alerting and reporting based on Client location, Client proximity to location, Client duration in location and Client proximity to other tagged items or persons;	No		Unable to verify system's integration and performance			
7.8.22.2(5)(b) provides association of an RTLS tagged medical device with a tagged Client via the HIS when the device is brought to within 1.5m of an Client bed location;	No		Unable to verify system's integration and performance			
7.8.22.2(5)(c) has the capacity to send an alarm signal if a particular piece of equipment or a Client pass through a door that leads to the exterior of the Facility;	No		Unable to verify system's integration and performance			
7.8.22.2(5)(d) provides alerting for RTLS tagged Clients based on: (d).1 location within the Facility; (d).2 movement within the Facility; and (d).3 status of a tag (low battery, tag removal, tamper, failure); and	No		Unable to verify system's integration and performance			
7.8.22.2(5)(e) upon the initiation of an alert the system will identify the location of the event and the particular Client and annunciate on the local clinical department and protection services workstation and status boards.	No		Unable to verify system's integration and performance			
7.8.22.2(6) Each department utilizing the Client tracking system will be provided with a wireless Client tracking tag test device that audibly and visually indicates on a pass / fail basis the functionality and battery life of the Client tracking tag. The testing device will be a closed loop device/station that allows for full functional testing without activating the Facility's Client tracking alarm system and will provide audit function as required.	No		Unable to verify system's integration and performance			

	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
7.8.22.2(7) At all entry/exit locations to the Facility and at each Department, provide an RTLS array that is capable of determining direction of travel and proximity to a secure door. This functionality will be interfaced with the corresponding access control system such that a 'lock-down' of a door will be initiated automatically.	No		Unable to verify system's integration and performance			
7.8.22.2(8) The Client tracking / wandering system will interface with the video surveillance system such that when an RTLS-tagged Client exits through a Department or Facility perimeter door, all local video surveillance cameras associated with the door are displayed at the local security services workstation, the Operations Security Centre, and a local audible/visual alarm is activated at the point of exit. The event will also be transmitted to the staff communication system.	No		Unable to verify system's integration and performance			
7.8.22.2(9) The Client tracking / wandering system will interface with all elevators such that these elevators will not operate when an unaccompanied tagged Client is present in the elevator cab. The elevator inhibit feature will not operate when the Client is accompanied by an authorised companion or staff tag.	No		Unable to verify system's integration and performance			
7.8.22.2(10) Client tracking / wandering system tags will have a barcode label affixed for the purpose of positive Client identification and integration to the Authority's clinical systems.	No		Unable to verify system's integration and performance			
7.8.23 Client Entertainment System						
7.8.23.1 Basic Requirements						
7.8.23.1(1) The Client entertainment system will provide Client, visitor, and staff television and pay per view content. The system will be administered after Service Commencement by a third party provider under the direction of the Authority. It is anticipated that Hospitality Networks will be the third party provider.	Yes	Yes	Not provided in Client Rooms, rough-in only.			
7.8.23.1(2) Project Co will be responsible for providing the infrastructure, including power, cabling (1 Coax + 2 Category 6A), amplifiers, splitters, and wall supports required to supply a fully operational system as specified in this Schedule.	No		Unable to verify system's integration and performance			
7.8.23.1(3) Project Co will be responsible for design and provision of the complete infrastructure, system, and interfaces necessary to support the system. Project Co will direct and procure services from the third party provider to supply a complete Client entertainment system other than associated equipment as categorized in Appendix 2D [Equipment and Furniture].	No		Unable to verify system's integration and performance			
7.8.23.1(4) The Authority will procure and deliver the IP TV's and wall mount brackets for the TVs to Project Co. See Appendix 2D [Equipment and Furniture]for equipment categorization.	No		Unable to verify system's integration and performance			
7.8.23.1(5) The Client entertainment system will consist of internet protocol based display units (Television). Refer to the Appendix 2D [Equipment and Furniture] for information regarding televisions.	Yes	Yes	Limited to observable conditions			
7.8.23.1(6) The Client entertainment and education system will both utilize the same display and audio. User controls for these systems will not necessarily be the same.	Yes	Yes	Limited to observable conditions			
7.8.23.1(7) The Client entertainment system will operate over physical networks other than the Authority's network.	No		Unable to verify system's integration and performance			
7.8.23.1(8) Project Co will be responsible for the complete system design and installation including off-site connections, entrance services, demarcation and distribution.	No		Unable to verify system's integration and performance			
7.8.23.1(9) The Client entertainment system in a smart hospital environment is a hub for interfacing technologies and systems. Incorporate in the planning, design and installation the multiple virtual and physical interfaces, and pathways that are required to support an integrated Client centric system. Physical pathways, interconnections, and interfacing are also required to support control of the Client entertainment/education system from the smart bed, and transmission of audio signals to the smart bed speakers.	No		Unable to verify system's integration and performance			
7.8.23.1(10) Client entertainment outlets will be installed at:						
7.8.23.1(10)(a) each Client bed location, Client care area, and each Client use area in all Client use and Client care areas/rooms/units of the Facility including: private Client room-medical; and	Yes	Yes	Rough-in and blank wall plates only.			
7.8.23.1(10)(b) each care team station, care hub, nurse station, staff lounge, waiting room, main entrance/lobby area (3 outlets), canteen (two outlets), and Emergency Operations Centre (three outlets).	No	Yes	Not provided			
7.8.23.1(11) At Client entertainment locations other than Client bed location Authority staff will control the channels/programming via remote control and will be able to change program channels or television inputs for access to Client entertainment programming.	Yes	Yes	rough-in only			
7.8.23.1(12) Not used.						
7.8.23.1(13) At each Client location in all clinical areas, provide a Client entertainment outlet capable of receiving television programming, Client education resources, clinical applications and internet access.	Yes	Yes	partially - unable to confirm in all areas.			
7.8.23.2 Quality Requirements						
7.8.23.2(1) The Client entertainment system will be manufactured by an industry leader and all components will be of that manufacturer.	Yes	Yes	rough-in only			
7.8.23.3 Performance Criteria						
7.8.23.3(1) A Client entertainment outlet consists of a quad-plex receptacle, one data outlet, and one coaxial cable. A Client entertainment outlet will serve a Client entertainment display, a Client education display, or a combined Client entertainment/education display. All cabling will be connected in the closest TR.	No		Provided duplex receptacle and data outlet only			
7.8.23.3(2) At each Client entertainment outlet location provide sufficient structural support and backing for a 55" display (TV) unit.	No		unable to view during audit visit			
7.8.23.3(3) Arrange for the installation and connection of TV service including the complete backbone, horizontal and distribution connections throughout the Facility.	No		Unable to verify system's integration and performance			
7.8.23.3(4) Include 5 additional Client entertainment system data drops for areas missed.	No		unable to view during audit visit			
7.8.24 Client Education System						
7.8.24.1 Basic Requirements						
7.8.24.1(1) The Authority intends to provide the application services, programs and electronic educational material that will be displayed via the Authority's network on televisions, Client entertainment displays, video conferencing equipment, tracking dashboards, and personal computers.	Yes	Yes	Limited to observable conditions			
7.8.24.1(2) Project Co will provide a content management system as described in this section, including all integration as required.	No		Unable to verify system's integration and performance			
7.8.24.1(3) Project Co will be responsible for design and provision of the complete infrastructure, system and interfaces necessary to support the education system.	No		Unable to verify system's integration and performance			
7.8.24.1(4) The Client entertainment and education system will both utilize the same display, audio and control features.	No		Unable to verify system's integration and performance			
7.8.24.1(5) The Client education system will include a full IP based content management system that will be capable of sending and streaming Authority based information across the entire Facility via the IMIT systems.	No		Unable to verify system's integration and performance			
7.8.24.2 Performance Criteria						
7.8.24.2(1) At Client education locations other than Client bed locations, Authority staff will control the channels/programming via remote control and will be able to change program channels or television inputs for access to Client education programming.	No		Unable to verify system's integration and performance			
7.8.24.2(2) Not used.						
7.8.24.2(3) Content management system will be integrated with the Client entertainment system so Authority content will be available at the point of Client care.	No		Unable to verify system's integration and performance			
7.8.24.2(4) Content management system will be fully integrated with the Integration Engine for mass notification purposes.	No		Unable to verify system's integration and performance			
7.8.24.2(5) The content management system will be used to control key information on digital displays and information boards throughout the Facility including the Client entertainment system.	No		Unable to verify system's integration and performance			
7.8.24.2(6) These information boards will be used to present Client group schedules, staff information (events, training), tip of the day, safety topics.	No		Unable to verify system's integration and performance			
7.8.24.2(7) Displays will be located in designated areas such as waiting rooms, the cafeteria and other public spaces so that staff and clients can be informed of Facility information and upcoming events.	No		Unable to verify system's integration and performance			
7.8.24.2(8) The Content management system will also support the Client education system by providing access to educational programming for Client and family audiences.	No		Unable to verify system's integration and performance			
7.8.24.2(9) Alerts from codes or security breaches may be shown provided they are subtle and confidential (i.e. border colour change used to indicate an alert/alarm such as missing Client).	No		Unable to verify system's integration and performance			
7.8.24.2(10) Information relevant to the Non-Secure Client and Secure Client programs will be controlled independently by the respective program and display their information separately within their respective spaces.	No		Unable to verify system's integration and performance			
7.8.24.2(11) The content management system will include all software, hardware (servers and storage) and licensing so as to provide a complete, operational content management system.	No		Unable to verify system's integration and performance			
7.8.24.2(12) Design the content management system to include 25% growth after system commissioning has been completed.	No		Unable to verify system's integration and performance			
7.8.25 Nurse Call Systems	No		Require as-built drawings and specifications			
7.8.25.1 Basic Requirements						
7.8.25.1(1) The nurse call system will utilize the latest proven technology used in facilities similar to the Facility.	Yes	No	System provided is an intercom system described in 7.8.18	DCR #179 changed the requirement as follows. ASCOM system was removed from the non-secure side -retain conduit and raceway for future use. ASCOM system removed from secure side and replace with Harding system with the functionality that was identified by the authority.	No documented variance allowed by the Authority.	Review with RTLS and Fire Alarm system performance. Confirm functionality identified by the Authority.

	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
7.8.25.1(2) The nurse call system in a smart hospital environment is a hub for interfacing technologies and systems. Incorporate in the planning, design and installation the multiple virtual and physical interfaces, and pathways that are required to support an integrated Client centric system. Pathways, interconnections, and interfacing are also required to control of the Client entertainment/education system from the smart bed (where applicable).	Yes	TBD	Refer to 1.8.25.1(1)			
7.8.25.1(3) Prior to designing and installing the nurse call system and as required by the Authority, identify the technical capabilities of the nurse call system, hardware interface and integration requirements, system layout, and functionality in consultation with the Authority and the Authority's clinical staff.	Yes	TBD	Refer to 1.8.25.1(1)			
7.8.25.1(4) Installation of the nurse call system will be to the satisfaction of the Authority including programming, configuration, interfacing, testing and commissioning of the system.	Yes	TBD	Refer to 1.8.25.1(1)			
7.8.25.1(5) Train Authority staff on the nurse call system, training schedule to be determined in consultation with the Authority.	Yes	TBD	Refer to 1.8.25.1(1)			
7.8.25.1(6) Provide a full feature audio and visual nurse call system with full duplex communications in any and all Client use and Client care areas/rooms/units of the Facility including: private Client room – medical and other locations for code white/panic alarm function.	Yes	TBD	Refer to 1.8.25.1(1)			
7.8.25.1(7) The nurse call system will be:						
7.8.25.1(7)(a) the primary communication device for Clients to contact staff in each clinical use and Client care area; and	Yes	TBD	Refer to 1.8.25.1(1)			
7.8.25.1(7)(b) the primary communication device for Authority staff to alert other staff that they need assistance in a clinical use or Client care area.	Yes	TBD	Refer to 1.8.25.1(1)			
7.8.25.2 Quality Requirements						
7.8.25.2(1) Comply with all applicable standards, including UL1069, CSA C22.2 and CSA Z32-09.	Yes	TBD	Refer to 1.8.25.1(1)			
7.8.25.3 Performance Criteria						
7.8.25.3(1) In consultation with the Authority, Interface and Integrate the nurse call system with other systems.	Yes	TBD	Refer to 1.8.25.1(1)			
7.8.25.3(2) Interface the nurse call system with other systems in a seamless manner to achieve the integrated functional requirements as determined in consultation with the Authority.	Yes	TBD	Refer to 1.8.25.1(1)			
7.8.25.3(3) The nurse call system will fully interface with the HIS to enable bi-directional communications and transfer of all required data.	Yes	TBD	Refer to 1.8.25.1(1)			
7.8.25.3(4) Integrate the nurse call system with the network and provide sufficient audio channels, in consultation with the Authority, for the requirements of the Facility.	Yes	TBD	Refer to 1.8.25.1(1)			
7.8.25.3(5) Interface the nurse call system with the RTLS and the HIS such that the system is capable of signalling the presence of an individual staff member in a particular room via the dome light, staff console, or status board. Interface the RTLS to the nurse call system to enable automatic nurse call cancellation based on the staff presence within or entering a room.	No		Unable to verify system's integration and performance			
7.8.25.3(6) The nurse call system will provide a full range of software applications as offered by the nurse call vendor's most current systems intended for use in large mental health facilities. The applications will include system administration and supervision,staff assignment and messaging, staff tracking and presence, workload and workflow management and statistical reporting.	No		Unable to verify system's integration and performance			
7.8.25.3(7) The nurse call system will have the capability to allow the HIS to report from the nurse call system and pull data from the nurse call system for the purposes of reporting and analytics for items such as workflow optimization. All data points within the nurse call system will be available for the HIS access.	No		Unable to verify system's integration and performance			
7.8.25.3(8) All data points within the nurse call system will be capable of being retained for the purposes of reporting for a minimum 30 days.	No		Unable to verify system's integration and performance			
7.8.25.3(9) Provide network separation of the nurse call system as per Section 7.8.6.1(2). Provide all network equipment for the nurse call system and integrate this network, in consultation with the Authority, with other Facility networks.	No		Unable to verify system's integration and performance			
7.8.25.3(10) Utilize standard Category 6A (or greater based on standard in place at the time of procurement) cabling and connectors for nurse call cabling as applicable.	Yes	TBD	Refer to 1.8.25.1(1)			
7.8.25.3(11) Install nurse call terminal cabinets in telecommunication rooms as reviewed by the Authority. All nurse call network horizontal runs to telecommunications rooms (TR) will be terminated in accordance with Appendix 3F(i) [Structured Telecommunications Cabling Systems].	No		Unable to verify system's integration and performance			
7.8.25.3(12) The nurse call system will annunciate on the wireless staff communication system (staff communication device, wireless phone devices, PDA's or phones) for near instant alarm response as a secondary alerting system. The nurse call system will operate seamlessly with the wireless staff communication devices and allow two-way VoIP communication into all Client locations.	No		Unable to verify system's integration and performance			
7.8.25.3(13) The nurse call system will utilize VoIP communications between all major components including staff consoles, Client stations, staff stations and all telephones and staff communication devices.	No		Unable to verify system's integration and performance			
7.8.25.3(14) At a minimum, provide a staff console in each clinical nursing area including care team stations, care hubs, nurse stations, reception, and administrative.	Yes	TBD	Refer to 1.8.25.1(1)			
7.8.25.3(15) Staff consoles will be colour, touch screen, user configurable, allow multiple screens, soft key enabled and hands-free full duplex capability with handset for private conversations.	Yes		partially - only visible features will be audited			
7.8.25.3(16) Staff consoles will have the capability to redirect all calls to other staff consoles on a manual, automatically scheduled basis, call escalation, or console failure.	No		Unable to verify system's integration and performance			
7.8.25.3(17) Client stations will be installed at each Client bed location, Client care area, and each Client use area as identified in Section 7.8.25.1(6)	Yes	TBD	Refer to 1.8.25.1(1)			
7.8.25.3(18) In each private Client room-medical provide the following:	Yes	TBD	Refer to 1.8.25.1(1)			
7.8.25.3(18)(a) one Client station for each bed location; and	Yes	TBD	Refer to 1.8.25.1(1)			
7.8.25.3(18)(b) one bath station with audio and call button capability.	Yes	TBD	Refer to 1.8.25.1(1)			
7.8.25.3(19) Client stations will be individually programmable to allow multiple call classification and priority levels. Client stations will be capable of connecting two alarm inputs. Provide the ability to disable any nurse call system input from any staff console.	No		Unable to verify system's integration and performance			
7.8.25.3(20) Client stations located in psychiatric areas will have a suitable physical barrier or enclosure that enables staff to prohibit access to the Client station by a Client.	Yes	TBD	Refer to 1.8.25.1(1)			
7.8.25.3(21) Where smart beds are planned the nurse call Client station will fully interface with the full range of smart bed call and audio functions.	No		Unable to verify system's integration and performance			
7.8.25.3(22) The nurse call system will provide an interface such that the audio from the Client entertainment/education system will be connected and audible through the smart bed speakers.	No		Unable to verify system's integration and performance			
7.8.25.3(23) The nurse call system will also provide an interface such that any smart bed is capable of controlling Client lighting at bed head side.	No		Unable to verify system's integration and performance			
7.8.25.3(24) The nurse call system will not have any cords included as part of the solution; only buttons will be acceptable.	Yes	TBD	Refer to 1.8.25.1(1)			
7.8.25.3(25) Provide multi-call classification dome light (minimum 4 LEDs) to annunciate staff presence, or calls in all rooms with nurse call devices. Locate dome lights in a manner that allow Authority staff the best possible view from the outside of the room where the nurse call device is located. Provide zone lights at all corridor intersections to direct and lead staff from anywhere within or outside the unit to the origin of the call.	Yes	No	Not present. Refer to 1.8.25.1(1)	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with RTLS and Fire Alarm system performance
7.8.25.3(26) Provide a code blue system with code blue buttons at locations determined in consultation with the Authority including each area as identified in Section 7.8.25.1(6), all clinical use areas, Client care areas, care team stations, care hubs, nurse stations, reception, administrative areas, Client therapy rooms, Client lounges, and private Client rooms. Provide a code blue system that is interfaced with the following systems: access control, Authority network, staff communication system, radio system, elevator controls, public address system.	Yes	No	Code White/Code Blue via Vocera	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with RTLS and Fire Alarm system performance
7.8.25.3(27) Provide a code blue system that achieves the following sequence of operation:	No		Code White/Code Blue via Vocera.			
7.8.25.3(27)(a) Upon a Code Blue button activation a priority call signal will be annunciated at the staff console, a pop-up message will also be displayed on all switchboard workstations that will indicate the precise origin of the code blue call.	No		not present			
7.8.25.3(27)(b) Provide dome/zone lights at all corridor intersections elevator lobbies to direct and lead the code blue team from anywhere within or outside the unit to the origin of the code blue call.	No		not present			
7.8.25.3(27)(c) A message will be automatically sent to all unit based staff communication and paging devices as directed and determined by the Authority.	No		Unable to verify system's integration and performance			
7.8.25.3(27)(d) Upon authentication of the code blue event by the unit clinical staff to the switchboard, a code blue signal will be manually initiated by the switchboard staff. The code blue signal will comprise a coded message on the public address system, and a text message which is sent to the code blue team's staff communication devices, and a pre-recorded message to be sent to the radio system.	No		Unable to verify system's integration and performance			
7.8.25.3(27)(e) Switchboard staff will also activate an elevator homing command by way of keyswitch at the switchboard location.	No		Unable to verify system's integration and performance			
7.8.25.3(27)(f) Switchboard will also activate a pushbutton which confirms to the access control system that the code blue event is genuine. The access control system determines the origin of the code blue call from the nurse call system. The access control system provides the code blue response team with an unrestricted route to the origin of the code blue call.	No		Unable to verify system's integration and performance			

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7.8.25.3(27)(g) Each code blue team member will have the ability to recall any elevator from any elevator lobby by means of an elevator recall keyswitch. The code blue team will assume control of the elevator by means of a code blue keyswitch located inside each elevator cab.	No		Unable to verify system's integration and performance			
7.8.25.3(27)(h) Upon cancellation of the code blue call at the Client station all systems will reset and resume normal operation.	No		Unable to verify system's integration and performance			
7.8.25.3(28) Provide code white system as part of the nurse call system with code white buttons at locations determined in consultation with the Authority including: each area as identified in Section 7.8.25, all clinical use areas, Client care areas, care team stations, care hubs, nurse stations, reception, administrative, Client therapy rooms, Client lounges and private Client rooms. Provide a code white system that is interfaced with the following systems: access control, Authority network, staff communication system, radio system, elevator controls, public address system.	Yes	TBD	Current system is not a true supervised/monitored system.			
7.8.25.3(29) Provide adequate staff/duty stations for each nurse call system to ensure that tones are heard throughout each department. Provide the capability to mute at each staff/duty station.	No		Unable to verify system's integration and performance			
7.8.25.3(30) Provide all end use devices for 5 additional Client rooms and 1 additional Nurse Station, including:	No		Unable to verify system's integration and performance			
7.8.25.3(30)(a) Client stations;	Yes	No	Refer to 1.8.25.1(1)	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with RTLS and Fire Alarm system performance
7.8.25.3(30)(b) washroom stations;	Yes	No	Refer to 1.8.25.1(1)	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with RTLS and Fire Alarm system performance
7.8.25.3(30)(c) dome lights;	Yes	No	Not present. Refer to 1.8.25.1(1)	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with RTLS and Fire Alarm system performance
7.8.25.3(30)(d) staff stations;	Yes	No	Not present. Refer to 1.8.25.1(1)	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with RTLS and Fire Alarm system performance
7.8.25.3(30)(e) duty station.	Yes	No	Not present. Refer to 1.8.25.1(1)	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with RTLS and Fire Alarm system performance
7.8.25.3(31) Provide 1 additional station gateway and power switch.	Yes	No	Not present. Refer to 1.8.25.1(1)	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with RTLS and Fire Alarm system performance
7.8.25.3(32) Provide the Ascom Telligence System for the nurse call system and ensure the nurse call system will align with the Authority's nurse call solutions at its other facilities.	Yes		Harding System using MicroComm Intercom Stations			
7.8.26 Integration Engine						
7.8.26.1 Provide an integration engine and framework that will be capable of sending and receiving critical data and information between all intelligent systems in the Facility and connecting via the WAN (the "**Integration Engine**").	No		Unable to verify system's integration and performance			
7.8.26.2 Project Co will provide training and support on the Integration Engine to the Authority staff.	No		Unable to verify system's integration and performance			
7.8.26.3 Design the Integration Engine to meet or exceed the following requirements:	No		Unable to verify system's integration and performance			
7.8.26.3(1) The Integration Engine will send notifications to all Facility communications systems for mass notification purposes with minimal delay in transmission.	No		Unable to verify system's integration and performance			
7.8.26.3(2) Transmission of data will be secure, timely, redundant and will support the workflow efficiencies, Client information security and clinical information quality.	No		Unable to verify system's integration and performance			
7.8.26.3(3) The Integration Engine will be built on a single common platform using existing industry standards and best practices and will communicate across the common data infrastructure.	No		Unable to verify system's integration and performance			
7.8.26.3(4) All systems included in the Facility will integrate with other IMIT systems, including the Authority's systems, via the Integration Engine, as set out in Appendix 3D(viii) [IMIT Systems Integration Matrix].	No		Unable to verify system's integration and performance			
7.8.26.3(5) The Integration Engine will provide communication and data transmission between the various HIS, IP based clinical, non-clinical and building systems and IP and non-IP based communication systems.	No		Unable to verify system's integration and performance			
7.8.26.3(6) No single point of failure will interrupt the transmission of data and information throughout the Facility.	No		Unable to verify system's integration and performance			
7.8.26.3(7) The Integration Engine will have full redundancy, fail-over, backups and downtime procedures in the event of an interruption in functionality.	No		Unable to verify system's integration and performance			
7.8.26.3(8) The Integration Engine will be highly available, scalable and flexible including built-in 25% expandability in processing power and storage.	No		Unable to verify system's integration and performance			
7.8.26.3(9) All hardware, software, licensing and professional services will be included to supply a fully operational Integration Engine upon Service Commencement.	No		Unable to verify system's integration and performance			
7.8.26.3(10) Interfaces:						
7.8.26.3(10)(a) Provide a bi-directional HL7 (Health Level Seven) Interface. HL7 is an international standards development organization that has set several standards for clinical system to system messaging. For systems that will contribute or receive information from the electronic health record utilize an HL7 V 2.4 (or the most recent version available) interface to do so.	No		Unable to verify system's integration and performance			
7.8.26.3(10)(b) Provide all industry standard IP based communication protocols to allow for bi-directional communication between all IMIT system included in this project and all current IMIT systems being used by the Authority. Protocols to include but not limited to: (b).1 BacNet; (b).2 SOAP; (b).3 RS232; (b).4 TAP/PET; (b).5 SMS; (b).6 SMTP; (b).7 REST; and (b).8 XML.	No		Unable to verify system's integration and performance			
7.8.26.3(11) The Integration Engine will act as the main messaging broker for all IMIT systems.	No		Unable to verify system's integration and performance			
7.8.26.3(12) Project Co will provide systems that will, at a minimum, be capable of:	No		Unable to verify system's integration and performance			
7.8.26.3(12)(a) transmitting/receiving alerts and alarms;	No		Unable to verify system's integration and performance			
7.8.26.3(12)(b) adding information to Client electronic medical record;	No		Unable to verify system's integration and performance			
7.8.26.3(12)(c) transmitting/receiving clinical and non-clinical information;	No		Unable to verify system's integration and performance			
7.8.26.3(12)(d) maintaining the security and safety of Clients, visitors and staff;	No		Unable to verify system's integration and performance			
7.8.26.3(12)(e) maintaining operational efficiencies of the Facility; and	No		Unable to verify system's integration and performance			
7.8.26.3(12)(f) transmitting/receiving data, voice, text of video information.	No		Unable to verify system's integration and performance			
7.8.26.3(13) Project Co will provide an integration consultant with proven integration background and experience to lead in the planning, design, procurement and implementation of the Integration Engine and integration of Project Co's systems to the all Facility systems.	No		Unable to verify system's integration and performance			
7.8.26.3(14) Project Co will engage experienced and certified personnel for each system to be integrated through the Integration Engine, to work with the integration consultant and the Authority to implement the integration between	No		Unable to verify system's integration and performance			
7.8.26.3(15) Any system that generates alerts and alarms (such as clinical and security systems) will remain operational as a stand-alone system in the absence of the Integration Engine.	No		Unable to verify system's integration and performance			
7.8.26.3(16) The Integration Engine will be designed so that users are not required to do multiple inputs and so that data will seamlessly be transmitted to multiple systems if required.	No		Unable to verify system's integration and performance			
7.8.26.3(17) The Integration Engine will be designed so that users are not required to access multiple systems in order to accomplish a single process (for example, determining the presence and location of key personnel).	No		Unable to verify system's integration and performance			
7.8.26.3(18) Project Co will include all design, software, hardware, licensing and training to ensure a complete integration solution that will provide all the required integration as per this Schedule.	No		Unable to verify system's integration and performance			
7.8.26.3(19) The Integration Engine is the framework that integrates the BMS, unified communication, clinical systems and devices, administrative systems and systems external to the Facility. The Integration Engine will be the foundation for interoperability throughout the Facility. It will provide a messaging engine that allows for bi- directional translation between varying communication protocols and messaging formats and facilitates the orchestration of transactions to fulfill desired interoperability workflow.	No		Unable to verify system's integration and performance			
7.8.26.3(20) Performance of "end-to-end" transactions will ensure the time required to complete the desired interoperability workflow will be as follows:	No		Unable to verify system's integration and performance			
7.8.26.3(20)(a) for BAS system interoperability workflow of <1 second; and	No		Unable to verify system's integration and performance			
7.8.26.3(20)(b) for clinical and administrative system interoperability workflow of <2 seconds.	No		Unable to verify system's integration and performance			
7.8.26.3(21) The Integration Engine will have the capability to monitor performance in real-time, including the volume and integrity of the transactions and will be able to report on this performance.	No		Unable to verify system's integration and performance			
7.8.26.3(22) The Integration Engine will be implemented by Project Co to have the flexibility to allow any system on the network to be interoperable with any other system on the network, and for expected future systems. Project Co will ensure that the Integration Engine has been programmed to deliver the interoperability use cases as they	No		Unable to verify system's integration and performance			
are defined in User Consultation Group meetings, which will be updated and validated by User Consultation Groups as part of the design process.	No		Unable to verify system's integration and performance			
7.8.26.3(23) The Integration Engine will include the following:						
7.8.26.3(23)(a) a graphical user interface (GUI) for managing the interfaces (e.g. through drag and drop functionality) for the purposes of managing integration between systems;	No		Unable to verify system's integration and performance			
7.8.26.3(23)(b) real time, batch and file processing;	No		Unable to verify system's integration and performance			
7.8.26.3(23)(c) web based monitoring and logging;	No		Unable to verify system's integration and performance			

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7.8.26.3(23)(d) alerts and alarms event based messaging; and	No		Unable to verify system's integration and performance			
7.8.26.3(23)(e) full bi-directional integration to external sites and data centre.	No		Unable to verify system's integration and performance			
7.9 Electronic Safety and Security (Division 28)						
7.9.1 General						
7.9.1.1 Project Co will:						
7.9.1.1(1) utilize CPTED (Crime Prevention Through Environmental Design) principles along with workplace safety and security considerations;	No		not viewable during audit visit			
7.9.1.1(2) minimize the visibility of security devices in Client care areas to reinforce the therapeutic nature and residential qualities of treatment spaces. In interior and exterior public spaces such as lobbies, reception and waiting areas, rest areas, access and egress points, security devices may be visible. Design the Facility and all outdoor areas with Facility Users' safety and security in mind; and	Yes	No	yes partially - duress system not acceptable, access control appears sufficient but timeline accessing into areas can take longer than expected due to time between card swipe and door unlocking; video monitoring appears sufficient, intrusion detection not verifiable during walkthrough	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with RTLS and Fire Alarm system performance
7.9.1.1(3) ensure a safe environment for Facility Users by proper utilization of electronic access control, duress, video monitoring and intrusion detection systems.	Yes	Yes	Limited to observable conditions			
7.9.1.2 All capabilities and functionalities specified in the Operations Security Centre will also be made available in other locations as specified in section 5.17.	No		Unable to verify system's integration and performance			
7.9.1.3 Refer to Section 7.8.4 regarding categorization of IMIT systems and equipment. Refer also to the summary included in Appendix 3D(vii) [IMIT Systems Responsibility Matrix].	No		Unable to verify system's integration and performance			
7.9.1.4 Design all electronic safety and security systems to comply with all applicable requirements of the communication systems set out in Section 7.8.	No		Unable to verify system's integration and performance			
7.9.2 Fire Alarm System						
7.9.2.1 Basic Requirements						
7.9.2.1(1) Design and install the fire alarm system to meet the latest applicable versions of the following standards:	Yes	No	Concerns with installation as per below	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with AHJ
7.9.2.1(1)(a) NBCC	Yes	No	Requires further review with AHJ - Confirm release of mag locks complies with NBC	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with AHJ
7.9.2.1(1)(b) CAN/ULC S524-06, Installation of Fire Alarm Systems	Yes	TBD				
7.9.2.1(1)(c) CAN/ULC S525, Audible Signal Devices	Yes	Yes	unable to verify audibility meets requirements			
7.9.2.1(1)(d) CAN/ULC S526, Visual Signal Devices	Yes	Yes	unable to verify visual identification of alarm meets			
7.9.2.1(1)(e) CAN/ULC S528, Manual Stations for Fire Alarm Systems including accessories	Yes	No	Requires further review with AHJ	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with AHJ
7.9.2.1(1)(f) CAN/ULC S529, Smoke Detectors	Yes	Yes				
7.9.2.1(1)(g) CAN/ULC S536-04, Inspection and Testing of Fire Alarm Systems, and	Yes	Yes				
7.9.2.1(1)(h) CAN/ULC S537-04, Verification of Fire Alarm Systems.	Yes	Yes				
7.9.2.1(2) Provide a fire alarm system for the Facility, including coverage of all buildings, for fire detection and signalling of alarms, trouble, and supervisory conditions while maintaining secure conditions for all Facility Users.	Yes	Yes	Limited to observable conditions			
7.9.2.1(3) Coordinate device types and locations to provide maximum coverage while minimizing opportunity for Facility User Excessive Damage.	Yes	No	partially - pull stations in greenhouse not safe from water exposure	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with AHJ
7.9.2.1(4) Ensure fire alarm system is of a type that failed devices will be rapidly replaced and programmed by building operations and do not require on site presence of a manufacturer's representative.	Yes	Yes	Programming of system to remain with manufacturer rep.			
7.9.2.1(5) Provide a complete two-stage, supervised, 24 VDC fire detection and alarm system that includes addressable, intelligent, automatic and manual initiation devices and audio/visual alarm devices with voice evacuation capabilities. Strategically zone the system devices by area and type of device for colour graphical menuing. Ensure alarm activation will be initiated by manual pull stations, smoke / heat detection and fire sprinkler water flow devices. Provide alarm indication consisting of visual and combination visual/audible devices.	Yes	TBD	Partially achieved. EVAC unable to provide day-day pages			
7.9.2.1(6) Design of the fire alarm system will include locating components in such a way that maintenance and testing will be performed with minimal interruption to the Client areas and to mitigate disruption to operations.	Yes	Yes	Limited to observable conditions			
7.9.2.2 Performance Criteria						
7.9.2.2(1) Install all fire alarm wiring in conduit. Provide fire rated cable where required by the National Building Code of Canada.	Yes	No	Rating of feeders/circuits to FA panels does not comply	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with AHJ
7.9.2.2(2) Provide addressable smoke detectors of self correcting type to maintain consistent sensitivity.	Yes	Yes				
7.9.2.2(3) Incorporate all Facility addressable fire alarm devices, fire alarms and fire troubles on the Authority's network computers. Ensure that the Facility's fire alarm panel devices and internal trouble condition details print out on the Authority's network printers.	No		Unable to verify system's integration and performance			
7.9.2.2(4) Provide two-stage manual pull stations at all exit doors and entrances to exit stairs as required.	Yes	No	Except in Secure Client Areas (Group B Div. 1 occupancy)	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with AHJ
7.9.2.2(5) Provide visual notification devices at all corridors, public spaces, staff and Client toilets and common use spaces.	Yes	Yes	Limited to observable conditions			
7.9.2.2(6) Provide fire alarm speakers throughout the Facility. Speaker system will be available to announce alarm conditions and for use as emergency public address announcements. Provide a telephone interface to the fire alarm voice paging system from the main switchboard for general public address over the fire alarm speaker system. Pre-programmed messages will be transmitted over the public address system to annunciate origin of alarm. Any program sources on the public address system will be muted while alarm and emergency voice messages are transmitted.	Yes	No	Separate public address system added for day-to-day pages No automated voice paging on fire alarm speakers	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with AHJ
7.9.2.2(7) Use combination audible alarm and visual notification devices where applicable.	Yes	Yes				
7.9.2.2(8) Include control devices and connection to close fire and smoke doors on activation of alarm condition.	No					
7.9.2.2(9) Incorporate smoke control systems with control fans and dampers.	No					
7.9.2.2(10) Provide a class A addressable loop for all detection circuits. Provide isolation modules at each penetration of a fire wall within the fire alarm zone.	Yes	Yes	Limited to observable conditions			
7.9.2.2(11) Fully integrate the fire alarm system with the sprinkler system, BMS, HVAC system, elevator controls, access control system, nurse call, and emergency generator plant. Provide a Graphic Command Centre (GCC) in the security centre with a duplicate on- line backup located as directed by the Authority. The GCCs will display fire alarm status and event. It will include integrated software to display and operate a fire alarm control panel, fire alarm colour graphics annunciator menuing, the building management system (BMS) for fan control, and an elevator status/control panel. The fire alarm annunciator will include alphanumeric display and graphic representation of the Facility including all zones.	No					
7.9.2.2(12) Provide functionality to notify and integrate the fire alarm system with the radio system to automatically broadcast voice messages to all security services radios. The voice message will relay the specific alarm message produced by the addressable fire alarm system. Provide all middleware and converters required to interface the radio system with the fire alarm system. Confirm actual programming, priorities, and overrides with the Authority prior to implementation.	No		Unable to verify system's integration and performance			
7.9.2.2(13) Include exterior speaker broadcast system to provide emergency broadcast coverage for all areas accessible to Facility Users other than when in a vehicle. Include zoning for all call and all other areas determined by the Authority based on the design of the Facility. The system will automatically broadcast messages with specific alarm messages. Provide all middleware and converters to interface the exterior speaker system with the fire alarm system.	No		Partial. Unable to verify performance			
7.9.2.2(14) Provide a graphic annunciator complete with:						
7.9.2.2(14)(a) LCD display at the main reception area for the Facility, as required and approved by the local fire department; and	Yes	Yes	Limited to observable conditions			
7.9.2.2(14)(b) an LED matrix and vellum floorplan overlays to provide for simple future revisions to floorplans.	No		Unable to verify			
7.9.2.2(15) Provide LED type indicators for remote indication that a heat and/or smoke detector has been activated in a lockable room (located outside room adjacent to door), in an elevator shaft (located at elevator lobby ceiling) or duct sensors that are not readily visible (located on ceiling or at visible location nearest to sensor installation).	Yes	Yes	Limited to observable conditions			
7.9.2.2(16) In consultation with the Authority, provide remote annunciators at key locations throughout the Facility. At a minimum, these will include nurse stations, maintenance workshops, Energy Centre and entries to all buildings for firefighter's use.	Yes	Yes	Limited to observable conditions			
7.9.2.2(17) Ensure the GCCs will provide multi-level password hierarchy software accesses, high colour resolution, will display a graphical representation of the Facility and will indicate the general origin of the fire alarm, trouble, supervisory condition or system event. Supplemental 'drill-down' detailed maps of each building and fire compartment will allow staff to identify the exact location.	Yes	Yes	Limited to observable conditions			
7.9.2.2(18) Design remote fire alarm panels (or control units) to operate in a stand-alone mode and transmit data using a multiplex data line connecting the entire Facility via a full complement of communication cable. Provide the fire alarm cable network with a redundant backbone taking different physical paths to enhance reliability of communication. A trouble status will annunciate at the main fire alarm panel if a partial break or fault occurs in the data link between any control panel and the main fire alarm panel. Locate the main fire control panel in the Facility's main electrical room.	Yes	Yes	Limited to observable conditions			
7.9.2.2(19) Provide a fireman's handset from the fire alarm system to a location of the Authority's choosing, such that the fire alarm voice paging system is capable of performing as a public address system.	Yes	Yes	Limited to observable conditions			
7.9.2.2(20) Coordinate with the Authority to establish a secure backup of the fire alarm system event log.	No		Unable to verify system's integration and performance			
7.9.2.2(21) Provide a fully functional supervisory fire alarm computer workstation in maintenance department.	Yes	Yes	Limited to observable conditions			
7.9.2.2(22) Provide a printer with each fire alarm workstation to generate a hard copy of the system's event log.	Yes	Yes	Limited to observable conditions			
7.9.2.2(23) Provide gel electrolyte type batteries with overcharge protection for FACP and all transponders. Provide solid state battery charger(s) with capacity to recharge entire battery system in 4 hours. Ensure batteries will have enough capacity (with 25 percent spare time) to operate entire system (except magnetic door holders) in accordance with the National Building Code of Canada.	No		Require specifications and shop drawings;			

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7.9.2.2(24) Include transmission of alarm signal to remote emergency response centre as approved by the Authority.	Yes	Yes	Limited to observable conditions			
7.9.2.3 Operational requirements:						
7.9.2.3(1) Design the fire alarm system to incorporate the following operations to provide a safe environment for all Facility Users:						
7.9.2.3(1)(a) Stage 1: (a).1 Silent stage 1 alarm throughout Facility. (a).2 Audible signal at OSC, BOSC and Nurse Stations. (a).3 Zone alarm on fire alarm graphic displays. (a).4 The OSC will be able to cancel the alarm if investigation reveals false alarm within five minutes. (a).5 Authorized third party (external) agency contracted by the Authority for monitoring of the fire alarm system.	Yes	Yes	Limited to observable conditions			
7.9.2.3(1)(b) Stage 2: (b).1 A Stage 2 alarm may be initiated by any of the following: (b).1.1 If first stage alarm has not been acknowledged after 5 minutes. (b).1.2 Inserting a key in a key switch at a manual pull station. (b).1.3 Inserting a key in a key switch in a staff workstation. (b).1.4 Initiated from OSC or BOSC. (b).2 For stage 2 alarm, speakers will sound in a temporal pattern at 120 strokes per minute in the alarm zone. (b).3 Speakers will sound at 20 strokes per minute in all other zones. (b).4 If the alarm zone is in a Client wing, trigger an automatic 'Fire Unlock' of all Client room doors in the Client wing. All exit doors will remain locked. (b).5 If the alarm zone is in visiting area, trigger an automatic lock release of all secure visiting booth doors. All exit doors will remain locked.	Yes	TBD	Confirm Authority Having Jurisdiction acceptance			Confirm Authority Having Jurisdiction acceptance
7.9.2.3(2) Ensure smoke and heat detectors are individually field programmable and include multiple elements for earliest detection, and are individually adjustable for ambient environmental conditions. Smoke detectors in the Client accessible areas will be housed in a rugged, heavy duty steel, perforated enclosure which is listed for use with the detector, supplied with tamper resistant hardware to allow maintenance access to the detector, and the same color as the ceiling.	Yes	Yes	Limited to observable conditions			
7.9.2.3(3) Design the fire alarm system to monitor:						
7.9.2.3(3)(a) solenoid valve positions of sprinkler system zones;	Yes	Yes	Limited to observable conditions			
7.9.2.3(3)(b) all generators for run and trouble alarms; and	Yes	Yes	Limited to observable conditions			
7.9.2.3(3)(c) any pre-action or dry agent fire suppression systems for trouble and alarms.	Yes	Yes	Limited to observable conditions			
7.9.2.3(4) Synchronize the fire alarm system clock with the security systems and the synchronized clock system.	No		Unable to verify system's integration and performance			
7.9.2.4 Integration						
7.9.2.4(1) Ensure the fire alarm system may be monitored by the Authority's approved third party monitoring agency.	Yes	Yes				
7.9.3 Electronic Security Systems						
7.9.3.1 General						
7.9.3.1(1) Design, provide and install a security system to meet the Authority's security programs within a healthcare and correctional facility environment.	Yes	Yes	Limited to observable conditions			
7.9.3.1(2) Refer to security levels 1, 2, 3, and 4 outlined in Appendix 3A [Clinical Specifications].						
7.9.3.1(3) Provide fully networked integrated security systems to protect Facility Users and property. As part of this security management program, at a minimum, provide: a video surveillance system to view and record events; an access control system to restrict access to secure areas to authorized personnel only and to support the safe operation of psychiatric facilities; and an intrusion alarm detection systems to detect and report unauthorized entry into protected spaces.	Yes	Yes	Limited to observable conditions			
7.9.3.1(4) Develop the security design based on the Facility Threat and Risk Assessment.	No		Unable to verify system's integration and performance			
7.9.3.1(5) Project Co will be responsible for the initial programming of proximity cards. Project Co will locate all security devices and provide monitoring and alarm annunciation requirements to the satisfaction of the Authority.	Yes	Yes	Limited to observable conditions			
7.9.3.1(6) The Authority's security staff will monitor the security system from the Operations Security Centre. Project Co will be responsible for providing new monitors, PCs, hardware and software infrastructure and all electrical requirements.	Yes	Yes	Limited to observable conditions			
7.9.3.1(7) Design all electronic security systems to reside on a dedicated security systems VLAN as part of the Authority's information technology infrastructure connected via the structured cabling system and network devices to allow the Authority the opportunity to review events and monitor the status of security systems from off-Site locations. The system will be fully accessible through the Authority's network.	Yes	Yes	Limited to observable conditions			
7.9.3.1(8) Ensure electronic security systems are scalable to allow for future additions and interconnections of many devices and subsystems from different manufacturers.	Yes	Yes	Limited to observable conditions			
7.9.3.1(9) Incorporate commercial off-the–shelf equipment and proven designs from manufacturers regularly engaged in the production of models and types of equipment used in the security industry. Ensure products are quality control tested and verified for the intended operation prior to installation in the Facility.	Yes	Yes	Limited to observable conditions			
7.9.3.1(10) Ensure all materials, including hardware and software provided are fully compatible with the Authority's head-end systems and are new and the most current version or production model.	No		Unable to verify system's integration and performance			
7.9.3.1(11) Ensure electronic security systems will maintain dependability and reliability under all operational environmental conditions, capable of 24 hours per day, seven days per week continuous operation.	Yes	Yes	Limited to observable conditions			
7.9.3.1(12) Interconnect security systems to the fire alarm system and other systems as required by applicable codes and standards.	Yes	Yes	Limited to observable conditions			
7.9.3.1(13) Arrange meetings with the Authority to develop the system design, interconnections and programming requirements to integrate with the Authority's security systems.	Yes	Yes	Limited to observable conditions			
7.9.3.1(14) Train Authority staff on the use and operation of security systems and location of all security devices. Consult and schedule training with the Authority.	Yes	Yes	Limited to observable conditions			
7.9.3.1(15) Ensure security systems infrastructure comply with the manufacturer's technical specifications and configuration requirements.	Yes	Yes	Limited to observable conditions			
7.9.3.1(16) All electronic security systems will meet all Authority privacy standards pertaining to storage and operation of devices. Provide all necessary documentation and completed privacy impact assessment required to meet Authority privacy/confidentiality standards.	Yes	Yes	Limited to observable conditions			
7.9.3.1(17) Provide intercom stations at the entrance of parking and loading docks.	Yes	Yes	Limited to observable conditions			
7.9.3.1(18) Ensure that all areas of parking including stairwells are capable of being viewed with PTZ and fixed video surveillance in accordance with Section 7.9.7.2(7)(c). Coverage will be to a level that will allow facial identification.	Yes	Yes	partial - only that the PTZ are installed into stairwells			
7.9.4 Access Control						
7.9.4.1 Basic Requirements						
7.9.4.1(1) The Authority intends to maintain and manage a central access control head-end server and database for administration and programming of card access. This head-end system also provides administration of access control systems at various healthcare facilities under the Authority's jurisdiction throughout the region.	Yes	Yes	Limited to observable conditions			
7.9.4.1(2) Provide an access control system that is an extension of the Authority's existing system. The access control system is to fully integrate with the existing S2 Enterprise Security System and utilize the existing database of users, groups and schedules. Integration will be such that any change to one system will effect and cause the same change on the other system with no additional input or action.	No		Unable to verify system's integration and performance			
7.9.4.1(3) Provide a card access system and all required components for card reader identification, confirmation of access level and request for authentication functionality for controlled door operation.	Yes	Yes	Limited to observable conditions			
7.9.4.1(4) The access control system will lock and unlock doors via time schedule and card readers utilizing proximity field effect technology to grant or restrict access to staff via a programmable classification system with sufficient capacity to handle at minimum employees down to the field panel level, and operate over a standard TCP / IP Ethernet network.	Yes	Yes	Limited to observable conditions			
7.9.4.1(5) Refer to Appendix 3D(v) [Door Operation Matrix] for a schedule of doors required by the Authority, at a minimum, to be equipped with card access control.	No		Unable to verify system's integration and performance			
7.9.4.1(6) Provide staff access through the ESS to the relevant card access system transaction to facilitate movement of staff, Secure Clients and Non-secure Clients throughout secure and non-secure program areas.	Yes	Yes	Limited to observable conditions			
7.9.4.1(7) Equip all doors that require card access control with:						
7.9.4.1(7)(a) door position contacts/monitors,	Yes	Yes	Limited to observable conditions			
7.9.4.1(7)(b) request to exit sensors, hardware, or pushbuttons,	Yes	Yes	Limited to observable conditions			
7.9.4.1(7)(c) electric strikes or magnetic locks,	Yes	Yes	Limited to observable conditions			
7.9.4.1(7)(d) proximity card readers,	Yes	Yes	Limited to observable conditions			
7.9.4.1(7)(e) interface relays,	Yes	Yes	Limited to observable conditions			
7.9.4.1(7)(f) power supplies, and	Yes	Yes	Limited to observable conditions			
7.9.4.1(7)(g) manual key backup.	Yes	Yes	Limited to observable conditions			
7.9.4.1(8) Locking systems will be FAIL SECURE for the Secure Client side of the Facility and FAIL SAFE for the Non- Secure Client side of the Facility as a preference, or as required by code. Integrate the access control and monitoring system with the alarm interface unit and event recorder to provide graphic display of door position status and operating interface for central locking/unlocking of doors.	Yes	No	Authority Having Jurisdiction to review compliance to NBC article 3.4.6.16	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with AHJ
7.9.4.1(9) Design the access control system to permit full control functionality from off-site and on-site workstations.	No		Unable to verify system's integration and performance			

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7.9.4.1(10) Integrate the access control system with the video surveillance system such that when an alarm is initiated at an access controlled door all local video surveillance cameras associated with the door are displayed at the Operations Security Centre.	Yes	Yes	Limited to observable conditions			
7.9.4.1(11) In the security monitoring and control system, includes a touch- screen control station, system server, maintenance laptop and computer and printers. Provide programmable logic controller (PLC) system hardware, software, and equipment cabinetry. PLC's are to be controlled by the S2 Enterprise security software. Ensure systems include the following:	Yes	Yes	Limited to observable conditions			
7.9.4.1(11)(a) touch screen control stations including: (a).1 a touch-screen LCD monitor, which should be at a minimum 22" or greater, in order to allow for full visibility and functionality within arm's reach in an ergonomic fashion, based on a sitting position at the workstation; (a).2 personal computer; (a).3 UPS system.	Yes	Yes	Limited to observable conditions			
7.9.4.1(11)(b) Industrial grade programmable logic controllers including: (b).1 CPU; (b).2 power supply; (b).3 input/output cards; (b).4 mounting racks; (b).5 communication/network cable;	Yes	Yes	Limited to observable conditions			
(b).6 manufacturer's standard software configured for this project; (b).7 wiring interface modules and interposing relays; (b).8 DIN rails and terminal blocks; and (b).9 UPS system.	No		Unable to verify system's integration and performance			
7.9.4.1(12) The access control system will integrate with the Client wandering system to prevent unauthorized egress.	No		Unable to verify system's integration and performance			
7.9.4.1(13) Interface requirements between the access control system and other systems are described in this Section and in other sections identified in Appendix 3D(vii) [IMIT Systems Responsibility Matrix]	No		Unable to verify system's integration and performance			
7.9.4.2 Performance Criteria						
7.9.4.2(1) Refer to Appendix 3D(v) [Door Operation Matrix] for the high level description of functional intent for doors that require access control.	No		Unable to verify system's integration and performance			
7.9.4.2(2) Provide all access controlled doors with keyed hardware, on both sides of the door as required, to override all access controls and allow passage through the door in either direction.	Yes	Yes	Limited to observable conditions			
7.9.4.2(3) Ensure all mag lock controlled doors can be manually unsecured by means of a key switch which directly interrupts power to the doormag(s). Provide a key override on each side of the door(s).	No		Unable to verify system's integration and performance			
7.9.4.2(4) Equip all doors from the stairwells leading into the Facility with proximity card access control.	Yes	Yes	Limited to observable conditions			
7.9.4.2(5) Design all IPCRs to require simultaneous operation of a local pushbutton and proximity card to enter the room. A single card reader inside the room will enable egress. Provide each IPCR with a remote release toggle switch and door locked/unlocked indicators at the local nurse station. Clearly label all switches and indicators to indicate their function.	No		Unable to verify system's integration and performance			
7.9.4.2(6) Locate all access control panels / field controllers in TRs and connect access control panels / field controllers to UPS power.	Yes	Yes	Limited to observable conditions			
7.9.4.2(7) Design all access control panels to have either integral battery backup for 2 hour continual operation and be connected to vital power, or be connected to UPS power. For access controls and door hardware components required on secure doors in the Facility which do not fail secure, provided battery backup for 60 minutes and UPS power. Determination of these battery backed secure doors will be made by the Authority during the design phase.	No		Unable to verify system's integration and performance			
7.9.4.2(8) For all remote power supplies serving access control components and door hardware, provide battery backup for 4 hour continual operation and connection to vital power.	No		Unable to verify system's integration and performance			
7.9.4.2(9) For each access controlled door and its associated electrical door hardware components, including door strikes, door mags and hold open devices, provide individually fused, battery-backed circuits. Ensure that individual power supply units will not serve more than 8 doors, or more than 1 department, or multiple floors of the building, or an area greater than 2000m2.	No		Unable to verify system's integration and performance			
7.9.4.2(10) All doors will have their hardware keyed to provide fail-safe mechanical override of the access control.	No		Unable to verify system's integration and performance			
7.9.4.2(11) Design card access system to utilize a file server and allow multiple workstations to access this file server for control and annunciation purposes. Annunciate all alarms locally at Operations Security Centre.	No		Unable to verify system's integration and performance			
7.9.4.2(12) Project Co will provide a user interface at the Operations Security Centre and Nurse Stations that will provide the following functionality:	No		Unable to verify system's integration and performance			
7.9.4.2(12)(a) presentation of access control system alarm locations superimposed on a facility floor plan,	Yes	Yes	Limited to observable conditions			
7.9.4.2(12)(b) ability to configure and control each door or monitored point,	No		Unable to verify system's integration and performance			
7.9.4.2(12)(c) alarm handling, and	Yes	Yes	Limited to observable conditions			
7.9.4.2(12)(d) real-time indication of door/device status.	Yes	Yes	Limited to observable conditions			
7.9.4.2(13) Integrate the access control system with all codes emergency response procedures to provide unrestricted access through designated code travel routes. Sally Port doors will not automatically lock or unlock.	No		Unable to verify system's integration and performance			
7.9.4.2(14) Provide each access controlled door with the capability to emit an audible tone/alarm signal to annunciate door held open and door forced open. Ensure this tone is adjustable in volume and has a programmable option allowing the tone to be silenced or removed for door functionality as required on access or egress.	No		Unable to verify system's integration and performance			
7.9.4.2(15) Design the access control system to function at the field controller level without connection to the PC Host or gateway. All field controllers will be connected by TCP/IP using the structured cabling.	Yes	Yes	Limited to observable conditions			
7.9.4.2(16) Provide access control system capability to lock down departments or other areas in the event of an emergency or per an established schedule on a door by door basis or global command. Determine and program final access control system configuration in consultation with the Authority.	Yes	Yes	Limited to observable conditions			
7.9.4.2(17) Design the access control system with dual technology (proximity and microchip) type readers and with the capability of reusing all existing cards presently used by the Authority. Ensure volume level of the tones emitted by the card reader is adjustable and suitable for quiet environments. Card readers must also have a silent operation capability.	No		Unable to verify system's integration and performance			
7.9.4.2(18) Ensure the access control system is compatible with the Authority's existing systems to allow existing Authority cards to work on the access control system and allow new cards for the Facility to work on existing systems in the rest of the Authority's region. Provide base programming and coordination with the Authority.	No		Unable to verify system's integration and performance			
7.9.4.2(19) Provide all necessary equipment, hardware, network infrastructure and programming as required to establish interconnectivity and seamless interface with the S2 Enterprise Security head-end equipment.	No		Unable to verify system's integration and performance			
7.9.4.2(20) Provide 2000 blank HID Corporate iClass DH - Corporate 1000 35- bit proximity cards with smart technology for Authority staff. Consult with the Authority on card numbering sequence and format before ordering cards to ensure compatibility with existing cards and equipment.	No		Unable to verify system's integration and performance			
7.9.4.2(21) Provide delayed egress operation and alarms at emergency exit doors; alarms to annunciate audibly locally and via the integrated access system. See Appendix 3D(v) [Door Operation Matrix].	Yes	TBD	Unable to verify system's integration and performance			
7.9.4.2(22) Interconnect and interface all electronically controlled doors for remote "lock & unlock" capability through the access control system on a door-by-door or global command basis.	Yes	Yes	Capability at OCS and BOCS			
7.9.4.2(23) Provide clear signage indicating entry procedures. Consult with the Authority for appropriate and acceptable wording.	No		Unable to verify system's integration and performance			
7.9.4.2(24) Ensure all security alarms are logged and archived. Design logging system to be capable of external archiving/backup in order to extend the event information storage duration.	Yes	Yes	Limited to observable conditions			
7.9.4.2(25) Ensure access control system will provide canned reports and custom reporting capability as determined during consultation with the Authority.	Yes	Yes	Limited to observable conditions			
7.9.4.2(26) Provide interconnection access to the applicable control and reporting platform to security workstations located in the security offices.	Yes	Yes	Limited to observable conditions			
7.9.4.2(27) Provide a maintenance/administration workstation (MAW) PC complete with operating & application software, monitor, keyboard, mouse and interconnection to the security system. Locate MAW in PER data room, accessible to authorized personnel and Authority staff.	No		Unable to verify system's integration and performance			
7.9.4.2(28) Determine, in consultation with the Authority and per Appendix 3D(v) [Door Operation Matrix], the location of access control doors and door alarms within the Facility. Provide card readers, locking hardware, request-to-exit devices, door closers, door position/alarm contacts with all associated mechanical and electric hardware and field devices, including power supplies for a fully operational system.	Yes	Yes	Limited to observable conditions			
7.9.4.2(29) In addition to Appendix 3D(v) [Door Operation Matrix] provide access control doors and door alarms for the following:						
7.9.4.2(29)(a) Administration and cash offices;	Yes	Yes	Limited to observable conditions			
7.9.4.2(29)(b) Client unit main entrances;	Yes	Yes	Limited to observable conditions			
7.9.4.2(29)(c) medical records areas;	Yes	Yes	Limited to observable conditions			
7.9.4.2(29)(d) stairwells;	Yes	Yes	Limited to observable conditions			
7.9.4.2(29)(e) communication hubs;	Yes	Yes	Limited to observable conditions			
7.9.4.2(29)(f) staff / locker rooms, staff lounges, staff washrooms;	Yes	Yes	Limited to observable conditions			
7.9.4.2(29)(g) Emergency Operations Centre;	Yes	Yes	Limited to observable conditions			
7.9.4.2(29)(h) video conference rooms;	Yes	Yes	Limited to observable conditions			
7.9.4.2(29)(i) mechanical and electrical rooms;	Yes	Yes	Limited to observable conditions			
7.9.4.2(29)(j) computer rooms, PER, SER, TRs and equipment rooms;	Yes	Yes	Limited to observable conditions			
7.9.4.2(29)(k) perimeter entrances;	Yes	Yes	Limited to observable conditions			

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7.9.4.2(29)(l) pharmacy, drug storage & medication rooms;	Yes	Yes	Limited to observable conditions			
7.9.4.2(29)(m) support spaces (, Stores, Logistics, Clean rooms/storage; etc);	Yes	Yes	Limited to observable conditions			
7.9.4.2(29)(n) building management rooms (boiler rooms, fan rooms, hazmat storage etc);	Yes	Yes	Limited to observable conditions			
7.9.4.2(29)(o) staff only corridors;	Yes	Yes	Limited to observable conditions			
7.9.4.2(29)(p) entrances to locker rooms and staff lounges	Yes	Yes	Limited to observable conditions			
7.9.4.2(29)(q) all elevators (both hall call and inside the cab), with floor by floor control;	Yes	Yes	Limited to observable conditions			
7.9.4.2(29)(r) roof access;	Yes	Yes	Limited to observable conditions			
7.9.4.2(29)(s) stairwells;	Yes	Yes	Limited to observable conditions			
7.9.4.2(29)(t) all IPCRs; and	Yes	Yes	Limited to observable conditions			
7.9.4.2(29)(u) AV SaskTel Rooms.	Yes	Yes	Limited to observable conditions			
7.9.4.2(30) Following consultation with the Authority, provide combination pin code/proximity card readers at all access and egress locations to and from all strictly controlled areas identified by the Authority, such as:	Yes	Yes	Limited to observable conditions			
7.9.4.2(30)(a) Sally Ports;	Yes	Yes	Limited to observable conditions			
7.9.4.2(30)(b) pharmacy;	Yes	Yes	Limited to observable conditions			
7.9.4.2(30)(c) Operations Security Centre;	Yes	Yes	Limited to observable conditions			
7.9.4.2(30)(d) Backup Operations Security Centre; and	Yes	Yes	Limited to observable conditions			
7.9.4.2(30)(e) Data Centre.	Yes	Yes	Limited to observable conditions			
7.9.4.2(31) Integrate combination pin code/proximity card readers into the Facility's access control platform (stand-alone, non-integrated pin pads are not acceptable).	Yes	Yes	Limited to observable conditions			
7.9.4.2(32) Provide pan/tilt colour video intercom communications between the secure side of main entry doors and reception/care stations in departments and areas that are strictly controlled. Provide momentary remote pushbutton operation to release main entry doors when activated by staff or security staff. Integrate the video intercom system with the access control system as required.	Yes	Yes	Limited to observable conditions			
7.9.4.2(33) All delayed-egress doors intended for emergency use only will be alarmed locally at the nurse's stations and collaboration desk, and at the protection services monitoring stations via the access control system. Design alarms to be silenced through use of a key switch that will be integral to the panic hardware.	No		Unable to verify system's integration and performance			
7.9.4.2(34) Provide integration with the applicable control and reporting capabilities included with the security workstations located in the Operations Security Centre.	No		Unable to verify system's integration and performance			
7.9.4.2(35) Provide an additional 25% of end user devices, controllers and licenses.	No		Unable to verify system's integration and performance			
7.9.5 Staff Duress system						
7.9.5.1 Basic Requirements						
7.9.5.1(1) Provide a Real Time Location System ("**RTLS**") based staff duress system, in accordance with Section 7.8.20 (Real Time Location System).	Yes	TBD	Wireless Vocera Badge. RTLS system not fully implemented			
7.9.5.1(2) Provide staff duress system tags with staff duress function as outlined in Section 7.8.20.	Yes	Yes	Limited to observable conditions			
7.9.5.1(3) The staff duress system will provide 100% coverage throughout the Facility including elevator cabs, mechanical spaces, service areas, Facility exterior, stairwells, courtyards and parking lots.	Yes	TBD	Not reliable outdoors in cold temperature. Short battery life			
7.9.5.2 Performance Criteria						
7.9.5.2(1) Design the staff duress system to be capable of locating and tracking a staff member anywhere within the Facility.	No		Unable to verify system's integration and performance			
7.9.5.2(2) Project Co will consult with the Authority to ensure that departmental tracking/dashboard displays in each Secure Client and Non-Secure Client area of the Facility are capable of displaying real-time location mapping of RTLS-tagged staff.	No		Unable to verify system's integration and performance			
7.9.5.2(3) Project Co will provide a PC based application that will provide a presentation of staff locations by superimposing positional data on a Facility floor plan and providing staff tag based information.	No		Unable to verify system's integration and performance			
7.9.5.2(4) Provide an RTLS based staff duress system that provides the following functionality:	No		Unable to verify system's integration and performance			
7.9.5.2(4)(a) the system will be capable of identifying the staff duress tag location within the Facility by floor, within a 3 m x 3 m or smaller area;	No		Unable to verify system's integration and performance			
7.9.5.2(4)(b) the system will alert a duress system tag based on: (b).1 operation of the staff duress pendant pushbutton; or (b).2 status of a tag (low battery, pendant failure);	No		Unable to verify system's integration and performance			
7.9.5.2(4)(c) staff duress location tracking must update continuously when activated;	No		Unable to verify system's integration and performance			
7.9.5.2(4)(d) the system will interface and integrate with the nurse call system such that the system annunciates an alarm from either system in a similar fashion.	No		Unable to verify system's integration and performance			
7.9.5.2(4)(e) the system will integrate with the radio system to automatically broadcast voice messages to all security services radios. The voice message will indicate individual room location from which the staff duress call was initiated. Provide all middleware and converters required to interface the radio system with the RTLS wireless staff duress system;	Yes	No	Does not provide automated voice messages. Must be verbally broadcast	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with RTLS and Fire Alarm system performance
7.9.5.2(4)(f) upon the initiation of an alert the system will identify the location of the event and the particular staff member on the local clinical department and security services workstation and status boards.	No		Unable to verify system's integration and performance			
7.9.5.2(4)(g) the system will interface with the video surveillance system such that when an RTLS-tagged staff member activates a staff duress system pendant, all local video surveillance cameras associated with the event are displayed at the Nurse Station and at the Operations Security Centre. The event will also be transmitted to the staff communication system.	No		Unable to verify system's integration and performance			
7.9.5.2(4)(h) provide a "man-down" feature for the staff duress system.	No		Unable to verify system's integration and performance			
7.9.5.2(5) Provide each department utilizing wireless duress with a wireless duress pendent test device that audibly and visually indicates on a pass / fail basis the functionality and battery life of the duress pendent. The testing device will be a closed loop device/station that allows for full functional testing without activating the Facility's staff duress system and will provide audit function as required.	No		Unable to verify system's integration and performance			
7.9.6 Intrusion Detection and Perimeter Security						
7.9.6.1 Basic Requirements						
7.9.6.1(1) Perimeter Intrusion Detection System (PIDS):	Yes	Yes	Limited to observable conditions			
7.9.6.1(1)(a) There will be no part of the secure perimeter of the Facility that incorporates the use of wire material. Provide all Perimeter Intrusion Detection System (PIDS) through detection technology or monitoring system designed to be non-obstructive.	No		Unable to verify system's integration and performance			
7.9.6.1(1)(b) Provide a complete and fully functional Perimeter Intrusion Detection System to effectively detect, report and record any perimeter intrusion and to effectively monitor the activities in the following areas: the Secure Perimeter, the Secure Zone, the Threat Perimeter, the Threat Perimeter Zone and the Area of Interest.	Yes	Yes	Limited to observable conditions			
7.9.6.1(1)(c) The PIDS will include a perimeter detection system; Active Infrared Sensors (AIR) and perimeter video surveillance cameras (fixed and PTZ) with intelligent video analytics.	Yes	Yes	Limited to observable conditions			
7.9.6.1(1)(d) Provide 24 hours per day /7 days per week video surveillance of all access points to the Facility (pedestrian or vehicle) within the Area of Interest Zone, including all access points and loading zones, Sally Ports in Secure Client areas and Non-Secure Client areas and other structures, including those housing electrical or mechanical equipment, and all areas surrounding such access points, loading zones, building and structures.	Yes	Yes	Limited to observable conditions			
7.9.6.2 Performance Criteria						
7.9.6.2(1) Design the intrusion detection system(s) to utilize industry proven devices for intrusion alarm detection and reporting capable of 24 hours per day, seven days per week continuous operation, with a minimum of 8 hours battery backup operation in the event of power outages.	Yes	Yes	Limited to observable conditions			
7.9.6.2(2) Provide intrusion detection system(s) including alarm controllers, local keypads, motion sensors, shock sensors, glass break sensors, door contacts, strobes, sirens and other alarm initiating devices as needed for a reliable and fully operational system(s).	Yes	Yes	Limited to observable conditions			
7.9.6.2(3) Control each system with keypad(s) located inside the department or area being protected	Yes	Yes	Limited to observable conditions			
7.9.6.2(4) Local alarm controllers will be integrated with the Authority's existing intrusion monitoring system which resides in the Operations Security Centre. The intrusion alarms will report to digital receivers via its own phone line through a dedicated telephone line and be backed up over the LAN/WAN.	No		Unable to verify system's integration and performance			
7.9.6.2(5) Install intrusion detection systems in all areas where protection of physical assets is critical including:	Yes	Yes	Limited to observable conditions			
7.9.6.2(5)(a) pharmacy and narcotics rooms;	Yes	Yes	Limited to observable conditions			
7.9.6.2(5)(b) office suites (human resources, administration)	Yes	Yes	Limited to observable conditions			
7.9.6.2(5)(c) health records storage	Yes	Yes	Limited to observable conditions			
7.9.6.2(5)(d) stores (shipping/receiving)	Yes	Yes	Limited to observable conditions			
7.9.6.2(5)(e) hazmat storage	Yes	Yes	Limited to observable conditions			
7.9.6.2(5)(f) videoconference rooms	Yes	Yes	Limited to observable conditions			

	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
7.9.6.2(5)(g) data centers (server, telecom equipment and computer rooms);	Yes	Yes	Limited to observable conditions			
7.9.6.2(5)(h) cash offices; and	Yes	Yes	Limited to observable conditions			
7.9.6.2(5)(i) all perimeter windows and openings that compromise integral security of the Facility.	Yes	Yes	Limited to observable conditions			
7.9.6.2(6) Ensure the intrusion alarm system and all associated alarm panels are compatible and remotely programmable and monitored from Operations Security Centre.	Yes	Yes	Limited to observable conditions			
7.9.6.2(7) Integrate the intrusion alarm system with the radio system to automatically broadcast voice messages to all security services radios. The voice message will indicate the specific department area from which the call was initiated. Provide all middleware and converters required to interface the radio system with the intrusion alarm system.	Yes	Yes	Limited to observable conditions			
7.9.6.2(8) Perimeter Intrusion Detection System:						
7.9.6.2(8)(a) Provide a complete Perimeter Intrusion Detection System including all equipment, components, software and programming required for a completely integrated system.	No		Unable to verify system's integration and performance			
7.9.6.2(8)(b) Design the Threat Perimeter to be comprised of soft natural materials that blend naturally into existing landscape.	No		Unable to verify system's integration and performance			
7.9.6.2(8)(c) Design the Threat Perimeter as a boundary that is able to allow people to walk through it.	No		Unable to verify system's integration and performance			
7.9.6.2(8)(d) Supplemented with security sensors that will alert security staff in Operation Security Center that someone is moving in proximity to the Threat Perimeter, allowing a security response if required.	No		Unable to verify system's integration and performance			
7.9.6.2(8)(e) Where and when it is deemed necessary for the safety of the Client, provide for "real-time" locating systems which may be used to monitor Client movements (requires that alert-badges be issued to the Client). This approach would not be used comprehensively, but on a case-by-case basis for Clients with special needs.	No		Unable to verify system's integration and performance			
7.9.6.2(8)(f) Non-Secure Clients in non-secure areas are allowed freedom of movement outdoors. Provide an Area of Interest Zone perimeter boundary that serves as a visual "marker" for Non-Secure Clients in the non-secure outdoor areas of the Facility. This boundary will be highly permeable so that it does not restrict free movement, but it will be able to be monitored by unobtrusive sensors and cameras to ensure Client safety.	No		Unable to verify system's integration and performance			
7.9.6.2(8)(g) Secure Clients on the secure side of the Facility are not allowed freedom of movement on the exterior of the building. These Clients are secured within the building or within secure outdoor activity courtyards. The purpose of the Threat Perimeter is to restrict or limit approaches toward the Main Building from the outside. Therefore, the boundary will be less permeable in order to inhibit ease of approach to the Main Building. This boundary will be monitored with unobtrusive sensors and cameras.	Yes	Yes	Limited to observable conditions			
7.9.6.2(8)(h) The PIDS will report alarms to the Operations Security Centre.	Yes	Yes	Limited to observable conditions			
7.9.6.2(8)(i) Design PIDS components with open architecture, to be forward and backward compatible, to be non-proprietary, and to operate in standard TCP-IP Ethernet network environment.	Yes	Yes	Limited to observable conditions			
7.9.6.2(8)(j) The perimeter coverage will be broken into zones. Configure the zones such that a single camera covers an entire zone. No zones will be configured to require two cameras for total coverage. Zone lengths will not exceed 60 meters.	No		Unable to verify system's integration and performance			
7.9.6.2(8)(k) Design the PIDS to employ color video surveillance cameras in a video motion detection-based system with integral DVR/NVR capabilities and video services.	Yes	Yes	Colour - yes. Unable to verify DVR/NVR capabilities			
7.9.6.2(8)(l) The system will have integral DVR / NVR recording capabilities. (l).1 The video images from the perimeter security system will be available over the video surveillance system in a manner similar to the cameras required for the video surveillance system.	No		Unable to verify system's integration and performance			
7.9.6.2(9) Provide an additional 25% of end-user devices and controllers.	No					
7.9.7 Video Surveillance						
7.9.7.1 Basic Requirements						
7.9.7.1(1) Provide all necessary infrastructure required to support the following systems:	Yes	Yes	Limited to observable conditions			
7.9.7.1(1)(a) video surveillance;	Yes	Yes	Limited to observable conditions			
7.9.7.1(1)(b) webcams; and	No		unable to view during audit visit			
7.9.7.1(1)(c) videoconferencing cameras.	Yes	Yes	Limited to observable conditions			
7.9.7.1(2) Provide the supporting infrastructure including power, telecommunication outlets, audio-video wiring, raceways, outlet boxes, structural requirements necessary to deliver the Telehealth requirements identified in Appendix 3A [Clinical Specifications].	No		Unable to verify system's integration and performance			
7.9.7.1(3) Provide video surveillance throughout the Facility, and exterior areas for the purpose of viewing and recording video to enhance the level of security and assist Authority staff in providing a safe environment for Facility Users and the general public while protecting the physical assets. With respect to video surveillance coverage of doors, provide as a minimum, video surveillance in accordance with Appendix 3D(v) [Door Operation Matrix].	Yes	Yes	Limited to observable conditions			
7.9.7.1(4) Project Co will post signage at the main entrances to the Facility. The signage as per Authority standards will notify the public that this area is under video surveillance. Video surveillance processes will be governed by the Public Surveillance System Privacy Guidelines for the Province of Saskatchewan as well as the Freedom of Information and Protection of Privacy Act (Saskatchewan).	No		Unable to verify system's integration and performance			
7.9.7.1(5) Ensure the system is able to record clear images of individuals, which would allow distinction of gender, ethnicity and age category. Ensure the system will provide recorded images of sufficient quality to be used as court evidence in Canada.	No		Unable to verify system's integration and performance			
7.9.7.1(6) The Authority is implementing a project to integrate all Authority video surveillance cameras onto a single open architecture type platform. Provide a video surveillance system which is compatible with an open architecture system specified by the Authority.	No		Unable to verify system's integration and performance			
7.9.7.1(7) Interface requirements between the video surveillance system and other systems are described in Appendix 3D(viii)[IMIT Systems Integration Matrix].	No		Unable to verify system's integration and performance			
7.9.7.1(8) Design the video surveillance system to provide simultaneous monitoring and real time display, camera control, video playback and recording of multiple video streams.	No		Unable to verify system's integration and performance			
7.9.7.1(9) The video surveillance system software will match the existing Milestone solution. Ensure all cameras are compatible with the DVMS.	No		Unable to verify system's integration and performance			
7.9.7.1(10) Provide 100% coverage in all areas in the Facility except as indicated in this Schedule.	No		unable to verify during audit visit			
7.9.7.2 Performance Criteria						
7.9.7.2(1) Design system(s) to be a dedicated software-based virtual matrix that integrates to the existing Authority video surveillance system using the structured cable plant for transmission and recording of images.	No		Unable to verify system's integration and performance			
7.9.7.2(2) Provide the appropriate encoding/decoding capability to support 2 way (video and control) communications with any and all video surveillance camera, individually and/or in predetermined clusters via the Authority network.	No		Unable to verify system's integration and performance			
7.9.7.2(3) Provide video storage capacity for minimum of 30 days at 15 frames per second, minimum HD (1920 x 1080p) resolution. Provide the option of recording each camera at various resolution levels and frames per second depending on use and location, as well as by schedule or event. Provide file servers, workstations, and optical storage devices and connection to network. The system will have activity detection and incorporate smart search capabilities. Provide playback speed capable of 5x normal rate. During alarm conditions, allow for higher recording rates.	No		Unable to verify system's integration and performance			
7.9.7.2(4) Provide sufficient storage capability to allow for retention of video images for 30 days, as described in this Section, for all	No		Unable to verify system's integration and performance			
7.9.7.2(5) Integrate the video surveillance system with other systems identified in Appendix 3D(viii) [IMIT Systems Integration Matrix].	No		Unable to verify system's integration and performance			
7.9.7.2(6) Provide video surveillance display and review system that is a network-based application allowing for authorized users to view, control and manage all aspects of the video surveillance system across the network and export videos to secure storage device. Provide network and web access for monitoring, using predefined user authentication. Provide the ability for the Authority to exchange video surveillance hard drives to preserve original video footage in case of an incident.	Yes	Yes	Limited to observable conditions			
7.9.7.2(7) Allow display and review for all the cameras to be accessible through dual screen workstations located in the Operations Security Centre. Provide video surveillance workstations with all required operating and application software, monitors, keyboard, mouse, joystick control with interconnection to security system network.	Yes	Yes	Limited to observable conditions			
7.9.7.2(7)(a) Provide indoor cameras of fixed type, capable of facial recognition, colour, high-resolution, high sensitivity (day/night), smoke dome type with an auto iris and zoom capability. Mounting will be appropriate for the environment, unobtrusive, matching colour with hidden cabling. Ensure fixed cameras are vandal resistant wall mounted and / or mounted at protective locations and heights.	Yes	Yes	Limited to observable conditions			
7.9.7.2(7)(b) Provide outdoor cameras that are either: (b).1 fixed colour cameras, high resolution, capable of motion detection, low light day/night and weather induced limited visibility operation capability. Install cameras to be unobtrusive, solidly mounted on poles, parapets and walls such that they do not move in the wind, and located to provide optimum unobstructed viewing of the area under surveillance. Ensure fixed cameras are vandal resistant and/or mounted at protective locations and heights; or (b).2 pan-tilt-zoom (PTZ) colour dome cameras, high resolution, capable of minimum 35x optical zoom, high-speed with low light day/night and weather induced limited visibility operation capability with 360 degrees rotation in less than 3 seconds. Install domes to be solidly mounted on poles, parapets and walls located to provide optimum unobstructed viewing of the area under surveillance. PTZ cameras will have the ability to mask portions of view through software and remote programming.	Yes	Yes	Limited to observable conditions			

	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
7.9.7.2(7)(c) Provide fixed cameras in locations that have PTZ cameras to ensure all areas are properly covered at all times with no area left uncovered during PTZ movement.	Yes	Yes	Limited to observable conditions			
7.9.7.2(7)(d) Provide outdoor cameras complete with weatherproof housing and internal heater/ defroster/blower/wiper as required for suitable operation under varying environmental conditions.	Yes	Yes	Limited to observable conditions			
7.9.7.2(7)(e) Do not locate cameras in private areas such as Client rooms, treatment rooms or clinical areas, locker rooms or washrooms (unless specifically identified for use by clinical department staff). Cameras will not be placed or reviewed for the purpose of observing work performance of employees.	Yes	Yes	Limited to observable conditions			
7.9.7.2(7)(f) Locate video surveillance clinical activity monitors out of public view as required to protect privacy.	Yes	Yes	Limited to observable conditions			
7.9.7.2(7)(g) Provide controller at Operations Security Centre and BOSC to view and control all PTZ video surveillance cameras	Yes	Yes	Limited to observable conditions			
7.9.7.2(7)(h) Provide minimum 24" LED video surveillance monitors on Site.	Yes	Yes	Limited to observable conditions			
7.9.7.2(7)(i) At minimum provide two security workstations located at the Operational Security Centre and one security workstation located at the BOSC, each complete with virtual matrix controller and 4x42" 1080p monitors. Provide megapixel cameras in consultation with the Authority to capture appropriate identification footage.	Yes	Yes	Limited to observable conditions			
7.9.7.2(7)(j) Integrate all entry and exit points to departments and associated areas require recorded video surveillance to the video surveillance security system as identified in Appendix 3D(v) [Door Operation Matrix]. Where required by the Authority, provide video monitors for department staff to monitor local video surveillance cameras associated with the department.	No		Unable to verify system's integration and performance			
7.9.7.2(8) Provide video surveillance equipment to monitor and record the identity of all persons entering and exiting the Facility's main entrances, corridor/links and utilizing elevators in strictly controlled high risk departments and associated areas, as identified in consultation with the Authority.	Yes	Yes	Limited to observable conditions			
7.9.7.2(9) Provide video surveillance cameras at locations determined in consultation with the Authority, including:						
7.9.7.2(9)(a) main entrances & exits to the Facility;	Yes	Yes	Limited to observable conditions			
7.9.7.2(9)(b) entrance and exit corridors to all departments;	Yes	Yes	Limited to observable conditions			
7.9.7.2(9)(c) public lobbies and waiting areas;	Yes	Yes	Limited to observable conditions			
7.9.7.2(9)(d) pharmacy and associated entry doors;	Yes	Yes	Limited to observable conditions			
7.9.7.2(9)(e) dispensary/medication rooms narcotic vaults;	Yes	Yes	Limited to observable conditions			
7.9.7.2(9)(f) loading docks;	Yes	Yes	Limited to observable conditions			
7.9.7.2(9)(g) Sally Ports and Secure Vestibules;	Yes	Yes	Limited to observable conditions			
7.9.7.2(9)(h) inside all elevators and elevator lobbies;	Yes	Yes	Limited to observable conditions			
7.9.7.2(9)(i) parking entrances and exits, including stairwells, exterior locations for viewing parking areas;	Yes	Yes	Limited to observable conditions			
7.9.7.2(9)(j) perimeter walkways and walkways connecting to other buildings on Site;	Yes	Yes	Limited to observable conditions			
7.9.7.2(9)(k) public thoroughfares and walkways;	Yes	Yes	Limited to observable conditions			
7.9.7.2(9)(l) Therapy mall areas;	Yes	Yes	Limited to observable conditions			
7.9.7.2(9)(m) cash offices or areas where cash is exchanged;	Yes	Yes	Limited to observable conditions			
7.9.7.2(9)(n) Staff and Client entry at Non-Secure Client Care Unit;	Yes	Yes	Limited to observable conditions			
7.9.7.2(9)(o) access door locations to the outdoor activity spaces;	Yes	Yes	Limited to observable conditions			
7.9.7.2(9)(p) overhead door and man-door to Vocational Area 1, on East side of the Main Building;	Yes	Yes	Limited to observable conditions			
7.9.7.2(9)(q) overhead door to vocational Area 2 at loading dock and other overhead doors at loading docks;	Yes	Yes	Limited to observable conditions			
7.9.7.2(9)(r) Staff entry at secure Client care unit;	Yes	Yes	Limited to observable conditions			
7.9.7.2(9)(s) visitor entry at Secure Client visiting centre;	Yes	Yes	Limited to observable conditions			
7.9.7.2(9)(t) vehicular Sally Port and man-door at Admissions and Discharge;	Yes	Yes	Limited to observable conditions			
7.9.7.2(9)(u) Health Care Clinic; and	Yes	Yes	Limited to observable conditions			
7.9.7.2(9)(v) IPCR Rooms.	Yes	Yes	Limited to observable conditions			
7.9.7.2(9)(w) Accessible roof areas.	Yes	Yes	Limited to observable conditions			
7.9.7.2(9)(x) Patient care corridors in the Secure and Non-Secure areas.	Yes	Yes	Limited to observable conditions			
7.9.7.2(9)(y) Locations of all Intercom Door stations.	Yes	Yes	Limited to observable conditions			
7.9.7.2(10) Non-Secure side of the Facility non-recorded video surveillance coverage will be monitored locally at the Nurse's stations on local monitors. The non-recorded areas will include:	Yes	Yes	Limited to observable conditions			
7.9.7.2(10)(a) any Client accessible common areas,	Yes	Yes	Limited to observable conditions			
7.9.7.2(10)(b) rooms not directly observable from the care team station,	Yes	Yes	Limited to observable conditions			
7.9.7.2(10)(c) interview/consultation rooms,	Yes	Yes	Limited to observable conditions			
7.9.7.2(11) Non-recorded cameras will be IP based and the same type as recorded surveillance cameras.	Yes	Yes	Limited to observable conditions			
7.9.7.2(12) Provide an interface between the video surveillance system and the fire alarm system such that when a fire alert or fire alarm is activated, the video surveillance cameras in the vicinity of the fire alarm or alert will automatically be displayed in the Operations Security Centre.	No		OSC is able to select camera view to access alarm. Requires staff presence to verify an alarm.			
7.9.7.2(13) Design and provide for 25% growth in cameras and video storage at the time of commissioning.	No		Unable to verify system's integration and performance			
7.9.7.2(14) Provide recorded video surveillance in all IPCR Rooms in the facility, with viewing at the associated Nurse Station	No		Unable to verify system's integration and performance			

PART 8. SITE, INFRASTRUCTURE AND LANDSCAPE SUBGROUP SPECIFICATIONS	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was	Recommended next steps.
8.1 Exterior Improvements						
8.1.1 Aggregate Base Courses						
8.1.1.1 Basic Requirements						
8.1.1.1(1) Utilize granular sub-base for stability of surface treatment through freeze thaw cycles and for its ability to store moisture.	No					
8.1.1.1(2) Place granular sub-base and base only on an underlying subgrade that has been properly compacted and approved by the project engineer.	No					
8.1.1.1(3) The granular sub-base and base course will consist of crushed rock, gravel and sand consisting of hard, clean durable material, free from coatings of silt, clay or other deleterious materials and containing no organic matter	No					
8.1.1.2 Performance Criteria						
8.1.1.2(1) Design the depths of aggregate base courses to exceed limits defined by regional average freeze thaw cycles averaged over a twenty year period.	No					
8.1.1.2(2) Design aggregate base courses to meet or exceed the specifications of the pavement structure design for intended loads and climate conditions found on site.	No					
8.1.2 Asphalt Paving						
8.1.2.1 Basic Requirements						
8.1.2.1(1) Utilize asphalt paving in areas where vehicle traffic and snow clearing equipment require a smooth surface for travel.	Yes	Yes	this requirement appears to be complied with			
8.1.2.1(2) Place hot mix asphalt only on an underlying base course that has been compacted and approved by the project engineer.	No					
8.1.2.1(3) Design asphalt mix for the intended load and climate conditions found on site.	No					
8.1.2.2 Performance Criteria						
8.1.2.2(1) Asphalt will meet or exceed the specifications of the pavement structure design and asphalt mix design. Pavement structure thicknesses will be as required by Project Co's geotechnical engineers, based on assessment of specific Site conditions.	No					
8.1.2.2(2) Asphalt design will meet or exceed the intended loads and climate conditions found on site	No					
8.1.3 Concrete Curbs and Unit Paving						
8.1.3.1 Basic Requirements						
8.1.3.1(1) Utilize unit paving in areas that require firm, long lasting hard surfaces for activities such as pedestrian pathways, loading docks, and building entrances.	Yes	No	There are areas where hard surfaces are not provided at building entrances. Another building entrance had a concrete patch added. Another location there's a trip hazard on Level 2 exterior space.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co.
8.1.3.1(2) Provide concrete curbs along the perimeter of asphalt surfaces, unless otherwise reviewed by the Authority.	Yes	No	Concrete curbs were not provided along asphalt pathways for wheelchair curbing. A crosswalk leads to a standard vertical curb with no wheelchair accessibility and no sidewalk is present on the north side of the intersection.	While no formal change was approved, it is not clear if the lack of concrete curbs was reviewed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co.
8.1.3.1(3) All concrete works are to meet or exceed Best Practice requirements for load and climate conditions found on site.	No					
8.3 Utilities (Division 33)						
8.3.1 Manholes and Catch Basins						
8.3.1.1 Basic Requirements						
8.3.1.1(1) Provide monolithic concrete manholes with transition to lid frame, covers, anchorage, and accessories.	No					
8.3.1.1(2) Provide modular precast concrete manhole sections with tongue and groove joints with masonry transition to lid frame, covers, anchorage, and accessories.	No					
8.3.1.2 Performance Criteria						
8.3.1.2(1) Locate and size manholes and catch basins in accordance with Best Design Practices. Avoid catch basins in walking areas.	Yes	No	Sizing of the manholes and catch basins were not confirmed. There were cases of catchbasins located in walking areas.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co.
8.3.1.2(2) All manhole joints will be watertight.	No					
8.3.2 Site Water Utility Distribution Piping						
8.3.2.1 Basic Requirements						

PART 8. SITE, INFRASTRUCTURE AND LANDSCAPE SUBGROUP SPECIFICATIONS	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in	If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per "Schedule 6: Changes" of the Project Agreement.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was	Recommended next steps.
8.3.2.1(1) Design the water system to conform to A Guide to Waterworks Design, as published by the Water Security Agency.	No				
8.3.2.1(2) The water system will include the pipes, valves, hydrants, fittings, and all other required appurtenances to comply with the applicable Municipal and Provincial Standards.	No				
8.3.2.1(3) Refer to Section 4.4.					
8.3.3 Site Sanitary Sewer Piping					
8.3.3.1 Basic Requirements					
8.3.3.1(1) Design the sanitary sewer system to conform to The Guidelines of Sewage Works Design, as published by the Water Security Agency.	No				
8.3.3.1(2) The sanitary sewer system will include the pipes, manholes, quality testing and all other required appurtenances to comply with applicable Municipal and Provincial Standards.	No				
8.3.3.1(3) Refer to Section 4.4.					
8.3.4 Storm Sewer Water Drains					
8.3.4.1 Basic Requirements					
8.3.4.1(1) Design the storm sewer system (major and minor) to meet or exceed the Guidelines of Sewage Works Design, as published by the Water Security Agency.	No				

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5.4.8 Outdoor Courtyards Fencing						
5.4.8.1 Outdoor courtyards in Secure Client care units, the Assessment Unit, and the central Secure Client courtyard on the ground level will:						
5.4.8.1(1) be designed to prevent escape or unauthorized entry, including anti-dig features;	No	TBD	Outdoor client courtyards in the secure zone appeared secure, anti-dig features in the form of concrete foundations are assumed to be in place.			
5.4.8.1(2) match the performance requirements of the adjacent building exterior walls and use materials and finishes that are either the same as or of a similar architectural vocabulary with such walls;	Yes	Yes	performance requirements to the secure courtyards met this requirement.			
5.4.8.1(3) be 5000mm in height above finished level;	Yes	Yes	appeared to comply, exact dimension was not verified on-site during the review			
5.4.8.1(4) be non-climbable, including restrictions at wall junctions and interfaces;	Yes	Yes	appeared to comply,			
5.4.8.1(5) have openings to frame views to the landscape outside the courtyard. Openings will have windows that will meet the requirements in Section 6.9.2.7 of this Schedule; and	Yes	Yes	appeared to comply,			
5.4.8.1(6) be anti-ligature.	Yes	Yes	appeared to comply,			
5.4.8.2 Outdoor courtyards in Non-Secure Client Care Units, Forensic Client Care Unit and Recreation Therapy on the ground level will:						
5.4.8.2(1) be 1800mm in height above finished level; and	Yes	Yes	appeared to comply,			
5.4.8.2(2) be of a material that allows views to the landscape outside the courtyard. If glazing is used, it will:	Yes	Yes	appeared to comply,			
5.4.8.2(2)(a) be security glazing;	Yes	Yes	appeared to comply,			
5.4.8.2(2)(b) be designed to withstand a minimum 100 year snow load;	Yes	Yes	glazing not utilised to non-secure courtyards			
5.4.8.2(2)(c) be designed to withstand minimum 115 km/hr wind load;	Yes	Yes	glazing not utilised to non-secure courtyards			
5.4.8.2(2)(d) have a design service life of at least thirty years; and	Yes	Yes	glazing not utilised to non-secure courtyards			
5.4.8.2(2)(e) be anti-ligature.	No	TBD	this appears to require glazing to be anti-ligature, this should be clarified.			
5.4.8.3 Outdoor courtyards in Secure Client Care Units on the upper levels will:						
5.4.8.3(1) be designed to prevent escape or unauthorized entry;	Yes	Yes	walls were not climable			
5.4.8.3(2) be 5000mm in height above finished level;	Yes	Yes	appeared to comply, exact dimension was not verified on-site during the review			
5.4.8.3(3) be non-climbable, including restrictions at wall junctions and interfaces;	Yes	Yes	areas appeares secure to climbing but more detail should be provided to describe the "restrictions"			
5.4.8.3(4) be anti-ligature; and	Yes	Yes	appeared to comply,			
5.4.8.3(5) be of a material that allows views to the landscape outside the courtyard. If glazing is used, it will:						
5.4.8.3(5)(a) be security glazing;	No	TBD	submittal review required to confirm			
5.4.8.3(5)(b) be designed to withstand a minimum 100 year snow load;	No	TBD	window manufacturer to be consulted			
5.4.8.3(5)(c) be designed to withstand minimum 115 km/hr wind load; and	No	TBD	submittal review required to confirm			
5.4.8.3(5)(d) have a design service life of at least thirty years.	No	TBD	submittal review required to confirm			
5.4.8.4 Outdoor courtyards in Non-Secure Client Care Units on the upper levels will:						
5.4.8.4(1) be 4000mm in height above finished level;	Yes	No	4000mm height not met, exact dimension was not verified on-site during the review	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
5.4.8.4(2) be non-climbable, including restrictions at wall junctions and interfaces;	Yes	Yes	walls were not climable			
5.4.8.4(3) be anti-ligature	Yes	No	Mesh fenced areas not considered to be anti-ligature	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
5.4.8.4(4) be of a material that allows views to the landscape outside the courtyard. If glazing is used, it will:	Yes					
5.4.8.4(4)(a) be security glazing;	Yes	Yes	glazing not utilised to non-secure courtyards			
5.4.8.4(4)(b) be designed to withstand a minimum 100 year snow load;	Yes	Yes	glazing not utilised to non-secure courtyards			
5.4.8.4(4)(c) be designed to withstand minimum 115 km/hr wind load; and	Yes	Yes	glazing not utilised to non-secure courtyards			
5.4.8.4(4)(d) have a design service life of at least thirty years.	Yes	Yes	glazing not utilised to non-secure courtyards			
5.4.8.5 All outdoor courtyard heights will be met by means of either the building perimeter or other enclosure and to the identified heights set out in this Section.	Yes	No	identified height of 4000mm not met to non-secured fenced courtyards	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co

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5.4.8.6 The central Non-Secure outdoor courtyard and the outdoor patio adjacent to the indoor courtyard will not be fenced.	Yes	Yes	this requirement appears to be complied with			
8.1.4 Prevailing Winds						
8.1.4.1 Basic Requirements						
8.1.4.1(1) Protect pedestrians at building entrances and high activity pedestrian areas from the negative effects of the prevailing winds.	Yes	Yes	this requirement appears to be complied except that not all courtyards will be free from the affect of wind; most common wind in summer months			
8.1.4.2 Performance Criteria						
8.1.4.2(1) Design and install the landscape with trees, shrubs, hedges, or other elements to protect pedestrians from the prevailing south easterly wind.	Yes	Yes	this requirement appears to be complied except that not all courtyards will be free from the affect			
8.1.4.2(2) Install trees and shrubs in a manner that reduces snow drifting onto roadways and parking lots.	Yes	No	some taller shrubs at N or NW edges of parking may create snow drifts in parking areas	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
8.1.5 Tree Retention and Protection						
8.1.5.1 Basic Requirements						
8.1.5.1(1) Conduct a predesign assessment of the existing vegetation to identify existing trees and mature plant communities to be retained.	No					
8.1.5.1(2) Retain existing trees and mature vegetation where they do not conflict with Site development or Site grading. Protect trees and mature vegetation that will be retained during construction.	No					
8.1.5.1(3) To reinforce the image of a well-established landscape, retain and incorporate mature trees and landscaping into the Site development. Develop a tree salvage plan that notes trees to be cut down, trees to remain, and trees to be relocated.	No					
8.1.5.1(4) Review the site for plants on the Saskatchewan Noxious Weed List and prepare and execute a strategy to clear site of problem plants.	No					
8.1.5.2 Performance Criteria						
8.1.5.2(1) Engage a certified arborist (licensed with the International Society of Arboriculture – ISA) to evaluate the existing trees to remain.	No					
8.1.5.2(2) Treat the retained trees as directed by the arborist and under the direct guidance of the arborist (e.g. root pruning, spiral pruning, watering, fertilizing).	No					
8.1.5.2(3) Control plants on the Noxious Weed List by appropriate means with the assistance of a certified Agrologist prior to the development of the site including any stockpiling of existing soils.	No					
8.1.5.2(4) Protect trees and mature vegetation that will be retained during construction with fencing to the Critical Protection Zone as defined herein as the drip line of the canopy of foliage.	No					
8.1.5.2(5) Surround trees and vegetation that will be retained by Protective Fencing to the Critical Protection Zone.	No					
8.1.5.2(6) Avoid excavating, storage of materials, parking, vehicular driving, preloading, or filling within the Critical Protection Zone of the trees being preserved.	No					
8.1.5.2(7) Comply with applicable tree protection bylaws with regard to tree replacement ratios and sizes.	No					
8.1.5.2(8) If there is no tree protection bylaw applicable to the Site, then comply with the following tree replacement requirements: a) whenever a tree over 300 mm diameter at breast height is removed, Project Co will replace the tree at a 1:1 ratio; and b) replacement trees will be specimen trees and must have a minimum calliper of 14 cm (5.9 in.) in diameter at breast height for deciduous trees, or 3.0 m ht. for coniferous trees.	No					
8.1.5.2(9) Provide tree wells and/or creative grading of the ground away from existing vegetation to remain. Where tree wells are to be constructed, the wells must be a minimum distance of 1.5 times the distance from the trunk of the tree to the drip line.	No					
8.1.6 Outdoor Art						
8.1.6.1 Basic Requirements						
8.1.6.1(1) The Master Site Plan will include areas for outdoor art/sculptures.	Yes	No	no outdoor art is apparent on the site	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
8.1.6.2 Performance Criteria						
8.1.6.2(1) Provide areas for outdoor art.	Yes	No	no outdoor art is apparent on the site	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
8.1.6.2(2) Place and prepare any art installations in a manner suited to the local context, program of the Facility, and specific program of the immediate sculptural location.	Yes	No	no outdoor art is apparent on the site	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
8.1.7 Trees, Shrubs and Groundcover						
8.1.7.1 Basic Requirements						

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8.1.7.1(1) Provide plantings to support the landscape design by reinforcing spatial relationships and way-finding. The plant selection and placement will address micro-climates surrounding the Facility and mitigation of heating and cooling loads. Planting will shade and screen parking lots. Planting will provide habitat for birds and other animals.	Yes	Yes	this requirement appears to be complied with			
8.1.7.1(2) Provide landscape treatments that protect and reinforce the existing natural landscape by providing view corridors and means of engaging the natural landscape.	Yes	Yes	this requirement appears to be complied with			
8.1.7.1(3) Provide landscape treatments for the complete Site that contributes to the creation of a liveable, healthy and responsive community.	No		This is quite a qualitative statement. Assessment maybe more subjective than would be helpful.			
8.1.7.1(4) Provide planting that is responsive to views from habitable/resident interior spaces. Planting will provide a positive benefit for residents equally from the interior and the exterior of the building.	Yes	Yes	this requirement appears to be complied with			
8.1.7.1(5) Use large caliper deciduous trees and evergreen trees that provide seasonal interest in association with ground covering shrub plantings. Use a variety of plant material to reflect seasonal change.	Yes	Yes	this requirement appears to be complied with			
8.1.7.1(6) Use similar plant species to help unify the site character, create recognizable spaces, contribute to site orientation and create a strong sense of place, recognizing that a diversity of tree specifies may increase the survival ratio of new landscaping.	Yes	Yes	this requirement appears to be complied with			
8.1.7.1(7) Use of indigenous flora will be a priority, in terms of minimizing maintenance and expressing an attitude about the Prairie context and location along the North Saskatchewan River.	Yes	Yes	while some indigenous species are included, this is not a majority of the plant material by species; however, per 8.1.7.2(10), more than 50% of total			
8.1.7.1(8) Landscape open space and setbacks to include existing trees that are of high quality, desirable species and appropriately situated.	Yes	Yes	this requirement appears to be complied with			
8.1.7.1(9) Provide trees, shrubs and other plants that are of the types listed in Appendix 3H [Plant List] and that meet the requirements set out in Appendix 3H [Plant List].	Yes	Yes	this requirement appears to be complied with			
8.1.7.2 Performance Criteria						
8.1.7.2(1) All planting is to be suitable for plant hardiness zone 3a or hardier and be grown in a nursery within the same hardiness zone.	No		cannot be observed on site. Would need a review of submitted documents			
8.1.7.2(2) Imported plant material must be accompanied with necessary permits and import licenses. Transportation of elm trees must comply with Provincial DED regulations.	No		cannot be observed on site. Would need a review of submitted documents			
8.1.7.2(3) Source any roses from areas free of the pathogen Pytophthora ramorum. Roses must be on their own roots and not grafted.	No		cannot be observed on site. Would need a review of submitted documents			
8.1.7.2(4) Quality and source will comply with the "Canadian Standards for Nursery Stock", by the Canadian Nursery Landscape Association (CNLA), referring to size and development of plant material and root ball.	No		cannot be observed on site. Would need a review of submitted documents			
8.1.7.2(5) Trees must be planted at a minimum ratio of one tree for every two surface parking stalls. Trees are to be distributed throughout the parking area in a manner that provides shade to pedestrian areas, maintains clear view corridors to exits and entries, and complements the building architecture. Note: Newly planted trees that are replacing existing trees (per Section 8.1.5 (Tree Retention and Protection) will not count towards this total.	Yes	No	This requirement was not met at the northwest staff parking lot. Other parking lots meet this requirement.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
8.1.7.2(6) Shrubs must be planted at a minimum ratio of six shrubs for every surface parking stall. Shrubs are to be distributed throughout the parking area in planting beds in order to soften the hard surface area.	Yes	No	This requirement is not met for southeast or northeast parking lot. This requirement is met at parking lot adjacent to main entry.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
8.1.7.2(7) Trees to be no smaller than 5 cm cal for deciduous shade trees, 2 m ht. Or 3 cm cal for ornamental/understory trees and 2.5 m ht. for coniferous trees upon installation.	Yes	Yes	this requirement appears to be complied with			
8.1.7.2(8) Shrubs will be no smaller than #2 pot size upon installation.	No		Construction process that likely is complete and cannot be reviewed on site			
8.1.7.2(9) Landscape treatment and circulation routes must be in accordance with Section 4.2.7.3.	No		Cannot be reviewed as City bylaws weren't provided			
8.1.7.2(10) To ensure safety and security in areas of entry/egress, areas open to the public, and areas of security concern, provide sightlines through any cluster of tall growing vegetation by keeping all under storey plants to a maximum of 1.2 m (3.9 ft.) in height. All tree canopies are to be no lower than 1.5 m (5.0 ft.) in height, at the time of installation.	Yes	No	tree canopy heights at time of planting do not appear to meet this requirement; trees at main vehicle entry off Jersey Street are too close to intersection and with tree growth will impede traffic signage at intersection	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
8.1.7.2(11) At least 50% of the total number of plants on the Site are to be native to Saskatchewan.	Yes	Yes	this requirement appears to be complied with			
8.1.7.2(12) Use some flowering and fruiting trees and shrubs to promote natural avian habitat.	Yes	Yes	this requirement appears to be complied with			

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8.1.7.2(13) The trees on Site will be a combination of small trees, medium- sized trees and large trees (in terms of ultimate size) with no less than 50% of the total number of trees being large trees.	Yes	No	the percentage of large trees appears to be approximately 32%	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
8.1.7.2(14) Do not install any plants listed as poisonous to humans by the Canadian Government's 'Canadian Poisonous Plants Information System'.	Yes	No	a variety of a Symphoricarpos albus, which is on the list, has been used on the site	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
8.1.7.2(15) Group plants to minimize the use of water, chemicals and fossil fuel use for routine maintenance and to promote a healthy local ecosystem using sustainable measures.	Yes	Yes	this requirement appears to be complied with			
8.1.7.2(16) Provide elements of healing gardens in the courtyards and close to building entries to stimulate senses of sight, smell and touch.	Yes	No	plant material is not near entrances into courtyards	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
8.1.7.2(17) Shrubbery within 2 m of walkways will not exceed 50 cm in height.	Yes	Yes	this requirement appears to be complied with			
8.1.7.2(18) Trees planted in narrow planting areas (e.g. 'Street Trees') between hard surfaces (e.g. curbs, sidewalks, roads, buildings) will have a continuous volume growing medium available to their roots along the length of the planting area (i.e. no tree pits). Minimum widths of planting areas to be 1.5 m, but wider planting areas are encouraged.	No		Construction process that likely is complete and cannot be reviewed on site			
8.1.7.2(19) Trees will be planted in areas that will provide root zone access to a volume of growing medium sufficient to support proper growth. This may include linear tree trenches, structural soil beneath pavement or other means necessary to provide ample growing medium. Provide minimum soil volume per tree as follows:	No		Construction process that likely is complete and cannot be reviewed on site			
8.1.7.2(19)(a) 5 cubic metres for small trees;	No		Construction process that likely is complete and cannot be reviewed on site			
8.1.7.2(19)(b) 10 cubic metres for a medium-sized tree; and	No		Construction process that likely is complete and cannot be reviewed on site			
8.1.7.2(19)(c) 20 cubic metres for a large tree.	No		Construction process that likely is complete and cannot be reviewed on site			
8.1.8 Mulches						
8.1.8.1 Basic Requirements						
8.1.8.1(1) Provide mulch to planting beds and tree wells to increase moisture retention.	Yes	Yes	this requirement appears to be complied with			
8.1.8.2 Performance Criteria						
8.1.8.2(1) Provide wood mulch that is untreated, locally sourced, and free from deleterious materials and weed sources. Wood mulch must be designed to a depth so as to retain moisture and reduce weed growth without the use of landscape fabric.	Yes	Yes	this requirement appears to be complied with			
8.1.8.2(2) Rock mulch will be clean washed rock, installed over professional grade landscape fabric. Rock mulch will only be used in areas without perennials, shrubs, needle bearing plants, and fruit bearing plants.	Yes	No	Material was not used	Changed of material noted in the Project Agreement Tracker.		Revise clause through Project Agreement amendment.
	Yes	Yes	this requirement appears to be complied with			
8.1.8.2(3) Mulch will be tapered to base of tree, shrub or perennial.	Yes	Yes	this requirement appears to be complied with			
8.1.9 Utility Visibility						
8.1.9.1 Basic Requirements						
8.1.9.1(1) Locate refuse/recycling areas, shipping, loading or utility areas, satellite dishes, and other similar structures, such as outdoor vents, mechanical equipment, or transformers out of view from streets and from adjacent properties.	Yes	No	The generator units were not blocked from view. They had landscaping around them, but were visible from the roadways. The Green Turtle vents are fully visible and have a foul odor.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
8.1.9.1(2) In cases where the above items will not be located out of view, they must be screened out of view from streets and from adjacent properties.	Yes	No	The generator units were not blocked from view. They had landscaping around them, and were not screened, and visible from the roadways. The Green Turtle vents are fully visible and have a foul odor without screening.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
8.1.9.1(3) Garbage and recycling bins must be easily accessible, and contained within roofed/walled enclosures or screened from public view and from adjacent properties.	Yes	Yes	this requirement appears to be complied with			
8.1.9.2 Performance Criteria						
8.1.9.2(1) Refuse/recycling areas, shipping, loading or utility areas, satellite dishes, and other similar structures, such as outdoor vents, mechanical equipment, or transformers must be screened out of view from streets and from adjacent properties using hedging, shrubs, trees, fencing or walls.	Yes	Yes	this requirement appears to be complied with			
8.1.9.2(2) Garbage and recycling bins must be easily accessible, and contained within roofed/walled enclosures, or screened from public view and from adjacent properties using hedging, shrubs, trees, fencing or walls.	Yes	Yes	this requirement appears to be complied with			
8.1.9.2(3) Bury electrical wires.	Yes	Yes	this requirement appears to be complied with			
8.2 Landscape						
8.2.1 Outdoor Open Space						

	Is the PA clause verifiable as per scope statement	Were the material and equipment quality and quantities were appropriate and actually installed and utilized, based on the contract terms? OR Was the labour utilized during the construction phase was in alignment with the Project Agreement terms?		If any deviation from the project design happened during construction due to change orders, these deviations were based on approved change orders engineering change notices and scope modifications as per “Schedule 6: Changes” of the Project Agreement. OR If any deviation from the project design happened during construction due to contract modifications or technical modifications, these deviations were based on approved changes by the Project Team, changes in building codes or regulations, market conditions for materials or equipment, or in-the-field conditions due to force majeure.	In the case of identifying poor labour performance or poor material and equipment utilization, this poor performance was noted and approved by the parties involved in the contract. In the case of finding repeated poor performance of the same supplier or contractor, this issue was noted and approved by the parties involved in the contract.	Recommended next steps.
8.2.1.1 Basic Requirements						
8.2.1.1(1) Provide outdoor spaces in the design of the Facility to accommodate activities.	No		This project agreement clause is subjective and verification would require input from the building operator			This project agreement clause is subjective and verification would require input from the building operator
8.2.1.1(2) Provide areas for temporary snow dumping at end of parking lots; design to ensure adequate drainage from snow melt.	Yes	Yes	this requirement appears to be complied with though not all are located at "end" of lot; most are off side			
8.2.1.2 Performance Criteria						
8.2.1.2(1) Provide outdoor spaces in the design of the Facility to						
8.2.1.2(1)(a) space and hard landscape elements conducive to healing and recovery that may be used as a component of physical and occupational therapy;	No		More specifics would be required on what types of physical and occupational therapy, they are trying to anticipate, before this could be assessed.			
8.2.1.2(1)(b) space which acts as the “front garden” of the Facility which will be fully accessible to the public with strong connections to the site and the neighbourhood;	Yes	No	some elements of this requirement have been complied with: front garden and connections to the site; however, pedestrian connection to the neighbour is poor as there are no walks / pathways adjacent to Jersey Street	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
8.2.1.2(1)(c) space to accommodate semi-public/private activities; and	Yes	Yes	this requirement appears to be complied with understanding that these activities would take			
8.2.1.2(1)(d) spaces for activities including Client/family visiting, staff breaks/retreats.	Yes	Yes	this requirement appears to be complied with			
8.2.1.2(2) Provide access to the outdoor spaces from the public areas of the hospital.	Yes	Yes	this requirement appears to be complied with			
8.2.1.2(3) Provide trees at least 1.5 metres from the edge of the sidewalk and 2 or 3 metres from the edge of a road for areas dedicated for snow pilling.	Yes	Yes	this requirement appears to be complied with			
8.2.2 Outdoor Courtyards						
8.2.2.1 Basic Requirements						
8.2.2.1(1) In addition to general outdoor spaces, provide distinct, separate outdoor courtyards to accommodate programmed and un- programmed activities at the Facility in accordance to the Appendix 3A [Clinical Specifications]:						
8.2.2.2 Performance Criteria						
8.2.2.2(1) The general specifications in this Section 8.2.2 will apply to all the outdoor courtyards.						
8.2.2.2(2) Project Co will design the outdoor courtyards throughout the Site:						
8.2.2.2(2)(a) to provide a sense of control:						
(a).1 provide a variety of spaces from which to choose;	Yes	Yes	this requirement appears to be complied with			
(a).2 provide fixed furniture and movable furniture as indicated in Section 8.2.2.2(4)(h); and	Yes	No	seating and picnic tables in courtyard were provided health authority and not necessarily installed per design plans	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
(a).3 promote a sense of security and safety;	No		This project agreement clause is subjective and verification would require input from the building operator			
8.2.2.2(2)(b) to provide for social support:						
(b).1 provide areas with seating to encourage conversation;	No		seating and picnic tables in courtyard were provided health authority and not necessarily installed per design plans			
(b).2 provide areas of refuge; and	No		seating and picnic tables in courtyard were provided health authority and not necessarily installed per design plans			
(b).3 provide areas for meditation, contemplation and reflection;	No		seating and picnic tables in courtyard were provided health authority and not necessarily installed per design plans			
8.2.2.2(2)(c) to provide for physical movement and exercise:	Yes	No	if exercise is expected to include walking, this requirement has not been fulfilled as only 1 courtyard has a walking loop;	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
(c).1 provide a variety of different activities;	Yes	Yes	this requirement appears to be complied with			

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(c).2 provide easy wayfinding;	Yes	Yes	This project agreement clause is subjective and verification would require input from the building operator			
(c).3 provide a variety of longer and shorter pathway loops for strolling and exercise;	Yes	No	only 1 courtyard has a hard surface pathway loops;	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
(c).4 no pathway is to have dead ends	Yes	Yes	this requirement appears to be complied with			
(c).5 utilize walkway edging to prevent those using wheelchairs from rolling into planting beds;	Yes	No	this is not apparent on site	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
(c).6 walkways will be a minimum 1.5m in width and will have a surface that accommodates Clients with intravenous equipment, gurneys and wheelchairs or walkers;	Yes	Yes	walkways meet the minimum requirement of 1.5m; PlanGrid item # notes a gap that could cause issues for equipment with small wheels or ends.			
(c).7 provide a minimum of one handrail between the entrance to any garden (from the interior of the Facility) and a seat for Clients experiencing difficulties with strength or balance; and	Yes	No	railing consistently extends less what the route would require	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
(c).8 pavement expansion joints to be no more than 1/8" in width to prevent the wheels of IV poles getting caught and stuck;	Yes	No	filler used in expansion joints is not flush with concrete leading to larger than 1/8" gap	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
8.2.2.2(2)(d) to provide access to nature and positive distractions:						
(d).1 gardens are to be incorporated as an integral extension of the hospital interiors, linking its internal spaces to view vistas of the exterior greenspace;	Yes	TBD	review by others needed			
(d).2 gardens are to be visible from at least one well- used interior area (unless otherwise noted below);	Yes	TBD	review by others needed			
(d).3 incorporate visibility and visual interest both into and out of the garden;	Yes	Yes	this requirement appears to be complied with			
(d).4 provide adequate signage within the building to alert people of the gardens;	Yes	TBD	review by others needed			
(d).5 gardens are to be fully accessible with low entry lips to facilitate wheelchair access;	Yes	TBD	entries have "low lip" entries however some have poor construction to achieve this (ie. Concrete patch)			
(d).6 provide plant material that attracts birds and provides seasonal interest;	Yes	Yes	this requirement appears to be complied with			
(d).7 provide visual relief and interest in vertical and horizontal dimensions;	Yes	Yes	this requirement appears to be complied with			
(d).8 provide bright colours; and	Yes	Yes	this requirement appears to be complied with			
(d).9 provide views as indicated in Section 5.4.8.	No		See 5.4.8			
8.2.2.2(2)(e) to minimize intrusive stimuli:						
(e).1 gardens must be sheltered from the wind;	Yes	No	not all courtyards will be free from the affect of wind; most common wind in summer months is from southeast.	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
(e).2 provide some gathering/seating areas that are sheltered from the sun and rain;	Yes	No	most courtyards include shade from an overhead structure, except for the large, secure courtyard	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
(e).3 surfaces must reduce glare (e.g. tinted concrete);	Yes	No	surfaces are typical white concrete	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
(e).4 seating material to be constructed of warm, comfortable material that does not get excessively hot or cold (e.g. wood) and facilitates the shedding of water. Avoid the use of concrete, aluminum & steel seats;	Yes	No	seating and picnic tables in courtyard was provided health authority and not necessarily installed per design plans	Changed to supply of unfixed furniture by Authority in the Project Agreement Tracker.		Revise clause through Project Agreement amendment.
(e).5 seating must include back rests;	Yes	No	seating and picnic tables in courtyard was provided health authority and not necessarily installed per design plans; backless benches are included in some courtyards	Changed to supply of unfixed furniture by Authority in the Project Agreement Tracker.		Revise clause through Project Agreement amendment.
(e).6 take measures to reduce or cover up loud or repetitive man-made sounds (e.g. by providing running water);	Yes	No	No measures appear to exist	No documented variance allowed by the	No documented variance allowed by the	Review with Project Co
(e).7 locate gardens to avoid unpleasant odours and smoke;	Yes	Yes	this requirement appears to be complied with			
(e).8 design gardens to avoid bright lights; and	No		could not be determined during a daytime inspection			
(e).9 all plant material selection will avoid any potential allergic reaction causing species;	Yes	No	most common allergens are not included in the plan; people who are very sensitive can have allergic reactions to plants that are typically non-allergenic	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	No recommnded action, there is no means of meeting this clause
8.2.2.2(2)(f) as gardens and not paved courtyards:						

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(f).1 gardens are to be lush and green with a minimum ratio of planted areas to hard surface areas of 1:1. Higher ratio of plants is acceptable;	Yes	Yes	this requirement appears to be complied with			
(f).2 stimulate the senses of sight, sound, smell and touch;	No		This project agreement clause is subjective and verification would require input from the building operator			
(f).3 provide natural lighting and sounds;	Yes	No	It is not clear what this clause requires however no additional "natural lighting" or sounds was provided	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
(f).4 design with an emphasis on natural features such as plants and wood; and	Yes	No	Designed stone boulders have not been installed	No documented variance allowed by the	No documented variance allowed by the	Review with Project Co
(f).5 provide at least one hose bib in each therapeutic garden regardless of whether an automatic irrigation system is supplied as part of the design;	Yes	Yes	this requirement appears to be complied with			
8.2.2.2(2)(g) to minimize ambiguity:						
(g).1 provide a well-defined and inviting garden entrance;	No		This project agreement clause is subjective and verification would require input from the building operator			
(g).2 provide a design that is easy to interpret by the majority of people; and	Yes	Yes	this requirement appears to be complied with			
(g).3 avoid the use of abstract art;	Yes	Yes	this requirement appears to be complied with			
8.2.2.2(2)(h) to provide fixed BBQ grill and a piped natural gas connection in the locations indicated in Appendix 3A [Clinical Specifications], with a lockable enclosure that protects the BBQ grill and gas connection from the exterior elements and prevents access to it by Clients. Enclosure will be constructed of materials in keeping with the Main Building performance requirements and resistant to heat and fire.	Yes	Yes	this requirement appears to be complied with			
8.2.2.2(3) To supplement the general specifications identified above, the following Sections 8.2.2.2(4) to 8.2.2.2(5) set out specific requirements for each of the outdoor courtyards at each Facility.						
8.2.2.2(4) Design the Client Care Unit Courtyards so that they:						
8.2.2.2(4)(a) are enclosed as indicated in Section 5.4.8.	Yes	Yes	this requirement appears to be complied with			
8.2.2.2(4)(b) are not visible from any well-used areas of the Facility;	Yes	TBD	review by others needed			
8.2.2.2(4)(c) are observable from indoor areas as described in Appendix 3A [Clinical Specifications];	Yes	TBD	review by others needed			
8.2.2.2(4)(d) Not used;						
8.2.2.2(4)(e) allow space for outdoor therapy;	No		More specifics would be required on what types of outdoor therapy, they are trying to anticipate, before this could be assessed.			
8.2.2.2(4)(f) allow Clients to have scheduled visits outdoors under supervision from staff;	Yes	Yes	this requirement appears to be complied with			
8.2.2.2(4)(g) allow basic activities like picnics, outdoor gardening, reading, resting, contemplation and walking;	Yes	Yes	this requirement appears to be complied with			
8.2.2.2(4)(h) have: (h).1 fixed furniture within Courtyards located in the Secure Perimeter and courtyards within Non- Secure Client areas that are located on an upper level above grade; and (h).2 movable furniture within all at-grade courtyards within Non-Secure Client areas;	Yes	No	seating and picnic tables in courtyard was provided by health authority and not necessarily installed per design plans; furniture in secure and non-secure client areas was fixed.	Changed to supply of unfixed furniture by Authority in the Project Agreement Tracker.		Revise clause through Project Agreement amendment.
8.2.2.2(4)(i) allow for areas / spaces for horticultural therapy programs (may include raised garden planters, storage of gardening supplies, access to water etc.);	Yes	Yes	this requirement appears to be complied with			
8.2.2.2(4)(j) have anti-glare and slip resistant pavement with defined pathway edges;	Yes	No	concrete is typical colour (i.e. not anti-glare); concrete surfacing is broom finish, which is considered anti-slip; pathway edges are not defined by any special means	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
8.2.2.2(4)(k) have plant material that supports / encourages sensory stimulation;	Yes	Yes	this requirement appears to be complied with			
8.2.2.2(4)(l) have accommodations for behavioural difficulties / challenges;	Yes	TBD	More specifics would be required on what types of behavioural difficulties / challenges they are trying to anticipate, before this could be assessed.			
8.2.2.2(4)(m) encourage home-like environments (residential scale);	Yes		This is quite a qualitative statement. Assessment maybe more subjective than would be helpful.			
8.2.2.2(4)(n) maintain and enhance views from interior spaces into courtyards, gardens and exterior green spaces;	Yes	TBD	review by others needed			
8.2.2.2(4)(o) include considerations for micro-climate control including wind, sun and precipitation; and	Yes	Yes	this requirement appears to be complied except that not all courtyards will be free from the affect of wind; most common wind in summer months is from southeast.			

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8.2.2.2(4)(p) include tables and chairs as required in Appendix 3A [Clinical Specifications].	Yes	No	seating and picnic tables were provided by health authority and not necessarily installed per design plans;	Changed to supply of unfixed furniture by Authority in the Project Agreement Tracker.		Revise clause through Project Agreement amendment.
8.2.2.2(5) Design the staff outdoor area so that it:						
8.2.2.2(5)(a) provides staff outdoor resting areas in close proximity to the staff facilities;	Yes	TBD	review by others needed			
8.2.2.2(5)(b) provides visual privacy from public and Client care areas so staff members do not have to mingle with Clients on their breaks;	Yes	TBD	review by others needed			
8.2.2.2(5)(c) has moveable furniture; and	Yes	Yes	this requirement appears to be complied with			
8.2.2.2(5)(d) includes tables and chairs, with seating for at least 30 people.	Yes	No	one table provided which is inadequate to accommodate required number of staff	Changed to supply of unfixed furniture by Authority in the Project Agreement Tracker.		Revise clause through Project Agreement amendment.
8.2.3 Site Slopes and Retaining Walls						
8.2.3.1 Basic Requirements						
8.2.3.1(1) Site grading is to provide positive drainage throughout (except where required for storm water detention/retention).	Yes	No	numerous areas of ponding and poor drainage are apparent on site	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
8.2.3.1(2) Site grading is to avoid over-steepened slopes that cause erosion, cause pedestrian instability and will not hold growing medium and plants.	Yes	No	grassed slopes in 3 courtyards appear to be over the 4:1 slope maximum and are finished with grass	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
8.2.3.1(3) Retaining walls to be architecturally finished.	Yes	No	No aesthetic design to retaining walls	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
8.2.3.1(4) Provide 'green' retaining walls.	No		See 8.2.3.2(3)			
8.2.3.2 Performance Criteria						
8.2.3.2(1) Adequate gradients are required to avoid ponding throughout the site except where required for storm water detention/retention.	Yes	No	numerous areas of ponding and poor drainage are apparent on site	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
8.2.3.2(2) Steep slopes are to be no steeper than 4:1 and finished with growing medium and plant material. Prohibit riprap on slopes.	Yes	No	grassed slopes in 3 courtyards appear to be over the 4:1 slope maximum	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
8.2.3.2(3) Slopes steeper than 4:1 are to be retained using structural architecturally-finished retaining walls (e.g. cast-in-place C.I.P concrete, precast concrete).	Yes	No	slopes in 3 courtyards appear to be over the 4:1 slope maximum and are finished with grass	No documented variance allowed by the Authority.	No documented variance allowed by the Authority.	Review with Project Co
8.2.3.2(4) Retaining walls within 5 m of roadways and building faces are to be 'green' retaining walls (e.g. planters) planted with vegetation to cover 80% of the face of the retaining walls one year following installation.	No		n/a no retaining walls were used within 5m of roadways and building faces			
8.2.4 Street Furniture						
8.2.4.1 Basic Requirements						
8.2.4.1(1) Unify the exterior ground plane treatment through the use of common paving materials, tree grates, lighting and other landscape furniture items.	Yes	No	seating and picnic tables were provided health authority and not necessarily installed per design plans; furniture styles were not consistent throughout the site	Changed to supply of unfixed furniture by Authority in the Project Agreement Tracker.		Revise clause through Project Agreement amendment.
8.2.4.1(2) Provide and coordinate design for street furniture, including benches provided at regular intervals for ease of use particularly for the infirm.	Yes	No	seating and picnic tables were provided health authority and not necessarily installed per design plans; some furniture is in poor condition. Regular spacing of benches does exist on site	Changed to supply of unfixed furniture by Authority in the Project Agreement Tracker.		Revise clause through Project Agreement amendment.
8.2.4.1(3) Where possible ensure universal accessibility at grade changes through sloped walkways and ramps, and avoid the use of stairs.	Yes	Yes	this requirement appears to be complied with			
8.2.4.1(4) Seating in public areas must: be ergonomically designed for a variety of people; be designed to allow a wheelchair to sit alongside fixed seating or, where tables are provided, to allow a wheelchair to pull up to each table; have a minimum of 5% with backrests; and shed rain water.	Yes	No	seating and picnic tables were provided health authority and not necessarily installed per design plans; seating in public areas are not fixed; as such space for a wheelchair was not maintained	Changed to supply of unfixed furniture by Authority in the Project Agreement Tracker.		Revise clause through Project Agreement amendment.
8.2.4.2 Performance Criteria						
8.2.4.2(1) Unify the ground plane treatment through the use of common paving materials, tree grates, lighting and other landscape furniture items.	Yes	No	seating and picnic tables were provided health authority and not necessarily installed per design plans; furniture styles were not consistent throughout the site	Changed to supply of unfixed furniture by Authority in the Project Agreement Tracker.		Revise clause through Project Agreement amendment.
8.2.4.2(2) Seating areas with benches will be located throughout the site no more than 70 m apart from each other. Select products on the basis of safety, comfort, design and materials that relate to the Facility architecture and landscape design, durability and required maintenance.	Yes	No	seating and picnic tables were provided health authority and not necessarily installed per design plans; some furniture is in poor condition. Regular spacing of benches does exist on site	Changed to supply of unfixed furniture by Authority in the Project Agreement Tracker.		Revise clause through Project Agreement amendment.

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8.2.4.2(3) Select products for their suitability and durability in the climatic conditions found at the Facility.	Yes	No	seating and picnic tables were provided health authority and not necessarily installed per design plans; some furniture is in poor condition.	Changed to supply of unfixed furniture by Authority in the Project Agreement Tracker.		Revise clause through Project Agreement amendment.
8.2.4.2(4) Utilize a variety of scales, locations and orientations of seating areas and site furnishings to cater to varied outdoor activities and varied experiences of the staff and visitors.	Yes	Yes	this requirement appears to be complied with			